
CORPORATE GOVERNANCE AND FIRM
PERFORMANCE: DO SHARIAH-COMPLIANT
COMPANIES ON BURSA MALAYSIA EXHIBIT GOOD
CORPORATE GOVERNANCE?

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Corporate Governance and Firm Performance: Do Shariah-compliant Companies on Bursa Malaysia Exhibit Good Corporate Governance?

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LIST OF ABBREVIATIONS

ACDIR	Number of Directors with Accounting Qualification
AVG	Average
BMEET	Number of Board Meetings
BIND	Board Independence
BOD	Board of Directors
BSIZE	Board Size
CDUAL	CEO Duality
CEO	Chief Executive Officer
CG	Corporate Governance
DVs	Dependent Variables
EPS	Earnings per Share
ICM	Islamic Capital Market
IVs	Independent Variables
MCCG	Malaysian Code of Corporate Governance
MDIR	Number of Malays Directors on Board
P-value	Probability Value

ROA	Return on Assets
ROE	Return on Equity
S.C	Securities Commissions
UTAR	Universiti Tunku Abdul Rahman
WDIR	Number of Woman Directors on Board

PREFACE

In Malaysia, the majority of the population in Malaysia is Muslim. Therefore, Shariah Law or “Halal” on products or services are the main concerns for Malaysia’s daily life, especially Muslim citizen. Invisibly, this has affected the way of business operations in Malaysia differently from other developing countries in Southeast Asia as well. With this concern, it is interesting to find out the significant of Shariah-compliant Companies in Malaysia.

On the other hand, Malaysia has introduced the Malaysian Code on Corporate Governance (MCCG) since 2000, and advise listed companies need to adhere the guideline of corporate governance in Malaysia. In order to align with international standard of corporate governance norms, the reformation of corporate governance has been established and are being continuously improving year by year to assist Malaysian companies achieve the good governance standards. Hence, this drove my curiosity to find out if firm level good governance which led to better performance? Thereby, the idea of finding the relationship of the corporate governance and company performance in Shariah-compliant companies has developed. To specific, I have narrowed the category down to consumer products and services sectors as it has a direct connection to our daily life.

Initially, as “Shariah” is related to Muslim religion and I have lack of knowledge in this area, however through this research I have gained a further understanding of the Shariah-compliant regulations and mechanism. Moreover, through the exploration of different variables of corporate governance mechanism as well as studying relevant literatures and corporate governance theories, my understanding of the connection and development between theories and variables has improved.

ABSTRACT

The purpose of this study is to explore whether there is any significant relationship between corporate governance and financial performance of Shariah-compliant companies in Consumer Products and Services sector listed on Bursa Malaysia and whether they exhibit good governance. By examining the board's characteristic of 100 Shariah-compliant companies in Consumer Products and Services sector of Bursa Malaysia's Main Market against firm performance using annual data from 2011 to 2020.

The analysis clearly showed that companies that applied MCCG practices in their operations improved their performance overall. The presence of BSIZE, BIND, BMEET, WDIR and MDIR have positive impact on the financial performance. On the other hands, presence of CEO Duality has significant negative impact on the firms' financial performance. These could believe that Shariah-compliant companies in Consumer Products and Services sector listed on Bursa Malaysia has exhibit good governance.

On the other hands, this study provides theoretical contributions to demonstrate the nature of corporate governance theories and the Shariah-compliance in Malaysia. Therefore, it has filled the gaps in literature sources studying the association between corporate governance and company's performance from the perspective of Shariah-compliant companies in Consumer Products and Services sector.

CHAPTER 1

INTRODUCTION

The introduction chapter explains how this research originally developed. The focus of this study is to inspect the implication of corporate governance on firm performance of 100 Shariah-compliant companies in Consumer Products and Services sector of Bursa Malaysia through data analysis from 2011 to 2020. The background of this study is clarified in Section 1.1, continuing with Section 1.2 expanding on the observed problem statement. The objectives of this research are stated in Section 1.3, followed by the research questions listed in Section 1.4, to which this study attempts to respond. Section 1.5 explains the significance of this study and concludes with Section 1.6, outlining the structure of this paper.

1.1 Research Background

The relationship between corporate governance (CG) and firm performance has been discussed more than decades. In the wake of 1997/98 financial crisis, to reinforce the effectiveness of boards of directors in overseeing corporate operations, many countries have implemented corporate governance codes and guidelines. There are two major events that have changed corporate governance in Malaysia. First, the Malaysia Code of Governance (MCCG) was introduced in year 2000 and second, the Minority Shareholder Watchdog Group (MSWG) was established as the regulator of institutional investors. To enhance and align with international corporate governance practices,

MCCG has been reviewed and updated in 2007, 2012, 2017 and 2021. MCCG plays a vital role for stakeholders as it maintains the board communicates effectively, transparently, and regularly with them.

In the meantime, in Malaysia, the Islamic Capital Market (ICM) has been established and attempt to turn itself become the centre of international Islamic market. The Shariah is the Islamic law of human conduct that regulates all matter of Muslims' lives (Basah, 2015). Shariah-compliant companies listed on Bursa Malaysia constitute one of the components of the ICM and their main activities are in compliance with the Shariah requirements by Shariah Advisory Council (SAC). Nonetheless, the events of delisted 148 firms from Shariah-compliant list announced in November 2013 has caused a great stir in capital market. Because while SC has provided a sufficient time of 17 months, the delisted companies had not met the criteria of the revised Shariah compliance screening method. The delisted companies appeared to be not doing enough to ensure they comply with Shariah principles.

On the other hands, whether a good CG may or may not lead to better firm performance has been a hot topic for researchers looking to continuously measure and find out the relationships that different frameworks may produce different outcomes. Kumar and Singh (2013) claimed that firm performance is directly affected by its board structure, composition, size and characteristics. However, there after many studies have also aimed to investigate the models with different evidence. Subsequently, there are varied results on the association between corporate governance practices and company's performances.

1.2 Problem Statement

In years of establish, there are increasing of number of Shariah-compliant companies in Malaysia. In 2020, there were 742 shariah-compliant PLCs listed in Bursa Malaysia, up from about 714 PLCs in 2019. The increased number of Shariah-compliant

companies has started the development and structure of good corporate governance which need to comply the Islamic laws and regulations. However, there are the challenges for this measurement as different practices and implementation of this governance are adopted among the Islamic financial institutions.

In Malaysia, the majority of the population by religion is Muslim, making up 63.5% of the total population by 2020 (Statista.com, 2022). In this context, the halal status on Consumer Products and Services or company's Shariah-compliance status will be highly concern to society. Any negative news related will impact the firm performance. Furthermore, as Kashim et al., (2016) believed even if companies' securities were classified as Shariah-compliant, but investment remains open to Muslim and non-Muslim. Hence, with Shariah compliance, the companies can increase their investment in an enhanced way and increasing shareholders' wealth to maximum.

By reviewing the prior literatures, it is generally found that board size, CEO duality, board independence are commonly used to measure corporate governance practices, while Return on Assets (ROA), Return on Equity (ROE), Tobin's Q, and Earnings Per share (EPS) are commonly used to measure performance. But there in lack of analysis on data from 2016 onwards or 10 years from 2011 to 2020. In fact, there have been limited studies focusing on the Shariah-compliant companies in Malaysia.

In this circumstance, investigation related to the corporate governance and company performance involving Shariah-compliant companies in Consumer Products and Services sector is expected. This study aims to fill the gaps and provide new insight by replicating the research of Ismail, Ismail, Sulaiman and Daud (2020) and Masruki, Henefah and Ismail (2019) and incorporating different variables to represent corporate governance practices and firm performance.

1.3 Research Objective

The main objective of this research is to inspect the implication of corporate governance on firm performance of 100 Shariah-compliant companies listed on Bursa Malaysia in Consumer Products and Services sector through data analysis from 2011 to 2020. In this study, we will examine the corporate governance attributes which includes board size, board independence, CEO duality, number of board meetings, number of women directors, number of Malays directors and number of directors with accounting qualifications. For firm's performance attributes, return on assets and equity (ROA, ROE), and earnings per share (EPS) is selected as the measurement. In brief, this study will hypothesize renowned corporate governance theories and firm financial performance in relation to board's characteristics.

Consequently, the extended objectives in this study will also discover the relationships of below hypothesis:

1. Board Size, ROA, ROE, and EPS;
2. Board Independence, ROA, ROE, and EPS
3. CEO Duality, ROA, ROE, and EPS;
4. Number of Board Meetings, ROA, ROE, and EPS
5. Number of Woman Directors on Board, ROA, ROE, and EPS
6. Number of Malays Directors on Board, ROA, ROE, and EPS
7. Number of Directors with Accounting Qualification, ROA, ROE, and EPS

1.4 Research Questions

The primary question for this study is focus on:

1. How have the corporate governance mechanism impacted Shariah-compliant companies on Bursa Malaysia about firm performance in last decade?

