CORPORATE GOVERNANCE ON BOARDROOM AND FIRM PERFORMANCE: FAMILY-CONTROLLED COMPANY

CHOONG WEI LIM

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UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

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Choong Wei Lim

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Corporate Governance on Boardroom and Firm Performance: Family-Controlled Company

By

Choong Wei Lim

This research project is supervised by:

Tung Soon Theam

Lecturer

Department of Accountancy

Faculty of Accountancy and Management

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.

(3) The word count of this research report is 16618

Name of Student: Choong Wei Lim

Student ID: 2004100

Signature: 

Date: 2 April 2022

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DEDICATION

I want to dedicate my research work to my supervisor, Mr Tung Soon Theam for his guidance and supports the provided to me for completing the research project. Because of him, I can complete the project smoothly.

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List of Abbreviations

CG	Corporate Governance
MCCG	Malaysia Code of Corporate Governance
CEO	Chief Executive Officer
NOID	Number of Independent Directors
NOWD	Number of Women Directors
AC	Audit Committee
BS	Board Size
ROA	Return on Asset
ROE	Return on Equity
P-value	Probability value
DV	Dependent Variables
IV	Independent Variables

Abstract

Purpose: The purpose is to investigate the influences of boardroom towards firm performance among family-controlled listed companies on Bursa Malaysia. Board size, number of independent directors, CEO duality, audit committee size, and number of women directors have been selected as independent variables whereas firm financial performances of the companies known as the dependent variables and were measured by return on asset and return on equity.

Design/Methodology/Approach: In this research study, 43 number of family-controlled companies have been selected from the. A software Statistical Package for Social Science (SPSS) has been used to run the descriptive analysis and was illustrated in table, measurements, and summaries. Besides, EViews also been used to run the panel data analysis.

Findings: The result showed the board size has a significant relationship with the family-controlled companies' financial performance in term of return on asset and equity. Interestingly, there were four independent variable was insignificant to the firm's financial performance which are number of independent directors, CEO duality, audit committee size and number of women directors.

Research Limitation: There might be other potential financial ratio that could be used to measure the firm's financial performance. Besides, limited time and resources give to conduct in this study, hence the company observation time-period were only 5 years and only 43 number of the companies being selected. This would possibly reduce the accountability and reliability of the analysed results. In addition, this research only used secondary data, which is annual report to run analysis, hence the data shows in the annual report has the possibility of not being accountable

Originality/Value: This research able to contribute the theoretical knowledge and development practices to the shareholders or investors, stakeholders, policymakers, as well as academia. This research able to provide investment idea to shareholders

and investors. Also, policymakers can better understand the factors that influence the firm performance and develop more comprehensive policy in order to sustain the business operation of family-controlled companies. Besides, policymakers also able to develop comprehensive police to safeguard the interest of Malaysian investors. Lastly, this research also provides insight of corporate governance on board and family-controlled company performance to academic to conduct their research in the future.

Chapter 1: Introduction

1.0 Introduction

This research provided a better understanding on the impact of Corporate Governance's mechanism toward boardroom and influence the firm financial performance among family-controlled listed companies in Bursa Malaysia. This chapter has included the research background, problem statement, research objectives, research questions, scope of the study, significance of the study, definition of term and organisation of the study.

1.1 Research Background

According to Amran & Che Ahmad (2011), family business in Malaysia play a vital role in Malaysian economy and contributing more than half of the Malaysia's Gross Domestic Product. Based on the research conducted by Ibrahim and Samad (2010), listed companies that governed by the Board of Directors (BODs) in family based owned a great number of percentage in East-Asia countries, especially in Malaysia. However, according to Francois (2020), a company governed by family will be always occurred some issue such as family member demand benefits that exceed their contribution, sibling rivalry and etc. In addition, an article found that approximately 70% of family-controlled business fail due to the poor succession plan, family conflict, lack of advisers, lack of financial education for the second generation and different vision between generation (Terentia, 2017).

In addition, by comparing family controlled companies and non-family controlled companies, family controlled companies faced more financial constraint than non-family companies (Hanazaki & Liu, 2006). One of the reasons is because of the

major or substantial shareholders who are able to control the family companies are more inclined to expropriate the other shareholders' value for their private benefit (Hanazaki & Liu, 2006). On the other hand, during the global financial crisis in 2008 - 2009, the financial unconstrained companies that controlled by family is underperform than non-family (Chu et al., 2016). This research also stated if firms are not financially constrained then there will be a mismanagement of free cash flow for inefficient investment. The author also stated that investment in family-controlled companies is lower than non-family-controlled companies. All of these issues will affect the company's performance; hence a governed board of director play a vital role in solving these issues.

Boardroom refer to a room where a group of people conducts meetings and the people known as board of directors that elected by shareholders of the company to manage the company (Daniel, 2021) .A Board of director is a group of individuals who elected by shareholder and make decision as a fiduciary on behalf of shareholder (James, 2020). Board of director play an important role in a corporate's Corporate Governance System. According to Helland and Sykuta (2004), the board of directors served two function which were the oversight and advisory roles. Nowadays, the issue of board diversity (e.g., gender diversity) in corporate has attracted attention of the researchers and policy marker (Alabede, 2016). Corporate board is efficient in monitoring and protect its shareholders and stakeholders when the board has demographic diversity such as gender (Gray et al., 2007). According to MCCG (2017), board composition of a company able the affect the ability of BOD oversight the company effectively. At the same time an effective board should include the right group of people with right skill, knowledge, experience and independent elements that suite the objective of the company.

Corporate governance is the process or structure that company can used to direct and manage its businesses and affairs to promote business prosperity and its accountability with the objective of achieving the long-term shareholder value, at the same time taking into consideration of the stakeholders' interest (Securities Commission Malaysia, 2017). Objective of corporate governance is not only

concern about the interest of shareholder but stakeholder (Securities Commission Malaysia, 2017). Malaysia saw the need to improved corporate governance practice in company to rebuild the investor's confidence after the East Asian Financial Crisis in 1997 (Norwani et al., 2011).

In short, corporate governance is an essential element that could influence the growth of an economy as good corporate governance practices of a company could reduce the risk faced by investors, enhances company financial position and assist company to attract investors (Goel, 2018). A research conducted in France, Italy, Japan, UK and US by Monda and Giorgino (2013) shows that better corporate governance practice will result a higher market valuation and Return on Asset for a company. In addition, a company having a good corporate governance practice able to improves its performance and protect shareholders' interest as it act as the mechanism of internal governance and monitors firm management (Ghabayen, 2012).

Therefore, in order to determine whether a family controlled companies become more effective if they apply the corporate governance mechanisms in Malaysia, this research aim to studies on the effect of CG mechanism that could apply in boardroom in relation to board size (BS), number of independent director (NOID), CEO duality (CEOD), audit committee size (ACS) and number of women director (NOWD) toward the firm financial performance of family-controlled companies on Bursa Malaysia such as Return on Equity (ROE) and Return on (ROA). The reason of the independent variable and dependent variable being selected by this study will be further discuss in Chapter 2.

1.2 Problem Statement

Corporate Governance has become a popular subject in Malaysia after the Asian financial crisis in 1997/1998 and the companies in Malaysia were said to increase their awareness of need to practice a better corporate governance practice (Yusoff, 2010).

Majority of the research studied on the corporate governance of family-controlled companies in foreign country such as, Australia, Taiwan, and Czech (Bartholomeusz & Tanewski, 2006; Filatotchev et al., 2005; Odehnalová & Pirožek, 2018). However, there are only few of research investigate on Malaysia regarding corporate governance of family-controlled companies. Even though the studies of corporate governance had increased recently, but still there is a lack of research that ascertains if the corporate governance mechanisms affect the family-controlled companies in Bursa Malaysia.

In addition, based on the previous research, although they investigate on the same independent variable toward the dependent variable. However, its shows inconsistent result of the independent variable on affecting the dependent variable. For example, there are few research found that board size of the company has a negative relationship toward the firm performance (Guo & Kga, 2012; Hussin & Othman, 2012; M. S. Malik & Makhdoom, 2016). However, Bennedsen et al., (2008) found that when board member was at six or below, it shows no effect on the firm performance, but when there were seven members and above on the board, then it shows a negative effect toward firm performance. Because of the inconsistency of the independent variable toward the dependent variable, hence this study will be re-examining the relationship between the independent variables and dependent variables.

1.3 Research Objectives

1.3.1 General Objectives

To determine Influences of boardroom towards firm performance among family-controlled listed companies on Bursa Malaysia. Performances of the companies were measured by ROA and ROE

1.3.2 Specific Objectives

Specifically, the following are the specific objective of the present study:

i. To determine the effect between Board Size and firm financial performance.
ii. To determine the effect between Number of Independent Director and firm financial performance.
iii. To determine the effect between CEO Duality and firm financial performance.
iv. To determine the effect between Audit Committee Size and firm financial performance.
v. To determine the effect between Number of Women Director and firm financial performance.

1.4 Research Question

The research questions in this study are as follows:

I. Does Board Size have a significant effect on firm financial performance?
II. Does Number of Independent Director show a significant effect on firm financial performance?
III. Does CEO Duality has a significant effect on firm financial performance?
IV. Does Audit Committee Size has a significant effect on firm financial performance?
V. Does Number of Women Director affect the firm financial performance significantly?

1.5 Hypothesis Development

The hypothesis of the present study as below:

i. Board size has a significant effect on firm financial performance
ii. Number of Independent Directors has a significant effect on firm financial performance
iii. CEO Duality has a significant effect on firm financial performance
iv. Audit Committee Size has a significant effect on firm financial performance
v. Number of Women Director has a significant effect on firm financial performance

1.6 Scope of the Study

This study aimed to identify the corporate governance mechanism that might influence the firm financial performance among family-controlled listed companies on Bursa Malaysia.

The study focuses on the family-controlled listed companies on Bursa Malaysia is because listed companies that governed by the Board of Directors (BODs) in family based owned a great number of percentages in East-Asia countries, especially in Malaysia. As mentioned earlier, half of the Malaysia's GDP is contributed by family business. Besides, PWC (2022) stated that 61% Malaysia family businesses are expected to grow in 2021, whereas 91% of them are expected to grow in 2022. Hence, family-controlled companies in Malaysia being selected as the population of the study.

1.7 Significant of Study

This research able to contribute the theoretical knowledge and development practices to the shareholders or investors, stakeholders, policymakers, as well as academia. A company with sound corporate governance practices could help to

attract new investors and capital as it would create a positive relationship between a company, and it expand the company business environment. In addition, a good corporate governance practice is crucial to enhance investor's confident level and market liquidity.

This research able to provide investment idea to shareholders and investors. As an outstanding corporate governance able to reduce the "control rights" of shareholders and creditors to hold on the managers (Shleifer & Vishny, 1997). Hence, in term of board and management, the transparency to shareholders and fairness to stakeholders should be practices by the company. Therefore, the conflict of interest will reduce and resolve which will lead to manipulation of the company financial statement is prohibit by the company in order to hide their bad company performance.

According to AL-Matari et al., (2012), a sound corporate governance practice of a company able to lower down the exposure faced by emerging market, such as financial crises, minimize transaction cost, strengthen property right, reduce the cost of capital, and improve firm performance. A well-functioning corporate governance practices also assist the company to attract new investment (Mohan & Chandramohan, 2018). On the other hand, an investor gain extra comfort on their trading decision when a company having a good corporate governance framework (Bhugeloo, 2019). Therefore, this research enables the investors and shareholders to make a better decision regarding their investment. This is because, sound corporate governance practice mitigates risk since the board of director and management protect their interest.

Other than that, policymakers can better understand the factors that influence the firm performance and develop more comprehensive policy in order to sustain the business operation of family-controlled companies as its contributing more than half of the Malaysia's Gross Domestic Product. Besides, policymakers also able to develop comprehensive police to safeguard the interest of Malaysian investors.

Lastly, this research also provides insight of corporate governance on board and family-controlled company performance to academic to conduct their research in the future.

1.8 Definition of Term

Table 1. 1: Definition of Term

Variable	Definition
Board Size	Board size defined as the total number of board of director in the company (Larmou and Vafeas, 2010).
Number of Independent Director	Number of independent director defined as the number of board of director who do not have a business relationship with the company (Rafel & Bartolomé, 2013).
CEO Duality	CEO Duality known as the practice of an individual who serving the role of Chief Executive Director and the Chairman of the board of director (Georgeta, 2011).
Audit Committee Size	Audit committee known as a sub-committee of the board of director and Audit committee size defined as the number of directors who held the position of board of audit (Ghabayen, 2012).
Number of Women Director	Number of women directors referred to the proportion of women director in the company (Torchia et al., 2011).
Return of Asset	Return of asset defined as the company's ability to use its asset to generate profit (Kurniawan, 2021). It calculated by net income divide by total assets of the company.
Return of Equity	Return of equity defined as the company earning that generated by its shareholder's equity (Masood & Ghodratollah, 2010). It calculated by net income divide by shareholder's equity of the company.

1.9 Organisation of the Study

There are five chapters in this research and each of the chapter is interlinked with each other. Below is the brief outline of these chapters:

Chapter 1: Introduction

Chapter 1 introduced family-controlled companies and provide an overview of the influence of boardroom towards firm performance. This chapter included the research background, problem statement, research objectives, research, questions, significant of the study, scope of the study, definition of terms, organisation of the study and conclusion.

Chapter 2: Literature Review

Chapter 2 discussed the review and analyses of the literature in the past that in line with this research topic. Agency theory, Stewardship theory, and Resource Dependency theory will be the underlying theory in this study. This chapter also discussed on the independent variables that determine the dependent variable which is the influences of boardroom towards firm performance.

Chapter 3: Methodology

The method and the way of the research conducted will be stated in this chapter. Research design, data collection method, sampling design, research instruments, data processing and data analysis will be discussed. At the end of chapter, construct measurement and technique used to examine the collected data were defined.

Chapter 4: Data Analysis

Data collected in this research were analyzed using various statistical test such as correlation analysis, significant of the variables etc. The result was presented at the end of this chapter.

Chapter 5: Discussion and Conclusion

This chapter discussed and justified the findings of this research. Besides, the summaries of the major findings, limitations of the research and recommendations for future research were included in this chapter.

Chapter 2: Literature Review

2.0 Introduction

Chapter 2 included literature review related to research variables which are Board Size, Number of Independent Director, CEO Duality, Number of Women Director, Audit Committee Size and Firm Financial Performance (Return on Asset and Return on Equity). Other than that, the proposed conceptual framework and, hypotheses were included at the end of the chapter.

2.1 Family-Controlled Companies

Family-Controlled business defined as a business in which included two or more family members and owns the majority of the ownership or control toward the business (Prencipe & Bar-Yosef, 2011). Family firm also defined as a small business operate by a family or large multinational firms (Macciocchi, 2014). According to Villalonga & Amit (2006), family-controlled companies are the publicly traded companies which were controlled by one or more families, or even by an individual who has publicly expose his objective to pass the stick to his relatives. Moreover, Tan (2016) stated that family-controlled companies consist of three criteria, firstly, the family members such as husband, wife, children, grandparents, and relatives own the single largest block of shares directly or indirectly that exceeding 10% in the company. Second, the board of the company is held by the family members. Lastly, the principal management position such as Executive Chairman, Managing Director, Chief Executive Office or Executive Director is held by the family members.

According to Chen (2017), family-controlled business are the most popular most of business in the world. Other than that, the importance of family business to the world economy has never been greater (David, 2019). Research done by Eddleston, Jaskiewicz and Wright (2020) also stated that family-controlled companies also play a vital role in Asian countries, this is because the trade between East-Asian countries have reached 55% of the global trade volume and 85% of the companies are family-owned in the Asia.

Based on the research conducted by Ibrahim and Samad (2010), they found that in year 2008, there were 27 among the 40 richest Malaysian were family-based and it was 67.5% of the top 40. Moreover, there were 15 family-controlled business controlled 28.3% of market capitalization in Malaysia (Ponnu et al., 2009). In short, family-controlled companies are likelihood to lead the corporate world with a ubiquitous performance.

After the financial crisis occurred in South East Asian countries, the countries which were greatly operated or structured with family-controlled companies were started to raise awareness and emphasis on sound corporate governance practice (Filatotchev et al., 2005).

2.1.1 Boardroom

Boardroom refer to a room where a group of people conducts meetings and these peoples known as board of directors (Daniel, 2021). It is also considered as the central hub of the company to formulate the strategic decision, govern the company, and manage the company risk (Johl & Salami, 2015). Board of director defined as a group of individuals who elected by shareholder and make decision as a fiduciary on behalf of shareholder (James, 2020).

According to Helland and Sykuta (2004), the board of directors served two function which were the oversight and advisory roles. Research conducted by Walt and

Ingley (2003) stated that, board of director also known as a group of individual who with diverse competencies and capabilities to perform monitoring and advisory function in a corporate. Besides, finding shows that firm's performance enhanced when board of directors with diverse qualification (Johl & Salami, 2015). At the same time, diverse boards also able to formulate different strategic skills and competences that are the vital elements for a good corporate governance in a company (Johl & Salami, 2015).

In short, board of director play an important role in a company's Corporate Governance System. Therefore, diversify of board of directors has become an important governance issue. Hence, another concern were the problem of what is the correct mix of board of director and how these board of directors able to improve the board's performance (Abdulmalik & Ahmad, 2016).

2.2 Corporate Governance in Malaysia

Corporate governance known as the structure of rule, process, and practice to direct and control the company. Corporate governance not only concern with the relationship between board of director, management, shareholder, and stakeholders, it's should also related with how to manage and control the company (Suffian et al., 2017). A research conducted by Ehikioya (2009) stated that corporate governance is crucial for a company to shape its code of conducts, procedure, rules and also makes the company to become more competitive..

