GLOBALIZING THE BOARDROOM AMONG FAMILY-CONTROLLED COMPANIES LISTED ON BURSA MALAYSIA- THE EFFECTS OF CORPORATE GOVERNANCE ON FIRM PERFORMANCE

VERONICA NG ZI CHING

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT DEPARTMENT OF INTERNATIONAL BUSINESS

NOVEMBER 2019

GLOBALIZING THE BOARDROOM AMONG FAMILY-CONTROLLED COMPANIES LISTED ON BURSA MALAYSIA- THE EFFECTS OF CORPORATE GOVERNANCE ON FIRM PERFORMANCE

BY

VERONICA NG ZI CHING

A final year project submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT DEPARTMENT OF INTERNATIONAL BUSINESS

NOVEMBER 2019

Copyright @ 2019

ALL RIGHTS RESERVED. No part of this paper may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, graphic, electronic, mechanical, photocopying, recording, scanning, or otherwise, without the prior consent of the authors.

DECLARATION

I hereby declare that:

- (1) This undergraduate FYP 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 FYP 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 10968.

Student ID:

Signature:

VERONICA NG ZI CHING

1700791

Date: _____

ACKNOWLEDGEMENT

First of all, praises and thanks to God, the Almighty, for all His blessings throughout my journey in completing this research.

Besides, I would like to express my deep gratitude to whomever who have contributed their valuable time in assisting me to complete this research project. I appreciate all the support, encouragement, advice and guidelines that have been given to me in completing this research project.

My appreciation goes to Mr. David Ng Ching Yat, my supervisor, for all the guidance, support, time, and valuable comments on this research. I am extremely grateful for the opportunity to work with him as I have learnt a great deal from his valuable knowledge and experience. Without his guidance and useful suggestions to improve on my research, completion of this research might be impossible.

Last but not least, I would like to thank my family and friends for their love, caring, prayers and encouragement throughout the journey of completing this thesis.

TABLE OF CONTENTS

Copyright Page	ii
Declaration	iii
Acknowledgement	iv
Table of Contents	V
List of Tables	ix
List of Figures	X
List of Appendices	xi
List of Abbreviations	xii
Preface	xiii
Abstract	xiv
CHAPTER ONE: INTRODUCTION	1
1.0 Introduction	1
1.1 Research Background	1
1.2 Problem Statement	3
1.3 Research Objectives	4
1.4 Research Questions	4
1.5 Significance of the Study	5
1.6 Chapter Layout	6
CHAPTER TWO: LITERATURE REVIEW	7
2.0 Introduction	7

2.1 Family-Controlled Companies	7	
2.1.2 Globalized Boardroom		
2.2 Corporate Governance in Malaysia		
2.3 Review of Literature		
2.3.1 Dependent Variables	10	
2.3.1.1 Return on Assets	10	
2.3.1.2 Return on Equity	11	
2.3.1.3 Tobin's Q	11	
2.3.2 Independent Variables		
2.3.2.1 Board Size	12	
2.3.2.2 Number of Independent Directors	13	
2.3.2.3 CEO Duality	14	
2.3.2.4 Number of Women Directors	16	
2.3.2.5 Number of Foreign Directors	17	
2.3.2.6 Number of Directors with Foreign Qualifications	18	
2.3.2.7 Audit Committee Size	19	
2.4 Theoretical Perspective of Corporate Governance	20	
2.4.1 Agency Theory		
2.4.2 Stewardship Theory	21	
2.4.3 Stakeholder Theory	23	
2.4.4 Resource Dependency Theory	25	
2.5 Research Framework	27	
CHAPTER THREE: RESEARCH METHODOLOGY		
3.0 Introduction		
3.1 Research Design	28	

3.2 Data Collection Method		
3.2.1 Secondary Data	28	
3.3 Sampling Design		
3.3.1 Target Population	29	
3.3.2 Sampling Frame	29	
3.3.3 Sampling Element	29	
3.3.4 Sampling Technique	30	
3.3.5 Sampling Size	30	
3.4 Research Instruments	30	
3.5 Constructs Measurement	31	
3.5.1 Origin of Construct	31	
3.5.2 Scale Measurement	32	
3.6 Data Processing	33	
3.7 Data Analysis	34	
3.7.1 Descriptive Analysis	34	
3.7.2 Inferential Analysis	34	
3.7.2.1 Panel Data Analysis	34	
CHAPTER FOUR: RESEARCH RESULTS	36	
4.0 Introduction	36	
4.1 Descriptive Analysis	36	
4.1.1 Dependent Variables	36	
4.1.2 Independent Variables	37	
4.2 Panel Data Analysis	39	
4.2.1 ROA	39	
4.2.1.1 Random Effect Model of ROA	39	

4.2.1.2 Hausman Test for ROA	40	
4.2.2 ROE	41	
4.2.2.1 Random Effect Model of ROE	41	
4.2.2.2 Hausman Test for ROE	42	
4.2.3 Tobin's Q	43	
4.2.3.1 Random Effect Model of Tobin's Q	43	
4.2.3.2 Hausman Test for Tobin's Q	44	
CHAPTER FIVE: DISCUSSION AND CONCLUSION	46	
5.0 Introduction	46	
5.1 Hypothesis Testing		
5.1.1 Hypothesis Testing Summary of ROA Results	46	
5.1.2 Hypothesis Testing Summary of ROE Results	47	
5.1.3 Hypothesis Testing Summary of Tobin's Q Results	47	
5.1.4 The Summary of Hausman Specification Test	48	
5.1.5 Hypothesis Test Summary	48	
5.2 Summary of Test	54	
5.2.1 Descriptive Analysis		
5.2.2 Inferential Analysis		
5.2.2.1 Panel Data Analysis (6Years Analysis)	55	
5.3 Discussion on Findings	55	
5.4 Limitations in Research	57	
5.5 Recommendations for Future Research	57	
5.6 Conclusion	58	
References	59	
Appendix A	81	

LIST OF TABLES

	Page
Table 3.3.5.1: The Number of Firms in Yearly Observations for 6-	30
Years Period	
Table 3.3.5.2: The Sample Size for 6-Years Period	30
Table 3.5.1a: Table of Dependent Variables	31
Table 3.5.1b: Table of Independent Variables	
Table 4.1.1: Descriptive Statistics for ROA, ROE, Tobin's Q	
Table 4.1.2a: Descriptive Statistic for CEOD	
Table 4.1.2b: Descriptive Statistic for BS, NOID, NOWD, NOFD,	38
NODFQ and ACS	
Table 4.2.1.1: Random Effect Model of ROA	39
Table 4.2.1.2: Hausman Test Result for ROA	40
Table 4.2.2.1: Random Effect Model of ROE	41
Table 4.2.2.2: Hausman Test Result for ROE	
Table 4.2.3.1: Random Effect Model of Tobin's Q	
Table 4.2.3.2: Hausman Test Result for Tobin's Q	
Table 5.1.1: Hypothesis Testing Summary of ROA Results	46
Table 5.1.2: Hypothesis Testing Summary of ROE Results	47
Table 5.1.3: Hypothesis Testing Summary of Tobin's Q Results	47
Table 5.1.4: The summary of Hausman Specification Test	48
Table 5.1.5: The Summary of Hypothesis Tests in Malaysia	48

LIST OF FIGURES

Page

Figure 2.4.1: Diagram of Agency Theory	20
Figure 2.4.2: Diagram of Stewardship Theory	21
Figure 2.4.3: Diagram of Stakeholder Theory	23
Figure 2.4.4: Diagram of Resource Dependency Theory	25
Figure 2.5: CG Mechanisms that Influence Firm Performance among Family-Controlled firms in Malaysia	27
Figure 3.6.1: Data Processing	33

LIST OF APPENDICES

Appendix A

Results of Multiple Linear Regression Analysis

LIST OF ABBREVIATIONS

ACS	Audit Committee Size
BODs	Board of Directors
BS	Board Size
CEO	Chief Executive Officer
CEOD	CEO Duality
CG	Corporate Governance
DVs	Dependent Variables
IVs	Independent Variables
NODFQ	Number of Directors with Foreign Qualifications
NOFD	Number of Foreign Directors
NOID	Number of Independent Directors
NOWD	Number of Women Directors
P-value	Probability Value
ROA	Return on Assets
ROE	Return on Equity
SCM	Securities Commission Malaysia
S.D.	Standard Deviation

PREFACE

This topic of this research is Globalizing the Boardroom among Family-Controlled Companies listed on Bursa Malaysia- The effects of Corporate Governance on Firm Performance. The scope of corporate governance is being chosen as it relates to the course of International Business. Moreover, familycontrolled companies are interesting to further explore on.

Family-controlled companies play important roles in Malaysia's economy. Thus, it is quite interesting to explore and gain some knowledge on this scope of research. Besides, this research can also contribute to different parties of a company in understanding the significance of corporate governance in their roles.

In conclusion, this study can help practitioners such as the board of directors, shareholders, stakeholders as well as future researchers to gain further understanding of corporate governance and its impact on firm performance.

ABSTRACT

This research aims to determine if corporate governance affects firm performance among family-controlled listed companies on Bursa Malaysia with globalized boardroom after the implementation of Malaysia Code on Corporate Governance (MCCG) 2012 and The Code 2012.

In this research, all family-controlled companies listed on Bursa Malaysia from the year 2013 to 2018 are obtained from book "Family Controlled Companies in Bursa Malaysia". The sample size includes 240 firm year observations. Panel data analysis which includes fixed and random effect model as well as Hausman test, are used in this research to analyse the effect between CG mechanisms (Board size, Number of independent directors, CEO duality, Number of women directors, Number of foreign directors, Number of directors with foreign qualifications and Audit committee size) and firm performance, as measured by return on assets (ROA), return on equity (ROE) and Tobin's Q. A liberty is also taken to run multiple linear regressions (MLR).

According to the panel data analysis, it is found that there is no significant effect between corporate governance and firm performance of family-controlled companies listed on Bursa Malaysia with globalized boardroom. The same results were also being found in using multiple linear regressions.

Thus, this research is helpful in providing further insights of corporate governance practices to the government, policy makers, stakeholders, investors and banks.

CHAPTER 1: INTRODUCTION

1.0 Introduction

This research sought to determine if Corporate Governance (CG) has any effect on the firm performance among family-controlled listed companies on Bursa Malaysia with a globalized boardroom with foreign directors and directors with foreign qualifications. There were seven sections being included in this chapter, which were introduction, research background, problem statement, research objectives, research questions, significance of the study and chapter layout.

1.1 Research Background

Family-controlled companies play a significant role in Asian countries (Filatotchev, Lien, & Piesse, 2005). Family-controlled companies are the businesses that are run by two or more family members with the majority of the ownership held by the family. Research by Ibrahim & Abdul Samad (2011) revealed that there was a great percentage of listed companies in East Asia's countries especially Malaysia who is governed by the board of directors (BODs) which were family-based.

BOD becomes a vital element in a firm's CG system. The board served two functions which were the monitoring and advisory roles (Masulis, Wang & Xie, 2012). Board diversity (e.g., gender diversity, nationality diversity) has been a commonly examined characteristic on boards because it was believed that the board quality can be improved with the presence of distinct members from dominant members in the group (Zhu, 2012). According to Masulis, Wang & Xie (2012), they made a recommendation that foreign directors actually brought both benefits and costs to firms. According to Masulis & Wang (2007), there was an

argument that the foreign directors' global perspective and foreign expertise are valuable additions to boards, but, a greater cost is needed.

According to MCCG (2017), CG was defined as "the process and structure used to direct and manage the business and affairs of the company towards promoting business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value while taking into account the interest of other stakeholders". The objective of CG is to align the interests of individuals, corporations and society (Škare & Hasić, 2015). Ever since the corporate scandals and the failures of some of the biggest firms around the world, the attention of CG increased worldwide (Ghabayen, 2012).

Good CG was fundamental for companies to establish a striking investment environment to gain a strong position in financial markets while facilitating the success of entrepreneurship (Khan, 2011). According to Škare & Golja (2014), countries will achieve higher income growth rates with better CG. CG also help to improve firm performance and protect shareholders' interests as it acts as the mechanism of internal governance and monitors firm management (Ghabayen, 2012).

CG becomes a hot topic due to globalization and is important in organizations in both developed and developing countries (Mulili & Wong, 2010). There was not a single model of CG that could be applicable to all every organization even within a single country as content and structure of CG also need to facilitate based on the different situation of every country. Therefore, international organizations have encouraged every country to spread codes in order to have an international standard of CG (Otman, 2014).

This research focus on analysing the effects of CG mechanisms such as board size (BS), number of independent directors (NOID), CEO duality (CEOD), number of women directors (NOWD), number of foreign directors (NOFD), number of directors with foreign qualifications (NODFQ) and audit committee size (ACS)

on firm performance of family-controlled companies on Bursa Malaysia such as Return on Equity (ROE), Return on Assets (ROA) and Tobin's Q.

1.2 Problem Statement

Due to the Asian financial crisis in 1997/1998, CG in Malaysia became an interesting topic and Malaysian companies were said to increase their awareness of the need for a better CG (Wan Yusoff, 2010).

Most of the research studied on the CG of family-controlled companies (Chau & Gray, 2010; Bartholomeusz & Tanewski, 2006; Odehnalová & Pirožek, 2018; Lee & Barnes, 2017; Filatotchev, Lien, & Piesse, 2005). There was insufficient research that studied on impact of CG among family-controlled companies with a globalized boardroom. There was only a few research that studied the impact of CG with globalized boardroom, but not among family-controlled companies (Masulis, Wang & Xie, 2012; Rahman, Rehman & Zahid, 2018). Although the studies on CG had recently increased, there is still a lack of research that determines if the mechanisms of CG effect on family-controlled companies in Bursa Malaysia.