To extend further, the below secondary questions have been developed to response the primary research question:

1. Does the board size significantly affect firm performance?
2. Does board independence affect firm performance?
3. Will CEO duality affect firm performance?
4. Does firm performance improve with the number of board meetings?
5. Does number of woman directors affect firm performance?
6. Does the number of Malays directors contribute to firm performance?
7. Will firm performance enhance if directors have the accounting qualifications?

1.5 Significance of the Study

There is a lot of research focused on corporate governance and company's performance, but limited studies have been found on the Shariah-compliant companies and governance and its impact of firm performance. Therefore, it is significant to study the governance practices of the Shariah-compliant companies and its impact on business performance.

The empirical results contribute consistent estimation of the relationship between CG and firm performance. Specifically, contribute to the understanding of current corporate governance of Shariah-compliant companies in the Consumer Products and Services sector on Bursa Malaysia and firm performance relationship. It can give recommendations and improvement of Malaysian Code of Corporate Governance 2021. In addition, in the context of Consumer Products and Services in Malaysia which most of the population by religion is Muslim who daily life is surrounding by products that are daily use will bring awareness of researchers to extend from this study. Furthermore, the outcome of this research would be valuable to the board of directors, policy makers, Government, Security Commission of Malaysia and Bursa Malaysia to

further improve relevant policies and regulations in the future. On the other hand, this study provides theoretical contributions to demonstrate the nature of CG theories and the Shariah-compliance in Malaysia. Consequently, it helps to fill gaps in literature sources studying the association between corporate governance and company's performance from the perspective of Shariah-compliant companies in Consumer Products and Services sector.

1.6 Chapter Layout

This research paper consists of five (5) chapters. The chapter layout begins with the Introduction chapter (Chapter 1), explaining the research background, questions, objectives and the significance of this study. Continue with Literature Review chapter (Chapter 2), to review relevant literature and theories of this study. Then, Methodology chapter (Chapter 3), which illustrated how the research was developed and designed. Next, the Research Result chapter (Chapter 4) is structured to present the results from panel data analysis. Finally, the Discussion and Conclusion chapter (Chapter 5) concludes the findings and suggestions for future extends possibilities.

CHAPTER 2

LITERATURE REVIEW

This chapter reviews the relevant literatures which covering the association between corporate governance and company's performance and develops a conceptual framework for this study. In Section 2.1, the concept of good governance and Shariah-compliance in Malaysia are introduced. Following on from the theoretical perspective of corporate governance as Section 2.2, exploring the Agency theory, Stewardship theory, and Resource Dependency theory and Stakeholder theory. Section 2.3 is related literature reviews describing the independent variables related to corporate governance attributes and the set of dependent variables that represent firm performance. From literatures deliberation, a theoretical framework is constructed in Section 2.4, which leads to the development of the conceptual framework of this study in Section 2.5.

2.1 Good Governance Practice and Shariah Compliance in Malaysia

CG is a process that ensures a fair return on investment for investors. The primary focus of CG is addressing agency problems. Existing literatures have investigated the impact of CG mechanism on firm performance (Roy, 2016; Ramli and Ramli, 2016; Zabri, Ahamd and Khaw, 2016; Yusoff and Alhaji, 2012). Furthermore, according to Roy (2016), an effective CG requires system to ensure that company's executives respect

the rights and interest of shareholders and act responsibly in yield, safeguarding and delivering wealth invested in the company.

Good corporate governance is expected to enhance firm performance and optimize the greater value for shareholders and stakeholders. To further improve the practices of corporate governance in Malaysia, there are some issues that need to look into which includes the large portion of government level of equity ownership; free float remains low; and directors' accountability and protection for minority shareholders (world bank 2022). Thereby, MCCG is a guideline for good governance practices. The continuing update and revised of MCCG in every five years (2007, 2012, 2017, 2021) has brought consciousness of Malaysian companies comply with good governance practice.

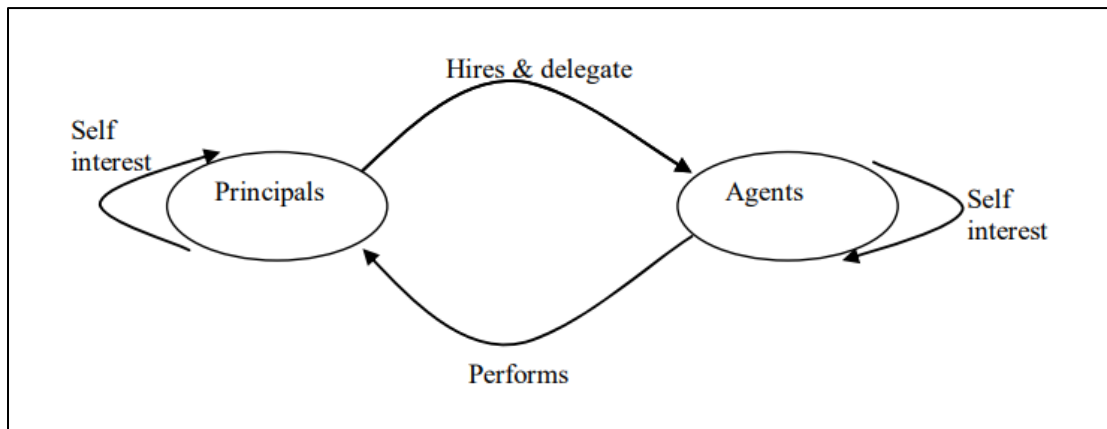
Meanwhile, for Shariah-compliant companies, boards play an important role and are responsible for ensuring Shariah compliance (Kasim, Hasim and Salman, 2016). In many Muslim countries, Islam is not only personal belief, but is integrated into all aspect of society which including business, law and community. In the study of Masruki, Hanefah and Ismail (2019), explained that explained that sound governance as defined by the Holy Quran is to encourage justice and fulfillment duties for oneself to others. They also concluded that good governance is Islam is not mechanical but qualitative. According to Securities Commission (SC) Malaysia, through ICM, Muslims can learn and build confidence in Shariah-compliant investment as all securities and transactions under Islamic capital (ICM) are permitted by Shariah. The SAC is a committee established on 16 May 1996, to advice the Commission of Shariah on ICM matters. In addition, the SAC also responsible published a list of Shariah-complaint securities which classified companies listed in Bursa Malaysia as Shariah compliant companies and non-shariah-compliant companies (Kasim et al., 2016). List of Shariah-complaint securities will be screened and updated by SAC twice a year helping investors to identify securities status as well as increase the confidence of investors.

2.2 Theoretical Perspective of Corporate Governance

This section explores the scope of corporate governance theories. In this study, instead of making assumptions based on just one CG theory, a combination of several CG theories has been employed to obtain results that best describe an effective and sound corporate governance practices. Based on this proposition, Agency theory, Stewardship theory, and Resource Dependency theory and Stakeholder theory are chosen to explore in this study.

2.2.1 Agency Theory

Figure 1: The Agency Model



Note. From Abdullah, H., and Valentine, B. (2009). Fundamental and ethics theories of corporate governance. *Middle Eastern Finance and Economics*, 4(4), p.90.

Agency theory defines the relationship between the principals and agents, i.e., the relationship between shareholders and executives such as CEO, directors, or managers. The theory stated that agents are recruited by the principals to perform work. Responsibilities for business operations are delegated by the principals to the directors

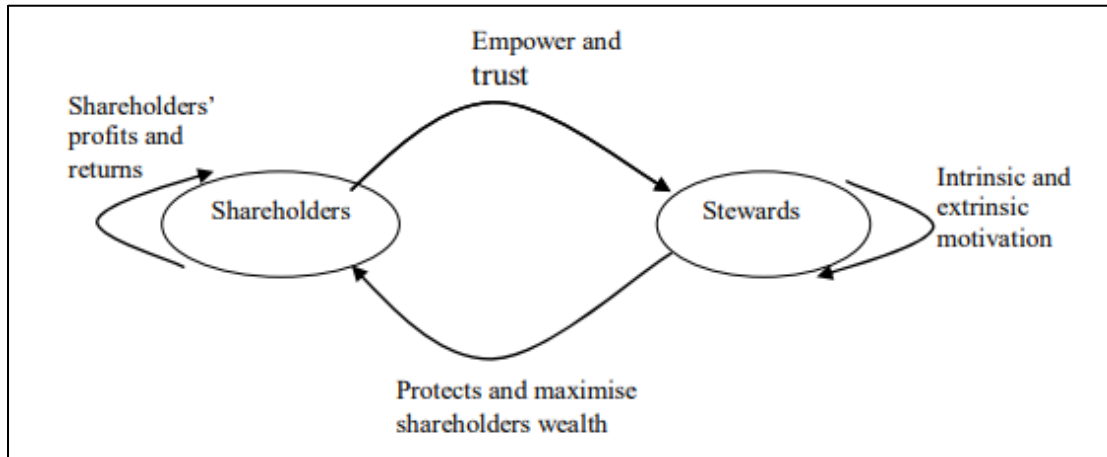
and/or managers who act as the agents of shareholders. Thus, proxies to act and make decisions in the best interest of principals are expected by shareholders towards the agents. Figure 1 illustrated the agency model which has described.