Asian Financial Crisis in the year 1997-1997 brough a huge impact in the development of corporate governance practices in South-East Asian countries which including Malaysia. Therefore, introduction of Malaysia Code of Corporate Governance(MCCG) has become the remedial action as most of the countries have started to realize the significance of corporate governance (Suffian et al., 2017). MCCG was introduced in Malaysia in year 2000. MCCG has become a vital tool to

reform corporate governance and brough beneficial effect on corporate governance practices of Malaysia companies (MCCG, 2017). Based on the research conducted by Chu et al., (2016), MCCG focus on reinforce and improve the fiduciary duty and role of board of directors. According to Bhatt and Bhatt (2017), in order to encourage and promote corporate governance in Malaysia, Malaysia high-level finance committee has make a emblematic changes to enhance corporate practice.

There are few versions of MCCG in Malaysia, such as MCCG 2000, MCCG 2007, MCCG 2012, MCCG 2017 and MCCG 2021. According to Bhatt and Bhatt (2017), new version of MCCG was introduced to stricter the corporate governance practices for Malaysia companies. While, introduction of MCCG 2021 is focused on the board policies and practices on the processes and criteria to select or nominate a director (Securities Commission Malaysia, 2021). Besides, it also focused on the company's board and senior management to treat the its sustainability risks and opportunities (Securities Commission Malaysia, 2021). In short, MCCG is applies to all listed companies in Malaysia, because of MCCG is targeted at listed companies, so certain practices are only applicable to the "Large Company" who have a market capitalization of RM20,000,000 and above as well as who are on the FTSE Bursa Malaysia Top 100 Index. However, the non-listed companies are also encouraged to practice or adopt the guidelines on MCCG to enhance their company transparency, responsibility, and sustainability.

2.3 Underlying Theories

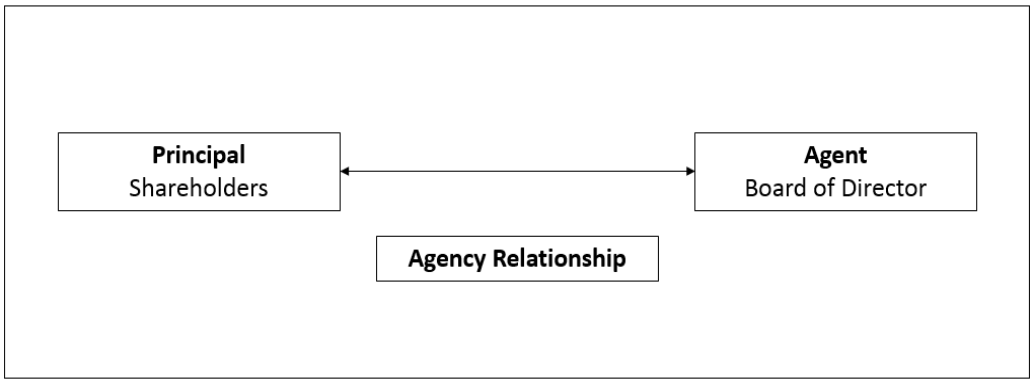
Table 2. 1: Independent Variable and Theories Relationship

Independent Variable	**Related Theories**
Board Size	● Agency Theory - Larger board size can be increasing the agency problem due to the difficulty to create coordination ● Resource Dependency Theory - Larger board size able to bring more opportunity to access to different resources.
Number of Independent Director	● Agency Theory - Boardroom should comprised with majority of independent directors to reduce conflict of interest and agency cost.
CEO Duality	● Agency Theory - Separation of control and ownership, the position of Chairman and CEO should be separate to prevent abuse of power and improve company performance. ● Stewardship Theory - Positive view toward human and managerial behavior and believe CEO Duality would not cause abuse of power but brings unity of command and make decision in a short time.
Audit Committee Size	● Agency Theory - Audit Committee created to reduce the agency problem and act as a monitoring mechanism on the prepares of company's financial statement and shareholder. ● Resources Dependency Theory - Appointment of Audit Committee lead to efficient internal monitoring
Number of Women Director	● Agency Theory - Diverse board with different skills, capabilities, experiences, and networks able to provide innovative ideas on complex issues and able to solve problem effectively and formulate strategic.

	● Resource Dependency Theory - Board with diverse gender would indulge valuable and unique resources due to having different network.

2.3.1 Agency Theory

Figure 2. 1: Agency Theory



Source: Barry, M. (1973). *Fiduciary Rationality and Public: The Theory of Agency and Some Consequences*.

According to Solomon and Solomon, (2010), agency theory considered as a foundational aspects of the different corporate governance theory. Besides, agency theory has been widely used in the studies of corporate governance (Dedman, 2004). According to Barry (2011), Agency Theory was created by Stephen Ross and Barry Mitnick in year 1973. Based on this theory, principal known as the shareholder or owner of the company, while agent known as the board of director or manager. The relationship between principal and agent referred to agency relationship. Moreover, agency theory focused on the concept of separation of ownership (principal) between management (agent).

The role of principal is to delegate the authority of decision making to the agent and assume or expect the decision made by the agent is in the interest of principal. On

the other hand, the role of agent is to perform daily business operation on behalf of the principal. When there is a situation that the agent is not acting in the best interest of principal, the problem will arise, and this problem also known as agency problem. There are two type of agency problems, such as the difference the conflict of interests occurred between principal and agent, as well as the difference in risk appetite between both parties (Oguz & Dincer, 2016).

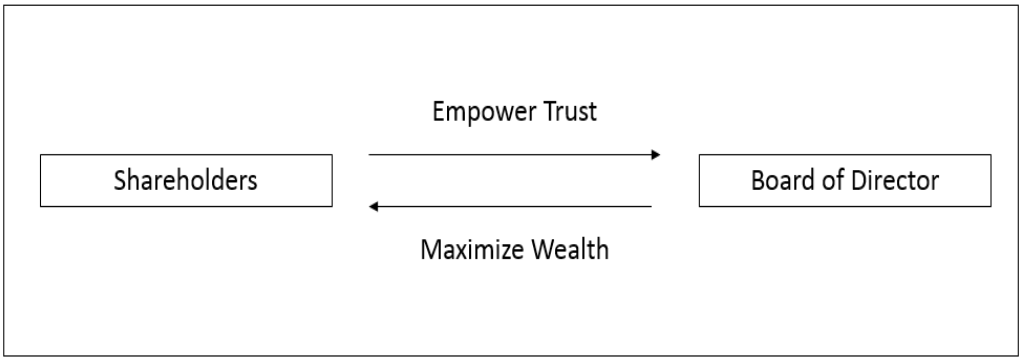
In order to reduce the agency problem, the CG mechanism such as board size and number of independent director are playing an important role (Choong et al., 2014). For instance, a research conducted by Chaudhary (2021) found that a company able to reduce the agency problem when the board size is larger, more expertise, experience, and knowledge. Moreover, because of independent directors are the directors who do not has any relationship with the company, therefore they can pay more attention on the interest of shareholder. Besides, agency theory also suggested that CEO duality should be minimized to prevent abuse of power and reduce the agency cost (Goergen et al., 2020). Interestingly, agency problem also can be reduced by appointment of audit committee as they act as a monitoring mechanism on the preparation of company's financial statement and shareholder (Islam et al., 2010). Moreover, agency theory also proposed that board diversity able to provide innovation idea or formulate strategic on solving the complex issues and problem effectively (Gallego-Álvarez et al., 2010).

In addition, there are several corporate governance mechanisms that able to place in an organization to reduce the agency problem. This including internal and external control mechanism. According to Farhat (2014) internal control mechanism, included implementation of monitoring services in a company and compensation contracts, yet external control mechanism known as the monitoring activities conducted by investors, legislators, and investment professionals. In short, the goals of corporate governance mechanism are to protect shareholder interest, reduce agency cost and make sure that the interest of principal and agent is align (Davis et al., 1997).

Based on the discussion above, this research has chosen board size, number of independent directors, CEO duality, audit committee size, and number of women directors as the independent variables to measure the firm financial performance.

2.3.2 Stewardship Theory

Figure 2. 2: Stewardship Theory



Donaldson, L., & Davis, J. H. (1989). CEO governance and shareholder returns: Agency theory or stewardship theory. Paper presented at the annual meeting of the Academy of Management, Washington, DC.

According to Subramanian (2018), Stewardship Theory introduced by Donaldson and Davis in 1989 which also known as an alternative theory to agency theory. In stewardship theory, the executive manager wanted to perform a good work and become a good steward of the company assets. Agency theory focusing on principal-agent relationship, while stewardship theory emphasis on principal-steward relation (Davis et al., 1997). However, stewardship also can referred to agent, who is the steward of the organization, and will act in the best interest of the organization and achieve the organization goal, instead of personal interest and goal. Davis et al., (1997) also stated that steward will pay more attention collective rather than personal's goal, since they believe that when they have fulfilled principal's goal then their personal goal also will be fulfilled. According to Davis et al. (2007), steward also behave in a community-focused manner, directing

trustworthy moral behaviour towards the company and the shareholders. In tern of CEO duality, stewardship theory also claimed that a clear leadership structure will be only occurred when there is a unity command of a company (Chen, 2014).

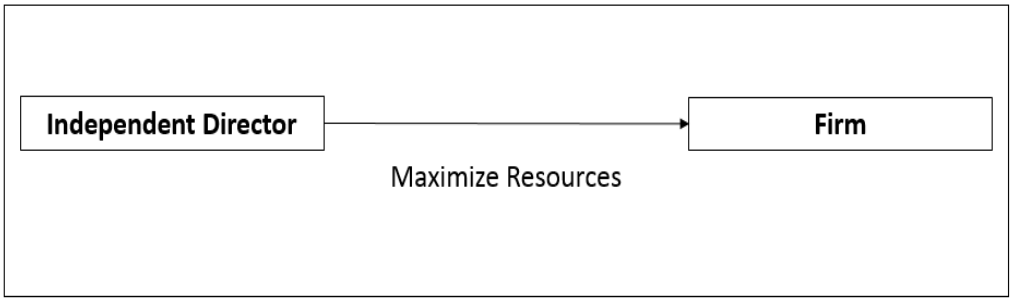
In addition, there will be a transaction cost in stewardship theory. Moreover, the transaction cost will be higher in the initial stage, yet it will be reduced over time to time (Van Slyke, 2007). The transaction cost known as the time and cost that principal need to invest such as the time in formulating problem, exchanging information, making joint decision and try to understand the need of stewards. Furthermore, the frequency of monitoring activities and rebidding contract of steward will be reduced as stewardship theory focused on collective objectives rather than personal objectives.

According to Davis et al., (1997), in order to choose the stewardship factors, psychological and situational factors must be taken into account. Psychological factors consist of the motivation of an individual that able to provide satisfaction for itself such as the intangible and higher order reward, while situational factors are concern with the culture surrounding an individual (Davis et al., 1997). On the other hand, stewardship theory also recommend that low power distance and collectivism cultures are the elements that influence the stewards' behaviour. In short, the company that adopts and influences the choice of stewardship behaviour able to maximize a company's performance (Madison, 2014).

In short, according to above discussion regarding to the stewardship theory, CEO duality has been included in this research as the determinant of firm financial performance.

2.3.3 Resource Dependency Theory

Figure 2. 3: Resource Dependency Theory



Source: Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.

According to Udayasanakar (2008), the view of resources dependence in corporate governance is originates from the logic that the element of corporate governance can be the important resources for a firm. Resource Dependency Theory (RDT) used to identity the influence of external environment on company behaviour, even though the external factors able to constraint the company, yet the top management could act to reduce the environment uncertainty and dependence (Hillman et al., 2009). According to Ulrich and Barney (1984), the concept of power is the central to these action, which known as the control over on the crucial resources. In addition, companies are only able to acquire these resources from own environment, however there will also be other companies that want to acquire the same resources. Furthermore, RDT stated that the accomplishment of a company relies on how the firm expands its effort to acquire the resources needed in order to operate smoothly (Pfeffer, 1972).

Resource Dependence Theory known as the distinct tool to examine boards. According to Hillman et al., (2009), RDT is a successful theory to better understand the boards. This is because the principal role of board is to provide access to resources for the companies, be it in positive or negative effect that able to assist maximizing the company performance (Dill, 1978). In short, the resources that provided by board including legitimacy, advice and counsel, platform to

communicate and access to the important resources and the commitments outside the company.

In addition, Resource Dependence Theory able to bring benefit to boards when there are higher number of independent directors. This is because independent director is more likely to affect the firm performance if there is a need for environmental change, since the directors are more likely to own the connection and knowledge with the external environment (Peng, 2004). Lastly, resource dependency theory also proposed that board with diverse gender would bring valuable resources to the company due to they are having different networks (Gallego-Álvarez et al., 2010).

Based on the discussion earlier, this research has included board size, audit committee size and number of women directors as the independent variable to determine the firm financial performance.

2.4 Review of Literature

2.4.1 Dependent Variables

2.4.1.1 Return on Equity (ROE)

Return on Equity is calculated by net income divided by total shareholder's equity. ROE is a frequent used tool to measure the company's capability to generate profit by using shareholder's equity (Rosikah et al., 2018). On the other hand, ROE also used to shows the investors that how much profit that the firm generate with using the money invested from investors (Masood & Ghodratollah, 2010). According to Johnson & Greening (1999), ROE was being recognized as one of the most reliable ratio in measure the company performance. When looking into this financial ratio, investor need to be aware that the disproportionate amount of debt in capital structure which would result in a smaller equity, which mean that how is the company finance their investment (Billah, 2019). Because of this, a company that generate low net profit can have a high ROE and this also indicate that the company facing higher insolvency risk due to the company using more debt to finance their businesses.

Company having a great value of ROE indicates a good amount of profitability with limited capital, whereas weak ROE shows that the company needs expert to advise in order to improve their level of equity. In short, a higher ROE also indicated that the company has higher return. In addition, there were several research were utilized ROE to examine the firm's performance (Kajola, 2008; Lee & Barnes, 2017; Mashayekhi & Bazaz, 2008). In the same time, a research conducted by Ng et al., (2016) found that board characteristic has a positive significant relationship with ROE, while CEO duality has a negative significant relationship with ROE.

Hence, this study measured the company financial performance (ROE) by using the five variables in relation with the corporate governance mechanism.

2.4.1.2 Return on Assets (ROA)

Return on Assets is a ratio calculated as net income divided by total asset. It's also known as a tool used to determine the ability of the company in generating profits by using the total asset of the company (Rosikah et al., 2018). A research conducted by Khatab et al., (2010), stated that ROA also defined as how profitable a firm is in term of its assets. In addition, ROA also shows the company earning that generated from its invested assets to the investors (Epps & Cereola, 2008). According to Masood and Ghodratollah (2010), managers are responsible for the operation of the business, therefore they need to utilize the firm's asset. Hence, investor able to use the indicator of ROA to assess how well the company's corporate governance mechanism is in securing and motivating the efficiency of the company.

In short, the higher the value of ROA, the greater the company in generating profit via using its asset. Higher ROA value also seem to be a positive indicator for investors to invest in the company. ROA increases when company able to increase their net profit with relatively low amount of total assets. There are several studies found adopted ROA as a firm performance measure and found that board characteristic have a positive significant influence toward ROA (Farhat, 2014; Khatab et al., 2010; Ng et al., 2016). But still, there are certain research found that corporate governance mechanism has no relationship with ROA (Achim et al., 2016; Thuraisingam, 2013). This might because of the investor that uses ROA to determine a company's performance are restricted in nature and causes the inconsistency of the result.

Therefore, the company financial performance in this study is measured by the corporate governance mechanism and how it affects the ROA and the five independent variables.

2.4.2 Independent Variables

2.4.2.1 Board Size

According to Larmou and Vafeas (2010) board size referred to the total number of board of director in the company. Eisenberg, Sundgren and Wells (1998) stated that board size and firm size are interrelated, at the same time board size has a significant impact toward firm performance. Therefore, the company should find out the process of developing the board member and board structure if the company is managed by the board of director. As mentioned earlier, board of directors plays a significant role in corporate governance of the company. Hence, the formation of the company's board should take into consideration of the balance of non-executive and executive directors. According to MCCG 2021, boardroom should be comprising of at least half of the independent directors. This is because a boardroom that comprising majority of independent directors will achieve effective monitor toward the management.

Board size known as one of the crucial factors to affect the effectiveness of governance practices. Empirical research found that there is a relationship between board size and firm performance. A research conducted by Larmou and Vafeas (2010) stated that the larger board size indicated that the boardroom possessed greater knowledge base, more expertise, and more capacity to monitor and share the workload of the board of director. This align with resource dependency theory, which larger board able to bring more opportunity to access to different resources (Kalsie & Shrivastav, 2016). Other than that, larger board size able to help the company to achieve more objective (Aggarwal et al., 2011). Furthermore, a company with larger board size also less likely to be interrupt or manipulate in relation to the decision making process by the CEO of the company (Perumal, 2019). Yet, this method may not apply to every company and industry due to the specific variable such as financial performances, practices, corporate governance standards are varying according to different nation.

On the another hand, a research conducted by Jensen (1993) found that larger boards size are less effective than smaller board. This is align with the agency theory, because it is difficult for a larger board to reach consensus and act in a short time due to the communication problem and coordination cost (Chaudhary, 2021). Moreover, the incentive and ability of the board to control the management reduce with a larger board size. This is because larger board size is encouraging free rider in the boardroom (Cheng et al., 2008). This research also stated that small board size help to mitigate the communication and coordination costs of board. In addition, the board also able to control the board easily. In addition, smaller boards can be reducing the agency cost and the free rider problem due to reaching consensus is easier and faster.

In conclusion, this research defined board size as the total number of board of directors held in the boardroom of the company.

2.4.2.2 Number of Independent Director

According to Rafel and Bartolomé (2013), independent director referred to those who do not have a business relationship with the company. Independent director also referred to a person who has no interest of conflict with management and can act independently in management (Goh et al., 2014). They also entrusted by shareholders and able to reduce the agency problem (Faatihah et al., 2016). Therefore, they are always expected to make a fair and independent judgement in shareholder's interest. According to Masulis and Mobbs (2013), independent directors are able to better monitor the company's management team. In addition, board's independence plays a significant role in corporate governance, since firm can make a unbiased decisions when the board is independent (M. Ali, 2016).