According to Mashayekhi and Bazaz (2008), there were only very scarce shreds of research on the impact of CG on firm performance, especially in developing countries. The CG impact on firm performance was being studied in most of the existing empirical literature. However, there were inconsistent results as different studies yielded mixed results (Yermack, 1996; Morck, Shleifer & Vishny, 1988; Klein, 1998). These resulted in a huge gap between the significance and insignificance impacts of CG on firm performance. Thus, this research was conducted to further study and determine the relationship between CG with firm performance, specifically among the family-controlled companies with the globalized boardroom in order to narrow up the gap of results.

1.3 Research Objectives

The *primary objective* of this research was to determine if CG affects firm performance among family-controlled listed companies on Bursa Malaysia with globalized boardroom. Performances of the companies were measured by ROA, ROE and Tobin's Q.

In line with the primary objectives, the secondary objectives were

- i) To determine the effect between BS and firm performance.
- ii) To investigate the effect between NOID and firm performance.
- iii) To evaluate the effect between CEOD and firm performance.
- iv) To explore the effect between NOWD and firm performance.
- v) To ascertain the effect between NOFD and firm performance.
- vi) To determine the effect between NODFQ and firm performance.
- vii) To examine the effect between ACS and firm performance.

1.4 Research Questions

The general research question was:

Has CG among family-controlled listed companies on Bursa Malaysia with globalized boardroom affect the firm performance?

The *specific research questions* were:

- i) Does BS have a significant effect on firm performance?
- ii) Does NOID show a significant effect on firm performance?
- iii) Has CEOD has a significant effect on firm performance?
- iv) Can NOWD affect the firm performance significantly?
- v) Will NOFD have a significant effect on firm performance?
- vi) Is there any significant effect between NODFQ and firm performance?
- vii) Does ACS affect firm performance significantly?

1.5 Significance of the Study

This research could contribute to both theoretical knowledge as well as development practices to the stakeholders, policymakers, as well as academia. Good CG practices can help draw in new investors and capital as it would create a positive relationship between a company and its wider business environment. According to Dalton and Dalton (2005), the connection between CG and performance has significant implications for policymakers who prescribe CG mechanisms. A good CG is important to increase investor confidence and market liquidity.

According to Shleifer and Vishny (1997), an outstanding CG could reduce the "control rights" shareholders and creditors hold on managers. Therefore, in the relationships of board and management, transparency to shareholders, and fairness to other stakeholders should exist (AlFaki, 2006). With this, conflict of interests was reduced and resolved which led to a prohibition of manipulation activities on the financial statements by companies in order to hide their poor company performance.

Improving CG in emerging-market countries brought many essential public policy objectives. For instance, a fine CG could lower emerging market exposure to financial crises, strengthen property rights, minimize transaction costs and the cost of capital and enhance firm performance (Al-Matari et al., 2012).

According to Mohan & Chandramohan (2018), a well-functioning CG was able to facilitate in attracting new investments. With this research, investors and shareholders were able to make better decisions regarding their investments because good CG mitigates risks since the board and management safeguarded their interests. According to Bhugeloo (2019), a good CG framework could provide extra comfort to investors on their investment decisions.

1.6 Chapter Layout

This research is made up of five chapters; Chapter 1 was an overview of the study which encompassed introduction, research background, research problem, followed by research objectives and questions. The significance of the study is also discussed in this chapter. Chapter 2 was the literature review which comprised of the discussion of past studies that are related to this research. Chapter 3 reported the research methodology, including the explanation of the methods used in order to conduct this research. Chapter 4 then explained the research results of descriptive analysis and panel data analysis. Chapter 5, summarized on the hypotheses tests which include Multiple Linear Regression (MLR) and panel data analysis. Limitations of this study and recommendations for future analysts are provided in this chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter included an overview of the review of the literature. The literatures were sourced from reports, e-books, articles, journals, and theses. This chapter covered seven sections; Section 2.1 discussed on the literature of family-controlled companies and globalized boardroom; Section 2.2 discussed on the literature of CG; Section 2.3 talked on the review of the literature for dependent variables (DVs) and independent variables (IVs); Section 2.4 discussed the theoretical perspective on CG and Section 2.5 covered on research framework.

2.1 Family-Controlled Companies

According to Macciocchi (2014), family firms referred to small businesses held by a family, but also large multinational firms. They were publicly traded companies, which were directly controlled by one or more families, or by an individual who has publicly uncovered his objective to pass the stick to one of his relatives (Faccio and Lang, 2002; Brunello et al., 2001, 2003; Villalonga and Amit, 2006). Studies that were done by Anderson and Reeb (2003); Yeh et al., (2001), stated that family-controlled firms were the firms where families hold shares according to a particular amount of equity while the family members appearing on the board.

Family controlled firms were the most common form of business organization in the world (Ibrahim & Samad, 2010). They significant in Asian countries, as most research of CG in Asian countries relied on case study methods and tend to focus on certain industries (Taniura 1993; Numazaki, 1993).

There were 27 among the 40 richest Malaysians in the year 2008 were familybased and it was 67.5% of the top 40 (Ibrahim & Samad, 2010). According to Ponnu et al., (2009), there was 28.3% of market capitalization in Malaysia being controlled by 15 families. In other words, family firms have a tendency to lead the corporate world with a ubiquitous performance.

According to Piesse, Filatotchev and Lien (2007), ever since the South East Asian financial crisis occurred, the countries which were greatly occupied and structured by the family-controlled companies started to emphasize on CG.

2.1.2 Globalized Boardroom

According to Walt and Ingley (2003), BOD was referred to a collection of individuals with diverse competencies and capabilities being gathered together to perform monitoring and advisory functions in a company. Diversified boards appeared to be an important governance issue. Respectively, the controlling concern were the problems of what constitutes the correct mix of individuals and how these individuals could help to improve board outcomes (Abdulmalik & Che Ahmad, 2016).

The benefit of Foreign Independent Directors (FIDs) was that they could deliver valuable international knowledge and information to companies. FID usually has first-hand knowledge of foreign markets which was the key element to aid the company in developing a network with foreign contacts. However, according to Masulis, Wang & Xie (2012), they claimed that FID tends to be less effective in the field of management compared to the local directors. They also validated that the existence of FID would bring to poor board meeting attendance records and more likely to display the scenario of intentional financial misreporting, higher CEO compensation and lower CEO turnover to performance.

2.2 Corporate Governance in Malaysia

CG was defined as the structures and procedures for the direction and control of companies. According to Mohd Suffian et al. (2017), CG not only deals with the relationship between management, BODs, shareholders and stakeholders, it also deals with how the companies are being managed and controlled. According to Ehikioya (2009), CG is important in shaping up and also makes the firm to be more competitive globally.

Due to the Asian Financial Crisis in the year 1997-1998, the development of CG was being influenced in most South-east Asian countries including Malaysia. Thus, remedial actions such as the introduction of MCCG has been taken since most of the countries have started to realize the importance of CG (Mohd Suffian et al., 2017). Besides, to promote CG in Malaysia, the high-level finance committee has contributed to making symbolic changes to reform corporate practices (Bhatt & Bhatt, 2017).

The Malaysian Code on Corporate Governance (MCCG) was introduced in the year 2000. This has become an important tool to reform CG and brought positive impacts to the CG practices of companies (MCCG, 2017). It was then being revised and named as MCCG 2007. This code focuses on strengthening and enhancing the roles and fiduciary duty of a board member (Chu, Lai & Song, 2017).

In year 2011, the Securities Commission Malaysia (SCM) released CG Blueprint 2011 to enable a stricter CG guideline for companies in Malaysia (Bhatt & Bhatt, 2017). Thus, MCCG 2012 was introduced. This code focused on reinforcing the board structure and composition by recognizing the role of directors as active and accountable fiduciaries. They were obliged not to just set strategic direction and oversee the business, but also to make sure that the company is conducting in a way which complies to the laws and values while at the same time ensuring the appropriate management of risks and level of internal controls (Securities Commission Malaysia, 2012).

According to Christopher and Lee (2017), SCM has introduced a new MCCG, which was MCCG 2017 to replace MCCG 2012. It was stated that MCCG 2017 brought new huge changes as it adopted the Comprehend, Apply and Report method (CARE approach), where it was distinct in terms of the compliance method in MCCG 2012. It was believed that MCCG 2017 could allow a more flexible and adaptable application in business practices.

MCCG applies to all the listed companies in Malaysia, where some practices are only applicable to the "Large Companies" who are on the FTSE Bursa Malaysia Top 100 Index or those who have a market capitalization of RM2 billion and above. Since MCCG is targeted at listed companies, the non-listed entities are encouraged to adopt these guidelines to improve their responsibility, transparency, and sustainability.

2.3 Review of Literature

2.3.1 Dependent Variables

2.3.1.1 Return on Assets (ROA)

According to Finkelstein and D'Aveni (1994), ROA was calculated as net income divided by total assets and acted as an indicator of short-term performance. The rate of return on the assets of a firm can reflect the efficiency of the usage of a firm's assets (Heenetigala, 2011). ROA is also an indicator of how profitable a firm is in terms of its total assets (Khatab, Masood, Zaman, Saleem & Saeed, 2010). Besides, according to Epps and Cereola (2008), ROA showed the earnings a firm generated from its investment in capital assets to the investors. They also stated that ROA could help in assessing the CG system of a firm. Several previous research also adopted ROA as firm performance measure (Lin et al., 2008; Heenetigala, 2011; Hashim, 2011; Farhat, 2014; Lee & Barnes, 2017). Moreover, some studies have shown that board characteristics have a positive significant impact on ROA (Farhat, 2014; Khatab et al., 2010; Ng et al., 2016). However, some studies concluded no impact between CG and ROA (Thuraisingam, 2013; Sorin, Monica & Codruta, 2017).

2.3.1.2 Return on Equity (ROE)

ROE was calculated by net income divided by common equity (Heenetigala, 2011). According to Khatab et al. (2010), ROE was referred to as the amount of net income that was returned as a percentage of shareholders' equity. ROE was also considered to be one of the measures to determine the effectiveness of the management of a firm using its firm's assets in making a profit. Besides, ROE was able to examine the degree of profitability of a firm by using the money invested by shareholders and stockholders (Khatab et al. 2010). In the shareholders' perspective, ROE was being recognized as one of the reliable measurements in examining firm performance (Johnson & Greening, 1999). With this, a higher return was indicated by a higher ROE. There were several studies that have used ROE to measure the firms' performance (Zabri et al., 2016; Kajola, 2008; Lee & Barnes, 2017). Some of the previous research found that there were mixed results when analyzing the CG mechanisms with firm performance. According to Ng et al. (2016), they concluded that ROE had a positive relationship with board characteristics; negative relationship with CEO duality.

2.3.1.3 Tobin's Q

Tobin's Q was first introduced by Tobin in the year 1967 (Farhat, 2014). Tobin's Q refers to the total market value of the company added with liabilities divided by total book value with liabilities. Moreover, Farhat (2014) also stated that Tobin's Q was being used broadly as firm performance measures no matter in developing or developed countries. Several studies were found using Tobin's Q (Borlea et al., 2017; Fu, Parkash & Singhal, 2016; Balagobei, 2018). The previous studies shown that there were mixed results when analyzing the CG mechanisms with firm performance. A study done by Yermack (1996), on the governance and financial data of 452 large US firms has found that there was an inverse relationship between BS and firms' Tobin's Q value. This was then supported by the findings of another study by Gurusamy (2017) who also stated that BS has no impact on firm performance. However, there was some research that concluded positive relationship between BS and Tobin's Q (Kao & Chen, 2004; Singh et al., 2018).

2.3.2 Independent Variables

2.3.2.1 Board Size

Empirical studies have found mixed affiliation between board size and firm performance. Based on the study by Lipton and Lorsh (1992), they have suggested that an effective board should be small which only comprised of maximum eight members. This is because an oversized board will cause difficulties in expressing ideas and opinions, controlling and functioning (Hermalin & Weisbach, 2003). Besides, the larger board will be ineffective as the board will then be performing beyond the ordinary functions of the management and moved towards a more complicated role to serve the compliance goals (Hermalin & Weisbach, 2003). In contrast, Coles et al., (2008) supported a larger BS played an important advisory role in a firm.

Some research resulted that when BS grows, the value of the firm declined as there is a negative relationship between BS and firm performance (Guo & Kga, 2012; Hussin & Othman 2012; Kota & Tomar, 2010; Malik & Makhdoom, 2016). According to Bennedsen, Kongsted & Nielsen (2008), they found that there was no effect on firm performance when the BS was at six or lesser members, but when there were more than six members on the board, a negative effect was seen. On the other hand, according to the research by Badu and Appiah (2017), they found significant relationship between BS and firm performance. Nevertheless, Gurusamy (2017) also found a significant and positive affiliation of BS and firm performance with the ROE and ROA; negative and no relationship with Tobin's Q. A large board was also proved to perform better than smaller board (Abidin et al., 2009).

Based on the past studies, it was hypothesized that:

H1A: BS has a significant effect on firm performance (ROA).

H1B: BS has a significant effect on firm performance (ROE).

H1c: BS has a significant effect on firm performance (Tobin's Q).

2.3.2.2 Number of Independent Directors

The term "independent" referred to a director who can act independently in management and has no conflict of interests (Goh et al., 2014). Hence, independent directors are always expected to practice fair and independent judgment in shareholders' interests. Furthermore, Ali (2016) stated that board's independence plays an important role in CG as a firm can make better and unbiased decisions when their board is independent. Firms who have their board as independent tend to face lesser financial pressure (Elloumi & Gueyie, 2001). According to Borlea et al. (2017), the number of outside directors on the board can identify the independence of board.

In Malaysia, MCCG required all the firms to have at least one-third of independent directors on boards (Ponnu et al., 2009). In year 2002, MCCG defined the independent directors of public listed firms strictly (Liew, 2007; Pascoe & Rachagan, 2005). With this, directors need to claim to be independent to fulfill the requirements of a 'general test'. Further, according to Principle 3 of MCCG (2012), it stated that evaluation of the independent directors should be done annually.

According to Gomez-Mejia et al. (2011), family owners view independent directors as a source of expertise instead of monitoring. Family owners were the ones who appointed the independent directors; thus, the independent directors would like to lend support to the board at times, which then render the effectiveness of internal governance (Schepker & Oh, 2013).