However, the agency problem arises when the goals set by the agents has conflict with shareholders' benefits. Commonly, it is due to the diverse of interests between managers and shareholders (Salama and Putnam, 2013). In other words, agents may have their own self-interest, due to the opportunistic behavior, they may abandon the expectations of the principals. Fama and Jensen (1983) claimed that such problems arise when main decision makers (the agents) have little or no financial interest in the result of their decisions. Thus, agency theory suggests that an effective way to alleviate agency problems is providing relative benefits to the agents because it aligns the interests of both principals and agents (Ismail, Ismail, Sulaiman and Daud, 2020). In this respect, corporate governance represents a set of mechanism designed to reduce the agency issues and preserve the same goals between principals and agents. In this sense, the main idea of agency theory advocates separating the leadership from ownership and control. Agency theory suggest a negative relationship between CEO duality and firm performance. The theory prescribes those employees are held accountable in their tasks and responsibilities where the reward and punishments can be applied to correct the priorities of agents.

2.2.2 Stewardship Theory

Davis, Schoorman & Donaldson (2018) defined Stewardship theory as a steward (e.g., company executive and managers) protects and maximizes shareholders wealth through firm performance, as by doing so, the steward's utility functions are maximized. Figure 2, the stewardship model, demonstrated the relationship between shareholders and stewards.

Figure 2: The Stewardship Model



Note. From Abdullah, H., and Valentine, B. (2009). Fundamental and ethics theories of corporate governance. *Middle Eastern Finance and Economics*, 4(4), p.91.

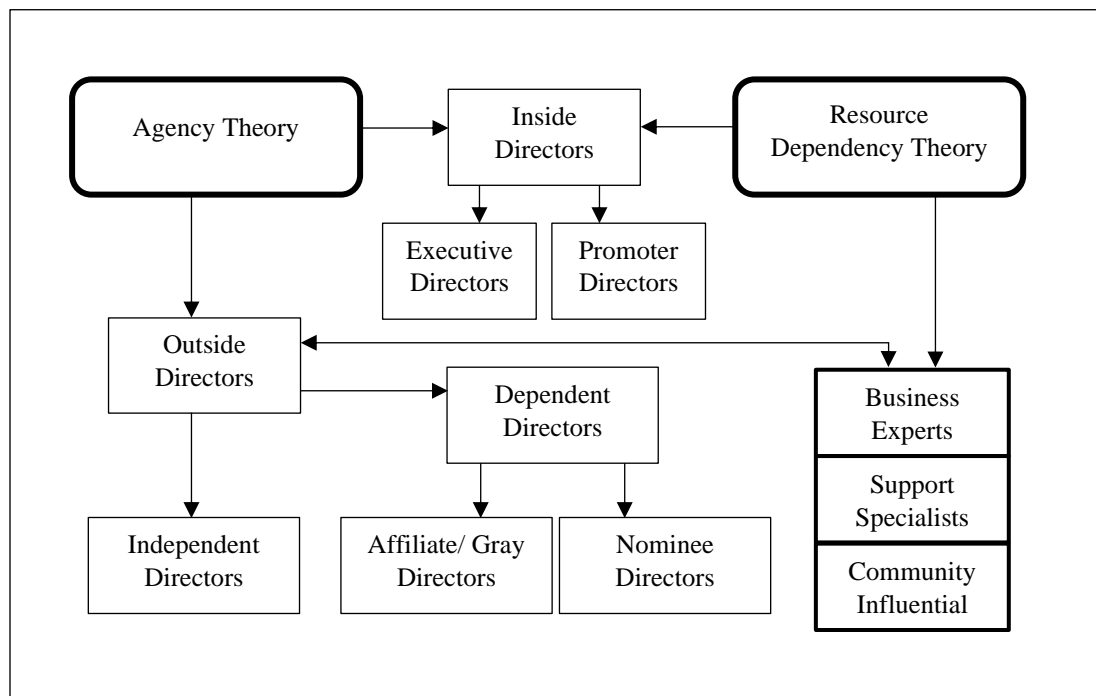
According to Keay (2017) stewardship theory emphasizes on the role of top management being as stewards, integrating their goals as part of the organization. Furthermore, Hernandez (2012) clearly stated that steward is an individual who is willing to sacrifice his/her own interests for long-term interests of others. Based on Stewardship theory, higher levels of synchronization and more effective management can have a positive impact on company performance if decisions and responsibilities are limited to one person (Arosa, Iturralde & Maseda, 2013). In contrast to the opportunities self-interest assumptions of agency theory, the stewardship perspective assumes that managers are trustworthy individuals and good stewards of the company's resources (Hernanndez, 2012). When a company is successful, the stewards feel satisfied and positive. Subsequently, employees take ownership of their jobs and work hard for personal ambitions. Additionally, Stewardship theory advocates combining the roles of CEO and chairman so that not only agency costs can be reduced, but it also allows stewards play a greater role in the organization to better safeguard shareholders' interest (Keay, 2017).

2.2.3 Resource Dependency Theory

A company profitability is often an assessment of how well (or poorly) that executives are doing (Pugliese, Minichilli, and Zattoni, 2014). According to Jajja, Kannan, Brah, and Hassan (2017), the Resource Dependency theory claimed that business do not have sufficient resources and capabilities to fulfill the projected goals, so it is uncontrollable and much relies on external resources to fulfill its goals. In facts, directors should extent the ability in providing or securing necessary resources for an organization through their connection with the external environment. The connection is crucial for better firm performance in four dimensions which are (1) valuable information; (2) identification of communication channel; (3) step to obtain environmental fundamental support; (4) a value of legitimizing organizations (Luckeath-Rovers, 2013). From the perspective of resource dependency theory, directors must possess human capital and social capital resources. In other words, when appointing board of directors, the factors must be considered is whether they are resourceful in terms of both, human capital (education, experience, expertise, skill) and social capital (network of ties to other firms, external environment and external contingencies) (Hundal, Eskola and Wahlgren, 2020). While inside directors play a role of delivering valuable information on the internal development of the company and outside directors are involved in both formulating strategic by its social capital and independently based on their human capital justify the CEO's decisions (Chou, Chung and Yin, 2013).

For better understanding, roles and characteristics of directors can be classified into four categories of insider, business experts, support specialist and community influential as shown in Figure 3.

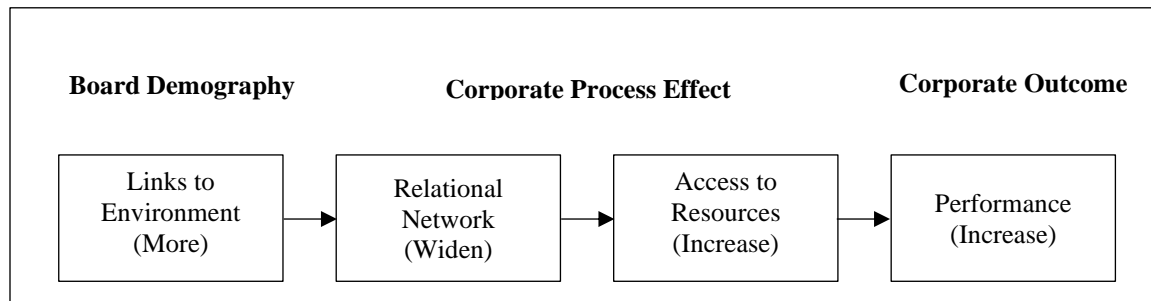
Figure 3: Classification of Directors Based On Agency Theory And Resource Dependency Theory



Note. Adapted from Hundal, S., Eskola, A. & Wahlgren, A. (2020). Changing university governance dynamics through interplays and convergences with corporate governance. *6th Higher Education Institutions Conference*, p.21.

The provision of resources enhances organizational functions, company's performance and its survival. Specifically, the resources such as information, skills, access to key constituents (e.g.: suppliers, buyer, public policy makers, social groups) as well as legitimacy may brought by directors bring to the firm to reduce uncertainty (Madhani, 2017). Additionally, Madhani (2017) clarified that resource dependency theory supports board appointment diversity as it increases the collection of information and networking in various ways to improve firm performance. In Figure 4, shows the courses of the board's influence on corporate governance as assumed by resource dependency theory.