MCCG defined the public listed firm independent director strictly in year 2002 (Liew, 2007). According to MCCG (2021), practice 5.9, a large company must has

at least half of the board must be an independent director. Besides, MCCG 2021 also stated that the company should conduct the annual assessment on the board to measure the effectiveness of the board. At the same time, the tenure of the independent directors should not be exceed a term limit of 9 years unless it provided justification and seek the approval from the shareholder through a two-tier voting process (MCCG ,2021).

Independent director known as a source of expertise for family business (Gomez-mejia et al., 2011). Based on the research conducted by Schepker and Oh (2015), independent director that appointed by family business will provide their external knowledge, skill, and independent judgement to the company, hence it will enhance the effectiveness of internal governance. In agency theory perspective, independent director could reduce the conflict of interest and agency cost, this is because of they are the one who do not have any relationship with the company, therefore they can pay more attention on the interest of shareholder (Rashid, 2015). Moreover, independent directors are appointed perform the oversight role on executive directors and management performance (Perumal, 2019). Therefore, they must act independently in the presence, performance and decision they make.

Appointment of independent director should be improving the corporate governance practices and financial performance of the company. For instance, there are several researchers found that there is a positive significant relationship between number of independent director and firm financial performance (Müller, 2014). Yet, another research found that the number of independent director has a negative relationship with firm financial performance (Lew et al., 2018). Which indicates the higher number of independent directors, the lower the company financial performance. This is because the “insider” is the one who has the better understanding toward the company’s operation and business environment (Lew et al., 2018). Therefore, a strict assessment such as expertise, skill, knowledge, network, and qualification should be conduct before the appointment of the independent director.

In short, this research concluded that number of independent directors refers to the number of directors who do not have a business relationship with the company, has no interest of conflict with management and can act independently in the boardroom of the company.

2.4.2.3 CEO Duality

CEO Duality defined as a practice of an individual serving the role of Chief Executive Director and Chairman of the Board of Director at the same time (Georgeta, 2011). The role of CEO is to plan, implement, and monitor the strategic plans, while the chairman of a company is to monitor and evaluate the executive director, which including CEO (Weir & Laing, 2001). According to Palanissamy (2015), a company with CEO Duality does not required long time and process to make a decision. Furthermore, Palanissamy also stated CEO Duality is good for a company as a single leader can be create a clear direction. A research conducted by Farhat (2014) stated that, CEO Duality could be an added advantage to the firm as they would have sufficient knowledge and better understand of the firm's operation procedure and environment.

According to MCCG (2021), the position of CEO and Chairman should be held by different individuals. On the other hand. Kamarudin et al. (2012) argued that an individual holding the position of CEO and Chairman of BOD will have an excessive power to control the decision of BOD. Moreover, CEO Duality will result to biased decision to be made in a company and cause an individual monopolized the company (Ali, 2016). As the role of BOD is to monitor the performance of manager such as CEO on behalf of shareholders and BOD also decide the compensation package and fire or hire the CEO. In another word, CEO duality diminishing the role of BOD to monitor the executive director, and it will bring a negative impact toward the company's performance.

In contrast, the research conducted by Afzalur, Anura, Sudhir and Kathy (2010) found that there is a positive significant relationship between CEO Duality and firm performance. This indicates that if the position of CEO and Chairman are held by the same person, then the company performance will be higher. This might because of CEO duality would be results better communication and stability in the company between the boardroom and management (Perumal, 2019).

Agency theory also suggest that the separation of the control (CEO) and ownership (Chairman) able have a significant impact toward the independency of the board and its effectiveness. In another word, the position of Chairman and CEO should held by different individual to prevent the abuse of power and improve the performance of the company (Goergen et al., 2020). Whereas, in stewardship theory perspective, it has a positive view toward human and managerial behavior, and believe CEO duality will improve the company's performance (Chen, 2014). For instance, they have a positive view on unity of command which believe that it will benefit the shareholder and improve the shareholder's return, this might because of the person who holding these two positions will have the full power to make a decision in a short time to solve the problem immediately.

Based on the discussion above, this research concluded that CEO duality refers to a practice of an individual serving the role of Chief Executive Director and Chairman of the Board of Director at the same time in the boardroom of the company.

2.4.2.4 Audit Committee Size

Audit Committee known as a sub-committee of board of directors. ACS refers to the number of directors who held the position of board of audit (Ghabayen, 2012). According to Madawaki and Amran (2013), audit committees are the person who in charge of the management of the financial reporting of the company to evade any

possible irregularities appear in the financial statements of the company. An effective audit committee should monitor the financial reporting process and at the same time bringing in transparency, focus and independent judgement to the company (Securities Commission Malaysia, 2021).

The audit committee also plays a crucial role in a company's governance structure (Securities Commission Malaysia, 2021). This is because an independent audit committee will have a better performance in term of facing challenge and ask probing question, such as the question on risk management, internal control, financial reporting process and governance of the company (Securities Commission Malaysia, 2021). On the other hand, the quality of audit can be revealed by measuring the quality system that carried out by the internal and external audit to investigate or find out whether the company complies with the processes of the quality system (Perumal, 2019).

According to Miko and Kamardin (2015), agency theory reveals that, audit committee with quality able to reduce the agency cost that occurs between the agent and principle such as the different goals and objectives that two different parties would like to achieve. In addition, resource dependency theory also states that the bigger the audit committee, the better the performance is achieved (Al-Matari et al., 2014). Three audit committee members are the minimum recommended size in boardroom yet, most of the corporate governance practice states number of board member in between of three to six members are the ideal size, this is because they should be act independent to monitor the mechanism of control effectively and reduce the internal control risk (Crişan & Fülöp, 2014). On the other hand, Perumal (2019) argued that audit committee that completely independent from management is not recommended, this is because the discussion that held in the meeting would create an objective result. Next, Salloum, Azzi and Gebrayel (2014)also stated that the higher the number of audit committee size, the effective the company in the long run.

Other than that, research by Yasser, Entebang and Mansor (2011)found that there was a positive significant relationship between audit committee size with firm financial performance. Besides that, Ali and Nasir (2015) also found that the position of audit committee held by the majority of non-executive director has a positive significant relationship with firm performance (ROE & ROA). This might because of the more manpower given by audit committee, the more oversight or monitor has put into the audit process.

In short, this research concluded that audit committee size refers to the number of directors who held the position of board of audit in the boardroom of the company.

2.4.2.5 Number of Women Director

Number of women directors referred to the proportion of the director is held by women. In Malaysia, women account for nearly half of the population and workforce (Azmi & Barrett, 2014). Besides, more women in Malaysia are well educated and holding a bachelor of degree more than men yet, only small amount of them held as a corporate board in Malaysia, which only 6 out of 100 percent of the board position held by (Azmi & Barrett, 2014). Therefore, Malaysia government also pay great effort to encourage more women director on board (Victoria, 2017). For Instance, MCCG 2021 practice 5.9 stated a company should consist at least 30% of women director on board (Securities Commission Malaysia, 2021). Hence, gender diversity become a popular topic in corporate governance (Hafner, 2019).

According to Şener and Karaye (2014), the reason why we should include women into the board are due to they would increase the number of diverse idea in the boardroom, they also able to bring strategic input into the boardroom, they could also affect the decision making and leadership approaches of the company, at the same time enhance the reputation of the company by developing capabilities of women and show the availability of board of director for the women. Besides,

gender diversity in board also have potential to contribute to a better corporate governance practices, this is because women might bring more independent view and strengthen the monitor function in the company (Alliance, n.d.).

Based on the agency and resource dependency theory, gender diversity has a positive impact toward the board on the firm financial performance. In term of agency theory, it shows that diverse board with different skills, capabilities, experiences, and networks able to provide innovative ideas on complex issues and able to solve problem effectively and formulate strategic (Gallego-Álvarez et al., 2010). While in resource dependency perspective, it claims that board with diverse gender would indulge valuable and unique resources due to having different network (Gallego-Álvarez et al., 2010).

A research conducted by Ruigrok et al. (2006) found that women directors are better in sharing distinct value, norms, understanding others and having valuable knowledge and skill. Therefore, women directors are significantly better than male director at making decision (Bart & McQueen, 2013). According to APEC (2016), companies with women director outperform those with no women director. This studies also claim that women help business to solve problem more effectively and efficiency. Other than that, a greater women director on board bring greater level of public disclosure, which indicate that greater transparency and accountability of the company; and better monitoring or oversight of management reporting that enhance and improve earning quality (Sabatier, 2015).

In a nutshell, this research would conclude that number of women directors referred to the number of directors that held by women.

2.5 Hypothesis Development

2.5.1 Board Size

There are several research found that there is a significant relationship between board size and firm performance (Guo & Kga, 2012; Gurusamy, 2017; Kalsie & Shrivastav, 2016). For instance, Gurusamy (2017) there is a positive and significant relationship between board size and firm performance (ROE and ROA). This indicates that the larger the board size, the better the company's financial performance in term of return on equity and asset. Furthermore, based on the research conducted by Kalsie and Shrivastav, (2016), also found that board size has a significant and positive influence toward return on Equity.

In contrast, a research conducted by Cao, Yang and Liang (2021) found that there is a negative significant relationship between board size and company financial performance (ROA). This is because of smaller board size has included the relevant core competencies and entrepreneur skill that able to enhance the company financial performance (ROA) (Gambo et al., 2018). Yet, according to Bennedsen et al., (2008), board size has an insignificant relationship with firm performance when there were six and less than six member of board, while if there were more than six members on the board, there will be a negative relationship between board size and firm performance. There are several studies also found that board size does not has relationship with firm performance (Kılıç & Kuzey, 2016; Lin & Lee, 2008; Shao, 2019). The possible reason of board size has insignificant relationship with firm performance is because of the present boardroom unable to contribute to the firm performance (Alshetwi, 2017).

Based on the discussion above, the research found there are inconsistent finding in the relationship between board size and firm performance (ROE and ROA). Therefore, there is a need to further investigate the influences of board size toward firm financial performance (ROE and ROA). Hence the present study forms the following hypothesis:

H1a: Board size has a significant effect on firm financial performance (ROE)

H1b: Board size has a significant effect on firm financial performance (ROA)

2.5.2 Number of Independent Director

According to Ameer et al, (2014), company board composition populated by independent director has a positive influence toward firm performance. Other than that, there are several research also found that there is relationship between board independence and firm performance (Bebchuk & Weisbach, 2010; Chiang & Lin, 2011; Unda et al., 2019). Besides that, research conducted by Saat, Karbhari, Heravi, and Nassir (2011) also found that number of independent directors has a positive significant influences toward firm performance (ROE) and states that independent director not only able to solve agency problem but also able to think objectively as they are not holding any executive position in the company and could bring in the external expertise which able to improve the company's financial performance.

In contrast, a research conducted by Rashid (2018) found that board independence does not has a positive significant influence toward firm performance. This research also stated that insiders are the most effective director as they are better understanding on the firm's operation. Several research also concluded that there was no significant relationship between number of independent director and firm performance (Mcintyre et al., 2007; Mohd Nor et al., 2014; Ponnu & Karthigeyan, 2010).

Based on the discussed earlier, a different study has a different result on the influences of number of independent directors toward firm performance. Therefore, there is a need to further investigate the effect of number of independent directors

toward firm performance is seem necessary. Hence the present study forms the following hypothesis:

H2a: Number of independent directors has a significant effect on firm financial performance (ROE)

H2b: Number of independent directors has a significant effect on firm financial performance (ROA)

2.5.3 CEO Duality

A research conducted by Afzalur, Anura, Sudhir, and Kathy (2010) in Bangladesh concluded that CEO Duality has a positive significant influence toward firm performance (ROA). In addition, there are few studies also found that CEO Duality has a significant influence toward firm performance (Hussin & Othman, 2012; Naciti, 2019; Tang, 2017). This result indicates that if CEO duality exist in the company, then the company's financial performance is better. This is because when the position of CEO and chairman hold by an individual, it will facilitate a faster respond to the changes of external business environment as the decision by the company will be conformity, hence it resulted a higher firm financial performance (Rashid, 2010).

Conversely, a research conducted in Nigeria revealed that there is insignificant relationship between CEO Duality and firm performance (Okwara et al., 2019). Additionally, a research investigate on family business firm also argued that there is no relationship between CEO Duality and firm performance (Goh et al., 2014). On the other hand, a research also found CEO duality has a negative significant relationship with company performance (ROA) (Rashid, 2011). This is because if CEO duality exist in a company, abuse of power would be occurred and the director might be unable to handle the job responsibilities of both positions, hence it lead to the effectiveness and monitoring of the board and company reduce.

Based on the above discussion, in order to reconfirm on the influences of CEO Duality towards the family-controlled firm's performance (ROA & ROE) in Malaysia. Therefore, there is a need to further investigate the effect of CEO Duality towards firm performance is seem necessary. Hence the present study forms the following hypothesis:

H3a: CEO Duality has a significant effect on firm financial performance (ROE)

H3b: CEO Duality has a significant effect on firm financial performance (ROA)

2.5.4 Audit Committee Size

Previous studies found there is a positive significant relationship between audit committee size and firm financial performance (Chou & Buchdadi, 2017; Mohammed, 2018; Yasser et al., 2011). A research conducted by Alqatamin (2018), found that there is a positive significant relationship between audit committee size and company financial performance, this is because larger audit committee size owns more resources to solve the issue faced by the company.

In contrast, according to Gurusamy (2017), in order to prevent the dispersion of responsibility, the number of audit committee is not encourage to be too high. Besides, Ofoeda, Commey, Osabutey and Afoley (2020)also found that audit committee size has the negative significant relationship with company financial performance. This indicates that the increase of audit committee size, the poorer the company financial performance. This is due to the problem of free riders prone to follow board's opinion without any independent judgement. However, another research found that audit committee size has no significant relationship with company's financial performance, this is because mere size of audit committee may

not to be enough to determine the company's financial performance (Aanu et al., 2014).

Based on the above discussion, the research found there are inconsistent finding in the relationship between audit committee size and firm financial performance. Therefore, there is a need to further investigate the effect of audit committee size towards firm financial performance is seem necessary. Hence the present study forms the following hypothesis:

H4a: Audit Committee Size has a significant effect on firm financial performance (ROE).

H4b: Audit Committee Size has a significant effect on firm financial performance (ROA).

2.5.5 Number of Women Director

According to Conyon and He (2017), women director on board led better performance of a firm. This statement also supported by the research conducted by Erhardt et al. (2003) and shows that gender diversity has a significant influence toward firm performance. Furthermore, a research conducted by Julizaerma & Sori (2012) also shows that there was a significant positive relationship between gender diversity on board and firm performance (ROA). This indicates that the higher the number of women directors in a boardroom, the greater the performance of the company's financial performance. Moreover, Rodríguez-Domínguez, Gallego-Alvarez and Sanchez (2012) research also found that number of women directors has a positive significant impact toward firm financial performance (ROE & ROA). This is because gender diversity can bring along new perspective in term of the decision-making process, knowledge base and innovation to the boardroom. In short, the more diverse the boardroom is, the better decision making and problem solving by the boardroom (Rodríguez-Domínguez et al., 2012).

In contrast, a research conducted by Christopher (2016) founds that there was a no relationship between number of women director on board and firm performance. Besides that, Farrell & Hersch (2005) claimed that number of women director and firm performance has no relationship when there are more women director on the board. In addition, the research conducted by Satria, Mahadwartha and Ernawati (2018), also found that number of women directors has no significant relationship with company financial performance (ROA & ROE) They also claimed that it is because of the presence of women in the boardroom still very few and unable to play its role in influence the decisions which have impact on the company's financial performance (Satria et al., 2018).

Based on the discussed earlier, the research found there are inconsistent finding in the relationship between number of women director and firm performance (ROE & ROA). Therefore, there is a need to further investigate the effect of number of women directors on board towards the firm financial performance is seem necessary. Hence the present study forms the following hypothesis:

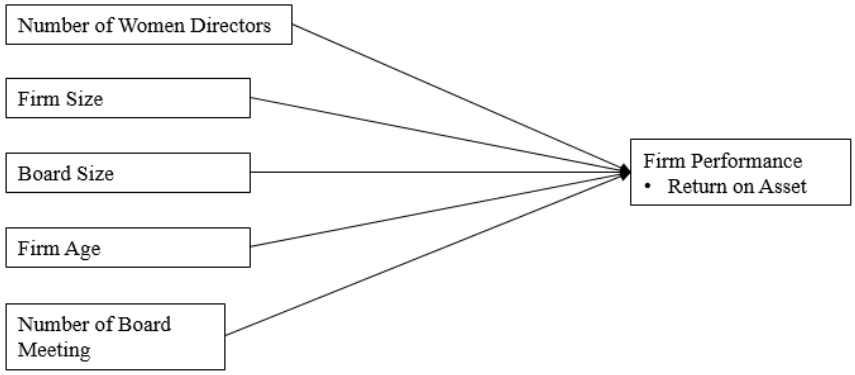
H5a: Number of women directors has a significant effect on firm financial performance (ROE)

H5b: Number of women directors has a significant effect on firm financial performance (ROA)

2.6 Review of Relevant Theoretical Models

2.6.1 Model 1

Figure 2. 4: Model of Gender Diversity in the Boardroom and Firm Performance of Malaysian Public Listed Companies.



Source: Julizaerma, M. K., & Sori, Z. M. (2012). Gender diversity in the boardroom and firm performance of Malaysian public listed companies. Procedia-Social and Behavioral Sciences, 65, 1077-1085.

The objective of research conducted by Julizaerma and Sori (2012) is to investigate the relationship between gender diversity in board and Malaysia Pubic-Listed companies, as well as address the gap as compared with past research.

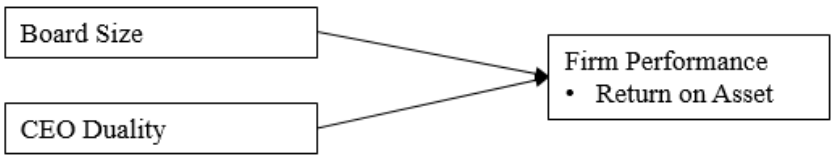
This research found that gender diversity in board has a positive significant relationship with firm performance (Return on asset). In another word, more female director in a boardroom will improve the performance of the company. Besides, this research also found that larger firm size will have a better performance than small firm in term of profitability. Interestingly, several researchers found that board size has a positive significant relationship with firm performance, yet the result in this research shows that board size does not has a significant relationship with firm performance. In addition, the result in this research also shows that firm age and number of board meeting has a negative relationship with form performance. This result may suggest that young firms having better performance than older firms

(Julizaerma & Sori, 2012). Furthermore, in their study number of women directors with others variable i.e., board size, firm size, firm age, and number of board meeting has a higher prediction power up to 51%.