Research by Bebchuk and Weisbach (2010) shown that a board with more outside directors increased board independence and positively affected the firm performance. Moreover, some studies reported a direct relationship between board independence and business performance (Hidayat & Utama, 2012; Black et al., 2015; Ameer et al., 2010). On the contrary, it was argued by Bhagat and Black (2002) that there was no evidence that support higher board independence could increase the firm performance. It was then supported by Brown and Caylor (2004). Besides, some studies concluded that there was no relationship between NOID and financial performance (Kumar and Singh, 2012; Mohd Nor, Shafee, & Samsuddin 2014).

Based on the past studies, it was hypothesized that:

H2A: NOID has a significant effect on firm performance (ROA).

H2B: NOID has a significant effect on firm performance (ROE).

H2c: NOID has a significant effect on firm performance (Tobin's Q).

2.3.2.3 CEO Duality

CEO duality (CEOD) referred to the board leadership structure where the roles of Chief Executive Officer (CEO) and chairman are entrusted to one person. A CEO is responsible for planning and implementing strategic plans. According to Weir and Laing (2001), the chairman of a firm is obliged to monitor and evaluate the executive directors, including the CEO. With CEO duality, there will be freedom for one to manage the firm freely without any constraints (Chau & Gray, 2010). Having the same individual for both positions could be a potential advantage as they would have sufficient

knowledge and a better understanding of the operating procedures and environment of the firm (Farhat, 2014).

However, Jensen (1993) stated that CEO duality could be perceived as compromising the board's independence as one possesses a huge amount of power and authority. According to Ali (2016), CEO duality will lead to biased decisions to be made and cause one to monopolize. This will affect the firm performance and lead to lower confidence of board members. Imbalanced power will be created within the firm and results in ineffective and highly biased decisions.

The significance of board independence is highlighted in MCCG 2017 Paragraph 1.3 in order to promote authority and encourage the separating of accountabilities (Securities Commission Malaysia, 2017). MCCG 2012 further elaborates on the independency of directors as they could make independent and objective judgment to the board and also alleviate the risks arising from conflict of interest (Securities Commission Malaysia, 2012).

A study by Hussin and Othman (2012) has concluded that companies with independent chairman have a positive effect on the companies' performance. According to Norazian & Radiah (2012), CEO duality was found to have a significant effect on firm performance of ROA. However, there were some inconsistent results where another study with an analysis of 87 companies found that CEO duality has no effect on a company's profitability (Ghazali, 2010). Research by Goh (2014) on family business firms found that CEO duality has a non-significant effect on the relationship with firm performance.

Based on the past studies, it was hypothesized that:

H3A: CEOD has a significant effect on firm performance (ROA).

H3B: CEOD has a significant effect on firm performance (ROE).

H3c: CEOD has a significant effect on firm performance (Tobin's Q).

2.3.2.4 Number of Women Directors

According to Rose (2007), number of women directors is referred to as the proportion of people on board who are women. Gender diversity on board has become a popular topic of CG lately (Pasaribu, 2017). There were several policies being implemented by Malaysian regulators to encourage board gender diversity. As stated in MCCG 2017, large companies should comprise of a minimum of 30% of women directors on board (Securities Commission Malaysia, 2017). This has proven the effort of the government to encourage more women on board. According to Ruigrok et al. (2007), women directors could share distinct values, norms and understanding besides having valuable skills and knowledge. Thus, women directors can improve decision making. Konrad, Kramer & Erkut (2008) also claimed that women directors with special qualities such as open-minded and sympathy are important in solving problems in meetings. Thus, they can lead to better oversight on the management reports which then improve the earnings of a firm (Srindhi, Gul & Tsai, 2011).

According to Erhardt et al. (2003), they concluded that there was a significant effect between gender diversity and firm performance. Another research by Conyon and He (2017) also proven that having women on board led to better performance. Besides, positive and significant association between NOWD and firm performance was also shown in Kanadli, Torchia and Gabaldon (2018). However, according to Adams and Ferriera (2009), they found that women directors do not have a strong relationship with the financial performance of the firm. Another research by Farell and Hersch (2005) has stated that more women on the boards leave no significant effect on firms' performance.

Based on the past studies, it was hypothesized that:

H4A: NOWD has a significant effect on firm performance (ROA).

H4B: NOWD has a significant effect on firm performance (ROE).

H4c: NOWD has a significant effect on firm performance (Tobin's Q).

2.3.2.5 Number of Foreign Directors

It is often important to understand who is on the boards to understand the boards' effects. According to Tee (2018), the profiles of all the directors in a company's annual report will be read to determine whether the person is a foreign or local citizen. Thus, the number of foreign directors is being measured manually.

Research by Masulis, Wang & Xie (2012) stated that foreign directors could lead to less effective monitors. Foreign directors may also be less effective on corporate boards due to their physical and also cultural and language differences (Barrios et al., 2016). On the other hand, Barrios et al. (2016) and Masulis et al. (2012) claimed that foreign directors are actually valuable to their firms with the expertise that is unavailable locally for firms that want to be involved in globalization. Foreign directors possess foreign experience that could improve firm performance (Giannetti et al., 2014).

All the empirical results on the impact of foreign directors' appointments on a firm's performance were inconsistent. Miletkov, Poulsen, and Wintoki (2014) conducted a cross-country study and concluded that the impact of foreign directors on firm performance is positive. Another study by Gulamhussen and Guerreiro (2009) showed that there was a positive impact of foreign directors' presence on the firm's performance. The presence of foreign directors that have positively influenced the firms' performance was shown in several studies (Carter, Simkins and Simpson, 2003; Choi, Park and Yoo, 2007). However, Masulis, Wang and Xie (2012) proved that foreign directors lead to poor firm performance.

Based on the past studies, it was hypothesized that:

H5A: NOFD has a significant effect on firm performance (ROA).

H5B: NOFD has a significant effect on firm performance (ROE).

H5c: NOFD has a significant effect on firm performance (Tobin's Q).

2.3.2.6 Number of Directors with Foreign Qualifications

Every organization has BOD which is a chosen group of people who oversee a firm and represent shareholders. According to KPMG (2001), several factors such as knowledge, education, credibility, and experience were important for board efficiency. Most academic research today identified their directors as insiders and outsiders. However, this shows ignorance of the true value of the expertise that directors could bring onto the board. According to Gantenbein and Volont é (2011), the subject of the personal profile needs to be focused, since the performance benefits from career specifics are not exactly associated with demographics (i.e., females or foreigners).

Gantenbein and Volont é (2011) stated that the factor of the place of education (domestic or abroad) might show more significance than the demographic attributes when explaining firm performance. In a less developed country, a person with a foreign degree is considered elite (Baldwin, 1963). According to Ball and Chik (2001), they mentioned that people usually prefer to study in developed countries due to a lack of higher education in the home country and also the limitations of modern and cool technologies in home country.

Unfortunately, the empirical studies and results on the correlations of directors with foreign qualifications and firm performance were rare. Research by Zeng and Xie (2004) found that the U.S. employees who had foreign qualifications earned lesser than Americans who had domestic qualifications. In Indonesia, it was concluded that board members with foreign qualifications led to a better financial performance of the firm (Darmadi, 2011).

Based on the past studies, it was hypothesized that:

H6A: NODFQ has a significant effect on firm performance (ROA).

H6в: NODFQ has a significant effect on firm performance (ROE). H6с: NODFQ has a significant effect on firm performance (Tobin's Q).

2.3.2.7 Audit Committee Size

An audit committee is a sub-committee of the board of directors. ACS refers to the number of directors who are serving on the board of audit (Ghabayen, 2012). As stated in MCCG (2017), an effective audit committee should oversee the financial reporting process while bringing in transparent, focus and independent judgment. Moreover, under Principle B of MCCG (2017), it stated that the chairman of the audit committee should not be the chairman of the board and the audit committee should only comprise of solely independent directors (Securities Commission Malaysia, 2017).

According to Gurusamy (2017), the number of audit committee members is not encouraged to be too high to prevent dispersion of responsibility. Similarly, audit committees are required to be at least three members in Malaysia (Malaysia Bursa Securities Limited, 2014). ACS is quite significant in order to enhance the effectiveness of a firm.

Previous studies show mixed results on the effect of ACS and firm performance. Research by Yasser, Entebang and Mansor (2011) concluded that there was a positive relationship between ACS and firm performance in 30 listed firms in Karachi Stock Exchange. According to Matari et al. (2012), the results showed that ACS and firm performance are significantly related to the availability of broader knowledge and wider authority. However, Azim (2012) found that ACS showed a negative relationship with firm performance due to inefficient governance. Mak and Kusnadi (2005) could not provide any relationship between the size of ACS and firm performance in Malaysia and Singapore.

Based on the past studies, it was hypothesized that:

H7A: ACS has a significant effect on firm performance (ROA).

H7B: ACS has a significant effect on firm performance (ROE).

H7c: ACS has a significant effect on firm performance (Tobin's Q).

2.4 Theoretical Perspective of Corporate Governance

2.4.1 Agency Theory



Figure 2.4.1: Diagram of Agency Theory

Source: Developed for the research

According to Dedman (2004), agency theory has been widely used in CG studies and analyses. It was developed by Jensen and Meckling (1976). Under this theory, principal is referred to the shareholder or owners of the company, while agent stands for the BOD or managers. It emphasizes on the idea of separation of ownership (principal) and management (agent). The relationship between the principal and agent is known as agency relationship. An agent performs daily business operations on behalf of the principal in an organization. The principal also delegates the authority of decision making to the agent and expects the agent to make decisions in the interest of principal. According to Fontrodona and Sison (2006), the agent is bound and must perform its legal and economic obligations for the principal.

Under the separation of ownership, when agent is not acting in the best interest of principal, problem will arise. This is named as agency problem. According to Oguz and Dincer (2016), two types of agency problems could be formed, which is the difference in risk appetite between the principal and agent and the conflict of interests occurred between both parties.

According to Choong et al. (2014), CG that involves BS and independence of director could also help in reducing agency problems. When the BS is larger, more knowledge, expertise and experience is available and they are able to limit agency problem (Ghazali, 2010). Moreover, independent directors who have control over the management will pay attention to the interest of the shareholders and reduce agency problems.

There were several CG mechanisms that could be placed in a company to reduce agency problems and ensure the utilization of resources by managers efficiently. They can be categorized into internal and external control mechanisms (Biswas & Bhuiyan, 2006). For internal mechanisms, it includes compensation contracts and implementing monitoring activities, while external mechanisms involve monitoring activities by the capital market which include investors, investment professionals and legislators (Farhat, 2014). According to Davis et al. (1997), the objectives of CG mechanisms are to "protect shareholder interests, minimize agency cost and ensure agent-principals interest alignment".

2.4.2 Stewardship Theory




Source: Developed for the research

According to Donaldson and Davis (1991), stewardship theory was developed as a model where senior executives (managers) work diligently in the best interests of the principals by acting as stewards of an organization. In contrast with agency theory, stewardship theory focuses on the principal-steward relationship (Davis et al., 1997). Besides, stewardship theory also describes that agent, who is the steward of a company, will act in the company's interest instead of their own interest to achieve the common goals with the principal. The stewards will pay more attention to collective rather than individual goals as they believe that their personal needs would be fulfilled when their interests are aligned with the interests of the principals (Davis et al., 1997). According to Nicholson and Kiel (2003), stewardship theory asserts that managers are trustworthy individuals. Thus, it assumes that managers are trustworthy stewards of an organization (Davis et al., 1997, Donaldson & Davis, 1991).

Stewardship theory actually places a greater value on goal unification with the parties involved in CG as compared to the steward's self-interest. The cultivation of the process can increase a company's sustainability and ultimately become a competitive advantage for the company (Eddleston & Kellermanns, 2007).

According to Van Slyke (2006), the transaction costs involved in a principal-steward relationship will be reduced over time. The transaction costs will only be higher in the initial stage as the principal needs more investment on time in formulating problem, making joint decisions, exchanging information and also attempt to understand the needs of stewards. This is because the frequency of monitoring activities of stewards and rebidding of contracts reduced since stewardship theory emphasizes more on collective goals instead of individual goals.

Psychological and situational factors have to be taken into account when choosing the stewardship behaviour (Davis et al., 1997; Vallejo, 2009).

Psychological factors include motivation of an individual that could provide satisfaction for itself such as some intangible and high order rewards (Davis et al., 1997; Lee & O'Neill, 2003). Situational factors are more related to the cultures of the surrounding (Donaldson & Davis, 1991). The theory also suggests that collectivists and low power distance cultures are factors that influence stewards' behaviour. Therefore, an organization that adopts and influences the choice of stewardship behaviour could help to maximize a firm's performance (Madison, 2014).

2.4.3 Stakeholder Theory



Figure 2.4.3: Diagram of Stakeholder Theory

Source: Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: concepts evidence, and implications. *Academy of Management Review*, 20(1), 65-91.

According to Freeman (1984), a stakeholder is any group of people who can affect or is affected by the activities of the firm, in achievement of firms'

objectives. This theory emphasized on the importance of balanced interests of the stakeholders in order for the company to create value (Gooyert, Rouwette, Kranenburg & Freeman, 2017). Thus, this has significantly increased the obligations of managers from the interests of the shareholders to other stakeholders by expanding their network of relationships to serve more parties (Okiro, 2014). Moreover, Freeman (1999) stated that this group of the network is way more important as compared to the relationship in agency theory.

Due to the internationalization of the capital markets, CG is in a state of transition and result in convergence of the shareholder value-based approach to CG and the stakeholder concept of CG towards sustainable business systems. Hence, the interest of stakeholders has become more significant. The interconnections have caused the companies to become larger and enhance their impact on society. Thus, a firm who adopts stakeholder theory will also be affected by stakeholders instead of it affects the stakeholders.