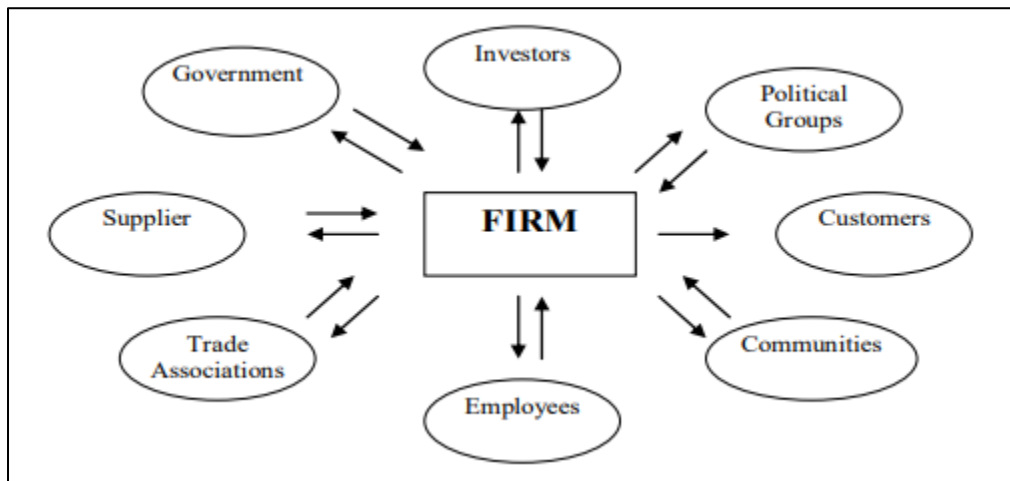
Figure 4: Board Demography and Corporate Governance: Resource Dependency Theory



Note. Adapted from Madhani, P. M. (2017). Diverse roles of corporate board: a review of various corporate governance theories. *The IUP Journal of Corporate Governance*, 16 (2), p.16.

2.3.4 Stakeholder Theory

Figure 5: The Stakeholder Model



Note. From Donaldson, T. and Preston, L.E. (1995). The stakeholder theory of the corporation: concepts, evidence and implications. *Academy of Management Review*, 20 (1), p. 69.

Stakeholder theory unified the accountability of management to a broad range of stakeholders. In Figure 5, the stakeholder model, shown that investors, employees, suppliers, customers, government, trade associations, political group and communities have the liaison with the firm are all stakeholders with their own networks of

relationships with the firm. Freeman (1984) argues that decision making processes can be influenced by associations with many groups because stakeholder theory focuses on the nature of these associations i.e., the processes and results of the company and their stakeholders. The theory conveyed that director on board are network of relationships serving the engaged group which includes the suppliers, employees and business partners. The company annual report is the incentive assets derived from the Stakeholder theory (Murugesan, Gayathri, Vasanth, Lingaraja, and Sigo, 2016). To maximize values of stakeholders, the stakeholders must be considered in the decision making while they have rights to obtain company information. Annual report serves as a communication tool between BOD and all stakeholders, and accountability for information provide in annual report could significantly enhance firm performance.

2.3 Literature Review

Details of the independent variables and dependent variables are discussed in the following sections of this chapter.

2.3.1 Independent Variables and Hypothesis Development

To measure board characteristics as independent variables to represent corporate governance mechanism, board size, board independence, CEO duality, number of board meetings, number of woman directors on board, number of Malays directors on board and number of directors with accounting (A/C) qualifications are being used in this study.

2.3.1.1 Board Size (BSIZE)

In many prior literatures (Zain, 2019; Ng, Teh, Ong, and Soh, 2016; Johl, Kaur and Cooper, 2015; Topal and Dogan, 2014; Kumar et al., 2013; Shukeri, Shin, and Shaari, 2012;), researchers took board size as the main measurement variable to represent board characteristic and CG mechanism. It is the total number of Board of Directors (BOD) which consist of executive and non-executive directors either independent or dependent. The effectiveness of the board could significantly influence the operations and performance of the company. Thus, the structure of the board becoming vital for ruling company. According to Ng, et al. (2016), an average board size of eight (8) has a strong impact on company performance. In Malaysia, there is no particular limit to the number of directors, but it is recommended that each company should examine its size to determine the impact on its number (Johl et al., 2015). However, for public companies must have at least two (2) resident directors. Regardless of which variables are correlated, literatures review presents two conflicting arguments. With regard to good governance, Ng, et al. (2016) claimed that smaller board size can improve management efficiency, while larger board size is critical for coordination and effectiveness of making strategic decision. Nevertheless, Zabri et al. (2016) explained that board size may be different amongst countries caused by different cultures therefore no ideal size of boards amongst organizations can be well-defined, but they considered a smaller size of board can bring better firm performance, as evidenced by the outcomes of their study.

According to Masruki et al., (2019) number of boards has a robust constructive association with the performance of the firms which explained that if board size increases, the company ROA is likely to increase. Similarity, Johl et al., (2015) argue that by having a larger board size can improve oversight and value creation of the company and their analysis results demonstrated larger board size has a positive impact on firm performance. Likewise, results are consistent with Abdullah (2016) and

Hussain and Hadi (2017). While in the similar study of Ng (2016) has demonstrated the relationship of board size toward ROA and ROE was significant. Yet, in the recent study of Zabri et al. (2016) argued that board size is negatively significant association with ROA but it was found to be insignificant to ROE. Meanwhile, Shittu, Ahmad, and Ishak (2016) found that Malaysia Islamic Bank's board size has a significant positive impact on earnings per share.

Based on the above relevant literatures, it is assumed that there is an association between Board Size and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 1

H1a: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H1b: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H1c: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.1.2 Board Independence (BIND)

Terjesen, Couto and Francisco (2016) pointed out that the Board of Directors (BOD) is responsible in directing, overseeing, enforcing company's strategy decisions (e.g.: merger and acquisitions, employment or dismissal executives and structuring capital fund) that affect the company's performance and overall capital outflows. Meanwhile, Agency theory stresses on board independence to ensure the effectiveness of the monitoring process (Kasim et al., 2016). Conversely, Stewardship theory suggests that higher proportion of inside directors enhance the company performance (Abdulsamad, Yusoff, and Lasyoud, 2018). From the view of financial efficacy, independent directors are associated with enhanced corporate governance, thereby increasing company value,

and expanding shareholder's capital (Wang, 2014). Generally, board independence is measured through the proportion of independent directors to the total directors in boardroom i.e., number of independent directors divided by total board size. Independent directors are directors who have less conflict of interest with the company. In other words, they are free from the business or family relationship with those who hold power and shares in the company. They exercise independent judgement in the best interests of the company. The existence of independent directors will enhance board's effectiveness, this is the basic supposition of agency theory, as it prevents company's directions and strategies from ruled by specific groups (especially in family businesses where family members are members of the board). In the revision of MCCG 2021, the guideline recommended that at least half of the boards are independent directors. Johl et al. (2015) emphasized that the revision of MCCG 2021 in increasing the proportion of independent directors in boardroom is significant in good governance practices as it safeguards the effectiveness of the independent directors in preserving sound decision making for the company. In different view, Fuzi, Halim and Julizaerma (2016) pointed out that there is no guarantee to the firm that by having high proportion of independent directors in board can improve their performance.

Awan (2012) has explored positive relationship between board independence and firm performance which using measurement of ROA and ROE in Pakistan. However, a negative correlation was found in a sample of 25 Canadian companies (Bozec and Dia, 2015). Abdulsamad et al. (2018) found that board independence was positively and significantly correlated to firm's ROA, which support the Agency theory. Moreover, EPS was found to be positive but not significant in the same study. Though the literature by Adebayo, Olusola, and Abiodun (2013) showed the result is positively significant between variables of board independence and EPS.

The previous study of Zabri et al. (2016) on a sample of Top 100 Malaysia Public listed companies from year 2008 to 2012 declared the board independence rate is 46% but there was no relationship between board independence and firm performance (ROA and ROE). Likewise, in the study of Johl et al. (2015) showed that the participation of independent directors has no impact on firm performance. The result showed a

negatively insignificant between the number of independent board and firm performance (ROA).