As nowadays gender diversity has become a popular topic in the corporate world and Malaysia also encourage gender diversity in Public Listed Companies. Therefore, number of women directors has become one of the independent variables in this research to examine the effect towards the firm financial performance (Return on Asset & Return on Equity).

2.6.2 Model 2

Figure 2. 5: The Model of The Relationship Between Board Size and CEO Duality and Firm Performance: Evidence from Jordan



Source: Almontaser, A. M. Q., & Faudziah, H. B. F. (2018). The Relationship Between Board Size and CEO Duality and Firm Performance: Evidence from Jordan. International Journal of Accounting, Finance and Risk Management, 3(3), 16.

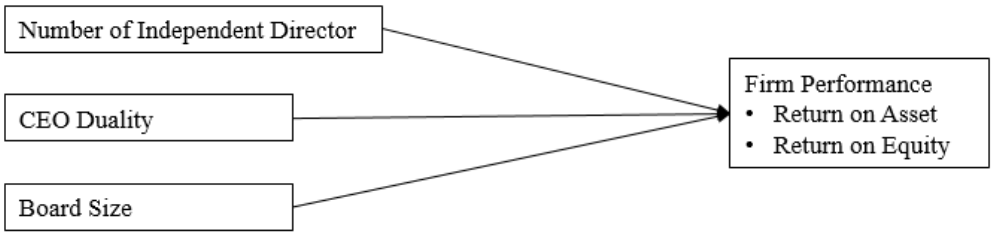
The research conducted by Almontaser and Faudziah (2018) used to examine the relationship between board characteristics (Board Size & CEO Duality) and firm performance. The target respondent of this research is the Amman Stock Exchange listed industrial firms which consists of 10 sub-sector and 64 firm.

This research found that board size has a positive significant relationship towards firm performance. In another word, larger board size indicates better performance of a company. This is because there are more board to monitor the firm performance and enhance the shareholder value (Almontaser & Faudziah, 2018). Other than that, this research also found that CEO Duality has a negatively significant relationship with firm performance. This result indicates that with CEO Duality will makes a company has a poorer performance. This is because when an individual holding two important position at the same time, he or she will be more likely to make a decision based on his or her own interest instead of the interest of the company or the shareholder (Almontaser & Faudziah, 2018). Moreover, the R Square is this study only shows that 6.4% strength of relationship between board size, CEO Duality and return on asset. Therefor it seems necessary to include the variable such as number of women boards, and number of independent directors in this research to examine the factor that might influence firm performance.

Based on the in underlying theory and discussion above, board size and CEO Duality seem to be an independent variable to affect the firm performance. Therefore, this research will be included board size and CEO duality as the independent variable to affect the firm financial performance.

2.6.3 Model 3

Figure 2. 6: Model of the effect of corporate governance on performance of commercial banks in Kenya: a panel study



Source: Nyamongo, E. M., & Temesgen, K. (2013). The effect of governance on performance of commercial banks in Kenya: A panel study. *Corporate Governance (Bingley)*, *13*(3)

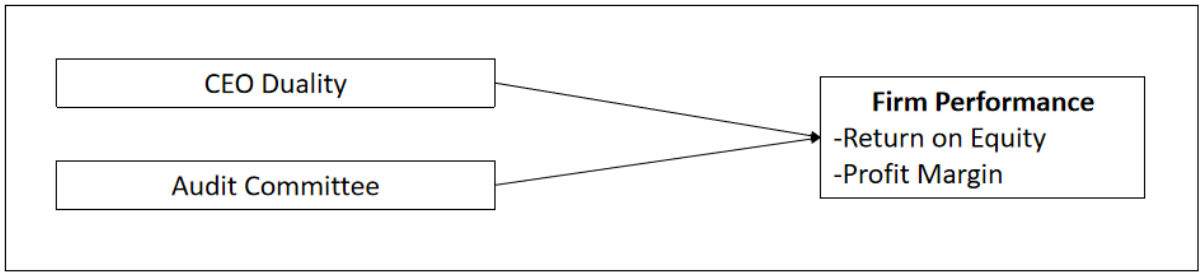
This research model used to investigate the effect of corporate governance on the Kenya commercial bank performance. There are 37 number of commercial banks in Kenya were surveyed over the period of 2005-2009. Besides the models used in this research shows 73% strength of the relationship between number of independent directors, CEO Duality, board size, and firm performance (Return on Asset & Return on Equity)

Nyamongo and Temesgen (2013) found that board size has a negatively significant relationship with firm performance. This indicate that the larger the board size, the lower the firm performance. This is because of the decision making in a larger board tend to be slow as it is difficult to reach consensus (Jensen, 1993). Interestingly, result shows in this research found that there is no evidence shows that CEO Duality has a significant relationship towards firm performance. Besides, result shows in this research stated that there is a positive significant relationship between number of independent directors and firm performance. This indicates that the greater the number of independent directors, the greater the commercial bank performance.

Based on the discussion above and underlying theory, this research will be including number of independent directors as the independent variable in order to re-examine the relationship between numbers of independent directors in family-controlled companies in Bursa Malaysia and their performance.

2.6.4 Model 4

Figure 2. 7: Model of the impact of CEO Duality and Audit Committee on Firm Performance: A Study of Oil & Gas Listed Firms of Pakistan



Source: Arslan, M., Zaman, R., Malik, R. K., & Mehmood, A. (2014). Impact of CEO Duality and Audit Committee on Firm Performance: A Study of Oil & Gas Listed Firms of Pakistan.

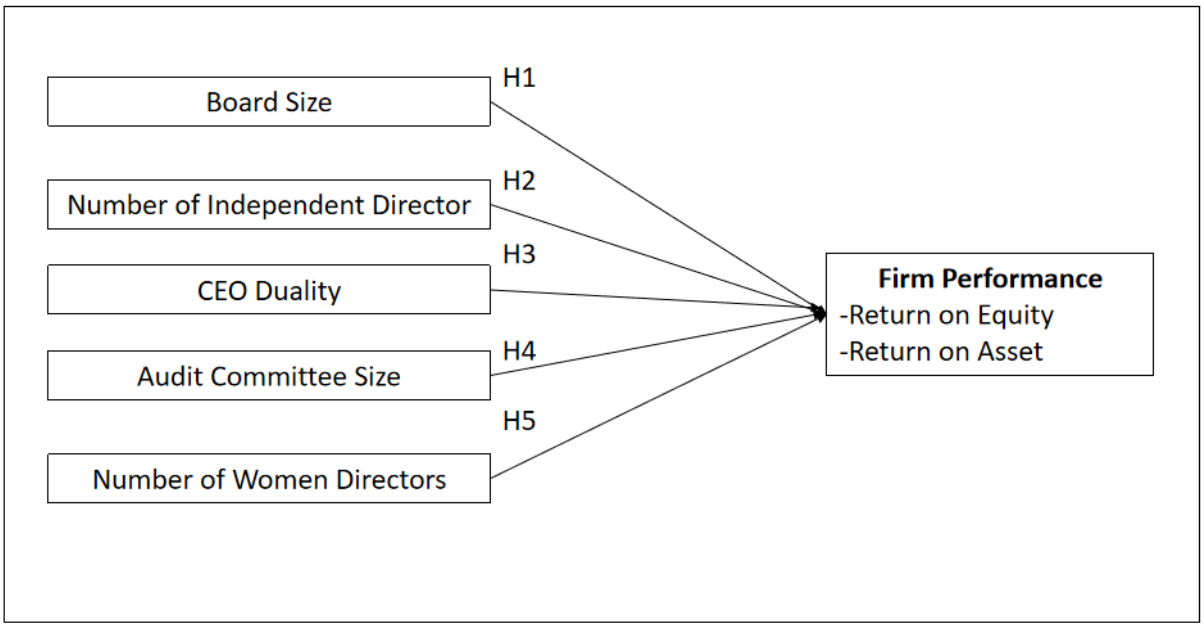
This research model study on the relationship between the corporate governance practices and firm performance on oil and gas listed companies in Pakistan.

Arslan, Zaman, Malik and Mehmood (2014) found that the CEO duality has a significant but weak relationship with return on equity, whereas audit committee size has a strong significant relationship with return on equity. This indicates that the oil and gas company with higher number of audit committee and CEO duality exist in their company, then the company's performance is higher. This is because the majority of audit committee is held by non-executive director, which mean that they are able to make decision independently. Yet, this research did not have much explanation toward why CEO duality has a weak relationship with return on equity. CEO duality has a weak relationship with firm financial performance might because of the financial ratio do not capture the leadership and board roles in creating a company's value (Yasser et al., 2014).

Hence, this research will be also including audit committee size as one of the independent variables as a determinant of the family-controlled companies' financial performance in Bursa Malaysia.

2.7 Proposed Conceptual Framework

Figure 2. 8: Research Proposed Conceptual Framework



Source: developed for the research

Based on the finding and discussion on the literature review above, a research framework was developed as above to investigate the relationship between the independent variables and dependent variables. The independent variables were the CG mechanism of board size, number of independent directors, CEO duality, audit committee size and number of women directors. While the dependent variables known as firm performance in term of return on equity and return on asset. The framework above is used to determine if CG mechanism has effect on the firm performance among family-controlled companies listed on Bursa Malaysia

Chapter 3: Methodology

3.0 Introduction

Chapter 3 outlines the research technique used in this study. Research design, data collection method, sampling design, research instruments, data processing and data analysis will be discussed. At the end of chapter, construct measurement and technique used to examine the collected data were defined.

3.1 Research Design

Research design known as the structure of the research (Akhtar, 2016), which summarizes all the procedures, method to conduct a research, and data collection (Norhidayah, 2014). It's also a plan that stated the methods and procedures for collecting, analysing and generating empirical evidence to answer the research question.

The objective of this research was to investigate if corporate governance mechanism has any effect on firm financial performance among family-controlled companies in Bursa Malaysia from year 2016 – 2020. Thus, this research was conducted using quantitative research method to generate the statistical result from the data collected (Apuke, 2017). This method enabled researchers to identify the relationships between independent variables and dependent variables. All the data involved in this study was obtained from annual reports of the respective companies and Bloomberg.

To run the panel data analysis, five years period of full and complete data was required. Therefore, for some companies with missing data, they were replaced with "0". Moreover, cross-sectional analysis was used to investigate the effect between IVs and DVs for the five years period.

3.2 Data Collection Method

3.2.1 Secondary Data

According to Ajayi (2017), secondary data are the data which have already been collected by other researchers. Researchers able to collect the data at e-books, published articles, journals, thesis reports, websites and etc. In this research, secondary data specifically data from annual reports were used. The annual reports of family-controlled companies in Bursa Malaysia from year 2016 – 2020 were downloaded from the official website of the companies. In addition, the data derived from annual reports and Bloomberg were used to calculate ROA and ROE, as well as used to examine the relationship between IVs and DVs.

3.3 Sampling Design

3.3.1 Target Population

The objective of this research is to determine the influences of corporate governance of boardroom towards firm performance among family-controlled listed companies on Bursa Malaysia. Therefore, the target population of this research was being drawn from all the family-controlled companies that are listed in Bursa Malaysia where the annual reports and financial data was accessible. In short, there are total 43 number of target population of this study, which known as the listed family-controlled companies in Bursa Malaysia.

3.3.2 Sampling Frame

Sampling frame defined as the list of sampled in the target population in the survey (Turner, 2003). The complete list of family-controlled companies listed on Bursa Malaysia was obtained from the book "Family Controlled Companies in Bursa Malaysia" by Tan (2016). Besides, this book covers the company under the consumer and industrial product, trading and services, finance, technology, properties, hotel, infrastructure, and plantation and mining sectors.

3.3.3 Sampling Element

In this research, not every family-controlled company that included in the book of "Family Controlled Companies in Bursa Malaysia" by Tan (2016) were used. Some of the family-controlled companies were excluded due to the limited and insufficient information available. Besides, the book published by Tan (2016) also stated that there are three criteria used by them to define what is a family-controlled companies. First, the family members own more than 10% of the company shares. Next, the family members held a position on the board of the company. Lastly, the family members held the principal position such as Executive Chairman, Managing Director, Chief Executive Office, or Executive Director in the company.

3.3.4 Sampling Technique

Sampling Technique known as the technique to collect the data from target population in a research. This research used non-probability sampling method to gather the sample based on the accessibility or by the purposive personal judgement from the researcher. In addition, convenience sampling techniques were used whereby the samples chosen due to they are more accessible for the research

(Showkat & Parveen, 2017). In short, all the family-controlled companies listed in the book of "Family Controlled Companies in Bursa Malaysia" by Tan (2016) with sufficient information will be selected to run an analysis in this research.

3.3.5 Sampling Size

The sample size is known as the total amount of respondents in research. The sample size is vital to ensure that estimates for the result are obtained is with required precision (Vishwakarma et al., 2017). Sekaran (2003) has cited on Roscoe (1975), the ideal range of sample size is between 30 to 500. Panel data analysis was used in this research based on the cross-sectional data and resulted 215 firms for the year observation. Other than that, in term for Multiple Linear Regression analysis, the sample size included in the research was 43 family-controlled companies.

Table 3. 1: Number of Firms in Yearly Observations for 6 Years Period

Firm Yearly Observations	**Number of Firms**
2016 - 2020	215

Source: developed for the research

Table 3. 2: Sample Size for 6 Years Period

Year	**2016**	**2017**	**2018**	**2019**	**2020**
Sample Size	43	43	43	43	43

Source: developed for the research

3.4 Research Instruments

To run the analysis to measure the relationship between IVs and DVs, the data was extracted from financial statements and annual reports from year 2016 – 2020. In order to gather all the figures and data for IVs and DVs, all annual reports were downloaded. In addition, all variables were transferred into Eviews version 10 to run panel data analysis.

3.5 Constructs Measurement

3.5.1 Origin of Construct

There was 2 DVs (Return on Asset & Return on Equity) and 4 IVs (Board Size, CEO Duality, Number of Independent Director, Number of Women Director) in this research. Besides, Table 3.3 shown the IVs, IV's formula, and the sources of the formula, while Table 3.4 shown the DVs, DV's formula, and the sources of the formula.

As CEO Duality known as the dummy variable, therefore if one individual held both position of CEO and Chairman, it would be coded as "1", while if the position of CEO and Chairman held by the different individual, then it will be coded as "0".

Table 3. 3: Table of Independent Variables

IVs	Formulas	Sources
Board Size	Total number of directors	(Hussin & Othman, 2012)
Number of Independent Director	Number of independent directors	(Goh et al., 2014)

CEO Duality	1 = CEO Duality 0 = No CEO Duality	(M. Ali, 2016)
Number of Women Director	Number of women directors	(Rose, 2007)
Audit Committee Size	Number of audit committees	(Gurusamy, 2017)

Source: developed for the research

Table 3. 4: Table of Dependent Variable

IVs	Formulas	Sources
Return on Equity	$\frac{\text{Net Income}}{\text{Total Equity}}$	(Kajola, 2008)
Return on Asset	$\frac{\text{Net Income}}{\text{Total Asset}}$	(Farhat, 2014)

Source: developed for the research

3.5.2 Scale Measurement

There are four levels of scale of measurement are nominal scale, ordinal scale, interval scale, and ratio scale. Dummy scale (CEO Duality), ratio scale (Board size, Number of Women Director, Number of Independent Director, Audit Committee Size), and interval scale (Return of Asset and Return of Equity) were included in this research.

3.6 Data Processing

The first step of data processing was to select the IVs and DVs that were related with this research based on the past studies. Besides, some formulas were identified in order to obtain the data.

Other than that, related data were collected from the secondary sources such as annual reports, financial statements, and Bloomberg. Next, data were gathered and entered into different files. In addition, the complete set of data was combined into one Excel file.

In order to generate the result, fourth step known as transfer the data into SPSS version 23.0 and EViews version 11. Lastly, the result generated from SPSS version 23.0 and EViews version 11 were analysed and interpreted.

3.7 Data Analysis

3.7.1 Descriptive Analysis

Descriptive analysis known as a step to transform the raw data into a formed that is unambiguous and easier for interpret. Descriptive analysis was used in this research to shows the minimum, maximum, means, and standard deviations for IVs and DVs in a form of table. In addition, the number and percentage of companies with CEO Duality was shown in a frequency table.

3.7.2 Inferential Analysis

3.7.2.3 Panel Data Analysis

Panel regression techniques were way more superior than classical regression techniques as they included both the time dimension and cross-sectional dimension (Yilmaz & Buyuklu, 2016). Other than that, panel regression model was preferred to show the relationship between IVs and DVs, as the data in this research comprised of both cross-sectional dimension and time dimension.

Panel data regression model was made up of Fixed Effects Model (FEM), Random Effect Model (REM), and Pooled Ordinary Least Square (OLS). Yet, only Fixed Effects Model and Random Effect Model were used in this research. Fixed Effects Model used to examine an individual's characteristic for each perception in the sample based on the intercept term, but Random Effect Model was based on the random error term. The major difference between REM and FEM was REM will capture the distinct characteristics of the observations at different times, but FEM ignored the time effect.

Therefore, in order to decide on which model to be used, Hausman test must be conducted. According to Studentmund (2016),when the probability value (P-Value) shows in Hausman test was greater than 0.05, the REM was used unless Hausman test rejects the null hypothesis.