According to Smallman (2004), by fulfilling the interests of stakeholders, it has provided the agents an opportunity to draw the wealth away to others from shareholders. However, according to the moral perspective of stakeholder theory, managers of an organization should manage the organization for the benefit of every stakeholder since all the stakeholders have a right to be treated fairly (Deegan, 2004). Companies would be considered intelligent by taking into account the interest of a broader group of stakeholders since they might have enough power to demolish a company if their needs are not satisfied (Ooi, 2017).

2.4.4 Resource Dependency Theory

Figure 2.4.4: Diagram of Resource Dependency Theory



Source: Developed for the research

The resource dependence view of CG originates from the logic that the elements of CG can act as important resources for a firm (Udayasankar, 2008). This theory states that organizations should participate in interactions with other organizations to obtain resources to sustain their long term existence. According to Pfeffer and Salancik (1978), organizations are only able to acquire these resources from own environment while there will also be other organizations that want to acquire the same resources. This theory stated that the accomplishment of a firm relies on how the firm expands its efforts to obtain the resources they need in order for it to operate smoothly (Pfeffer, 1972).

Resource dependence theory is being used most in research on BOD. This was because it is a distinct tool for examining boards. Nonetheless, it was claimed that it is a successful theory to understand the boards better (Hillman et al., 2009). The main role of BOD is to provide access to resources for the firms, be it in positive or negative effect that could help in maximizing the firm performance (Pfeffer & Salancik, 1978). The resources that are provided by the board include advice and counsel, legitimacy, platform to communicate and access to significant resources or commitments outside the firm. These four components are firmly attached to the arrangement of assets and board capital.

This theory can advantage the boards with a higher number of independent directors. According to Peng (2004), it was concluded that an independent director is more likely to influence the firm performance positively given there is a need for environmental change as independent directors own knowledge and connections with external environment.

2.5 Research Framework





Source: Developed for the research

A research framework was developed as above. The IVs were the CG mechanisms of BS, NOID, CEOD, NOWD, NOFD, NODFQ and ACS. The DVs were referred to the firm performance, ROA, ROE and Tobin's Q. This framework was to determine if CG has effect on the firm performance among the family-controlled firms listed on Bursa Malaysia.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter discussed the research methods that have been applied in the research. It was made up of seven sections. The sections were research design, data collection method, sampling design, research instruments, construct measurement, data processing and data analysis.

3.1 Research Design

The purpose of this study was to determine if CG has any effect on firm performance among family-controlled companies on Bursa Malaysia from year 2013 to 2018. A quantitative research method is used in this research. All the data involved in this study was obtained from the annual reports of the respective companies and Bloomberg. In order to run the panel data analysis, full and complete data for the six years period was required. Thus, for some companies with missing data, they were being replaced with "0". A cross-sectional analysis was used in this research as the effect between the DVs and IVs were examined for the six years period.

3.2 Data Collection Method

3.2.1 Secondary Data

In this research, secondary data specifically data from annual reports were used. The annual reports of family-controlled companies on Bursa Malaysia from year 2013 to 2018 were downloaded from the official websites of the respective companies. Besides, the data that were used to calculate ROA, ROE and Tobin's Q was also extracted from the financial statements in the annual reports and Bloomberg.

3.3 Sampling Design

This section comprised of target population, followed by sampling frame, sampling element, sampling technique and sampling size.

3.3.1 Target Population

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 were accessible. Therefore, the total target population of this study included 40 listed family-controlled companies in Bursa Malaysia.

3.3.2 Sampling Frame

The sampling frame in this research referred to the complete list of familycontrolled companies listed on Bursa Malaysia which was obtained from the book "Family Controlled Companies in Bursa Malaysia" by Tan (2016).

3.3.3 Sampling Element

In this research, not all the family-controlled companies published in the book "Family Controlled Companies in Bursa Malaysia" by Tan (2016) were used. Some companies were excluded as there was limited and insufficient information available. Thus, a sample size of 40 family-controlled companies was selected.

3.3.4 Sampling Technique

Most of the family-controlled companies included in "Family Controlled Companies in Bursa Malaysia" by Tan (2016) were being selected, except for seven companies with insufficient information.

3.3.5 Sampling Size

Cross-sectional yearly data were used in the panel data analysis and resulted in 240 firms for the yearly observations. For the Multiple Linear Regression analysis, the sample size included was 40 family-controlled firms.

Table 3.3.5.1: The Number of Firms in Yearly Observations for 6-Years Period

Firm Yearly Observations	Number of Firms
2013-2018	240

Source: Developed for the research

Table 3.3.5.2: The Sample Size for 6-Years Period

Year	2013	2014	2015	2016	2017	2018
Sample Size	40	40	40	40	40	40

Source: Developed for the research

3.4 Research Instruments

The data was obtained from financial statements and annual reports from year 2013 to 2018. All annual reports were downloaded in order to gather all the figures and data for IVs. All variables were then being transferred into EViews version 8 to perform panel data analysis. Statistical Package for Social Science (SPSS) Version 21 was also used to analyse the multiple linear regressions (MLR).

3.5 Constructs Measurement

3.5.1 Origin of Construct

There were 3 DVs and 7 IVs in this study. In the 7 IVs, there was 1 dummy variable, which was CEOD. A table of DVs was shown in Table 3.5.1a, while a table of IVs was shown in Table 3.5.1b.

For the dummy variable of CEOD, if one individual held both the role of Chairman and CEO, it would be coded as "1", and if two different individuals who held the role of Chairman and CEO, it would be coded as "0".

DVs	Formulas	Adopted From
ROA	Net income Total Assets	Khatab et al. (2010) Farhat (2014)
ROE	Net income Total Equity	Heenetigala (2011) Kajola (2008)
Tobin's Q	Total market value of company + liabilities Total assets vale + liabilities	Singh et al. (2018) Borlea et al. (2017)

Table 3.5.1a: Table of Dependent Variables

Source: Developed for the research

IVs	Formulas	Adopted From
BS	Total number of directors	Kota & Tomar (2010)
		Hussin and Othman (2012)
NOID	Number of independent directors	Goh et al. (2014)
		Borlea et al. (2017)
CEOD	0= No CEO Duality;	Ali (2016)
	1= CEO Duality	Chau & Gray (2010)
NOWD	Number of female directors on board	Luckerath-Rovers (2013)
		Rose (2007)
NOFD	Number of foreign directors	Tee (2018)
		Masulis, Wang & Xie (2012)
NODFQ	Number of directors with foreign	Gantenbein & Volont é(2011)
	qualifications	Darmadi (2011)
ACS	Number of audit committees	Ghabayen (2012)
		Gurusamy (2017)

|--|

Source: Developed for the research

3.5.2 Scale Measurement

According to Stevens (1946), all the measurements in science were conducted using four types of scales that he named as "nominal", "ordinal", "interval" and "ratio". There were dummy (CEOD), interval (ROA, ROE and Tobin's Q) and ratio (BS, NOID, NOWD, NOFD, NODFQ and ACS) scale of measurement in this research.

3.6 Data Processing



Figure 3.6.1: Data Processing

Source: Developed for the research

Referring to the diagram above, there were five stages of data processing in this research. The first step was to select the DVs and IVs that were related to this research based on previous studies. Moreover, some related formulas were identified in order to obtain the data.

The second step was collecting data from secondary sources including annual reports, financial statements and Bloomberg. Then, the data entry process is started by gathering and entering all the data into different files. The complete set of data was then being combined in one Excel file.

Next, all the data was transferred into SPSS version 21 and EViews version 8. The results were then generated from both of the software. Lastly, the results were analyzed and interpreted.

3.7 Data Analysis

3.7.1 Descriptive Analysis

Descriptive analysis is data simplification where we can know about the needs, techniques, practices, populations and settings in most of the research that is relevant to specific research (Loeb et al., 2017). Descriptive analysis was applied in this research. In order to describe the minimum, maximum, means and standard deviations for DVs and IVs, a descriptive table was used. Furthermore, a frequency table was used to describe the number and percentage of companies with CEOD.

3.7.2 Inferential Analysis

Inferential statistics involve using statistical techniques to test the hypotheses and draw inferences from the findings of a study (Kolawole, 2001). The tools that were applied in this research include panel data analysis. Besides conducting the panel data, Multiple Linear Regression (MLR) was also conducted.

3.7.2.1 Panel Data Analysis

According to Yilmaz and Buyuklu (2016), panel regression techniques were way more superior to classical regression techniques as they consider both the time dimension and cross-sectional dimension.

Since the data in this research comprised of both cross-sectional dimension and time dimension, the panel regression model was preferred to show the relationship between DVs and IVs.

According to Choong et al. (2014), panel data regression model was made up of Pooled Ordinary Least Square (OLS), Fixed Effects Model (FEM) and Random Effects Model (REM). However, only FEM and REM were used. FEM was used to determine the individual's characteristics for each perception in the sample based on the intercept term while REM was based on the random error term. The main difference between FEM and REM was FEM ignored the time effect but REM will capture the distinct characteristics of observations at different times. When deciding on which effects model to be used, Hausman test has to be conducted. The idea of Hausman test was that when the probability value (P-value) was greater than 0.05, the REM was used unless Hausman test rejects the null hypothesis (Studenmund, 2016).

The general equation for panel analysis was:

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

Below were the equations of panel analysis for each DVs:

 $ROAit = \beta_0 + \beta_1 BSit + \beta_2 NOIDit + \beta_3 CEODit + \beta_4 NOWDit + \beta_5 NOFDit + \beta_6 NODFQit + \beta_7 ACSit + \epsilon it$

 $ROEit = \beta_0 + \beta_1 BSit + \beta_2 NOIDit + \beta_3 CEODit + \beta_4 NOWDit + \beta_5 NOFDit + \beta_6$ NODFQit + $\beta_7 ACSit + \epsilon it$

 $To bin's \ Qn = \beta_0 + \beta_1 \ BSn + \beta_2 \ NOIDn + \beta_3 \ CEODn + \beta_4 \ NOWDn + \beta_5 \ NOFDn + \beta_6$ $NODFQn + \beta_7 \ ACSn + \epsilon_n$

 $\beta = Beta$

- $\epsilon = A$ classical error term
- i = Observation number in a cross-sectional data set
- t = Observation number in a time-series data set

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

This chapter included the analysis and description of the results. The descriptive analysis and panel data were also discussed in this chapter.

4.1 Descriptive Analysis

4.1.1 Dependent Variables

ROA, ROE and Tobin's Q were used to measure the firms' performance in this research. The formula for ROA was net income over total assets, ROE was net income after tax over total equity and Tobin's Q was the total market value of company added with liabilities divided by total book value with liabilities.

|--|

		ROA		R	OE	Tobin's Q	
Year	Sample	Mean	S.D.	Mean	S.D.	Mean	S.D.
2013	40	5.445	5.652	10.991	9.504	1.315	0.698
2014	40	5.008	5.653	10.577	9.920	1.337	0.816
2015	40	4.194	5.019	8.836	8.816	1.362	0.994
2016	40	3.744	6.787	7.840	13.122	1.326	0.851
2017	40	4.867	3.708	10.436	6.754	1.392	0.822
2018	40	3.630	6.246	7.608	13.002	1.397	1.299
Avg	40	4.481	5.511	9.381	10.186	1.355	0.913

S.D.: Standard Deviation

Avg: Average

Source: Developed for the research

From year 2013 to 2018, the mean of ROA were 5.445, 5.008, 4.194, 3.744, 4.867 and 3.630 respectively, while the S.D. were 5.652, 5.653, 5.019, 6.787, 3.708 and 6.246 respectively. The mean of ROE from year 2013 to 2018 were 10.991, 10.577, 8.836, 7.840, 10.436 and 7.608 respectively, where the S.D. were 9.504, 9.920, 8.816, 13.122, 6.754 and 13.002 respectively. For Tobin's Q, the mean were 1.315, 1.337, 1.362, 1.326, 1.392 and 1.397 respectively, while the S.D. were 0.698, 0.816, 0.994, 0.851, 0.822 and 1.299 respectively from year 2013 to 2018.

4.1.2 Independent Variables

		CEOD				
Year	Sample	Yes (%)	No (%)			
2013	40	8 (20%)	32 (80%)			
2014	40	7 (17.5%)	33 (82.5%)			
2015	40	7 (17.5%)	33 (82.5%)			
2016	40	7 (17.5%)	33 (82.5%)			
2017	40	5 (12.5%)	35 (87.5%)			
2018	40	5 (12.5%)	35 (87.5%)			
Avg	40	39 (16.25%)	201 (83.75%)			

Table 4.1.2a: Descriptive Statistic for CEOD

Avg: Average

Source: Developed for the research

In the research, CEOD was a dummy variable. The number of familycontrolled companies in Malaysia that practiced CEOD was 8 in year 2013, 7 from year 2014 to 2016 and 5 in year 2017 and 2018.

		BS	5	NO	ID	NO	WD	NO	FD	NOI	OFQ	A	CS
Year	Sample	Mean	S.D.										
2013	40	8.875	2.090	3.925	1.141	0.900	1.081	0.500	1.038	5.750	2.629	3.450	0.714
2014	40	8.850	1.968	3.825	1.152	0.875	0.911	0.500	1.038	5.650	2.627	3.425	0.675
2015	40	8.775	1.981	3.950	1.085	0.950	1.061	0.500	1.013	5.675	2.556	3.450	0.677
2016	40	8.625	1.863	4.000	1.086	1.075	1.118	0.550	0.959	5.700	2.514	3.375	0.628
2017	40	8.800	1.786	4.150	1.075	1.350	1.122	0.525	0.905	5.975	2.607	3.475	0.716
2018	40	8.550	2.264	4.075	1.207	1.575	1.217	0.575	1.107	5.750	2.519	3.375	0.540
Avg	40	8.746	1.992	3.988	1.124	1.121	1.085	0.525	1.010	5.750	2.575	3.425	0.658

Table 4.1.2b: Descriptive Statistic for BS, NOID, NOWD, NOFD, NODFQ and ACS

S.D.: Standard Deviation Avg: Average

Source: Developed for the research

From year 2013 to 2018, the average mean for BS was 8.746, where the lowest S.D. was 1.786 in year 2017 and the highest S.D. was 2.264 in year 2018. The average mean for NOID from year 2013 to 2018 was 3.988 where the lowest S.D. fell in year of 2017, which was 1.075; highest S.D. fell in the year of 2018 with 1.207. In the 6 years' time, the average mean for NOWD was 1.121. The lowest S.D. for NOWD was0.911 in year 2014 and highest S.D. was 1.217 in year 2018. The average mean of NOFD from year 2013 to 2018 was 0.525, where the lowest S.D. was 0.905 in year 2017 and highest S.D. was 1.107 in year 2018. For NODFQ, it had an average mean of 5.750 among the 6 years, where it had a lowest S.D. in year 2016, which was 2.514 and highest S.D. in year 2013, which was 2.629. The average mean for ACS was 3.425 with the lowest S.D. of 0.540 in year 2018 and highest S.D. of 0.716 in year 2017.