Based on the literatures stated, it is assumed that there is an association between board independence and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 2

H2_a: Number of independent directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H2_b: Number of independent directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H2_c: Number of independent directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.1.3 CEO Duality (CDUAL)

CEO Duality refers to the event where an individual serves as both chairman of the board and CEO at the same time. The Agency theory proposed the concept of non-duality leadership between Chairman of BOD and CEO, as separation of control rights will reduce agency cost and enhance firm performance. Likewise, Zain (2019) supports the separation between the roles of chairman and CEO, since the composition of board is an important decisive issue in corporate governance, and board is the link between management and shareholders, while the company is influenced by board's verdict. In order to establish good governance practices, according to MCCG guidelines, it is recommended that CEO and chairman of the board should be two different people, i.e., separate leadership to avoid agency issues. MCCG also recommends that chairman of

the board is a non-executive independent director in order to encourage board independence and non-interference in the business operations of the company. In contrast, Vo and Nguyen (2014) support the Stewardship theory which acknowledges the role of CEO Duality i.e., the CEO concurrently act as chairman in the board to improving firm performance. The empirical study of Vo and Nguyen (2014) in context of Vietnam listed companies claimed that low level of ownership discourage the CEOs from improving firm performance.

There is evidence study for ROA and CEO Duality, which found positively correlated but insignificant with ROA (Zain, 2016). In the same study of Zain (2016), the CEO Duality has a negative relationship but insignificant with ROE. Yet Adebayo et al. (2013) found negatively significant between CEO duality and EPS. While the study of Yasser, Mamun and Suriya (2014) showed no association between ROA, EPS and CEO Duality in respectively.

Based on the relevant literatures, it is assumed that there is an association between CEO Duality and company performance. Therefore, the hypotheses were derived as below:

Hypothesis 3

H3_a: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H3_b: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H3_c: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.1.4 Number of Board Meetings (BMEET)

According to Chou et al. (2013), it is directors' duties to attend board meetings in order to finalize the discussion and making strategic decisions for company's direction and overseeing company performance. In their empirical result found that that the higher frequency of the BOD attending board meetings can enhance better firm performance. According to the guideline of MCCG version in year 2007, board meetings is encouraged to conduct regularly for BOD to relieve obligations and responsibilities. Besides, it is mandatory for the board to reveal the number of board meetings and the attendance status of each director held in the fiscal year. Juhl at al. (2015) explained that board meetings and attendance are considered important channels through which directors obtain company specific information and be able to perform supervisory duties. In the past studies of Chou et al. (2013) showed that the frequency of board meetings has significant positive relationship with corporate performance (ROA). In other words, more frequent board meetings tend to produce higher financial performance. Furthermore, they also found that internal directors have better attendance rate than outside director in Taiwan. Conversely, Chaudhary and Gakhar (2018) found that the frequency of the board meetings has negative impact on ROA but are not found to be significantly impact ROA and ROE. The study also indicated that frequency of board meetings has not revealed any significant impact on EPS (Chaudhary and Gakhar ,2018). Nonetheless, Abdulsamad et al. (2018) obtained result where the relationship towards ROA and EPS are both negatively significant from board meetings.

Based on the relevant literatures' arguments above, it is assumed that there is an association between Board meetings and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 4

H4_a: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H4_b: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H4_c: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.1.5 Number of Woman Directors on Board (WDIR)

Diversity at work environment and several trials faced by women workforce influences firm performance (Dastane and Eshegbe, 2015). But undeniable the ratio of existence of women directors are increasing in companies' boardroom (Terjesen et al., 2016). In Malaysia, authorities are putting efforts to improve board's gender diversity in listed companies. It can be observed from the revision of guideline while MCCG 2012 only briefly recommended listed companies to develop gender diversity policy nonetheless in the revision of MCCG 2017, it requires companies to publicly unveil their policies for employing more women in the board, and also set goals and measures towards achieving those goals in employing more women in boards. According to the media press released by Securities Commission Malaysia (SC) in April 2021, among the top 100 listed companies, the rate of women's participation in the BOD is 25.3%. Therefore, to speed up the process of women on boards, MCCG 2021 recommends at least 30% women on boards of all listed companies. In this sense, it is significant to find out the relationship between number of women directors towards firm performance.

In the past research of Topal et al. (2014), found that there is no correlated to the firm performance on this independent variable (Number of women directors) but they still suggested to have balance board composition to get possible outcomes. Gallucci, D'Amato and Santulli (2015), found same outcomes that firm performance are not affected by number of female directors as there is insignificant result on ROA and ROE. Contrary, Zain (2016) and Julizaerma and Sori (2012) found that women board size has a positive and significant relationship within dependent variable ROA and ROE and suggested that women directors might provide better firm performance. Furthermore, Ishak, Amran and Abdul (2015) found that larger firms tend to have higher performance which showed positively association between female board on ROA and EPS in particularly.

Based on the relevant literatures, it is assumed that there is an association between number of woman directors and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 5

H5_a: Number of woman directors of 100 shariah-compliant companies in Consumer Products and Services has a significant relationship on firm performance (ROA)

H5_b: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H5_c: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.1.6 Number of Malays Directors on Board (MDIR)

According to the findings of Masruki et al., (2019), Shariah-compliant companies in the Consumer Product Sector were found to have lower levels of ethnic diversity. Their research (Masruki et al.,2019) encouraged Shariah-compliant companies to consider appointing directors with a high degree of shariah background, as these companies are dealing with the merchandises supply such as food, drinks, pharmaceutical and cosmetics that Muslim consume everyday. On the other hand, for Shariah-compliant firm to leverage their knowhow in enhancing halal and Shariah compliance, the Malays directors play the role from their understanding of their religion.

Due to limited studies that examining on firm performance from Shariah-compliant perspective, Ramli et al. (2016) found that the number of Malays directors and large board size could not exert significant impact towards corporate governance. Contrarywise, a positively correlated between number of Malays directors and firm performance (ROA) was tested by Zain (2019).

As this study is related to Shariah-compliant companies, number of Malays directors have drawn the attention to see whether this has a significant relationship with firm performance.

Based on the relevant literatures, it is assumed that there is an association between Number of Malays Directors and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 6

H6a: Number of Malays directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H6b: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H6c: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services has a significant relationship on firm performance (EPS)

2.3.1.7 Number of Directors with Accounting Qualification (ACDIR)

Poor decisions in forecast or financial planning can lead to failures in assessing company performance and the root of this poor decision may be related to a lack of knowledge to make good decision. In the arrival of knowledge economy aspect, undeniable that knowledgeable workforce become essential for firm to sustain competitive advantage amongst rivals (Hislop, 2013). Roy (2016) has emphasized that board composition such as board demographics, size, structure, education and leadership is one of the important factors affecting a company's financial performance. Besides, from the perspective of resource dependence theory, directors may be actively participating in the corporate strategy by advising the CEO to reduce the uncertainty. Therefore, the existence of A/C qualified directors is significant by conveying their knowledge on the preparing of financial reporting. Johl et al (2015) clarified that the necessity to have for board who are expertise in financial or accounting can enhance firm performance by obtaining accountability on the financial judgement of the board.

However, the study of Ramli et al. (2016) found that firms with higher proportion number of directors with accounting qualifications would drive lower total revenues compare to their counterparts. Thus, directors with accounting qualifications have drawn the attention to find out if this has a significant relationship with firm performance. While empirical result of Johl et al. (2015) has concluded that there is positive and significant result on ROA and suggested that to have higher proportion of board members with A/C qualifications.

Based on these, it is assumed that there is an association between number of directors with A/C qualifications and firm performance. Therefore, the hypotheses were derived as below:

Hypothesis 7

H7_a: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H7_b: Number of Directors with A/C qualification of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H7_c: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

2.3.2 Dependent Variables

From the perspective of shareholders, company performance can be assessed using financial ratios derived from financial statement or stock market prices (Masruki et. al., 2019). In this study, three measures of firm performance are used as dependent variable; (1) Return on Assets (ROA), (2) Return on Equity (ROE) and (3) Earnings Per Share (EPS).

2.3.2.1 Return on Assets (ROA)

ROA measures on how efficiently the firm uses its assets to generate profits, or in other words, it measures how much profit is generated from capital of the firm. The calculation for this performance variable is net income divided by total assets. Many researchers, for instance, Johl et al. (2015), Shukeri et al. (2012); Gallucci et al. (2015) have adopted ROA as performance measurement. Likewise, Masruki et. al. (2019) used ROA as dependent variable in their study.

In this study, ROA was calculated based on the figure of each company's net profit divided by total assets. The figure was extracted from balance sheet disclosed in firm's audited annual reports published in Bursa Malaysia website or its company's website.

2.3.2.2 Return on Equity (ROE)

Generally, ROE is net income divided by shareholders' equity. It is a ratio that indicates how well the company manages the capital invested by shareholders. It is considered as an accounting based performance measurement used to capture operational efficiencies and returns to owners of the firm. According to Roy (2016), a good CG may lower the expected return of equity, thereby lowering the monitoring and auditing costs for shareholders, and thus lowering the cost of capital. In this study, ROE was generated based on the figure of each company's net profit divided by total equity. The figure was also extracted from balance sheet disclosed in firm's audited annual reports published in Bursa Malaysia website or its company's website.