The equation for panel analysis was:

$$y_{it} = \beta_1 x_{it1} + \beta_2 x_{it2} + \ldots + \beta_k x_{itk} + \varepsilon_{it}$$

Below were the equations of panel analysis for each DVs:

1. $ROA_{it} = \beta 0 + \beta 1\ BS_{it} + \beta 2\ NOID_{it} + \beta 3\ CEOD_{it} + \beta 4\ NOWD_{it} + \varepsilon_{it}$

2. $ROE_{it} = \beta 0 + \beta 1\ BS_{it} + \beta 2\ NOID_{it} + \beta 3\ CEOD_{it} + \beta 4\ NOWD_{it} + \varepsilon_{it}$

Chapter 4: Data Analysis

4.0 Introduction

Chapter 4 will be discussed in the data analysis result. Statistical Package for Society Science (SPSS) Version 23.0 was used run the descriptive analysis. Besides, Eview Version 10 was also used to run the panel data analysis.

4.1 Descriptive Analysis

4.1.1 Dependent Variables

Firms' financial performance being measured by ROA and ROE in this research. ROA was calculated by net income over total assets, whereas ROE was calculated by net income over total equity,

Table 4. 1: Descriptive Statistics for ROA and ROE

Year	Sample	ROA		ROE	
		Mean	Standard Deviation	Mean	Standard Deviation
2016	43	3.8300	7.26018	7.1383	13.61429
2017	43	5.0650	3.37119	9.9086	6.25319

2018	43	3.8289	6.16645	6.9554	13.21891
2019	43	3.1236	4.20223	6.1073	7.34735
2020	43	2.8522	8.04198	4.3448	14.95364
Avg	43	3.7400	5.8084	6.8909	11.0775

ROA = Return on Asset

ROE = Return on Equity

Avg: Average

Source: Developed for the research

According to the table 4.1, from year 2016 to 2020, the mean of ROA was 3.8300, 5.0650, 3.8289, 3.1236 and 2.8522 respectively, where the standard deviation was 7.26018, 3.37119, 6.16645, 4.20223 and 8.04198 respectively. On the other hand, the mean of ROE was 7.1383, 9.9086, 6.9554, 6.1073, and 4.3448 respectively, at the same time the standard deviation was 13.61429, 6.25319, 13.21891, 7.34735 and 14.95364 respectively.

4.1.2 Independent Variables

Table 4. 2: Descriptive Statistic for CEOD

Year	Sample	CEOD	
		Yes (%)	No (%)
2016	43	4 (9.3%)	39 (90.7%)
2017	43	4 (9.3%)	39 (90.7%)

2018	43	4 (9.3%)	39 (90.7%)
2019	43	4 (9.3%)	39 (90.7%)
2020	43	4 (9.3%)	39 (90.7%)
Avg	43	4 (9.3%)	39 (90.7%)

CEOD = CEO Duality

Avg: Average

Source: Developed for the research

Table 4.2 illustrates the descriptive statistic on CEO Duality. CEO Duality known as the dummy variable in this research. From year 2016 to 2020, there are 4 out of 43 number of family-controlled companies in Malaysia that practiced CEO Duality in each year.

Table 4. 3: Descriptive Statistic for BS, NOID, NOWD and ACS

Year	Sample	BS		NOID		NOWD		ACS	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
2016	43	8.5581	1.90616	3.7907	1.01320	1.1163	1.09565	3.3721	0.57831
2017	43	8.7442	1.87836	4.0000	1.06904	1.3953	1.09413	3.5116	0.66805
2018	43	8.7442	2.15023	4.0698	1.20308	1.5814	1.17984	3.4419	0.62877
2019	43	8.5814	2.20640	4.0000	1.15470	1.8140	1.21999	3.3953	0.62257
2020	43	8.9302	2.33397	4.3023	1.47252	1.9070	1.21133	3.5581	0.82527
Avg	43	8.7116	2.09502	4.0326	1.18251	1.5628	1.16019	3.4558	0.66460

BS = Board Size

NOID = Number of Independent Director

NOWD = Number of Women Director

ACS = Audit Committee Size

Avg: Average

S.D.: Standard Deviation

Source: Developed for the research

Based on Table 4.3, from year 2016 - 2020, the average mean for BS was 8.7116, where the lowest S.D. was 1.87836 in year of 2017 and the highest S.D. was 2.33397 in year of 2020. On the other hand, the average mean for NOID was 4.0326, while the lowest S.D. was 1.01320 in year of 2016 and the highest S.S was 1.47252 in year of 2020. Besides, the average mean for NOWD was 1.16019, while the lowest S.D. was 1.09413 in year of 2017 and highest S.D. was 1.21999 in year of 2019. For ACS, it had an average mean of 3.4558 among five years, where it had a lowest S.D in year 2016, which was 0.57931 and highest in 2020, which was 0.82527.

4.2 Panel Data Analysis

4.2.1 Return on Asset

4.2.1.1 Random Effect Model of Return on Asset

Table 4. 4: Random Effect Model of Return on Asset

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 02/17/22 Time: 20:37
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	0.334233	0.699787	0.477621	0.6334
BS	0.782658	0.353362	2.214887	0.0278
CEOD	-1.870630	1.946440	-0.961052	0.3376
NOID	-0.279762	0.566098	-0.494194	0.6217
NOWD	-0.675326	0.470015	-1.436818	0.1523
C	-1.875751	2.734546	-0.685946	0.4935

Effects Specification

	S.D.	Rho
Cross-section random	4.320112	0.5109
Idiosyncratic random	4.226834	0.4891

Weighted Statistics

R-squared	0.034424	Mean dependent var	1.499213
Adjusted R-squared	0.011324	S.D. dependent var	4.238764
S.E. of regression	4.214695	Sum squared resid	3712.604
F-statistic	1.490229	Durbin-Watson stat	1.624400
Prob(F-statistic)	0.194301		

Unweighted Statistics

R-squared	0.061000	Mean dependent var	3.739961
Sum squared resid	7392.349	Durbin-Watson stat	0.815810

Based on Table 4.4, the equation for panel data were formed as:

ROA = -1.8757 + 0.3342 ACS + 0.7826 BS - 1.8706 CEOD - 0.2797 NOID - 0.6753 NOWD + 2.734546 ε

According to the equation formed for panel data, it showed that ACS and BS have a positive effect toward ROA, whereas CEOD, NOID and NOWD have a negative effect on ROA.

The Random Effect Analysis was used for ROA based on five years period in this research. Based on the Table 4.4, the P-value for BS was 0.0278, it showed that BS had a significant effect toward ROA as its P-value was lesser than 0.05 and 0.10. On the other hand, ACS (0.6334), CEOD (0.3376), NOID (0.6217), and NOWD (0.1523) had P-value that more than 0.05 and 0.10. Therefore, this indicate that they did not show any significant effect toward ROA. In addition, R-squared at the table known as 0.0344, this showed 3.44% of the variation in ROA can be explained by the variation in the five independent variables. Besides, the adjusted R-square was 0.0113 and F-statistic was 1.4902.

4.2.1.2 Hausman Test for Return on Asset

Table 4. 5: Hausman Test for Return on Asset

Correlated Random Effects - Hausman Test
Equation: RANDOMEFFECTROA
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.801273	5	0.5784

Hausman Test was used to decide on which regression would be the most suitable among the Fixed Effect Model and Random Effect Model. Hence, according to the Hausman Test showed above, the following hypothesis was formed:

H0: Random Effect Model is the most suitable model
H1: Fixed Effect Model is the most suitable model

Based on the result shows at Table 4.5, the P-value was 0.5784, which was higher than 0.05. Hence, H1 was rejected. In conclusion, Random Effect Model is the most suitable model.

4.2.2 Return on Equity

4.2.2.1 Random Effect Model of Return on Equity

Table 4. 6: Random Effect Model of Return on Equity

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 02/17/22 Time: 20:42
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	0.404289	1.378850	0.293207	0.7697
BS	1.560516	0.677180	2.304433	0.0222
CEOD	-4.996209	3.724362	-1.341494	0.1812
NOID	-0.636383	1.090712	-0.583456	0.5602
NOWD	-1.342170	0.913331	-1.469532	0.1432
C	-2.972384	5.317533	-0.558978	0.5768

Effects Specification		
	S.D.	Rho
Cross-section random	7.765435	0.4543
Idiosyncratic random	8.511614	0.5457

Weighted Statistics			
R-squared	0.036855	Mean dependent var	3.033010
Adjusted R-squared	0.013814	S.D. dependent var	8.575504
S.E. of regression	8.516069	Sum squared resid	15157.40
F-statistic	1.599504	Durbin-Watson stat	1.725944
Prob(F-statistic)	0.161590		

Unweighted Statistics			
R-squared	0.064210	Mean dependent var	6.890854
Sum squared resid	27254.47	Durbin-Watson stat	0.959872

Based on Table 4.6, the equation for panel data were formed as:

ROE = -2.9724 + 0.4042 ACS + 1.5605 BS - 4.9962 CEOD - 0.6364 NOID - 1.3422 NOWD + 5.3175 ε

According to the equation formed for panel data, it showed ACS and BS have a positive impact toward ROE, yet CEOD, NOID and NOWD have a negative impact toward ROE.

The Random Effect Analysis was used for ROE based on five years period in this research. Based on the Table 4.6, the P-value for BS was 0.0222, it showed that BS had a significant effect toward ROE because its P-value was lesser than 0.05 and 0.10. In contrast, ACS (0.7697), CEOD (0.1812), NOID (0.5602), and NOWD (0.1432) had P-value that more than 0.05 and 0.10. Therefore, this indicate that they have an insignificant effect toward ROE. In addition, R-squared at the table known as 0.0344, this showed 6.42% of the variation in ROE can be explained by the variation in the five independent variables. Besides, the adjusted R-square was 0.0138 and F-statistic was 1.5995.

4.2.2.2 Hausman Test for Return on Equity

Table 4. 7: Hausman Test for ROE

Correlated Random Effects - Hausman Test
Equation: RANDOMEFFECTROE
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.218802	5	0.3898

Hausman Test was used to decide on which regression would be the most suitable among the Fixed Effect Model and Random Effect Model. Hence, according to the Hausman Test showed above, the following hypothesis was formed:

H0: Random Effect Model is the most suitable model
H1: Fixed Effect Model is the most suitable model

Based on the result shows at Table 4.7, the P-value was 0.3898, which was higher than 0.05. Hence, H1 was rejected. In conclusion, Random Effect Model is the most suitable model.

Chapter 5: Discussion and Conclusion

5.0 Introduction

Chapter 5 comprised of the statistical analysis and discussion of findings according to the results showed in Chapter 4. In addition, limitations of the research, recommendations for future research and conclusion were included in this Chapter as well.

5.1 Statistical Analysis

5.1.1 Descriptive Statistics of Dependent Variables

ROA and ROE are the dependent variables, its used to measure the company financial performance in this research. According to Table 4.1 in Chapter 4, the mean of ROA increased 32.25% from the year 2016 to year 2017. In year 2018, the mean of ROA drops significant and remain decline in year 2019 and year 2018. At the same time, the mean of ROE grows 38.81% from year 2016 to year 2017 and fall steadily from year 2017 to year 2020.

5.1.2 Descriptive Statistics of Independent Variables

According to Table 4.2, the descriptive statistic of CEO Duality shows that there has been a consistent result in the family-controlled companies from year 2016 to year 2020. At this period, only 9.3% of the company practiced CEO Duality.

Meanwhile, 90.7% of the company do not practice CEO Duality, this shows that, 90.7% of the company implemented MCCG code 2012 2017 and 2021, which the positions of Board's Chairman and Chief Executive Officer are held by different individuals.

Besides, the mean value shows in descriptive analysis for board size in the family-controlled company are fluctuated. In year 2016, the mean value was 8.5581 and increase to 8.7442 in year 2017 and 2018. Yet, it declines to 8.5814 in year 2019 and increase to 8.9302 in year 2020. Teh, Shabnam and Tze (2012) cited at the research conducted by Lipton and Lorcsh (1992) stated that the ideal size of board of director is 8 to 10.

In addition, the descriptive analysis on the number of independent directors shows that there has been an increase in the mean of number of independent directors steadily from year 2016 to year 2020. According to MCCG 2017, the boardroom should at least comprise 50% of independent director, whereas the boardroom should comprise a majority of the independent director for large companies. Hence, the result at Table 4.3 shows there are more companies practising the MCCG code 2017.

Next, the mean of the number of women directors rises steadily from year 2016 to year 2020. Based on MCCG 2012 and MCCG 2017, it recommends the boardroom should comprises at least 30% of women directors. Hence, this indicates this code was practice crucially by the family-controlled companies. For example, the mean of number of women rises from 1.1163 at year 2016 to 1.9070 at year 2020.

The last independent variable known as audit committee size. The descriptive analysis on audit committee shows there is a fluctuation on the mean. For example, the mean value at year 2016 was 3.3721, followed by year 2017 was 3.5516, year 2018 was 3.4419, year 2018 was 3.3953 and year 2020 was 3.5581. One of the

responsibilities of audit committee is to make sure the company complies with the financial reporting standard. A research conducted by Ashari and Krismiaji (2020) stated that the number of audit committee size should not more than 8.

5.1.3 Hypothesis Summary

5.1.3.1 Hypothesis Testing of ROA and ROE

Table 5. 1: Hypothesis Testing of ROA and ROE

	ROA (2016 - 2020)	**ROE (2016 - 2020)**
Constant	-1.8758	-2.9724
ACS	0.3342	0.4043
BS	0.7827	1.5605
CEOD	-1.8706	-4.9962
NOID	-0.2798	-0.6364
NOWD	-0.6753	-1.3422

Source: Developed for the research

5.1.3.2: Hausman Specification Test

Table 5. 2: Hausman Specification Test

Model	**Hausman Specification Test**
ROA	Random Effect Model
ROE	Random Effect Model

Source: Developed for the research

5.1.3.3: Summary of Hypothesis Testing

Table 5. 3: Summary of Hypothesis Testing

Research Questions	Research Hypothesis	Result
Does Board Size have a significant effect on firm financial performance?	H1a: Board size has a significant effect on firm financial performance (ROE)	A
	H1b: Board size has a significant effect on firm financial performance (ROA)	A
Does Number of Independent Director show a significant effect on firm financial performance?	H2a: Number of independent directors has a significant effect on firm financial performance (ROE)	R
	H2b: Number of independent directors has a significant effect on firm financial performance (ROA)	R
Does CEO Duality has a significant effect on firm financial performance?	H3a: CEO Duality has a significant effect on firm financial performance (ROE)	R
	H3b: CEO Duality has a significant effect on firm financial performance (ROA)	R
Does Audit Committee Size has a significant effect on firm financial performance?	H4a: Audit Committee Size has a significant effect on firm financial performance (ROE).	R
	H4b: Audit Committee Size has a significant effect on firm financial performance (ROA).	R
Does Number of Women Director affect the firm financial	H5a: Number of women directors has a significant effect on firm financial performance (ROE)	R

performance significantly?	H5b: Number of women directors has a significant effect on firm financial performance (ROA)	R

A = Accept

R = Reject

Source: Developed for the research

Hypothesis 1

H1a: Board size has a significant effect on firm financial performance (ROE)

H1b: Board size has a significant effect on firm financial performance (ROA)

Refer to the panel data analysis result at Table 5.3 above, H1a and H1b was supported. There was enough evidence to reject null hypothesis of H1a and H1b. Hence, it shows that board size has a significant effect on firm financial performance (ROE and ROA). This finding consistent with previous study (Kanakriyah, 2021; Malik et al., 2014; Mehrotra, 2016). In short, board size has a significant effect on firm financial performance.

Hypothesis 2

H2a: Number of independent directors has a significant effect on firm financial performance (ROE)

H2b: Number of independent directors has a significant effect on firm financial performance (ROA)

According to the panel data analysis result at Table 5.3 above, H2a and H2b was rejected. This is because, there was insufficient evidence to reject null hypothesis of H2a and H2b. Thus, this indicates that number of independent directors has a significant effect on firm financial performance (ROE and ROA). This finding

consistent with previous study (Alshetwi, 2017; Arosa et al., 2013; Chang et al., 2021). In conclusion, the number of independent directors has no relationship with firm financial performance.

Hypothesis 3

H3a: CEO Duality has a significant effect on firm financial performance (ROE)

H3b: CEO Duality has a significant effect on firm financial performance (ROA)

Based on the panel data analysis result at Table 5.3 above, CEO Duality is insignificant towards ROA and ROE. As the result from panel data shows there was insufficient evidence to support H3a and H3b. This findings in line with previous study (Arora & Sharma, 2016; Costa & Martins, 2015; Rashid, 2010). Therefore, it can be concluded that CEO Duality has no significant relationship with the firm financial performance.

Hypothesis 4

H4a: Audit Committee Size has a significant effect on firm financial performance (ROE).

H4b: Audit Committee Size has a significant effect on firm financial performance (ROA).

The result at Table 5.3 above shows audit committee size has no significant effect towards ROA and ROE. For that reason, there was insufficient evidence to support H4a and H4b. This findings supported by Ahmad and Zraiq (2018); Amer, Ragab and Shehata (2014); Mak and Kusnadi (2005). In short, it can be concluded that audit committee size has no relationship with firm financial performance.

Hypothesis 5

H5a: Number of women directors has a significant effect on firm financial performance (ROE)

H5b: Number of women directors has a significant effect on firm financial performance (ROA)

According to the panel data analysis result at Table 5.3 above, H5a and H5b was not supported. Hence, there was insufficient evidence to support reject null hypothesis of H5a and H5b. This findings supported by previous studies (Andersson & Wallgren, 2018; Kweh et al., 2019; Voß, 2015). In conclusion, it can be concluded that number of women directors has insignificant effect towards firm financial performance.

5.2 Discussion on Findings

The research findings shows that the board size has the statistical effect toward firm financial performance (ROA and ROE) of family-controlled firm that listed on Bursa Malaysia, whereas number of independent directors, CEO duality, audit committee size and number of women directors did not has any relationship with firm financial performance.