4.2 Panel Data Analysis

4.2.1 ROA

4.2.1.1 Random Effect Model of ROA

Table 4.2.1.1: Random Effect Model of ROA

Dependent Variable: ROA Method: Panel EGLS (Cross-section random effects) Date: 08/01/19 Time: 23:44 Sample: 2013 2018 Periods included: 6 Cross-sections included: 40 Total panel (balanced) observations: 240 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.				
BS	0.835415	0.351144	2.379123	0.0182				
NO_ID	-0.329811	0.501719	-0.657362	0.5116				
CEO_D	-1.756326	1.414620	-1.241553	0.2157				
NO_WD	-0.111398	0.393717	-0.282939	0.7775				
NO_FD	-0.104126	0.524213	-0.198634	0.8427				
NO_DFQ	0.018680	0.294689	0.063390	0.9495				
ACS	-0.010914	0.626809	-0.017412	0.9861				
С	-1.067866	2.527604	-0.422481	0.6731				
	Effects Spe	cification						
			S.D.	Rho				
Cross-section rando	om		4.337874	0.5962				
Idiosyncratic rando		3.569726	0.4038					
Weighted Statistics								
R-squared 0.045251		Mean depe	ndent var	1.435442				
Adjusted R-								
squared	0.016444	S.D. depen	3.584479					
S.E. of regression	3.553338	Sum square	2929.281					
F-statistic	Durbin-Wa	tson stat	1.486304					
Prob(F-statistic)	0.144933							
	Unweighted	1 Statistics						
R-squared	0.063204	Mean depe	ndent var	4.481399				
Sum squared resid	6967.249	Durbin-Watson stat 0.6248						

According to Table 4.2.1.1, the equation was formed as the following:

ROA = -1.068 + 0.835 BS - 0.330 NOID - 1.756 CEOD - 0.111 NOWD - 0.104 NOFD + 0.019 NODFQ - 0.011 ACS + 2.528 ε

According to the equation formed, it showed that BS and NODFQ have a positive effect with ROA while NOID, CEOD, NOWD, NOFD and ACS have a negative effect on ROA.

Random Effect Model was used to run the ROA for the six years period in this research. As shown in the results, only BS with the P-value of 0.018 had a significant effect on ROA as its P-value was lesser than 0.05 and 0.10. NOID (0.512), CEOD (0.216), NOWD (0.778), NOFD (0.843), NODFQ (0.950) and ACS (0.986) had P-values that were greater than 0.05 and 0.10. Hence, they did not show any significant effect on ROA. 4.53% of the variation in ROA could be explained by the variation in the seven IVs. The Adjusted R-square was 0.016 where the F-statistic was 1.571.

4.2.1.2 Hausman Test for ROA

1 dolo 4.2.1.2. Hadshall 1 ost Result for Rom

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

Test Summary	Chi-Sq. Statistic Chi-	Sq. d.f.	Prob.
Cross-section random	4.594737	7	0.7093

Hausman test was carried out in order to decide which regression would be the most appropriate among the Fixed Effect Model and Random Effect Model. Based on the Hausman test, the following hypothesis was formed: Ho: Random Effect Model is the most appropriate model H1: Fixed Effect Model is the most appropriate model Based on the results of the Hausman test, the P-value was 0.709, which was greater than 0.05. Therefore, H₁ was rejected and do not reject H₀. In conclusion, Random Effect Model was the most appropriate model.

4.2.2 ROE

4.2.2.1 Random Effect Model of ROE

Table 4.2.2.1: Random Effect Model of ROE

Dependent Variable: ROE Method: Panel EGLS (Cross-section random effects) Date: 08/01/19 Time: 23:55 Sample: 2013 2018 Periods included: 6 Cross-sections included: 40 Total panel (balanced) observations: 240 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.		
BS	1.552576	0.648263	2.394981	0.0174		
NO_ID	-0.597153	0.965121	-0.618733	0.5367		
CEO_D	-6.000147	2.536775	-2.365266	0.0188		
NO_WD	-0.703944	0.759128	-0.927307	0.3547		
NO_FD	0.621082	0.982309	0.632267	0.5278		
NO_DFQ	0.140483	0.527975	0.266079	0.7904		
ACS	-0.050501	1.232108	-0.040988	0.9673		
С	-0.945488	4.862182	-0.194458	0.8460		
	Effects Spe	cification				
	-		S.D.	Rho		
Cross-section random	l		6.339659	0.4099		
Idiosyncratic random			7.606769	0.5901		
Weighted Statistics						
R-squared	0.074513	Mean deper	ndent var	4.141132		
Adjusted R-						
squared	0.046589	S.D. depend	lent var	7.817620		
S.E. of regression	7.634797	Sum squared resid 135		13523.31		
F-statistic	2.668409	Durbin-Wat	tson stat	1.514384		
Prob(F-statistic)	0.011283					
Unweighted Statistics						
R-squared	0.130897	Mean deper	ndent var	9.381237		
Sum squared resid	22525.16	Durbin-Wat	tson stat	0.909183		

According to Table 4.2.2.1, the equation was formed as the following:

 $ROE = -0.945 + 1.553 \text{ BS} - 0.597 \text{ NOID} - 6.000 \text{ CEOD} - 0.704 \text{ NOWD} + 0.621 \text{ NOFD} + 0.140 \text{ NODFQ} - 0.051 \text{ ACS} + 4.862 \text{ }\epsilon$

According to the equation formed, it showed that BS, NOFD and NODFQ have a positive effect with ROE while NOID, CEOD, NOWD and ACS have a negative effect on ROE.

Random Effect Model was used to run the ROE for the six years period in this research. As shown in the results, BS with the P-value of 0.017 and CEOD with the P-value of 0.019 had a significant effect on ROE as their P-values were lesser than 0.05 and 0.10. NOID (0.537), NOWD (0.355), NOFD (0.528), NODFQ (0.790) and ACS (0.967) had P-values that were greater than 0.05 and 0.10. Hence, they did not show any significant effect on ROE. 7.45% of the variation in ROE could be explained by the variation in the seven IVs. The Adjusted R-square was 0.047 where the F-statistic was 2.668.

4.2.2.2 Hausman Test for ROE

Tuble 1.2.2.2. Huubhhun Test Result for Roll
--

Correlated Random Effects	- Hausman Test		
Equation: ROERANDOM			
Test cross-section random e	ffects		
	Chi-Sq.		
Test Summary	Statistic Chi-	Sq. d.f.	Prob.
Cross-section random	8.718454	7	0.2735

Hausman test was carried out in order to decide which regression would be the most appropriate among the Fixed Effect Model and Random Effect Model. Based on the Hausman test, the following hypothesis was formed: Ho: Random Effect Model is the most appropriate model

H1: Fixed Effect Model is the most appropriate model

Based on the results of the Hausman test, the P-value was 0.274, which was greater than 0.05. Therefore, H₁ was rejected and do not reject H₀. In conclusion, Random Effect Model was the most appropriate model.

4.2.3 Tobin's Q

4.2.3.1 Random Effect Model of Tobin's Q

Table 4.2.3.1: Random Effect Model of Tobin's Q

Dependent Variable: TOBINQ Method: Panel EGLS (Cross-section random effects) Date: 08/02/19 Time: 00:02 Sample: 2013 2018 Periods included: 6 Cross-sections included: 40 Total panel (balanced) observations: 240 Swamy and Arora estimator of component variances

Variable Coefficient Std. Error t-Statistic				Prob.		
BS	0.032834	0.042727	0.4430			
NO_ID	0.024480	0.057627	0.424792	0.6714		
CEO_D -0.127727 0.180396 -0.708				0.4796		
NO_WD	0.067025	0.045397	1.476420	0.1412		
NO_FD	0.055821	0.061738	0.904151	0.3669		
NO_DFQ	0.023989	0.037597	0.638057	0.5241		
ACS	0.006706	0.069939	0.095888	0.9237		
С	0.718440	0.307261	2.338209	0.0202		
	Effects Spe	ecification				
			S.D.	Rho		
Cross-section rand	om		0.884227	0.8529		
Idiosyncratic rando	om		0.367168	0.1471		
Weighted Statistics						
R-squared 0.055414 Mean dependent var 0.2274 Adjusted R-						
squared	0.026914	S.D. depend	lent var	0.367930		
S.E. of regression	0.363169	Sum square	d resid	30.59880		
F-statistic	1.944320	Durbin-Wat	son stat	1.403396		
Prob(F-statistic)	0.063648					
Unweighted Statistics						
R-squared	0.060688	Mean depen	dent var	1.354633		
Sum squared resid	191.8324	Durbin-Wats	son stat	0.223853		

According to Table 4.2.3.1, the equation was formed as the following:

Tobin's Q = 0.718 + 0.033 BS + 0.024 NOID - 0.128 CEOD + 0.067NOWD + 0.056 NOFD + 0.024 NODFQ + 0.007 ACS + 0.307ϵ

According to the equation formed, it showed that BS, NOFD, NOWD, NOFD, NODFQ and ACS have a positive effect with Tobin's Q while only CEOD had a negative effect on Tobin's Q.

Random Effect Model was used to run the Tobin's Q for the six years period in this research. As shown in the results, all the variables including BS (0.443), NOID (0.671), CEOD (0.480), NOWD (0.141), NOFD (0.367), NODFQ (0.524) and ACS (0.924) had P-values that were greater than 0.05 and 0.10. Hence, they did not show any significant effect on Tobin's Q. 5.54% of the variation in Tobin's Q could be explained by the variation in the seven IVs. The Adjusted R-square was 0.027 where the F-statistic was 1.944.

4.2.3.2 Hausman Test for Tobin's Q

|--|

Correlated Random Effects - Hausman Test
Equation: TOBINQRANDOM
Test cross-section random effectsChi-Sq.
Statistic Chi-Sq. d.f.Prob.Cross-section random2.67222670.9136

Hausman test was carried out in order to decide which regression would be the most appropriate among the Fixed Effect Model and Random Effect Model. Based on the Hausman test, the following hypothesis was formed: Ho: Random Effect Model is the most appropriate model H1: Fixed Effect Model is the most appropriate model Based on the results of the Hausman test, the P-value was 0.914, which was greater than 0.05. Therefore, H1 was rejected and do not reject H0. In conclusion, Random Effect Model was the most appropriate model.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

Chapter 5 comprised of five sections which are hypothesis testing, summary of tests (descriptive analysis), discussion on the findings, limitations of research, and the recommendations for future research.

5.1 Hypothesis Testing

5.1.1 Hypothesis Testing Summary of ROA Results

	ROA
IVs	(Overall 6 years)
(Constant)	0.6731
BS	0.0182*
NOID	0.5116
CEOD	0.2157
NOWD	0.7775
NOFD	0.8427
NODFQ	0.9495
ACS	0.9861

Table 5.1.1: Hypothesis Testing Summary of ROA Results

Source: Developed for the research

5.1.2 Hypothesis Testing Summary of ROE Results

	ROE
IVs	(Overall 6 years)
(Constant)	0.8460
BS	0.0174*
NOID	0.5367
CEOD	0.0188*
NOWD	0.3547
NOFD	0.5278
NODFQ	0.7904
ACS	0.9673

Table 5.1.2: Hypothesis Testing Summary of ROE Results

Source: Developed for the research

5.1.3 Hypothesis Testing Summary of Tobin's Q Results

Table 5.1.3: H	ypothesis	Testing	Summary	y of Tobin's Q) Results

	Tobin's Q
	(Overall 6 years)
(Constant)	0.0202
BS	0.4430
NOID	0.6714
CEOD	0.4796
NOWD	0.1412
NOFD	0.3669
NODFQ	0.5241
ACS	0.9237

Source: Developed for the research

5.1.4 The Summary of Hausman Specification Test

Model	The Hausman Specification Test
ROA	REM
ROE	REM
Tobin's Q	REM

Table 5.1.4: The summary of Hausman Specification Test

REM = Random Effect Model

Source: Developed for the research

5.1.5 Hypothesis Tests Summary

In this research, liberty was also taken to run the MLR besides running the panel data analysis.

Research Questions	Research Hypothesis	Panel Data Analysis	MLR
Does BS have a	H1A: BS has a significant effect on firm performance (ROA).	Α	R
significant effect with firm performance?	H1B: BS has a significant effect on firm performance (ROE).	Α	R
	H1C: BS has a significant effect on firm performance (Tobin's Q).	R	R
	H2A: NOID has a significant effect on firm performance (ROA).	R	R

Table 5.1.5: The	Summary	of Hypothesis	Tests in	Malay	ysia

Does NOID show a significant effect with firm performance?	H2B: NOID has a significant effect on firm performance (ROE). H2C: NOID has a significant effect on firm performance (Tobin's Q).	R	R R
Is there any significant effect between CEOD and firm performance?	H3A: CEOD has a significant effect on firm performance (ROA).	R	R
	H3B: CEOD has a significant effect on firm performance (ROE).	Α	R
	H3C: CEOD has a significant effect on firm performance (Tobin's Q).	R	R
Can the NOWD affect firm performance significantly?	H4A: NOWD has a significant effect on firm performance (ROA).	R	R
	H4B: NOWD has a significant effect on firm performance (ROE).	R	R
	H4C: NOWD has a significant effect on firm performance (Tobin's Q).	R	R
Will NOFD have a significant effect on firm performance?	H5A: NOFD has a significant effect on firm performance (ROA).	R	R
	H5B: NOFD has a significant effect on firm performance (ROE).	R	R
	H5C: NOFD has a significant effect on firm performance (Tobin's Q).	R	R
	H6A: NODFQ has a significant effect on firm performance (ROA).	R	R

Is there any significant			
effect between NODFQ and firm performance?	H6B: NODFQ has a significant effect on firm performance (ROE).	R	R
	H6C: NODFQ has a significant effect on firm performance (Tobin's Q).	R	R
	H7A: ACS has a significant effect on firm performance (ROA).	R	R
Does ACS affect firm performance significantly?	H7B: ACS has a significant effect on firm performance (ROE).	R	R
	H7C: ACS has a significant effect on firm performance (Tobin's Q).	R	R

A = Accept, R = Reject

Source: Developed for the research

Hypothesis 1

H1A: BS has a significant effect on firm performance (ROA).