2.3.2.4 Earnings per Share (EPS)

EPS is a financial measure that indicates the profitability of a company. It is a crucial performance measurement reported by firm to their stakeholders (Jorgensen, Lee and Rock, 2014). The higher a company's EPS, the better is its profitability. Generally, it is calculated as a company's profit divided by the outstanding shares of its common stock. In this study, the figure of EPS is direct extracted from the annual reports of the selected companies published in Bursa Malaysia website or from their company's website. If there is absence of the EPS figures stated in annual report, the formula (stated in Table 3) will be implemented. In review past literatures, Shittu et al. (2016), Salim and Yadav (2012) and Yusoff & Alhaji (2012) have previously used EPS as indicator of firm performance.

2.4 Research Framework

Summarizing the corporate governance theories explained in earlier section, variables and applications of the four theories in term of board effectiveness and characteristics of the board are classified as follows in Table 1:

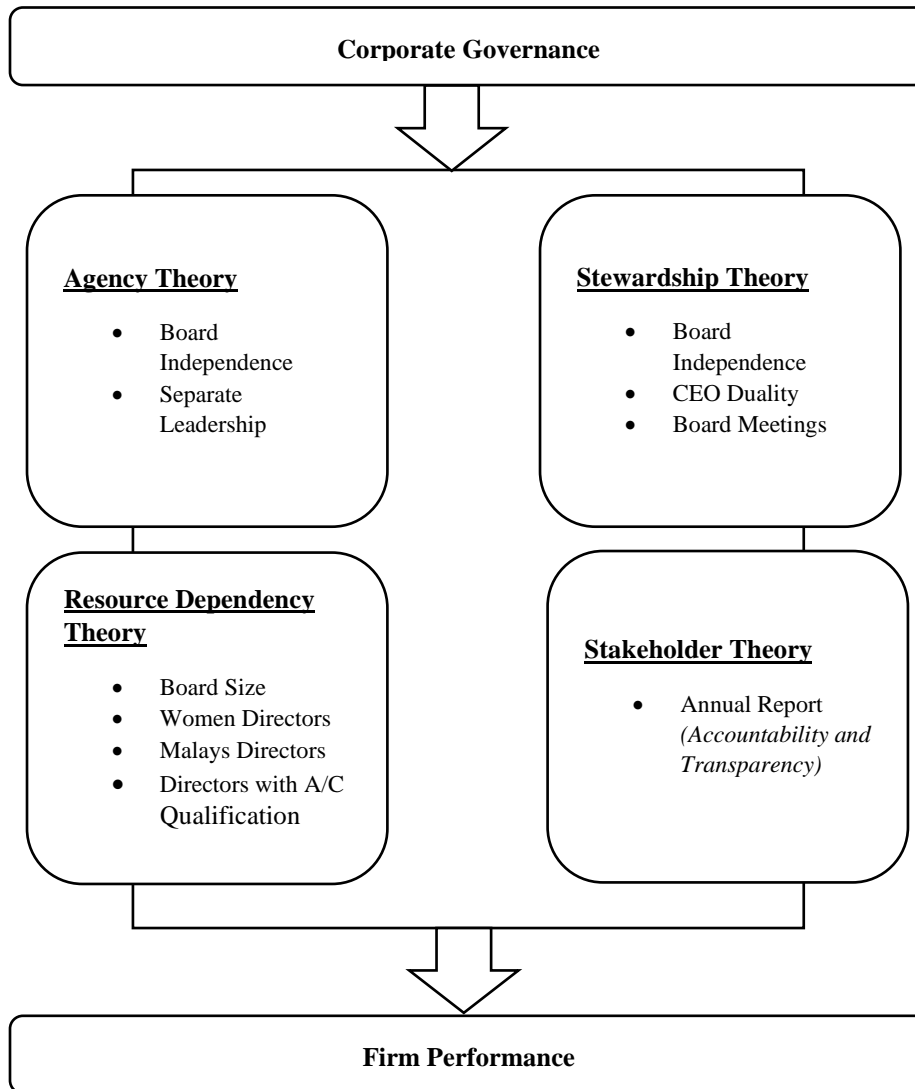
Table 1: Theories of corporate governance and its applications

Dimension	Agency Theory	Stewardship Theory	Resource Dependency Theory	Stakeholder Theory
Board Role	Control and Supervision	Service and advice	Links the firm to the resources requires to maximize performance	Uphold interest of all stakeholders
Theoretical Basis	Economics and finance	Sociology and psychology	Organizational theory and sociology	Management
Effective Boards	Independent (outside dominated board, no social, personal or professional ties between board and CEO/ management) Separate CEO-Chairperson	Insider dominated board. Joint CEO-Chairperson (duality) CEO-board social ties	Large board Board member diversity External networks among board members and other firms	Maximizing the shareholder returns is not the sole objective. Interests of all stakeholders should be equally honored
Representative studies	Baysinger & Hoskisson, 1990; Baysinger, Kosnik, & Turk, 1991; Fama& Jensen, 1983; Hill & Snell, 1988	Davis et al.,1997; Donaldson, 1990; Donaldson & Davis, 1991, 1994	Hillman et al., 2000; Pfeffer, 1973; Pfeffer & Salancik, 1978	Freeman 1984; Donaldson & Preston, 1995
Board Characteristic/ Applications	Separate of Leadership; Board Independence	CEO Duality; Board Independence; Board meetings	Board size; Board Meetings; Women Directors; Malays Directors; Directors with A/C Qualifications	Annual Report (Performance feedback disclosure and transparency to all stakeholders)

Note. Adapted from Castro et al., (2009). Does the team leverage the board's decisions?. *Corporate Governance: An International Review*, 17(6), 744-761

From the interpretation of Table 1, the theoretical framework of the CG theories and variables association between corporate governance and company's performance for this study is derived and illustrated in Figure 6:

Figure 6: Research Framework for Corporate Governance and Firm Performance

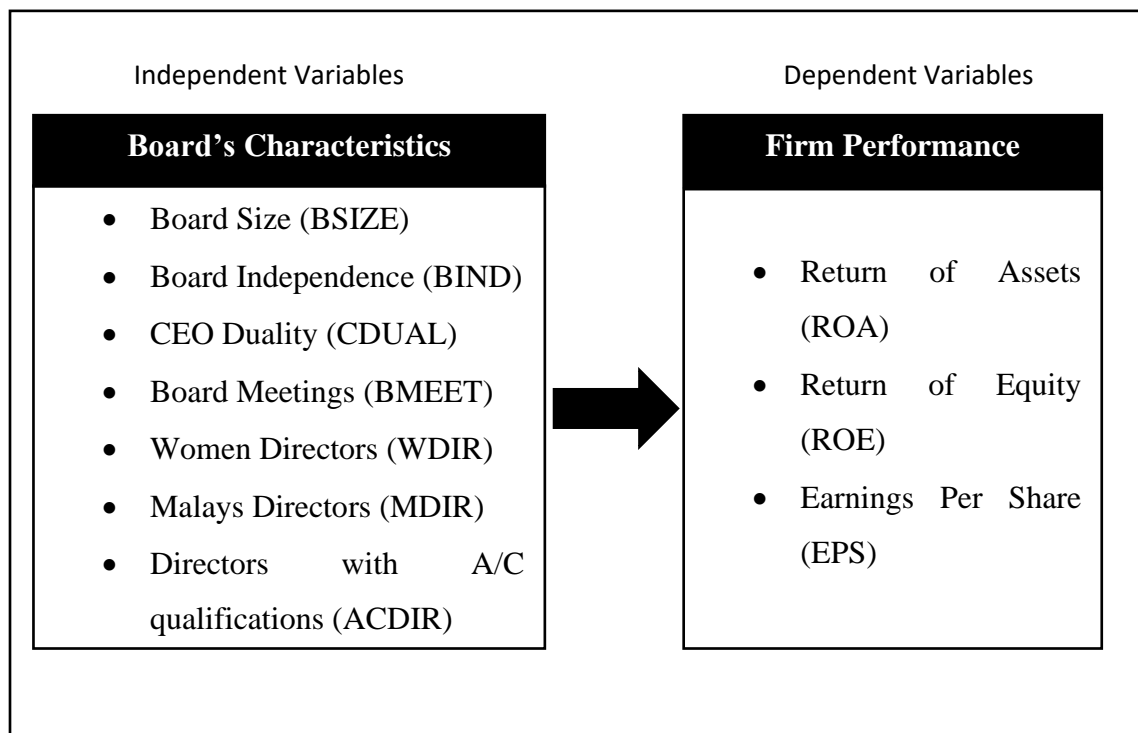


Note. Developed for the study

2.5 Conceptual Framework

In this section, Figure 7 illustrated the conceptual framework of this study. Board's characteristics, as indicators of corporate governance practices, are independent variables. In this study, the independent variables selected for measurement included board size, board independence, CEO duality, number of board meetings, number of women directors, number of Malays directors, and number of directors with accounting (A/C) qualifications. Correspondingly, ROA, ROE and EPS as dependent variables to measure firm performance.