The research findings shows that board size was statically significant at 5% level with firm financial performance (ROA and ROE), hence it shows that board size could affect the firm financial performance (ROA and ROE). This finding was in line with previous studies of Kanakriyah (2021) found that board size has a positive significant effect towards firm financial performance with ROE. Moreover, the research conducted by Kalsie and Shrivastav (2016) also found that board size has a positive significant impact towards firm financial performance with ROA. Kalsie and Shrivastav (2016) also state that a firm has diverse need, to fulfil this

requirement, the board must have greater pool of knowledge and skills which causes the company need to appoint more directors. In addition, Teh, Shabnam and Tze (2012)cited at research conducted by Lipton and Lorcsh (1992) stated that the ideal size of board of director is 8 to 10. Besides, based on the table 4.3, the descriptive analysis shows the average mean of family-controlled company's board size is 8.7716, which is in line with the ideal size of board stated by Lipton and Lorcsh (1992).

According to MCCG 2017, the boardroom should at least comprise 50% of independent director, whereas the boardroom should comprise a majority of the independent director for large companies. Yet, the descriptive analysis at table 4.3 shows the average mean of number of independent directors in family-controlled firm was 4.0326 only. Hence, this might be the reason why the research findings found the number of independent directors was not statically significant at 5% and 10 and has no relationship with firm financial performance (ROA and ROE). The findings were supported by several research and they found that number of independent directors has no significant effect towards firm financial performance. For instance, the research conducted by Chang, David, Low and Tee (2021) found that number of independent directors has insignificant relationship with return on asset and equity. Furthermore, Arosa, Iturralde and Maseda (2013) also concluded that there is no significant relationship between number of independent director and return on asset. They also claimed that independent director not adding value into firm financial performance is due to the criteria of selecting the independent director. The independent director selection is important as their professionalism should add value to the company's board. Hence, the independent director should be selected carefully to be adequately qualified to perform their task to improve the firm performance.

Based on MCCG code 2012 2017 and 2021, the positions of Board's Chairman and Chief Executive Officer are highly recommended to held by different individuals, as this can prevent abusive of power by an individual. Even though the descriptive analysis of CEO duality in table 4.2 shows there is an average mean of 90.7% of

the family-controlled firm is complied with the MCCG code, yet this research findings found CEO duality was not statically significant at 5% and 10 and has no relationship with firm financial performance (ROA and ROE). The results were supported by Costa and Martins (2015), they found that CEO duality has insignificant effect towards return on asset and return on equity. At the same time, Yasser, Al Mamun and Suriya (2014) also found an insignificant relationship between CEO duality and return on asset. They also stated that CEO duality is not corresponded to firm financial performance, as the financial ratio may be unable to measure the board or leadership roles in relation to create the firm's value, yet the long-term measurements such as the growth of firm and its share prices might be the useful measures.

According to the research conducted by Ashari and Krismiaji (2020), they found that the ideal size of audit committee is not more than 8. At the same time, the descriptive analysis of audit committee size shows an average mean of 3.4558, which not more than the ideal size of audit committee mentioned by Ashari and Krismiaji (2020). However, the research findings show audit committee size was not statistically significant at 5% and 10% level and has no relationship with firm financial performance (ROA and ROE). This research findings were consistent with previous research. For instance, the research done by Amer, Ragab and Shehata (2014) shows that audit committee size has an insignificant effect towards return on asset and return on equity. Furthermore, Aanu, Odianonsen and Foyeke (2014) also found that audit committee size do not has a significant relationship with return on asset and return on equity. In addition, they stated that audit committee size did not add value to the firm's financial performance, this is because mere audit committee size could not affect the firm's financial performance.

Based on MCCG code 2012, 2017 or 2020, it suggested that the board should comprised at least 30% of the women director. At the same time, refer to table 4.3, average mean of number of women directors has increased steadily. Yet, the research findings show number of women directors was not statistically significant at 5% and 10% level and has no relationship with firm financial performance (ROA

and ROE). This was supported by Amit, Shubham and Varda (2019) who did not find any effect between number of women director and return on asset. Moreover, the research conducted by Satria, Mahadwartha and Ernawate (2018) also found there was an insignificant relationship between number of women director and firm financial performance (ROA and ROE). This is because the number of women directors are still very less in the company and unable to make an influential decision to affect the firm's financial performance.

5.3 Limitations in Research

Throughout this research study, there were certain limitations that have been identified to reach a better improvement in future research studies. First, the firm financial performance only measured by two dependent variables, which are return on asset and return on equity. The second limitations are the observation time-period was short, because it was only five years period which is from year 2016 to 2020. In addition, due to the time constraint and limited data available in the research, it led to the reduction in sample size of only 43 family-controlled companies in Bursa Malaysia selected by this research. It would possibly reduce the accountability and reliability of the analysed results. In term of the data collection method, this research was only acquiring the secondary data which is the companies' annual report. Yet, the data shows in the annual report has the possibility of not being accountable.

5.4 Recommendations for Future Research

Based on the limitation of the research, the future research can be included more dependent variable such as Tobin's Q, Price to Earnings Ratio or Market-to-Book ratio, this is because these ratios could better measure the firm's financial performance in term of the market value. On the other hand, future research can

have a longer observation time-period such as 10 years to analyse the company more accurately. Besides, in order to have a more accurate result, the sample size of the number of the family-controlled companies should be increase, as this research only shortlisted 43 family-controlled companies. Lastly, future research could also conduct both quantitative and qualitative analysis for better understand on the subject matter. For example, the future research could invite the board to participate in the questionnaire in order to understand whether the corporate governance mechanism could help to improve the firm's financial performance.

5.5 Conclusion

In conclusion, the purpose of this research was to determine if corporate governance mechanism affects firm financial performance among the family-controlled companies in Bursa Malaysia. There have been unlikely results in this research, as most of the independent variables were found insignificant relationship with firm financial performance (ROA and ROE) of the family-controlled companies in Bursa Malaysia. While the findings only found board size has a significant relationship with firm financial performance (ROA and ROE). This probably due to mere size or number of selected types of directors could not add value to the firm's financial performance. The boardroom must have adequate pool of knowledge, skill, and experience in order to add value to the firm. Besides, some of the company might just want to comply or fulfil the code of MCCG and just simply appoint the director, hence this did not add value to the company.

As most of the independent variable were found that have insignificant impact towards firm financial performance (ROA and ROE). Hence, this research concluded that corporate governance mechanism in relationship to the board structure has insignificant impact toward firm financial performance of the family-controlled companies that listed on Bursa Malaysia except the board size.

Yet, Environment, Social, and Governance (ESG) criteria are growing important for companies and investors (Matthew, 2021). Environment referring to how the company protecting the natural of the word, social known as the company's consideration of people and relationship and Governance defined as the standard of the company practising (Gordon, 2022). The reason why ESG are growing are because, investor believe that companies that practiced ESG able to perform better (CFA Institute, 2022). For example, the companies that practiced ESG are in low risk, longer sustainability and could cope with uncertainty better. One of the elements in Governance known as the board structure, yet this research only covered board structure and only found out one out of five of the independent variables has a significant relationship toward return on asset and return on equity, which are board size. Hence, we believe ESG criteria are still important to the company and future researches can conduct further study on these areas.

References

Aanu, O. S., Odianonsen, I. F., & Foyeke, O. I. (2014). Effectiveness of Audit Committee and Firm Financial Performance in Nigeria: An Empirical Analysis. *Journal of Accounting and Auditing*, *2014*. https://doi.org/10.5171/2014

Abdulmalik, O. S., & Ahmad, A. C. (2016). Boardroom diversity and audit fees: director ethnicity, independence and nationality. *Audit Financiar*, *14*(136), 413. https://doi.org/10.20869/auditf/2016/14/413

Achim, M. V., Borlea, S. N., & Mare, C. (2016). Corporate Governance and Business Performance: Evidence for the Romanian Economy. *Journal of Business Economics and Management*, *17*(3), 458–474. https://doi.org/10.3846/16111699.2013.834841

Afzalur, R., Anura, D. Z., Sudhir, L., & Kathy, R. (2010). Board Composition And Firm Performance: Evidence From Nigeria. *Australasian Accounting, Business and Finance Journal*, *1*(5), 33–40. https://doi.org/10.26677/tr1010.2019.134

Aggarwal, R. K., Evans, M. E., & Nanda, D. (2011). Access, Board Size, and Incentives in Non-Profit Firms. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.918011

Ahmad, M., & Zraiq, M. A. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Academy of Accounting and Financial Studies Journal*, *22*(5). https://doi.org/10.2139/ssrn.3648194

Ajayi, V. O. (2017). *Course Title : Course Code : Advance Statistical Methods in Education Course of Study : PhD Science Education Presentation Title : Distinguish between primary sources of data and secondary sources of data Candidate Names : Oluwatosin Victor Ajayi Lecturer*. *September*. https://doi.org/10.13140/RG.2.2.24292.68481

Akhtar, M. I. (2016). Research Design. *Research in Social Science:*

Interdisciplinary Perspectives.

Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. B. (2014). Audit committee characteristics and executive committee characteristics and firm performance in Oman: Empirical study. *Asian Social Science*, *10*(12), 98–113. https://doi.org/10.5539/ass.v10n12p98

AL-Matari, Y., AL-Swidi, A. K., & AL-Matari, E. M. (2012). Board of Directors, Audit Committee Characteristics and Performance of Saudi Arabia Listed Companies. *International Review of Management and Marketing*, *2*(4), 241–251.

Alabede, J. O. (2016). Effect of Board Diversity on Corporate Governance Structure and Operating Performance: Evidence from the UK Listed Firms. *Asian Journal of Accounting and Governance*, *7*, 67–80. https://doi.org/10.17576/ajag-2016-07-06

Ali, A., & Nasir, S. Bin. (2015). Impact of Board Characteristics and Audit Committee on Financial Performance: A Study of Manufacturing Sector of Pakistan. *Journal of The Institute of Business Administration Karachi - Pakistan*, *10*(1), 102–114. http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=108471413&site=ehost-live

Ali, M. (2016). *Arabian Journal of Business and Impact of Corporate Governance on Firm ' s Financial Performance (A Comparative Study of Developed and Non Developed Markets)*. *6*(6). https://doi.org/10.4172/2223-5833.1000272

Alliance, E. (n.d.). *Policies and Practices to Promote Women in Leadership Roles in the Private Sector Report prepared by the OECD for the G20 EMPOWER Alliance*.

Almontaser, A. M. Q., & Faudziah, H. B. F. (2018). The Relationship Between Board Size and CEO Duality and Firm Performance: Evidence from Jordan. *International Journal of Accounting, Finance and Risk Management*, *3*(3), 16. https://doi.org/10.11648/j.ijafrm.20180303.11

Alqatamin, R. M. (2018). Audit Committee Effectiveness and Company

Performance: Evidence from Jordan. *Accounting and Finance Research*, *7*(2), 48. https://doi.org/10.5430/afr.v7n2p48

Alshetwi, M. (2017). The Association between Board Size, Independence and Firm Performance: Evidence from Saudi Arabia. *Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc*, *17*(1), 17–28.

Ameer, R., Ramli, F., & Zakaria, H. (2014). *A new perspective on board composition and firm performance in an emerging market*. https://doi.org/10.1108/14720701011085607

Amer, M., Ragab, A. A., & Shehata, S. E. (2014). Audit Committee Characteristics and Firm Performance : Evidence from Egyptian Listed Companies. *Proceedings of 6th Annual American Business Research Conference*, *9*(10), 1–25.

Amran, N. A., & Che Ahmad, A. (2011). Board Mechanisms and Malaysian Family Companies' Performance. *Asian Journal of Accounting and Governance*, *2*(1), 15–26. https://doi.org/10.17576/ajag-2011-2-6538

Andersson, P., & Wallgren, F.-M. (2018). *Board Gender Diversity and Firm Financial Performance*. *May*, 48.

APEC Office. (2016). *Good Practices on Gender Diversity in Corporate Leadership for Growth*. *November*.

Apuke, O. D. (2017). Quantitative Research Methods : A Synopsis Approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, *6*(11), 40–47. https://doi.org/10.12816/0040336

Arora, A., & Sharma, C. (2016). Corporate governance and firm performance in developing countries: evidence from India. *Corporate Governance (Bingley)*, *16*(2), 420–436. https://doi.org/10.1108/CG-01-2016-0018

Arosa, B., Iturralde, T., & Maseda, A. (2013). The board structure and firm performance in SMEs: Evidence from spain. *Investigaciones Europeas de Direccion y Economia de La Empresa*, *19*(3), 127–135. https://doi.org/10.1016/j.iedee.2012.12.003

Arslan, M., Zaman, R., Malik, R. K., & Mehmood, A. (2014). Impact of CEO

Duality and Audit Committee on Firm Performance: A Study of Oil & Gas Listed Firms of Pakistan. *SSRN Electronic Journal*, *5*(17), 151–157. https://doi.org/10.2139/ssrn.2515067

Ashari, S., & Krismiaji, K. (2020). Audit Committee Characteristics and Financial Performance: Indonesian Evidence. *Equity*, *22*(2), 139–152. https://doi.org/10.34209/equ.v22i2.1326

Azmi, I. A. G., & Barrett, M. A. (2014). *Women on Boards and Firm Performance in Malaysia: Preparing to Open the Black Box*. *63*(15), 73–77. https://doi.org/10.7763/IPEDR

Barry, M. (2011). Origin of the Theory of Agency: An Account By One of the Theory's Originators. *SSRN Electronic Journal*, *March 2011*. https://doi.org/10.2139/ssrn.1020378

Bart, C., & McQueen, G. (2013). Why women make better directors. *International Journal of Business Governance and Ethics*, *8*(1), 93–99. https://doi.org/10.1504/IJBGE.2013.052743

Bartholomeusz, S., & Tanewski, G. A. (2006). The relationship between family firms and corporate governance. *Journal of Small Business Management*, *44*(2), 245–267. https://doi.org/10.1111/j.1540-627X.2006.00166.x

Bebchuk, L. A., & Weisbach, M. S. (2010). The state of corporate governance research. *Review of Financial Studies*, *23*(3), 939–961. https://doi.org/10.1093/rfs/hhp121

Bennedsen, M., Kongsted, H. C., & Nielsen, K. M. (2008). The causal effect of board size in the performance of small and medium-sized firms. *Journal of Banking and Finance*, *32*(6), 1098–1109. https://doi.org/10.1016/j.jbankfin.2007.09.016

Bhatt, P. R., & Bhatt, R. R. (2017). Corporate governance and firm performance in Malaysia. *Corporate Governance (Bingley)*, *17*(5), 896–912. https://doi.org/10.1108/CG-03-2016-0054

Bhugeloo, N. (2019). *8 ways good corporate governance creates company value | Ocorian*. Ocorian. https://www.ocorian.com/article/8-ways-good-corporate-

governance-creates-company-value

Billah, M. M. (2019). *Corporate Governance and Bank Performance: Conventional vs Islamic Banks in Malaysia*. *8*(5), 55.

CFA Institute. (2022). *ESG Investing and Analysis*. CFA Institute. https://www.cfainstitute.org/en/research/esg-investing

Chang, Y. W., David, N. C. Y., Low, S. C., & Tee, P. L. (2021). Corporate Governance Codes and Intellectual Capital: Evaluating the Performance Impacts among Government-Linked Companies in Malaysia and Singapore – A Panel Data Analysis. *SHS Web of Conferences*, *124*, 08004. https://doi.org/10.1051/shsconf/202112408004

Chaudhary, P. (2021). Agency costs, board structure and institutional investors: case of India. *Asian Journal of Accounting Research*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/ajar-12-2020-0130

Chen, H. (2014). CEO duality and firm performance : an empirical study of EU listed firms. *3rdIBA Bachelor Thesis Conference*, 1–10.

Chen, T. Y. (2017, December 14). *Examining Family Businesses | The Global Network for Advanced Management*. Global Network Persepectives. https://globalnetwork.io/perspectives/2017/12/examining-family-businesses

Cheng, S., Evans, J. H., & Nagarajan, N. J. (2008). Board size and firm performance: The moderating effects of the market for corporate control. *Review of Quantitative Finance and Accounting*, *31*(2), 121–145. https://doi.org/10.1007/s11156-007-0074-3

Chiang, H.-T., & Lin, M.-C. (2011). Examining Board Composition and Firm Performance. *The International Journal of Business and Finance Research*, *5*(3), 15–27. http://search.proquest.com/docview/1418409550?accountid=169017

Choong, H. H., Emily, H. Y. L., Sai, S. T., Wong, H. M., & Yeow, C. T. (2014). The Impact of Ownership Concentration and Board Governance on Firm Performance: Malaysian Public Listed Property Companies. *Implementation Science*, *39*(1), 1–15. https://doi.org/10.4324/9781315853178

Chou, T.-K., & Buchdadi, A. D. (2017). Independent Board, Audit Committee, Risk Committee, the Meeting Attendance level and Its Impact on the Performance: A Study of Listed Banks in Indonesia. *International Journal of Business Administration*, *8*(3), 24. https://doi.org/10.5430/ijba.v8n3p24

Christopher, S. D. S. (2016). *Effects of Board Gender Diversity on Firm Performance and Director Compensation in India*. 1–43.

Chu, E. Y., Lai, T. S., & Song, S. I. (2016). Corporate governance and financial constraints in family controlled firms: Evidence from Malaysia. *International Journal of Business and Society*, *17*(3), 429–446. https://doi.org/10.33736/ijbs.534.2016

Conyon, M. J., & He, L. (2017). Firm performance and boardroom gender diversity: A quantile regression approach. *Journal of Business Research*, *79*, 198–211. https://doi.org/10.1016/j.jbusres.2017.02.006

Costa, Y. C. L. da, & Martins, O. S. (2015). CEO Duality and Corporate Performance: Evidence in the Brazilian Capital Market. *REV. ADM. UFSM, SANTA MARIA*, *12*, 403–417. https://doi.org/10.5902/19834659

Crişan, A. R., & Fülöp, M. T. (2014). The Role of the Audit Committee in Corporate Governance – Case Study for a Sample of Companies Listed on BSE and the London Stock Exchange - FTSE 100. *Procedia Economics and Finance*, *15*(May 2015), 1033–1041. https://doi.org/10.1016/s2212-5671(14)00666-2

Daniel, L. (2021, September 25). *Boardroom Definition*. Investopedia. https://www.investopedia.com/terms/b/boardroom.asp

David, B. (2019, January 1). *The World's Top 750 Family Businesses Ranking | Family Capital*. Family Capital. https://www.famcap.com/the-worlds-750-biggest-family-businesses/

Davis, J., Frankforter, S., Vollrath, D., & Hill, V. (2007). Business ~nd L~aclcrs hip : Re sea rch. Practi ce. and Teachi ng. *An Empirical Test of Stewardship Theory*, *3*(1), 40–50. http://scholars.fhsu.edu/jbl/vol3/iss1/6

Davis, J., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Business Ethics and Strategy, Volumes I and II*, *22*(1), 473–

500. https://doi.org/10.4324/9781315261102-29

Dedman, E. (2004). Discussion of reactions of the London stock exchange to company trading statement announcements. *Journal of Business Finance and Accounting*, *31*(1–2), 37–47. https://doi.org/10.1111/j.0306-686X.2004.d01.x

Dill, R. (1978). *The External Control of Organizations: A Resouce Dependence Perspective.Jeffrey Pfeffer, Gerald R.Salancik.* 757–759.