H1B: BS has a significant effect on firm performance (ROE).

H1c: BS has a significant effect on firm performance (Tobin's Q).

The results from panel data supported H1A and H1B but rejected H1C. There was enough evidence to reject null hypothesis of H1A and H1B. Thus, it could be concluded that BS has a significant effect on firm performance (ROA and ROE). This finding corresponded with previous researches (Gurusamy, 2017; Badu & Appiah, 2017; Singh & Harianto, 1989).

The results from MLR differ from panel data as the results did not support H1A, H1B and H1C. Thus, there was insufficient evidence to reject the null hypothesis of H1A, H1B and H1C. It would then be concluded that BS has no significant effect on firm performance.

In conclusion, BS has no significant effect on firm performance.

Hypothesis 2

H2A: NOID has a significant effect on firm performance (ROA).H2B: NOID has a significant effect on firm performance (ROE).H2c: NOID has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H2A, H2B and H2C. Thus, there was insufficient evidence to reject the null hypothesis of H2A, H2B and H2C. It could be concluded that NOID has no significant effect with firm performance (ROA, ROE and Tobin's Q).

The results from MLR also did not support H2A, H2B and H2C. Thus, there was insufficient evidence to reject the null hypothesis of H2A, H2B and H2C. It could be concluded that NOID has no significant effect on firm performance (ROA, ROE and Tobin's Q). The findings were consistent with the previous researches (Bhagat & Black, 2002; Zabri et al., 2016; Kumar & Singh, 2012).

In conclusion, NOID has no significant effect on firm performance.

Hypothesis 3

H3A: CEOD has a significant effect on firm performance (ROA).H3B: CEOD has a significant effect on firm performance (ROE).H3c: CEOD has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H3A and H3c. Thus, there was insufficient evidence to reject the null hypothesis of H3A and H3c. However, the results supported H3B, hence, there was sufficient evidence to reject null hypothesis of H3B. Therefore, it could be concluded that CEOD has a significant effect on firm performance (ROE).

The results from MLR did not support H3A, H3B and H3C. Thus, there was insufficient evidence to reject the null hypothesis of H3A, H3B and H3C. It could be concluded that CEOD has no significant effect on firm performance (ROA, ROE and Tobin's Q). The result was consistent with the previous study by Ghazali (2010).

In conclusion, CEOD has no significant effect on firm performance.

Hypothesis 4

H4A: NOWD has a significant effect on firm performance (ROA).H4B: NOWD has a significant effect on firm performance (ROE).H4c: NOWD has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H4A, H4B and H4C. Thus, there was insufficient evidence to reject the null hypothesis of H4A, H4B and H4C. It could be concluded that NOWD has no significant effect on firm performance (ROA, ROE and Tobin's Q).

The results from MLR also did not support H4A, H4B and H4C. Thus, there was insufficient evidence to reject the null hypothesis of H4A, H4B and H4C. It could be concluded that NOWD has no significant effect on firm performance (ROA, ROE and Tobin's Q). The findings were found to be correspond with the previous researches (Farell & Hersch, 2005; Adams & Ferriera , 2009).

In conclusion, NOWD has no significant effect on firm performance.

Hypothesis 5

H5A: NOFD has a significant effect on firm performance (ROA).H5B: NOFD has a significant effect on firm performance (ROE).H5c: NOFD has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H5A, H5B and H5C. Thus, there was insufficient evidence to reject the null hypothesis of H5A, H5B and H5C. It could be concluded that NOFD has no significant effect on firm performance (ROA, ROE and Tobin's Q).

The results from MLR also did not support H5A, H5B and H5C. Thus, there was insufficient evidence to reject the null hypothesis of H5A, H5B and H5C. It could be concluded that NOFD has no significant effect on firm performance (ROA, ROE and Tobin's Q). The findings were found to differ from the previous studies where most of them found a significant effect between NOFD with firm performance (Miletkov, Poulsen & Wintoki, 2014; Gulamhussen & Guerreiro 2009; Giannetti et al., 2014).

In conclusion, NOFD has no significant effect on firm performance.

<u>Hypothesis 6</u>

H6A: NODFQ has a significant effect on firm performance (ROA).H6B: NODFQ has a significant effect on firm performance (ROE).H6c: NODFQ has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H6A, H6B and H6C. Thus, there was insufficient evidence to reject the null hypothesis of H6A, H6B and H6C. It could be concluded that NODFQ has no significant effect on firm performance (ROA, ROE and Tobin's Q).

The results from MLR also did not support H6A, H6B and H6C. Thus, there was insufficient evidence to reject the null hypothesis of H6A, H6B and H6C.

It could be concluded that NODFQ has no significant effect on firm performance (ROA, ROE and Tobin's Q). The findings were different from previous researches (Zeng and Xie, 2004; Darmadi, 2011) as they found a significant effect between NODFQ on firm performance.

In conclusion, NODFQ has no significant effect on firm performance.

Hypothesis 7

H7A: ACS has a significant effect on firm performance (ROA).H7B: ACS has a significant effect on firm performance (ROE).H7c: ACS has a significant effect on firm performance (Tobin's Q).

The results from panel data did not support H7A, H7B and H7C. Thus, there was insufficient evidence to reject the null hypothesis of H7A, H7B and H17C. It could be concluded that ACS has no significant effect on firm performance (ROA, ROE and Tobin's Q).

The results from MLR also did not support H7A, H7B and H7C. Thus, there was insufficient evidence to reject the null hypothesis of H7A, H7B and H7C. It could be concluded that ACS has no significant effect on firm performance (ROA, ROE and Tobin's Q). The findings were supported by previous research by Mak and Kusnadi (2005).

In conclusion, ACS has no significant effect on firm performance.

5.2 Summary of Test

5.2.1 Descriptive Analysis

Descriptive analysis has shown the entire mean and S.D. of all the companies for the 6-years observation period. The trends between CG

practices and family-controlled firms' performance with globalized boardroom were recognized through the descriptive test and frequency table.

5.2.2 Inferential Analysis

5.2.2.1 Panel Data Analysis (6 Years Analysis)

The panel data analysis provided evidence on an overall 6-years basis in order to show the effect between CG practices and the family-controlled firm's performance with the globalized boardroom in Malaysia. The panel data analysis proved that most of the CG practices were not significant in affecting family-controlled firms in Malaysia, except for the variable of BS was found significant in ROA and ROE, where CEOD was also significant in ROE in the six years period.

5.3 Discussion on Findings

The findings showed that all six independent variables with the exception of BS did not statistically affect the firm performance of family-controlled firms listed on Bursa Malaysia.

The findings presented that BS was statically significant at a 5% level with ROA and ROE but was not statically significant at 5% and 10% level with Tobin's Q. This was consistent with the previous studies of Gurusamy (2017) who found a significant and positive effect between BS and firm performance with ROE and ROA; negative and insignificant with Tobin's Q. Another study by Badu and Appiah (2017), showed a positive and significant effect between BS and ROA and Tobin's Q.

The findings showed that NOID was not statistically significant at the 5% and 10% level and has no effect on firm performance. The results were supported by a few studies that also concluded that there was no significant effect between NOID and

financial performance. The research by Kumar and Singh (2012) who conducted research on the non-financial Indian companies has shown that independent directors have insignificant effect on firm performance. Similarly, a study done by Mohd Nor, Shafee, & Samsuddin (2014) proved that there was no significant effect on firm performance with independency. Goh (2014) who studied family-controlled firms also found that board independence has no effect on firm performance.

The findings showed that CEOD was statistically significant at the 5% level and has an effect on ROE. This result was consistent with the recommendations provided in MCCG 2017. According to Hussin and Othman (2012), they concluded that companies with independent chairman have an effect on the firms' performance. However, the findings showed that CEOD was not statistically significant at the 5% and 10% level and showed no effect with ROA and Tobin's Q. This was supported by Goh (2014) whose findings showed that CEOD was non-significant to the firm performance in family firms. Ghazali (2010) also concluded that CEO duality has no significant effect on firm profitability. Similar results were also shown in Dalton et al. (1998).

Moreover, the findings presented that NOWD was not statistically significant at the 5% and 10% level and has no effect on firm performance. This was consistent with the research by Farell and Hersch (2005) who stated that more women on the boards leave no significant effect on firms' performance. Another research by Yasser (2012) also showed an insignificant effect of women directors on the firm's performance.

The findings showed NOFD was not statistically significant at the 5% and 10% level and has no effect on firm performance. The results were inconsistent with the empirical studies where a significant effect was found between NOFD and firm performance (Masulis, Wang & Xie, 2012; Carter, Simkins & Simpson, 2003).

Besides, findings showed NODFQ was not statistically significant at the 5% and 10% level and has no effect on firm performance. However, most prior research contradicted these findings as they found a significant effect between NODFQ and firm performance (Darmadi, 2011; Zeng & Xie, 2004).

Analyzed findings showed that ACS was insignificant at the 5% and 10% level and has no effect on firm performance. This was supported by Mak and Kusnadi (2005) who could not provide any effect between ACS and firm performance in Malaysia and Singapore. The same results are also shown in the research by Chandrasegaram et al. (2013) where it proved that ACS has no effect on firm performance.

5.4 Limitations in Research

There were some limitations to this research. There were only three DVs (ROA, ROE & Tobin's Q) being used to examine firm performance. Moreover, the observation time-period was short, as it was only six years period from 2013 to 2018. Nonetheless, there were limited past studies available for family-controlled firms with globalized boardroom as compared to local family-controlled firms. The research methodology adopted was only acquiring data from companies' annual reports and Bloomberg.

5.5 Recommendations for Future Research

Based on the limitations, future researches can include more DVs such as price to earnings ratio, net asset value or market-to-book ratio as they could better describe the performance of the firms. Another recommendation is to have a longer research time frame which is up to a 10-years period. As this research is being limited to past empirical studies, future researches could further their researches on the scope of the globalized boardroom in family-controlled companies. Lastly, it would be better to apply quantitative and qualitative analysis,
for instance, to carry out a survey among the board of directors in different firms in order to obtain more accurate results.

5.6 Conclusion

The objective of this research was to determine if CG affects firm performance among family-controlled companies in Bursa Malaysia with a globalized boardroom. In general, most of the IVs were found not significant with firm performance of family-controlled companies. Referring to the findings, only BS was found to be significant with firm performance. The findings from panel data analysis corresponded with MLR results as it also showed that BS was significant with the firm performance (ROA and ROE) in the later years specifically in year 2018. As most of the IVs were found not significant with firm performance, this indicates that there might be other factors that could be investigated in order to determine their effects on firm performance.

In short, this research concludes that CG has no significant effect on firm performance of family-controlled firms listed on Bursa Malaysia.

REFERENCES

- Abdulmalik, O.S. & Che Ahmad, A. (2016). Boardroom diversity and audit fees: directory ethnicity, independent and nationality. *Audit Financiar, XIV*, 4(136), 413- 423, doi: 10.20869/AUDITF/2016/136/413
- Abidin, Z. Z., Kamal, N. M., & Jusoff, K. (2009). Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, 1(1), 150-164. doi:10.5539/ijef.v1n1p150
- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94, 291-309.
- Adams, R. B., B. E. Hermalin, and M. S. Weisbach. (2010). The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. *Journal of Economic Literature* 48 (1): 58–107.
- Ahsan Akbar. (2014), Corporate Governance and firm performance: Evidence from textile sector of Pakistan. *Journal of Asian Business Strategy*, 4(12), 200-207.
- Ali, M. (2016). Impact of Corporate Governance on Firm's Financial Performance (A Comparative Study of Developed and Non Developed Markets). *Arabian Journal of Business and Management Review*, 6(6), 272. doi:10.4172/2223-5833.1000272
- Al- Faki, M. (2006): "Transparency and corporate governance for capital market development in Africa: The Nigerian case study", *Securities Market Journal*, 2006 Edition, 9- 28
- Al-Matari, Y., Al-Swidi, A.,K., Fadzil, FHBFH., & Al-Matari, E.,M. (2012) Board of directors, audit committee characteristics and the performance

of Saudi Arabia listed companies, *International Review of Management and Marketing*, 2(4), 241–251. Retrieved from http://dergipark.org.tr/irmm/issue/32073/355012

- Ameer, R., Ramli, F., & Zakaria, H. (2010). A new perspective on board composition and firm performance in an emerging market. Corporate Governance: *The international journal of business in society*, 10(5), 647-661. Retrieved from https://doi.org/10.1108/14720701011085607
- Anderson, R. C., & Reeb, D. M. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301–1328.doi:10.1111/1540-6261.00567
- Azim, M. (2012). Corporate governance mechanisms and their impact on company performance: A structural equation model analysis. *Australian Journal of Management*, 37(3), 481-505.
- Bartholomeusz, S., & Tanewski, G. A. (2006). The Relationship between Family Firms and Corporate Governance*. *Journal of Small Business Management*, 44(2), 245–267. doi:10.1111/j.1540-627x.2006.00166.x
- Barrios, J., Bianchi*, P., Isidro, H., & Nanda, D. (2016). Retrieved from https://sites.insead.edu/facultyresearch/research/file.cfm?fid=59159
- Balagobei, S. (2018). Corporate Governance and Firm Performance: Empirical Evidence from Emerging Market. Asian Economic and Financial Review, 8(12), 1415–1421.doi:10.18488/journal.aefr.2018.812.1415
- Baldwin, G. B. (1963). "The foreign-educated Iranian: a profile", *Middle East Journal*, 17 (3), 264-278.