Figure 7: Conceptual Framework for Corporate Governance and Firm Performance



Note. Developed for the study

CHAPTER 3

METHODOLOGY

This chapter describes the methodological details in this study. Section 3.1 begins by explaining the research design, followed by section 3.2 showing which data collection method is used. Then in Section 3.3, the target population, sampling frame, sampling element, sampling technique and sample size employed in this study are described. Next, the details of the research tools are specified in Section 3.4. Section 3.5 then describes how each variable is constructed and manipulated. The manner in which the data is processed is described in Section 3.6, and finally, in the last section of this chapter, Section 3.7, the data analysis involved is described.

3.1 Research Design

In this study the research design is entirely based on secondary data. This study did not use primary instruments such as questionnaire, interviews, focus groups or surveys.

Secondary data is extracted from annual reports published on Bursa Malaysia's website or each selected company's website. The samples used for this study are the companies that are listed on Bursa Malaysia and registered as Shariah-compliant securities (November 2021) with research period 2011-2020.

3.2 Data Collection Method

This study adopted a quantitative approach as it allows the evaluation of numerical result and present the results numerically through their measurable properties. In order to affirm the authentic sources for this research, data has been collected from reliable websites. Data was extracted from annual reports published on Bursa Malaysia's website or its company's website. The audited annual report is chosen as the secondary data collection because the information is easy to obtain, and the data accuracy is very high. One of the main responsible of corporate governance is to provide audited annual reports to shareholders and other stakeholders. Shariah-compliant company must maintain their Shariah compliance. As such, audited annual report is not only an audited financial report that complies with regulatory requirements but also a communication tool that includes information such as the Board of Directors, company background and outlooks and governance, for stakeholders to review.

3.3 Sampling Design

3.3.1 Target Population

In 2020, approximately 79.27 percent of these companies were recognised as Shariah-compliant. However, as the current study focuses on analysing report, with a specific objective and a target sample, this study will use purposive-cluster sampling method. Therefore, the target population for this study are the 100 Shariah-compliant companies listed on Bursa Malaysia.

3.3.2 Sampling Frame

To be specific, the study aims to get sample data of 100 Shariah-compliant companies listed on Bursa Malaysia's Main market which categorized in Consumer products and services sectors. In the list of Shariah-compliant securities (November 2021), total securities in Consumer products and services sectors are 199 companies, while number of Shariah-compliant securities is 125 companies which categorized as consumer products and services in Main Market. These 125 companies are the observation sample data range.

3.3.3 Sampling Element

In this study, the sampling unit collected are based on the list of Shariah-compliant Securities published in November 2021. As the study aims to examine the data over the period from 2011 until 2020, so the qualified sample element are the companies with 10 years or above listed history. The companies with missing data over years will be removed from the sampling set. After screening, 100 companies are selected from the list of 125 companies.

3.3.4 Sampling Technique

The sampling technique used in this study is the probability sampling. All samples are known and have an equal chance of being studied. Hence, by screening out companies that is not eligible for data analysis, all 100 companies within the sampling frame were used for this study.

3.3.5 Sample Size

Sample size of this research is 100 companies registered as Shariah-compliant companies which specific in Consumer Products and Services and services sector in Main Market. Annual data for all selected variables were collected and considered for this study from year 2011 until 2020.

3.4 Research Instrument

All data was extracted from audited annual reports released on Bursa Malaysia's website or selected company's website. Both data for independent variables and dependent variables were manually extracted from the annual reports. Statistical software of "Eviews" have been used to process the data of variables. Same research instrument was adopted by Chughtai, Naseer and Hassan (2017).

3.5 Construct Measurement

Good CG should consist of a complex set of interrelationships, so using a single variable to measure CG may not be sufficient to demonstrate observability. Besides, from the review of previous literatures on the relationship between CG and firm performance, researchers are using mixed variables for analysis. Therefore, in this study, 7 independent variables (IVs) and 3 dependent variables (DVs) were developed.

The formula and definition of the variables are shown in the Table 2 and Table 3:

Table 2: Measurements of Independent Variables (IVs)

IVs	Definitions/Formula	Adopted from
BSIZE	Total number of BOD	Masruki et al. (2019) Roy (2016) Kasim et al. (2016) Ramli et al. (2016) Zain (2019)
BIND	$\frac{\text{No. of Independent Directors}}{\text{Total No. of Directors on Board}}$	Ismail et al. (2020) Roy (2016) Kasim et al. (2016)
CDUAL	When the chair of the board also served as a CEO, the variable was coded as 1, otherwise coded as 0	Ismail et al. (2020) Kasim et al. (2016) Zain (2019)
BMEET	Total number of board meetings conducted in the fiscal year	Albawwat et al. (2015) Johl et al. (2015)
WDIR	$\frac{\text{No. of Woman Directors}}{\text{Total No. of Director on board}}$	Zain (2019)
MDIR	$\frac{\text{No. of Malays Directors}}{\text{Total No. of Director on board}}$	Ramli et al. (2016)
ACDIR	$\frac{\text{No. of Directors with A/C Qualifications}}{\text{Total No. of Director on board}}$	Ramli et al. (2016) Johl et al. (2015)

Note. Developed for this study

Table 3: Measurement of Dependent Variables (DVs)

DVs	Definitions/Formula	Adopted from
ROA	$\frac{\text{Net Profit}}{\text{Total Assets}}$	Zain (2019) Masruki et. al (2019)
ROE	$\frac{\text{Net Profit}}{\text{Total Equity}}$	Zabri et al. (2016) Zain (2019)
EPS	$\frac{\text{Net Income}}{\text{Number of shares outstanding}}$	Shittu et al. (2016) Abdulsamad et al. (2018)

Note. Developed for this study

3.6 Data Processing

All annual data obtained from the company's annual report were first inserted into Microsoft Excel for editing and compilation into a database. In an opened Excel table, the format of company name which following alphabet and year of the data are structured in rows while all variables (independent and dependent) were placed in columns. In the initial stage, companies of missing data will be highlighted for deletion until 100 qualified companies are reached. By doing so, these data can easily transfer to Statistical software, "EViews" (Version 12), for processing and generating the panel data analysis.

3.7 Data Analysis

The collected and constructed sample data will use Statistical software, “EViews” (Version 12) to run a panel data analysis. Hausman Test was performed on the panel data to determine if a Fixed Effects Model or Random Effects Model should be opted for the study.

3.7.1 Panel Data Analysis

Panel data involves at least two dimensions, a cross-sectional dimension, and a time series dimension. As such, this analysis was chosen because it allows for the analysis of the cross-sectional information of variables that represent corporate governance across the period from 2011 to 2020 for total of 100 companies.

In this study, one of two methods will be adopted in the panel data analysis. The methods are Fixed effects model or Random effects model in respectively. To determine which method will be applied on the dependent variable, a Hausman test is then performed. By observing the Hausman test’s probability value, we can decide the adoptions of the model. If the probability value is less than 0.05, then the Fixed effect model will be adopted. Vice versa, if the probability of Hausman test result is more than 0.05, the random effects model will be adopted.

Review of the panel analysis equation:

$$\gamma_{it} = \beta_1 \chi_{it1} + \beta_2 \chi_{it2} + \cdots + \beta_k \chi_{itk} + \varepsilon_{it}$$

Hence, the relationship between corporate governance and firm's performance was tested by the following regression models:

$$\begin{aligned} ROA_{it}(\text{performance}) \\ &= \beta_0 + \beta_1 BSIZE_{i,t} + \beta_2 BIND_{i,t2} + \beta_3 CDUAL_{i,t3} + \beta_4 BMEET_{i,t4} \\ &+ \beta_5 WDIR_{i,t5} + \beta_6 MDIR_{i,t6} + \beta_7 ACDIR_{i,t7} + \varepsilon_{it} \end{aligned}$$

$$\begin{aligned} ROE_{it}(\text{performance}) \\ &= \beta_0 + \beta_1 BSIZE_{i,t} + \beta_2 BIND_{i,t2} + \beta_3 CDUAL_{i,t3} + \beta_4 BMEET_{i,t4} \\ &+ \beta_5 WDIR_{i,t5} + \beta_6 MDIR_{i,t6} + \beta_7 ACDIR_{i,t7} + \varepsilon_{it} \end{aligned}$$

$$\begin{aligned} EPS_{it}(\text{performance}) \\ &= \beta_0 + \beta_1 BSIZE_{i,t} + \beta_2 BIND_{i,t2} + \beta_3 CDUAL_{i,t3} + \beta_4 BMEET_{i,t4} \\ &+ \beta_5 WDIR_{i,t5} + \beta_6 MDIR_{i,t6} + \beta_7 ACDIR_{i,t7} + \varepsilon_{it} \end{aligned}$$

Where:

β = Beta

ε = Error/ disturbance/ residual

i = Observation in cross-sectional data set

t = Observation in a time-series data set

CHAPTER 4

RESEARCH RESULTS

In this chapter 4 is the reveal of the research result generated from the data. In Section 4.1 is the panel data analysis generated from EViews software.