Eddleston, K. A., Jaskiewicz, P., & Wright, M. (2020). Family firms and internationalization in the Asia-Pacific: the need for multi-level perspectives. *Asia Pacific Journal of Management*, *37*(2), 345–361. https://doi.org/10.1007/s10490-018-9608-6

Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: Evidence from Nigeria. *Corporate Governance: The International Journal of Business in Society*, *9*(3), 231–243. https://doi.org/10.1108/14720700910964307

Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, *48*(1), 35–54. https://doi.org/10.1016/s0304-405x(98)00003-8

Epps, R. W., & Cereola, S. J. (2008). Do institutional shareholder services (ISS) corporate governance ratings reflect a company's operating performance? *Critical Perspectives on Accounting*, *19*(8), 1135–1148. https://doi.org/10.1016/j.cpa.2007.06.007

Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Erhardt2003. *Corporate Governance*, *11*(2), 102–111.

Faatihah, S., Fuzi, S., Abdul, A., & Julizaerma, M. K. (2016). Board Independence and Firm Performance. *Procedia Economics and Finance*, *37*(16), 460–465. https://doi.org/10.1016/S2212-5671(16)30152-6

Farhat, A. (2014). *Corporate governance and firm performance: the case of UK*. *July*, 1–352. http://eprints.port.ac.uk/17221/1/Thesis.pdf

Farrell, K. A., & Hersch, P. L. (2005). Additions to corporate boards: The effect of gender. *Journal of Corporate Finance*, *11*(1–2), 85–106.

https://doi.org/10.1016/j.jcorpfin.2003.12.001

Filatotchev, I., Lien, Y. C., & Piesse, J. (2005). Corporate governance and performance in publicly listed, family-controlled firms: Evidence from Taiwan. *Asia Pacific Journal of Management*, *22*(3), 257–283. https://doi.org/10.1007/s10490-005-3569-2

Francois, B. (2020, March 26). *Family Business Challenges; The 3 Issues Families Can't Ignore*. Forbes. https://www.forbes.com/sites/francoisbotha/2020/03/31/family-business-challenges-the-3-issues-families-cant-ignore/#46521cc43cf4

Gallego-Álvarez, I., García-Sánchez, I. M., & Rodríguez-Dominguez, L. (2010). The influence of gender diversity on corporate performance. *Revista de Contabilidad-Spanish Accounting Review*, *13*(1), 53–88. https://doi.org/10.1016/S1138-4891(10)70012-1

Gambo, E.-M. J., Bello, B. A., & Rimamshung, S. A. (2018). Effect of Board Size, Board Composition and Board Meetings on Financial Performance of Listed Consumer Goods in Nigeria. *International Business Research*, *11*(6), 1. https://doi.org/10.5539/ibr.v11n6p1

Georgeta, V. (2011). of Companies Listed in Bucharest Stock Exchange. *The Bucharest University of Economic Studies*, 88–93.

Ghabayen, M. A. (2012). *Board Characteristics and Firm Performance : Case of Saudi Arabia* (Vol. 2, Issue 2). https://doi.org/10.5296/ijafr.v2i2.2145

Goel, P. (2018). Implications of corporate governance on financial performance: an analytical review of governance and social reporting reforms in India. *Asian Journal of Sustainability and Social Responsibility*, *3*(1). https://doi.org/10.1186/s41180-018-0020-4

Goergen, M., Limbach, P., & Scholz-Daneshgari, M. (2020). Firms' rationales for CEO duality: Evidence from a mandatory disclosure regulation. *Journal of Corporate Finance*, *65*. https://doi.org/10.1016/j.jcorpfin.2020.101770

Goh, C. F., Rasli, A., & Khan, S. (2014). *CEO duality , board independence , corporate governance and fi rm performance in family fi rms : Evidence from*

the manufacturing industry in. 1–25. https://doi.org/10.1057/abm.2014.4

Gomez-mejia, L. R., Cruz, C., Berrone, P., & Castro, J. De. (2011). *The Academy of Management Annals The Bind that Ties : Socioemotional Wealth Preservation in Family Firms The Bind that Ties : Socioemotional Wealth Preservation in Family Firms*. *6520*(November). https://doi.org/10.1080/19416520.2011.593320

Gordon, S. (2022, February 23). *Environmental, Social, and Governance (ESG) Criteria*. Investopedia. https://www.investopedia.com/terms/e/environmental-social-and-governance-esg-criteria.asp

Gray, S. J., Kang, H., & Cheng, M. (2007). Corporate Governance and Board Composition: diversity and independence of Australian boards. *Corporate Governance: An International Review*, *15*(2), 194–207.

Guo, Z., & Kga, U. K. (2012). Corporate Governance and Firm Performance of Listed Firms in Sri Lanka. *Procedia - Social and Behavioral Sciences*, *40*, 664–667. https://doi.org/10.1016/j.sbspro.2012.03.246

Gurusamy, P. (2017). Board Characteristics, Audit Committee and Ownership Structure Influence on Firm Performance of Manufacturing Firms in India. *International Journal of Business and Economics Research*, *6*(4), 73. https://doi.org/10.11648/j.ijber.20170604.16

Hafner, C. J. W. (2019, July 17). *Gender diversity key to improving corporate governance, Opinion - THE BUSINESS TIMES*. The Business Times. https://www.businesstimes.com.sg/opinion/gender-diversity-key-to-improving-corporate-governance#:~:text=GENDER diversity has become an,correlated with strong organisational performance.&text=Additionally%2C global data on gender,than men for comparable work.

Hanazaki, M., & Liu, Q. (2006). Corporate Governance and Investment in East Asian Firms - Emipirical Analysis of Family-Controlled Firms. *Center for Economic Institutions*, 41. http://hdl.handle.net/10086/13885

Helland, E., & Sykuta, M. (2004). *Regulatiion and The Evolution of Corporate Boards: Monitoring, Advising, or Window Dressing*. 167–193.

Heng, T. B., Azrbaijani, S., & San, O. T. (2012). Board of directors and capital structure: Evidence from leading malaysian companies. *Asian Social Science*, *8*(3), 123–136. https://doi.org/10.5539/ass.v8n3p123

Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, *35*(6), 1404–1427. https://doi.org/10.1177/0149206309343469

Hussin, N., & Othman, R. (2012). Code of Corporate Governance and Firm Performance. *British Journal of Economics, Finance and Management Sciences*, *6*(November), 32.

Ibrahim, H., & Samad, F. A. (2010). Family business in emerging markets: The case of Malaysia. *African Journal of Business Management*, *4*(13), 2586–2595.

Islam, M. Z., Islam, M. N., Bhattacharjee, S., & Islam, A. K. M. Z. (2010). Agency Problem and the Role of Audit Committee: Implications for Corporate Sector in Bangladesh. *International Journal of Economics and Finance*, *2*(3), 177–188. https://doi.org/10.5539/ijef.v2n3p177

James, C. (2020, July 11). *Board of Directors (B of D)*. Investopedia. https://www.investopedia.com/terms/b/boardofdirectors.asp

Jensen, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance*, *48*(3), 831–880. https://doi.org/10.1111/j.1540-6261.1993.tb04022.x

Johl, S. K., & Salami, O. L. (2015). Impact of board composition on firm performance: a study on listed firms in Malaysia. *Journal of Contemporary Management Sciences*, *3*(3), 94–102.

Johnson, R. A., & Greening, D. W. (1999). *The Effects of Corporate Governance and Institutional Ownership Types of Corporate Social Performance*. *42*(5), 564–576.

Julizaerma, M. K., & Sori, Z. M. (2012). Gender Diversity in the Boardroom and Firm Performance of Malaysian Public Listed Companies. *Procedia - Social and Behavioral Sciences*, *65*(ICIBSoS), 1077–1085.

https://doi.org/10.1016/j.sbspro.2012.11.374

Kajola, S. O. (2008). Corporate Governance and Firm Performance: The Case of Nigerian Listed Firms. *European Journal of Economics, Finance and Administrative Sciences*, *6*(14), 1450–2275. https://doi.org/10.22495/cocv6i2c3p3

Kalsie, A., & Shrivastav, S. M. (2016). Analysis of board size and firm performance: Evidence from NSE companies using panel data approach. *Indian Journal of Corporate Governance*, *9*(2), 148–172. https://doi.org/10.1177/0974686216666456

Kamarudin, K. A., Wan Ismail, W. A., & Samsuddin, M. E. (2012). The Influence of CEO Duality on the Relationship between Audit Committee Independence and Earnings Quality. *Procedia - Social and Behavioral Sciences*, *65*(ICIBSoS), 919–924. https://doi.org/10.1016/j.sbspro.2012.11.220

Kanakriyah, R. (2021). The Impact of Board of Directors' Characteristics on Firm Performance: A Case Study in Jordan. *Journal of Asian Finance, Economics and Business*, *8*(3), 341–350. https://doi.org/10.13106/jafeb.2021.vol8.no3.0341

Khatab, H., Masood, M., Zaman, K., Saleem, S., & Saeed, B. (2010). Corporate Governance and Firm Performance: A Case study of Karachi Stock Market. *International Journal of Trade, Economics and Finance*, *2*(1), 39–43. https://doi.org/10.7763/ijtef.2011.v2.76

Kılıç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: evidence from Turkey. *Gender in Management*, *31*(7), 434–455. https://doi.org/10.1108/GM-10-2015-0088

Kurniawan, A. (2021). Analysis of the effect of return on asset, debt to equity ratio, and total asset turnover on share return. *Journal of Industrial Engineering & Management Research*, *4*(1), 524–530. https://jiemar.org/index.php/jiemar/article/view/114

Kweh, Q. L., Ahmad, N., Ting, I. W. K., Zhang, C., & Hassan, H. Bin. (2019). Board gender diversity, board independence and firm performance in

malaysia. *Institutions and Economies*, *11*(2), 1–20.

Larmou, S., & Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. *Journal of Management and Governance*, *14*(1), 61–85. https://doi.org/10.1007/s10997-009-9091-z

Lee, D. K., & Barnes, D. L. (2017). Corporate Governance and Performance in Hong Kong Founded Family Firms: Evidence From the Hang Seng Composite Industry Index. *The Journal of Developing Areas*, *51*(1), 401–410. https://doi.org/10.1353/jda.2017.0023

Lew, Y. K., Yu, J., & Park, J. Y. (2018). The impacts of independent director and CEO duality on performance in the Chinese post-institutional-transition era. *Canadian Journal of Administrative Sciences*, *35*(4), 620–634. https://doi.org/10.1002/cjas.1468

Liew, P. K. (2007). *Corporate Governance Reforms in Malaysia : the key leading players ' perspectives*. *15*(5), 724–740.

Lin, T.-T., & Lee, Y. C. (2008). Organizational Characteristics, Board Size and Corporate Performance. *Journal of Global Business Management*, *4*(2), 338–347.

Macciocchi, D. (2014). *Corporate governance issues in family and non-family owned firms: an empirical analysis of CEO compensation, executive turnover, and earnings management*. http://eprints.luiss.it/1339/

Madawaki, A., & Amran, N. A. (2013). Audit Committees: How They Affect Financial Reporting in Nigerian Companies. *Journal of Modern Accounting and Auditing*, *9*(8), 1070–1080.

Madison, K. J. (2014). Agency Theory and Stewardship Theory Integrated , Expanded , and Bounded by Context : An Empirical Investigation of Structure , Behavior , and Performance within Family Firms. *University of Tennessee,Knoxville*, 1–160. https://doi.org/10.17129/botsci.8

Mak, Y. T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific Basin Finance*

Journal, *13*(3), 301–318. https://doi.org/10.1016/j.pacfin.2004.09.002

Malik, M. S., & Makhdoom, D. D. (2016). Does corporate governance beget firm performance in Fortune Global 500 companies? *Corporate Governance (Bingley)*, *16*(4), 747–764. https://doi.org/10.1108/CG-12-2015-0156

Malik, M., Wan, D. F., Ahmad, M. I., Naseem, M. A., & Rehman, R. U. (2014). Role of board size in corporate governance and firm performance applying pareto approach, is it cultural phenomena? *Journal of Applied Business Research*, *30*(5), 1395–1406. https://doi.org/10.19030/jabr.v30i5.8795

Mashayekhi, B., & Bazaz, M. S. (2008). Corporate Governance and Firm Performance in Iran. *Journal of Contemporary Accounting & Economics*, *4*(2), 156–172. https://doi.org/10.1016/s1815-5669(10)70033-3

Masood, F. C., & Ghodratollah, N. C. (2010). Corporate governance and firm performance. *International Conference on Sociality and Economics Development*, *10*, 484–489. https://doi.org/10.22459/tcbd.10.2005.08

Masulis, R. W., & Mobbs, S. (2013). Author ' s Accepted Manuscript Independent director incentives : Where do talented directors spend their limited time and energy ? œ. *Journal of Financial Economics*. https://doi.org/10.1016/j.jfineco.2013.10.011

Matthew, B. (2021, March 9). *Why ESG performance is important for investors | EY Malaysia*. EY. https://www.ey.com/en_my/assurance/why-esg-performance-is-growing-in-importance-for-investors

Mcintyre, M. L., Murphy, S. A., & Mitchell, P. (2007). The top team: Examining board composition and firm performance. *Corporate Governance: The International Journal of Business in Society*, *7*(5), 547–561. https://doi.org/10.1108/14720700710827149

Mehrotra, S. (2016). The Nature of Corporate Board Structure and Its Impact on the Performance of USA Listed Firms. *IUP Journal of Corporate Governance*, *XV*(1), 30–46.

Miko, N. U., & Kamardin, H. (2015). Impact of Audit Committee and Audit Quality on Preventing Earnings Management in the Pre- and Post- Nigerian Corporate

Governance Code 2011. *Procedia - Social and Behavioral Sciences*, *172*, 651–657. https://doi.org/10.1016/j.sbspro.2015.01.415

Mohammed, A. M. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Academy of Accounting and Financial Studies Journal*, *22*(5). https://doi.org/10.2139/ssrn.3648194

Mohan, A., & Chandramohan, S. (2018). Impact of Corporate Governance on Firm Performance: Empirical Evidence From India. *IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL)*, *6*(2), 209–218. http://www.impactjournals.us/archives.php?year=2018_11_2&id=11&jtype=2&page=6

Mohd Nor, M., Shafee, N. B., & Samsuddin, N. (2014). Board Characteristics and Malaysian Firm Performance. *Global Journal of Business Research in Accounting, Auditing and Business Ethics*, *3*, 139–147.

Monda, B., & Giorgino, M. (2013). Corporate governance and shareholder value in listed firms: An empirical analysis in five countries (France, Italy, Japan, UK, USA). *Corporate Ownership and Control*, *10*(3), 36–50. https://doi.org/10.22495/cocv10i3siart3

Müller, V.-O. (2014). The Impact of Board Composition on the Financial Performance of FTSE100 Constituents. *Procedia - Social and Behavioral Sciences*, *109*, 969–975. https://doi.org/10.1016/j.sbspro.2013.12.573

Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, *237*, 117727. https://doi.org/10.1016/j.jclepro.2019.117727

Ng, S. H., Teh, B. H., Ong, T. S., & Soh, W. N. (2016). The relationship between board characteristics and firm financial performance in Malaysia. *Corporate Ownership and Control*, *14*(1Continued1), 259–268. https://doi.org/10.22495/cocv14i1c1p9

Norhidayah, A. H. (2014). *Research Methodology-Research Design*. http://civil.utm.my/postgraduate-office/files/2014/03/research-design-mac-

2014.pdf

Norwani, N. M., Mohamad, Z. Z., & Tamby Chek, I. (2011). Corporate Governance Failure and Its Impact on Financial Reporting Within Selected Companies. *International Journal of Business and Social Science*, *2*(21), 205–213. https://doi.org/10.2139/ssrn.2275426

Nyamongo, E. M., & Temesgen, K. (2013). The effect of governance on performance of commercial banks in Kenya: A panel study. *Corporate Governance (Bingley)*, *13*(3), 236–248. https://doi.org/10.1108/CG-12-2010-0107

Odehnalová, P., & Pirožek, P. (2018). Corporate board composition in family businesses: Evidence from the czech republic. *Management (Croatia)*, *23*(2), 155–173. https://doi.org/10.30924/mjcmi/2018.23.2.155

Ofoeda, I., Commey, J., Osabutey, W., & Afoley, L. (2020). Effects of Internal Audit Committee Size on Profitability. *International Journal of Academic Research in Business and Social Sciences*, *10*(5). https://doi.org/10.6007/ijarbss/v10-i5/7189

Oguz, E., & Dincer, H. H. (2016). *Corporate Governance and Firm Performance: The Case for Turkey*. 1–61. https://lup.lub.lu.se/student-papers/search/publication/8888269

Okwara, O., Jennifer, A., & Okoro, U. (2019). *Effect of CEO Duality and Board Size on the Performance of Quoted Nigerian Brewery Companies*. *5*(1), 19–30.

Palanissamy, A. (2015). CEO duality-An explorative study. *European Scientific Journal*, *1*(December), 33–44.