- Ball, R. and Chik, R. (2001). "Early employment outcomes of home and foreign educated graduates: the Malaysian experience", *Higher Education*, 42 (2), 171-189.
- Badu, L. and Appiah, K. (2017). The Impact of Corporate Board Size on Firm Performance: Evidence from Ghana and Nigeria. *Research in Business* and Management, 4(2),1. doi: 10.5296/rbm.v4i2.11721
- Black, B. S., Kim, W., Jang, H., & Park, K.-S. (2015). How corporate governance affect firm value? Evidence on a self-dealing channel from a natural experiment in Korea. *Journal of Banking & Finance*, 51, 131–150.
- Bennedsen, M., Kongsted, H. and Nielsen, K. (2008). The causal effect of board size in the performance of small and medium-sized firms. *Journal of Banking & Finance*, 32(6), 1098-1109. doi: 10.1016/j.jbankfin.2007.09.016
- Bebchuk, L. A., & Weisbach, M. S. (2010). The state of corporate governance research. *The Review of Financial Studies*, 23(3), 939-961. Retrieved from https://doi.org/10.1093/rfs/hhp121.
- Bhatt, P. R., & Bhatt, R. R. (2017). Corporate governance and firm performance in Malaysia. Corporate Governance: The International Journal of Business in Society, 17(5), 896–912. doi:10.1108/cg-03-2016-0054
- Bhagat, S., & Black, B. (2002). The non-correlation Between Board Independence and Long-Term Firm performance. *Journal of Corporation Law*, 27, 231-274.
- Biswas, P. & Bhuiyan, M.(2006). Agency Problem and the Role of Corporate Governance. The Bangladesh Accountant, 52(25), 109-117.

- Brown, L. D., & Caylor, M. L. (2004). The Correlation between Corporate Governance and Company Performance. Retrieved from http: //www. solvay. edu/EN/ProhrammesNisiting ý/ ý20professors/docs/Brown_Firm-Performance. Pdf
- Brown, L. D., & Caylor, M. L. (2008). Corporate governance and firm operating performance. *Review of Quantitative Finance and Accounting*, 32(2), 129–144.doi:10.1007/s11156-007-0082-3
- Brunnermeier, M. (2009). Deciphering the liquidity and credit crunch 2007-2008. Journal of Economic Perspectives, American Economic Association, 23(1), 77–100. doi: 10.3386/w14612
- Brunello, G., Graziano, C., and Parigi, B. M. (2003). CEO turnover in insider dominated boards: the Italian case. *Journal of Banking and Finance* 27(6): 10-27. doi:10.1016/S0378-4266(02)00244-3
- Bhugeloo, N. (2019). 8 ways good corporate governance creates company value. Retrieved from https://www.ocorian.com/article/8-ways-goodcorporate-governance-creates-company-value
- Borlea, S. N., Achim, M. V., & Mare, C. (2017). Board characteristics and firm performances in emerging economies. *Lessons from Romania. Economic Research-Ekonomska* Istraživanja, 30(1), 55–75.doi:10.1080/1331677x.2017.1291359
- Carter, D., Simkins, B., and Simpson, W. 2003. Corporate governance, board diversity, and firm value. *Financial Review*, *38*: 33–53.
- Chau, G., & Gray, S. J. (2010). Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong. *Journal of International Accounting, Auditing and Taxation, 19*(2), 93– 109.doi:10.1016/j.intaccaudtax.2010.07.002

- Chu, E.Y., & Lai, T.S., & Song, S.I. (2017). Corporate Governance and Financial Constraints in Family Controlled Firms: Evidence from Malaysia. *International Journal of Business and Society*. 17(3), 429-446. doi: 17. 10.33736/ijbs.534.2016.
- Christopher, & Lee. O. (2017). The Malaysian Code on Corporate Governance 2017. Retrieved from https://www.christopherleeong.com/media/2803/clo-2017-05-themalaysian-code-onf.pdf
- Choong et al. (2014). The Impact of Ownership Concentration And Board Governance on Firm Performance: Malaysian Public Listed Property Companies. *Unpublished thesis*, Universiti Tunku Abdul Rahman, Malaysia.
- Choi, J.J., Park, S.W., & Yoo, S.S. (2007). The value of outside directors: Evidence from corporate governance reform in Korea. *Journal of Financial and Quantitative Analysis*, 4(4), 941-962.
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? Journal of Financial Economics, 87 (2), 329-356. doi: 10.1016/j.jfineco.2006.08.008
- Conyon, M. J., & He, L. (2017). Firm performance and boardroom gender diversity: A quantile regression approach. *Journal of Business Research*, 79, 198–211. doi:10.1016/j.jbusres.2017.02.006
- Darmadi, S. (2011). Board Members' Education and Firm Performance: Evidence from a Developing Economy. SSRN Electronic Journal. doi:10.2139/ssrn.1904762
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. Academy of Management Review, 22, 20–47.

- Dedman, E., (2004). Discussion of reactions of the London Stock Exchange to company trading statement announcements', *Journal of Business Finance & Accounting*, 31, 37–47.
- Deegan, C. (2004). *Financial Accounting Theory*, McGraw-Hill Australia Pty Ltd, NSW.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: concepts evidence, and implications. *Academy of Management Review*, 20(1), 65-91.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. Australian Journal of Management, 16(1), 49-65.
- Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: a stewardship theory perspective. *Journal of Business Venturing*, 22, 545-565.
- Elloumi F, Gueyie JP (2001) Financial distress and corporate governance: an empirical analysis. *Corporate Governance 1*: 15-23. doi: 10.1108/14720700110389548
- 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. doi: 10.1108/14720700910964307
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. Corporate Governance: An International Review, 11(2), 102-111.

- 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. Retrieved from https://doi.org/10.1016/j.cpa.2007.06.007
- Faccio, M., and Lang, L.P.H. (2002). The ultimate ownership of western European corporations. *Journal of Financial Economics* 65(3), 365-395. Retrieved from https://doi.org/10.1016/S0304-405X(02)00146-0
- Farhat, A. (2014). Corporate governance and firm performance: the case of UK. *Doctor thesis, University of Portsmouth.* Retrieved from https://researchportal.port.ac.uk/portal/en/theses/corporate-governanceand-firm-performance(ddb73381-f2f3-4492-b61a-344880cd9854).html
- Farrell, K., & Hersch, P. (2005). Additions to corporate boards: the effect of gender. *Journal Of Corporate Finance*, 11(1-2), 85-106. doi: 10.1016/j.jcorpfin.2003.12.001
- Freeman, R.E. (1984). Strategic Management: A Stakeholder Approach, Pitman Publishing, Boston, MA.
- Freeman, R. E. (1999). Response: Divergent stakeholder theory. *The Academy of Management Review*, 24(2), 233-236. doi:10.2307/259078
- Filatotchev, I., Lien, Y. C., & Piesse, J. (2005). Corporate Governance and Performance in Publicly Listed, Family-Controlled Firms: Evidence Taiwan. Asia Pacific Journal of Management, 22(3), 257–283.
- Finkelstein, S & D'Aveni, RA. (1994). 'CEO Duality as a Double-edged Sword: How Board of Directors Balance Entrenchment Avoidance and Unity of Command', Academy of Management Journal, 37(5), 1079-1108. doi: 10.2307/256667

- Fontrodona, J., Sison, A. J. G. (2006). The Nature of the Firm, Agency Theory and Shareholder Theory: A Critique from Philosophical Anthropology. *Journal of Business Ethics* 66(1), 33–42.
- Fu, L., Parkash, M., & Singhal, R. (2016). Tobin's Q ratio and firm performance. International Research Journal of Appllied Finance, 7, 1–11. doi:10.0704/article-2
- Gantenbein, P., & Volont & C. (2011). Director Characteristics and Firm Performance. *SSRN Electronic Journal*. doi: 10.2139/ssrn.1875710
- Ghabayen, M. A. (2012). Board characteristics and firm performance: Case of Saudi Arabia. International Journal of Accounting and Financial Reporting, 2(2), 168-200. doi:10.5296/ijafr.v2i2.2145
- Ghazali, N. A. M. (2010). Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce* and Management, 20(2), 109-119.
- Goh, C. F., Rasli, A., & Khan, S. (2014). CEO duality, board independence, corporate governance and firm performance in family firms: Evidence from the manufacturing industry in Malaysia. *Asian Business and Management*, 13(4), 333-357. doi: 10.1057/abm.2014.4
- Gooyert, V. D., Rouwette, E., Kranenburg, H. V., & Freeman, E. (2017). Reviewing the role of the stakeholders in operational research: a stakeholder theory perspective. *European Journal of Operational Research*, 262, 402-410.
- 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. doi:10.11648/j.ijber.20170604.16

- Gulamhussen, M. A., & Guerreiro, L. (2009). The influence of foreign equity and board membership on corporate strategy and internal cost management in Portuguese banks. *Management Accounting Research*, 20(1), 6-17.
- 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. doi: 10.1016/j.sbspro.2012.03.246
- Hashim, H. (2011). Corporate Disclosures by Family Firms: Malaysian Evidence. Journal of Business and Policy Research 6(2), 111-125. Retrieved from https://pdfs.semanticscholar.org/3cbc/2bae7a3358890b7b95b63cbc7cab2 d0df5bf.pdf
- Heenetigala, K. (2011). Corporate Governance Practices and Firm Performance of Listed Companies in Sri Lanka. Unpublished doctoral dissertation, Victoria University, Melbourne, Australia.
- Hermalin, B., & Weisbach, M. (2001). Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature.7-26. doi:10.3386/w8161
- Hussin, N., & Othman, D. R. (2012). Code of corporate governance and firm performance. British Journal of Economics, Finance and Management Sciences, 6(2).
- Hidayat, A. A., & Utama, S. (2012). Board characteristics and firm performance: Evidence from Indonesia. *International Research Journal of Business Studies*, 8(5), 688–694. doi: 10.7763/JOEBM.2015.V3.187
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: a review. Journal of Management, 35(6), 1404-1427.

- Ibrahim, H., & Samad, F.A.(2010). Family business in emerging markets: The case of Malaysia. African Journal of Business Management 4(13), 2586-2595. Retrieved from http://www.academicjournals.org/AJBM
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880. Retrieved from https://doi.org/10.1111/j.1540-6261.1993.tb04022.x
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. doi:10.1016/0304-405X(76)90026-X
- Johnson, R. A., & Greening, D. W. (1999). The Effects of Corporate Governance and Institutional Ownership Types of Corporate Social Performance. *Academy of Management Journal*, 42(5), 564–576. doi:10.2307/256977
- Kajola, S. (2008). Corporate Governance and Firm Performance: The Case of Nigerian Listed Firms. *European Journal of Economics, Finance and Administrative Sciences*. 14(14). 17-28. Retrieved from https://www.academia.edu/5808381/Corporate_Governance_and_Firm_Performance_The_Case_of_Nigerian_Listed_Firms
- Kao, L. and Chen, A. (2004) 'The effect of board characteristics on earnings management', Corporate ownership and Control, 1(3), pp. 96-107. doi: 10.22495/cocv1i3p9
- Kanadli, S. B., Torchia, M., & Gabaldon, P. (2018). Increasing women's contribution on board decision making: The importance of chairperson leadership efficacy and board openness. *European Management Journal*, 36(1), 91–104. doi:10.1016/j.emj.2017.03.006
- Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting

theories of corporate governance. Corporate Governance: *An International Review*, *11*(3), 189-205. doi:10.1111/1467-8683.00318

- Kota, H.B., & Tomar, S. (2010). Corporate governance practices in Indian firms. Journal of Management & Organization, 16(2), 266–279. doi: 10.5172/jmo.16.2.266
- Klein, A. (1998). Firm Performance and Board Committee Structure. *The Journal* of Law and Economics, 41(1), 275–304. doi:10.1086/467391
- Khan, H. (2011). A literature review of corporate governance. *International Conference on E-Business, Management and Economics*, 25, 1–5.
- Khan, A., & Awan, S. H. (2012). Effect of board composition on firm's performance: A case of Pakistani listed companies. *Interdisciplinary Journal of Contemporary Research in Business*, 3(10), 853-863.
- Kolawole, E.B. (2001). *Tests and Measurement*. AdoEkiti: Yemi Printing Services.
- Konrad, A. M., Kramer, V., & Erkut, S. (2008). The impact of three or more women on corporate boards. *Organizational Dynamics*, 37(2), 145-164.
- Kumar, N., & Singh, J. P. (2012). Outside directors, corporate governance and firm performance: Empirical evidence from India. Asian Journal of Finance & Accounting, 4(2), 39-55. Retrieved from https://doi.org/10.5296/ajfa.v4i2.1737.
- KPMG (2001), Corporate Governance in der Schweiz: Verwaltungsrat Zwischen Verantwortung und Haftung, Zürich: KPMG Fides Management AG, 2001.

- 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.doi:10.1353/jda.2017.0023
- Lee, P. M., & O'Neill, H. M. (2003). Ownership structures and R&D investments of U.S. and Japanese firms: Agency and stewardship perspectives. *Academy of Management Journal*, 46(2), 212-225.
- Lipton, M. & Lorsch, J. W. (1992). A modest proposal for improved corporate

governance. Business Lawyer, 48(1), 59-77.

- Lin, Y. C., Huang, S. Y., & Young, S. C. (2008). An empirical study on the relationship between ownership and firm performance: Taiwan evidence. *Afro-Asian J. of Finance and Accounting*, 1(1), 67-79.doi:10.1504/aajfa.2008.016891
- Liew, P.K. (2007). Corporate-governance reforms in Malaysia: The key leading players' perspectives. *Corporate Governance: An International Review* 15(5): 724–740.
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). *Descriptive analysis in education: A guide for researchers*. (NCEE 2017–4023). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- Luckerath-Rovers, M. (2013). Women on boards and firm performance. *Journal* of Management and Governance, 17(2), 491-509.
- Malaysia Bursa Securities Limited. (2014). Listing Requirements of MalaysiaBourse.1504-1506.Retrievedfrom

http://www.bursamalaysia.com/misc/system/ assets/5957/MAIN_Chap%2015_LRPh1%20%2827Jan2015%29.pdf

- Masulis, R.W., Wang, C., & Xie. F. (2011). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53 (3), 527–554. doi:10.1016/j.jacceco.2011.12.003
- Masulis, R.W., & Wang, C. (2007). Are Foreign Directors Valuable Advisors or Ineffective Monitors? Retrieved from https://pdfs.semanticscholar.org/7bfb/c4fccb7e2bbfaf3d9acc5ce6a3f0af9 ecdc8.pdf
- Matari, Y. A. A., Swidi, A. K. A., Fadzil, F. H. B., & Matari, E. M. A. (2012). Board of directors, audit committee characteristics and performance of Saudi Arabia listed companies. *International Review of Management* and Marketing, 2(4), 241-251.
- Macciocchi, D. (2014). Corporate governance issues in family and non-family owned firms: an empirical analysis of CEO compensation, executive turnover, and earnings management. *PhD thesis, LUISS Guido Carli University, Italy.* 1-128. Retrieved from https://pdfs.semanticscholar.org/ea62/af55e08c3a886a581bf4ea39aed615 95c573.pdf
- 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. doi:10.1108/CG-12-2015-0156
- 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, 301-318.

- 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. *PhD diss.*,
 University of Tennessee. Retrieved from
 https://trace.tennessee.edu/utk_graddiss/2711
- Mashayekhi, B., & Bazaz, M. S. (2008). Corporate Governance and Firm Performance in Iran. *Journal of Contemporary Accounting & Economics*, 4(2), 156–172. doi:10.1016/s1815-5669(10)70033-3
- Miletkov, M. K., A. B. Poulsen, and M. B. Wintoki. (2013). A Multinational Study of Foreign Directors on Non-U.S. Corporate Boards. SSRN Electronic Journal.
- Mohan, A., & Chandramohan, S. (2018). Impact of Corporate Governance on Firm Performance: Empirical Evidence from India. *International Journal* of Research in Humanities, Arts and Literature, 6 (2), 209-218. Retrieved from https://ssrn.com/abstract=3133491
- 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. https://doi.org/10.3145/epi.2017.jul.20
- Mohd Suffiana, M., T., Shamsudina, S., M., Sanusib, M., Z., & Hermawanc, A.,
 A. (2017). Malaysian Code of Corporate Governance and Tax Compliance: Evidence from Malaysia. *Management & Accounting Review.16*(2). 157-180. Retrieved from http://arionline.uitm.edu.my/ojs/index.php/MAR/article/view/665

- Moffatt, M. (2019). What is Panel Data? The Definition and Relevance of Panel Data in Economic Research. Retrieved from https://www.thoughtco.com/panel-data-definition-in-economic-research-1147034
- Morck, R., Shleifer, A., & Vishny, R. (1988). Management ownership and market valuation. *Journal Of Financial Economics*, 20, 293-315. doi: 10.1016/0304-405x(88)90048-7
- Mulili, M. B., & Wong, P. (2011). Corporate governance practices in developing countries: The case in Kenya. *International Journal of Business Administration*, 2(1), 14-27.
- Nicholson, G. J. & Kiel, G. C. (2007). Can directors impact performance: A case based test of three theories of corporate governance. *Review*, *15*: 585-608.
- Ng, S. H., Boon, H. T., Ong, T. S., & Soh, W. N. (2016). The relationship between board characteristics and firm financial performance in Malaysia. *Corporate Ownership & Control*, 14(1), 259–268. Retrieved fromhttps://pdfs.semanticscholar.org/590c/b99715472ce899b19e8025f32 10a2f5c5950.pdf
- Norazian and Radiah (2012). Code of corporate governance and firm performance. British Journal of Economics, Finance and Management Sciences, 6(2).
- Numazaki, I. (1993). The Tainanbang: The Rise and Growth of a Banana-bunchshaped Business Group in Taiwan. *Developing Economies*, *31*(4), 485 -510. doi: 10.1111/j.1746-1049.1993.tb00036.x
- Ocasio, W. (1994). Political dynamics and the circulation of power: CEO succession in U.S. industrial corporations, 1960-1990. *Administrative Science Quarterly*, *39*(1): 285-312.

- Odehnalová, P., & Pirožek, P. (2018). Corporate Board Composition in Family Businesses: Evidence from the Czech Republic. *Management: Journal of Contemporary Management Issues*, 23(2), 155–173. Retrieved from https://doi-org.libezp2.utar.edu.my/10.30924/mjcmi/2018.23.2.155
- Oguz, E., & Dincer, H. H. (2016). Corporate governance and firm performance: The case for Turkey. *Unpublished master's thesis*, Lund University, Lund, Sweden.
- Ooi, K.Y. (2017). An investigation into CG principles and firm performance. *Master Thesis*, Universiti Tunku Abdul Rahman. 24-27.
- Okiro, K. O. (2014). Corporate governance, capital structure, regulatory compliance and performance of firm listed at the East African community securities exchange. Unpublished doctoral dissertation, University of Nairobi, Nairobi, Kenya.
- Otman, K., A., M. (2014). Corporate Governance and Firm Performance in Listed Companies in the United Arab Emirates. *PhD thesis, Victoria University*. 4-8. Retrieved from http://vuir.vu.edu.au/25985/1/Khaled%20Abdelkadar%20Muftah%20Ot man.pdf
- Organisation for Economic Cooperation and Development, (1998). Corporate Governance: improving competitiveness and access to capital in global markets, a report to the OECD by the Business Sector Advisory Group on Corporate Governance, Paris: OECD.
- Pascoe, J., & Rachagan, S. (2005). KEY DEVELOPMENTS IN CORPORATE LAW REFORM IN MALAYSIA. Singapore Journal of Legal Studies, 93-113. Retrieved from http://www.jstor.org/stable/24869552

- Pasaribu, P. (2017). Female Directors and Firm Performance: Evidence from UK Listed Firms. Gadjah Mada International Journal Of Business, 19(2), 145. doi: 10.22146/gamaijb.15619
- Pitcher, P., Chreim, S., & Kisfalvi, V. (2000). CEO succession research: Methodological bridges over troubled waters. *Strategic Management Journal*, 21: 625-648. doi: 10.1002/(SICI)1097-0266(200006)21:63.0.CO;2-A
- Ponnu, C.H. & Lee, C.K. & Tan, Geron & Khor, T.H. & Leong, Adelyn. (2009). Corporate governance in family run business - A Malaysian case study. *Corporate Ownership and Control.* 6(4), 135-147. doi: 10.22495/cocv6i4p13.
- Peng, M. W. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25, 453-471.
- Pfeffer, J. (1972). Size and Composition of Corporate Boards of Directors: The Organization and Its Environment. Administrative Science Quarterly, 17, 218-228. http://dx.doi.org/10.2307/2393956
- Pfeffer, J., & Salancik, G. R. (1978). The external control of organisations: A resource-dependency perspective. New York, NY: Harper and Row.
- Rahman, H.U., Rehman, S., & Zahid, M. (2018). The Impact of Boardroom National Diversity on Firms' Performance and Boards' Monitoring in Emerging Markets: A Case of Malaysia. *City University Research Journal*, 8(1), 1-15.
- Rajan, R., & Zingales, L. (2009). Which Capitalism? Lessons from the East Asian Crisis. Journal of Applied Corporate Finance, 11(3), 40-48. doi: 10.7312/chew14854-007.

- Rashid, A. (2010). CEO duality and firm performance: Evidence from a developing country. *Corporate Ownership & Control*, 8(1), 163-175.
- Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. Corporate Governance: An International Review, 15(2), 404–413. doi:10.1111/j.1467-8683.2007.00570.x
- Roscoe, J. T. (1975). Fundamental research statistics for the behavioural sciences (2nd ed.). New York: Holt Rinehart & Winston.
- 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.
- Securities Commission Malaysia. (2012). *Malaysian Code of Corporate Governance*. Kuala Lumpur: Securities Commission Malaysia.
- Securities Commission Malaysia. (2017). *Malaysian Code of Corporate Governance*. Kuala Lumpur: Securities Commission Malaysia.
- Singh, S., Tabassum, N., Darwish, T. and Batsakis, G. (2018). Corporate Governance and Tobin's Q as a Measure of Organizational Performance. *British Journal of Management*, 29(1), 171-190. doi: 10.1111/1467
- Singh, H & Harianto, F (1989). Top management tenure, corporate ownership structure and the magnitude of golden parachutes. *Strategic Management Journal*, 10 (1), 143-156. doi: 10.1002/smj.4250100711
- Srindhi, B., Gul, F. A., & Tsai, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, 28, 1610–1644.

- Schepker, D.J. and Oh, W-Y. (2013) Complementary or substitutive effects? Corporate governance mechanisms and poison pill repeal. *Journal of Management 39*(7): 1729–1759.
- Škare, M., & Hasić, T. (2015). Corporate governance, firm performance, and economic growth – theoretical analysis. *Journal of Business Economics* & *Management*, *17*(1), 35–51. doi:10.3846/16111699.2015.1071278
- Škare, M., & Golja, T. (2014). The impact of government CSR supporting policies on economic growth, *Journal of Policy Modeling 36*(3): 562– 577. Retrieved from http://dx.doi.org/10.1016/j.jpolmod.2014.01.008
- Shleifer, A, and R.W, Vishny. (1997): "A survey of corporate governance", Journal of Financial Economics, 52(2), 737- 783. doi:10.1111/j.1540-6261.1997.tb04820.x
- Smallman, C. (2004). Exploring Theoretical Paradigm in Corporate Governance. International Journal of Business Governance and Ethics, vol. 1, no. 1, pp. 78-94
- Sheytanova, T. (2014). The Accuracy of the Hausman Test in Panel Data: a Monte Carlo Study. *Unpublished Master's Thesis*, Örebro University School of Business.
- Studenmund, A. H. (2016). Using econometrics: A practical guide (7th ed.). Boston: Pearson.
- Stevens, S. S. (1946). "On the Theory of Scales of Measurement". *Science 103* (2684): 677–680. doi:10.1126/science.103.2684.677.
- Tan, L. S. (2016). Family controlled companies in Bursa Malaysia. Selangor: Sparrow Publishing Home.

- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. SSRN Electronic Journal. doi:10.2139/ssrn.3205035
- Taniura, T. (1993). "The Lucky Goldstar Group in the Republic of Korea", *The Developing Economies 31*(4),465 484. doi: 10.1111/j.1746-1049.1993.tb00035.x
- Tee, P. L. (2018). Foreign Ownership, Foreign Directors and Firm Financial Performance: A Study of Malaysia and Singapore Listed Companies. Retrieved from http://search.ebscohost.com.libezp2.utar.edu.my/login.aspx?direct=true& db=ir00583a&AN=UTAR.3248&site=eds-live&scope=site
- Udayasankar, K. (2008). The Foundations of Governance Theory: A Case For The Resource-Dependence Perspective. *Corporate Ownership And Control*, 5(4). doi: 10.22495/cocv5i4c1p1
- Van Slyke, D. M. (2006). Agents or stewards: Using theory to understand the government-nonprofit social service contracting relationship. *Journal of Public Administration Research and Theory*, 17, 157-187.
- Vallejo, M. C. (2009). The effects of commitment of non-family employees of family firms from the perspective of stewardship theory. *Journal of business ethics*, 87(3), 379-390.
- Villalonga, B., and Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics* 80(2): 385-417. Retrieved from http://dx.doi.org/10.1016/j.jfineco.2004.12.005
- Wan-Yusoff, W. F. (2010). Characteristics of boards of directors and board effectiveness: A study of Malaysian public listed companies.

Unpublished Phd Thesis. Victoria University. Australia. Retrieved from http://eprints.uthm.edu.my/3928/1/Wan_Fauziah_Wan_Yusoff.pdf

- Walt, N. & Ingley, C. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate Governance: An International Review*, 11(3), 218-234. doi: 10.1111/ 1467-8683.00320.
- Yasser, R.Q., Entebang , H., &Mansor, A. Sh. (2011). Corporate governance and firm performance in Pakistan: The case of Karachi Stock Exchange (KSE)-30. Journal of Economics and International Finance, 3, 482-491.
- Yasser, Q. R. (2012). Affects of Female Directors on Firms Performance in Pakistan. *Modern Economy*, 03(07), 817 -825. https://doi.org/10.4236/me.2012.37104
- Yeh, Y.H., Lee, T.S., & Woidtke, T. (2001). Family Control and Corporate Governance: Evidence from Taiwan. *International Review of Finance* 2(1/2), 21-48. doi: 10.1111/1468-2443.00014
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors, *Journal of Financial Economics*, 40, 185-212. Retrieved from https://doi.org/10.1016/0304-405X(95)00844-5
- 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. doi: 10.15604/ejef.2016.04.01.004
- Zabri, S. M., Ahmad, K., & Wah, K. K. (2016). Corporate governance practices and firm performance: Evidence from top 100 Public Listed Companies in Malaysia. *Procedia Economics and Finance*, 35, 287–296. doi:10.1016/S2212-5671(16)00036-8

- Zeng, Z. and Y. Xie, (2004). "Asian Americans' Earnings Disadvantage Reexamined: The Role of Place of Education," *The American Journal of Sociology*, 109 (5), 1075–1108.
- Zhu, D.H. (2012). Group polarization on corporate boards: Theory and evidence on board decisions about acquisition premiums. *Strateg. Manag. J. 34*, 800–822. Retrieved from https://doi.org/10.1002/smj.2039