Peng, M. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, *25*(5), 453–471. https://doi.org/10.1002/smj.390

Perumal, K. M. A. (2019). *Relationship between Corporate Governance Mechanisms and its Influences on Company Performance*. *8*(5), 55.

Pfeffer, J. (1972). Size and composition of corporate boards of directors: The

organization and its environment. *Corporate Governance: Values, Ethics and Leadership*, *17*(2), 53–64. https://doi.org/10.2307/2393956

Ponnu, C. H., & Karthigeyan, R. M. (2010). Board independence and corporate performance: Evidence from Malaysia. *African Journal of Business Management*, *4*(6), 858–868.

Ponnu, C. H., Lee, C. K., Tan, G., Khor, T. H., & Leong, A. (2009). Corporate governance in family run business - A Malaysian case study. *Corporate Ownership and Control*, *6*(4 A), 135–147. https://doi.org/10.22495/cocv6i4p13

Prencipe, A., & Bar-Yosef, S. (2011). Corporate governance and earnings management in family-controlled companies. *Journal of Accounting, Auditing and Finance*, *26*(2), 199–227. https://doi.org/10.1177/0148558X11401212

PWC. (2021). *Family Business Survey 2021*. Price Water House Coopers. https://www.pwc.com/my/en/publications/2021/family-business-survey.html

Rafel, C.-C., & Bartolomé, P.-F. (2013). *Does the independence of independent directors matter ? Does the independence of independent directors matter ? July*.

Rashid, A. (2010). CEO duality and firm performance: Evidence from a developing country. *Corporate Ownership and Control*, *8*(1 B), 163–175. https://doi.org/10.22495/cocv8i1c1p1

Rashid, A. (2011). Board leadership structure and firm performance: An examination of resource dependence role. *Corporate Board: Role, Duties and Composition*, *7*(1), 7–23. https://doi.org/10.22495/cbv7i1art1

Rashid, A. (2015). Revisiting Agency Theory: Evidence of Board Independence and Agency Cost from Bangladesh. *Journal of Business Ethics*, *130*(1), 181–198. https://doi.org/10.1007/s10551-014-2211-y

Rashid, A. (2018). Board independence and firm performance: Evidence from Bangladesh. *Future Business Journal*, *4*(1), 34–49. https://doi.org/10.1016/j.fbj.2017.11.003

Rodríguez-Domínguez, L., García-Sánchez, I. M., & Gallego-Álvarez, I. (2012).

Explanatory factors of the relationship between gender diversity and corporate performance. *European Journal of Law and Economics*, *33*(3), 603–620. https://doi.org/10.1007/s10657-010-9144-4

Rose, C. (2007). Does female board representation influence firm performance ? The Danish evidence . Corporate Governance : An International Does female board representation influence firm performance ? The Danish evidence. *Corporate Governance*, *15*(2), 404–413. https://doi.org/10.1111/j.1467-8683.2007.00570.x

Rosikah, Prananingrum, D. K., Muthalib, D., Azis, M. I., & Rohansyah, M. (2018). Effects of Return on Asset , Return On Equity , Earning Per Share on Corporate Value. *The International Journal of Engineering and Science (IJES*, *7*(3), 6–14. https://doi.org/10.9790/1813-0703010614

Ruigrok, W., Peck, S., Tacheva, S., Greve, P., & Hu, Y. (2006). The determinants and effects of board nomination committees. *Journal of Management and Governance*, *10*(2), 119–148. https://doi.org/10.1007/s10997-006-0001-3

Saat, N. A. M., Karbhari, Y., Heravi, S., & Nassir, A. M. (2011). World Review of Business Research Effective Oversight Roles of Board of Directors – The Case of Listed Firms on Bursa Malaysia Nur Ashikin Mohd Saat *, Yusuf Karbhari , Saed Heravi , and Annuar Md Nassir Saat , Karbhari , Heravi & Nassir. *World Review of Business Research*, *1*(1), 231–245.

Sabatier, M. (2015). A women's boom in the boardroom: effects on performance? *Applied Economics*, *47*(26), 2717–2727. https://doi.org/10.1080/00036846.2015.1008774

Salloum, C., Azzi, G., & Gebrayel, E. (2014). *Audit Committee and Financial Distress in the Middle East Context: Evidence of the Lebanse Financial Institutions*. Elsevier.

Satria, Y., Mahadwartha, P. A., & Ernawati, E. (2018). The Effect of Gender Diversity on Company Financial Performance. *Advances in Economics, Business and Management Research*, *22*(2), 1–11.

SC. (2021, April 28). *SC Updates the Malaysian Code on Corporate Governance*

to Promote Board Leadership and Oversight of Sustainability - Media Releases | Securities Commission Malaysia. Securities Commission Malaysia. https://www.sc.com.my/resources/media/media-release/sc-updates-the-malaysian-code-on-corporate-governance-to-promote-board-leadership-and-oversight-of-sustainability

Schepker, D. J., & Oh, W.-Y. (2015). *Complementary or Substitutive Effects ? Corporate Governance Mechanisms and Poison Pill Repeal*. *39*(7), 1729–1759. https://doi.org/10.1177/0149206312441209

Securities Commission Malaysia. (2017). *Malaysia Code of Corporate Governance*.

Securities Commission Malaysia. (2021). Malaysian Code on Corporate Governance. *Malaysian Code on Corporate Governance*, 1–23.

Sekaran, U. (2003). *RESEARCH METHODS FOR BUSINESS A skill building Approad 4nd edition*.

Şener, İ., & Karaye, A. B. (2014). Board Composition and Gender Diversity: Comparison of Turkish and Nigerian Listed Companies. In *Procedia - Social and Behavioral Sciences* (Vol. 150, pp. 1002–1011). https://doi.org/10.1016/j.sbspro.2014.09.112

Shao, L. (2019). Dynamic study of corporate governance structure and firm performance in China: Evidence from 2001-2015. *Chinese Management Studies*, *13*(2), 299–317. https://doi.org/10.1108/CMS-08-2017-0217

Shleifer, A., & Vishny, R. W. (1997). A Survey of Corporate Governance Andrei. *PhD Proposal*, *1*(2), 737–783. https://doi.org/10.1017/CBO9781107415324.004

Showkat, N., & Parveen, H. (2017). *Non-Probability and Probability Sampling*. *July*.

Singh, A. K., Singhania, S., & Sardana, V. (2019). Do Women on Boards affect Firm's Financial Performance? Evidence from Indian IPO Firms. *Australasian Accounting, Business and Finance Journal*, *13*(2), 53–68. https://doi.org/10.14453/aabfj.v13i2.4

Solomon, J., & Solomon, A. (2010). Corporate Governance and Accountability. In *John Wiley & Son, Ltd*.

Studentmund, A. H. (2016). *Econometrics - Practical Guide 7*. Pearson.

Subramanian, S. (2018). Stewardship Theory of Corporate Governance and Value System: The Case of a Family-owned Business Group in India. *Indian Journal of Corporate Governance*, *11*(1), 88–102. https://doi.org/10.1177/0974686218776026

Suffian, M. T. M., Shamsudin, S. M., Sanusi, Z. M., & Hermawan, A. A. (2017). *Malaysian Code of Corporate Governance and Tax Compliance: Evidence from Malaysia*. *16*(2).

Tang, J. (2017). CEO duality and firm performance: The moderating roles of other executives and blockholding outside directors. *European Management Journal*, *35*(3), 362–372. https://doi.org/10.1016/j.emj.2016.05.003

Terentia. (2017, November 28). *Why Do Family Businesses Disintegrate? | Forbes India Blog*. Forbes. https://www.forbesindia.com/blog/business-strategy/why-do-family-businesses-disintegrate/

Thuraisingam, R. (2013). *The Effects of Corporate Governance on Company Performance : Evidence from Sri Lankan Financial Services Industry*. *4*(17), 103–110.

Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. *Journal of Business Ethics*, *102*(2), 299–317. https://doi.org/10.1007/s10551-011-0815-z

Turner, A. G. (2003). Sampling frames and master slides. *Handbook on Designing of Household Sample Survey*, *November 2003*, 26. http://unstats.un.org/unsd/demographic/meetings/egm/Sampling_1203/docs/no_3.pdf

Udayasanakar, K. (2008). *The Foundation of Governance Theory: A Case for The Resource-Dependence Perspective*. *5*(65), 1–29.

Ulrich, D., & Barney, J. B. (1984). T Ime To Adopt : L Ibrarians ' New Skills. *Academy of Management Review*, *9*(3), 471–481.

Unda, L. A., Ahmed, K., & Mather, P. R. (2019). Board characteristics and credit-union performance. *Accounting and Finance*, *59*(4), 2735–2764. https://doi.org/10.1111/acfi.12308

Van Slyke, D. M. (2007). Agents or stewards: Using theory to understand the government-nonprofit social service contracting relationship. *Journal of Public Administration Research and Theory*, *17*(2), 157–187. https://doi.org/10.1093/jopart/mul012

Victoria, B. (2017, November 23). *Push for women on boards | The Star*. The Star. https://www.thestar.com.my/news/nation/2017/11/23/push-for-women-on-boards-the-governments-seriousness-for-30-women-in-boardrooms-has-stakeholders-opt/

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, *80*(2), 385–417. https://doi.org/10.1016/j.jfineco.2004.12.005

Vishwakarma, G., Spinal, I., & Centre, I. (2017). *Sample Size and Power Calculation Sample Size and Power Calculation*. *May*.

Voß, J. (2015). The Impact of Gender Diverse Boards on Firm Financial Performance in Norway. *5th IBA Bachelor Thesis Conference, July 2nd, 2015, Enschede, The Netherlands.*, 1–16.

Walt, N., & Ingley, C. (2003). *Board Dynamics and the Influence of Professional Background, Gender and Ethnic Diversity of Directors*. *11*(518), 507–508.

Weir, C., & Laing, D. (2001). Governance structures, director independence and corporate performance in the UK. *European Business Review*, *13*(2), 86–95. https://doi.org/10.1108/09555340110385254

Yan, C. C., Hui, Y. Z., & Xin, L. (2021). The relationship between board size and firm performance. *E3S Web of Conferences*, *257*, 1–6. https://doi.org/10.1051/e3sconf/202125702079

Yasser, Q. R., Al Mamun, A., & Suriya, A. R. (2014). CEO Duality Structure and Firm Performance in Pakistan. *Asian Journal of Accounting and Governance*, *5*, 57–69. https://doi.org/10.17576/ajag-2014-5-05

Yasser, Q. R., Entebang, H., & Mansor, S. A. (2011). Corporate Governance and Firm Performance in Pakistan: The Case of Karachi Stock Exchange (KSE)-30. *Journal of Economics and International Finance*, *3*(August), 482–491.

Yilmaz, C., & Buyuklu, A. H. (2016). Impacts of Corporate Governance on Firm Performance: Turkey Case with a Panel Data Analysis. *Eurasian Journal of Economics and Finance*, *4*(1), 56–72. https://doi.org/10.15604/ejef.2016.04.01.004

Yusoff, W. F. W. (2010). Characteristics of Boards of Directors and Board Effectiveness: A Study of Malaysian Public Listed Companies. *Journal of Economics, Business and Management*, *3*(2), 310. https://doi.org/10.5296/ijafr.v2i2.2384

Appendices

Appendix 1: Descriptive Analysis

Descriptive Statistics

	N	Mean	Std. Deviation
ROA2016	43	3.8300	7.26018
ROA2017	43	5.0650	3.37119
ROA2018	43	3.8289	6.16645
ROA2019	43	3.1236	4.20223
ROA2020	43	2.8522	8.04198
ROE2016	43	7.1383	13.61429
ROE2017	43	9.9086	6.25319
ROE2018	43	6.9554	13.21891
ROE2019	43	6.1073	7.34735
ROE2020	43	4.3448	14.95364
Valid N (listwise)	43		

Descriptive Statistics

	N	Mean	Std. Deviation
BS2016	43	8.5581	1.90616
BS2017	43	8.7442	1.87836
BS2018	43	8.7442	2.15023
BS2019	43	8.5814	2.20640
BS2020	43	8.9302	2.33397
NOID2016	43	3.7907	1.01320
NOID2017	43	4.0000	1.06904
NOID2018	43	4.0698	1.20308
NOID2019	43	4.0000	1.15470
NOID2020	43	4.3023	1.47252
NOWD2016	43	1.1163	1.09565
NOWD2017	43	1.3953	1.09413
NOWD2018	43	1.5814	1.17984
NOWD2019	43	1.8140	1.21999
NOWD2020	43	1.9070	1.21133
ACS2016	43	3.3721	.57831
ACS2017	43	3.5116	.66805
ACS2018	43	3.4419	.62877
ACS2019	43	3.3953	.62257
ACS2020	43	3.5581	.82527
Valid N (listwise)	43		

Appendix 2: Frequency Distribution Table

Statistics

		CEOD2016	CEOD2017	CEOD2018	CEOD2019	CEOD2020
N	Valid	43	43	43	43	43
	Missing	0	0	0	0	0

CEOD2016

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	39	90.7	90.7	90.7
	YES	4	9.3	9.3	100.0
	Total	43	100.0	100.0	

CEOD2017

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	39	90.7	90.7	90.7
	YES	4	9.3	9.3	100.0
	Total	43	100.0	100.0	

CEOD2018

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	39	90.7	90.7	90.7
	YES	4	9.3	9.3	100.0
	Total	43	100.0	100.0	

CEOD2019

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	39	90.7	90.7	90.7
	YES	4	9.3	9.3	100.0
	Total	43	100.0	100.0	

CEOD2020

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	39	90.7	90.7	90.7
	YES	4	9.3	9.3	100.0
	Total	43	100.0	100.0	

Appendix 3: Panel Data Analysis for Return on Asset

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.685311	(42,167)	0.0000
Cross-section Chi-square	190.882339	42	0.0000

Cross-section fixed effects test equation:
Dependent Variable: ROA
Method: Panel Least Squares
Date: 02/17/22 Time: 20:32
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	-0.527340	0.676823	-0.779139	0.4368
BS	0.724170	0.261491	2.769395	0.0061
CEOD	-2.608797	1.405232	-1.856488	0.0648
NOID	0.469589	0.438081	1.071922	0.2850
NOWD	-0.577072	0.390329	-1.478424	0.1408
C	-1.495480	2.401303	-0.622778	0.5341

R-squared	0.079110	Mean dependent var	3.739961
Adjusted R-squared	0.057080	S.D. dependent var	6.065289
S.E. of regression	5.889644	Akaike info criterion	6.411778
Sum squared resid	7249.772	Schwarz criterion	6.505843
Log likelihood	-683.2662	Hannan-Quinn criter.	6.449785
F-statistic	3.590890	Durbin-Watson stat	0.845418
Prob(F-statistic)	0.003886		

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 02/17/22 Time: 20:37
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	0.334233	0.699787	0.477621	0.6334
BS	0.782658	0.353362	2.214887	0.0278
CEOD	-1.870630	1.946440	-0.961052	0.3376
NOID	-0.279762	0.566098	-0.494194	0.6217
NOWD	-0.675326	0.470015	-1.436818	0.1523
C	-1.875751	2.734546	-0.685946	0.4935

Effects Specification

	S.D.	Rho
Cross-section random	4.320112	0.5109
Idiosyncratic random	4.226834	0.4891

Weighted Statistics

R-squared	0.034424	Mean dependent var	1.499213
Adjusted R-squared	0.011324	S.D. dependent var	4.238764
S.E. of regression	4.214695	Sum squared resid	3712.604
F-statistic	1.490229	Durbin-Watson stat	1.624400
Prob(F-statistic)	0.194301		

Unweighted Statistics

R-squared	0.061000	Mean dependent var	3.739961
Sum squared resid	7392.349	Durbin-Watson stat	0.815810

Correlated Random Effects - Hausman Test
Equation: RANDOMEFFECTROA
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.801273	5	0.5784

Appendix 3: Panel Data Analysis for Return on Equity

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.797450	(42,167)	0.0000
Cross-section Chi-square	170.156953	42	0.0000

Cross-section fixed effects test equation:
Dependent Variable: ROE
Method: Panel Least Squares
Date: 02/17/22 Time: 20:39
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	-1.397192	1.298792	-1.075763	0.2833
BS	1.346012	0.501788	2.682431	0.0079
CEOD	-6.913314	2.696574	-2.563740	0.0111
NOID	0.835023	0.840657	0.993297	0.3217
NOWD	-1.103535	0.749023	-1.473299	0.1422
C	-1.006248	4.607987	-0.218370	0.8274

R-squared	0.083371	Mean dependent var	6.890854
Adjusted R-squared	0.061442	S.D. dependent var	11.66602
S.E. of regression	11.30195	Akaike info criterion	7.715338
Sum squared resid	26696.42	Schwarz criterion	7.809402
Log likelihood	-823.3988	Hannan-Quinn criter.	7.753344
F-statistic	3.801854	Durbin-Watson stat	0.999790
Prob(F-statistic)	0.002568		

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 02/17/22 Time: 20:42
Sample: 2016 2020
Periods included: 5
Cross-sections included: 43
Total panel (balanced) observations: 215
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACS	0.404289	1.378850	0.293207	0.7697
BS	1.560516	0.677180	2.304433	0.0222
CEOD	-4.996209	3.724362	-1.341494	0.1812
NOID	-0.636383	1.090712	-0.583456	0.5602
NOWD	-1.342170	0.913331	-1.469532	0.1432
C	-2.972384	5.317533	-0.558978	0.5768

Effects Specification

	S.D.	Rho
Cross-section random	7.765435	0.4543
Idiosyncratic random	8.511614	0.5457

Weighted Statistics

R-squared	0.036855	Mean dependent var	3.033010
Adjusted R-squared	0.013814	S.D. dependent var	8.575504
S.E. of regression	8.516069	Sum squared resid	15157.40
F-statistic	1.599504	Durbin-Watson stat	1.725944
Prob(F-statistic)	0.161590		

Unweighted Statistics

R-squared	0.064210	Mean dependent var	6.890854
Sum squared resid	27254.47	Durbin-Watson stat	0.959872

Correlated Random Effects - Hausman Test
Equation: RANDOMEFFECTROE
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.218802	5	0.3898