4.1 Panel Data Analysis

This chapter reflects the use of panel data analysis by Statistical software, “EViews” (Version 12), to inspect the association of variables in this study. The expected relationship outcome is a Fixed Effects model or a Random Effects model. The Hausman test is then used to determine whether it is a Fixed Effects model or a Random Effects model to decide which model is best for identifying relationships between variables.

In these circumstances, the assumption for each dependent variable based on the Hausman Test Probability is derived as follows:

H_0 : If $\text{prob} < 0.05$, the Fixed Effects Model is most appropriate model to used

H_1 : If $\text{prob} > 0.05$, the Random Effects Model is most appropriate model to used

We can observe the ‘Prob.’ (i.e., Probability value, p-value) indicates in the tables of Hausman Test to decide which assumptions is to be accepted or rejected. If the p-value is smaller than 0.05, then H_0 will be accepted (i.e., H_1 , rejected) and the Fixed Effect

model is the most appropriate model to used. On the other hands, if the p-value is greater than 0.05, then H_1 is accepted (i.e., H_0 rejected) and Random Effect model is the most appropriate model to used.

4.1.1 Return on Assets (ROA)

4.1.1.1 Hausman Test

Table 4: Hausman Test Result for ROA

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

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.989566	7	0.0120

The probability value of the Hausman test for ROA is 0.0120, which is smaller than 0.05. Thus, H_0 will be accepted, and the Fixed Effect model is the most appropriate model to used.

4.1.1.2 Fixed Effects Model

Table 5: Fixed Effects Model for ROA

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.881347	(99,882)	0.0000
Cross-section Chi-square	189.480659	99	0.0000

Cross-section fixed effects test equation:
Dependent Variable: ROA
Method: Panel Least Squares
Date: 08/03/22 Time: 18:29
Sample: 2011 2020
Periods included: 10
Cross-sections included: 100
Total panel (unbalanced) observations: 989

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOARD_SIZE	0.981955	0.522611	1.878940	0.0605 *
PERCENTAGE_OF_INDEPENDENT_D...	5.277821	7.594063	0.694993	0.4872
CEO_DUALITY	0.403091	1.840149	0.219054	0.8267
NUMBER_OF_BOARD_MEETINGS	-1.238757	0.559926	-2.212361	0.0272 **
NUMBER_OF_WOMEN_DIRECTOR_O...	1.196522	0.809061	1.478902	0.1395
NUMBER_OF_MALAY_DIRECTOR_ON...	0.590581	0.534942	1.104008	0.2699
NUMBER_OF_DIRECTORS_WITH_AC...	-0.027963	0.713549	-0.039189	0.9687
C	-1.414065	6.034112	-0.234345	0.8148
R-squared	0.015148	Mean dependent var		4.080993
Adjusted R-squared	0.008120	S.D. dependent var		25.51626
S.E. of regression	25.41245	Akaike info criterion		9.316412
Sum squared resid	633522.7	Schwarz criterion		9.356021
Log likelihood	-4598.966	Hannan-Quinn criter.		9.331474
F-statistic	2.155506	Durbin-Watson stat		1.782945
Prob(F-statistic)	0.035849			

Note. Significant at ***1%, **5%, *10% level.

Based on Table 5 shown above, the equation formulated as follows:

$$\text{ROA} = -1.414 + 0.981 (\text{BSIZE}) + 5.277 (\text{BIND}) + 0.403 (\text{CDUAL}) - 1.238 (\text{BMEET}) + 1.196 (\text{WDIR}) + 0.590 (\text{MDIR}) - 0.027 (\text{ACDIR}) + 6.034\varepsilon$$

The equation shows that Board Size (BSIZE), Board Independence (BIND), CEO Duality (CDUAL), Number of women directors on board (WDIR) and Number of Malays Directors on board (MDIR) have a positive relationship with ROA while Number of Board meetings (BMEET) and Number of directors with accounting qualification (ACDIR) have a negative relationship with ROA.

However, only BSIZE (p-value of 0.0605) and BMEET (p-value Of 0.0272) have a significant relationship with ROA at a significance level of 10%.

BIND, CDUAL, WDIR, MDIR, and ACDIR with the p-values greater than 0.1 are found no significant relationship with ROA.

The R-squared value is 0.0151, indicating that 1.51% of a variation in ROA. This can explain that a small changes in the 7 independent variables. The adjusted R-squared is 0.0081, showing that the independent variable does not follow the movement of the dependent variable.

4.1.2 Return on Equity (ROE)

4.1.2.1 Hausman Test

Table 6: Hausman Test for ROE

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

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.759343	7	0.3543

The probability value of the Hausman test for ROE is 0.3543, which is greater than 0.05. Thus, H_1 will be accepted, and Random Effect model is the most appropriate model to used.

4.2.2.2 Random Effects Model

Table 7: Random Effects Model for ROE

Dependent Variable: ROE

Method: Panel EGLS (Cross-section random effects)

Date: 08/03/22 Time: 18:46

Sample: 2011 2020

Periods included: 10

Cross-sections included: 100

Total panel (unbalanced) observations: 989

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOARD_SIZE	0.567017	1.137936	0.498286	0.6184
PERCENTAGE_OF_INDEPENDENT_D...	2.315274	16.04173	0.144328	0.8853
CEO_DUALITY	2.517944	4.052599	0.621316	0.5345 ***
NUMBER_OF_BOARD_MEETINGS	-5.475249	1.166398	-4.694153	0.0000
NUMBER_OF_WOMEN_DIRECTOR_O...	2.339248	1.750646	1.336220	0.1818 ***
NUMBER_OF_MALAY_DIRECTOR_ON...	3.419203	1.176987	2.905047	0.0038
NUMBER_OF_DIRECTORS_WITH_AC...	1.148705	1.545209	0.743398	0.4574
C	17.84486	12.85467	1.388201	0.1654
Effects Specification				
			S.D.	Rho
Cross-section random			9.985513	0.0400
Idiosyncratic random			48.93340	0.9600
Weighted Statistics				
R-squared	0.030803	Mean dependent var		5.705149
Adjusted R-squared	0.023887	S.D. dependent var		49.55181
S.E. of regression	48.95613	Sum squared resid		2351166.
F-statistic	4.454027	Durbin-Watson stat		2.247483
Prob(F-statistic)	0.000069			
Unweighted Statistics				
R-squared	0.036831	Mean dependent var		6.777124
Sum squared resid	2443513.	Durbin-Watson stat		2.162544

Note. Significant at ***1%, **5%, *10% level.

Based on Table 7, the equation formulated as follows:

$$\text{ROE} = -17.844 + 0.567 (\text{BSIZE}) + 2.315 (\text{BIND}) + 2.517 (\text{CDUAL}) - 5.475 (\text{BMEET}) + 2.339 (\text{WDIR}) + 3.419 (\text{MDIR}) + 1.148 (\text{ACDIR}) + 12.854\epsilon$$

The equation demonstrated that out of 7 independent variables there are 6 variables has a positive relationship with ROE which includes Board Size (BSIZE), Board Independence (BIND), CEO Duality (CDUAL), Number of women directors on board (WDIR), Number of Malays Directors on board (MDIR) and Number of directors with accounting qualification (ACDIR). Only Number of Board Meetings (BMEET) have a negative relationship with ROE.

However, only BMEET (p-value of 0.0000) and MDIR (p-value 0f 0.0038) which both at significant level of 1% indicates a very highly significant relationship with ROE.

BSIZE, BIND, CDUAL, WDIR, and ACDIR with the p-values greater than 0.1.are found no significant relationship with ROE.

The R-squared value is 0.0308, reveals that only 0.31% of a variation in ROE which is explained by a variation in the 7 independent variables. The adjusted R-squared is 0.0238, showing that the independent variable does not generally follow the movement of the dependent variable.

4.1.3 Earnings per Share (EPS)

4.1.3.1 Hausman Test

Table 8: Hausman Test for EPS

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

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.507665	7	0.0021

The probability value of the Hausman test for EPS is 0.0021, which is smaller than 0.05. Thus, H_0 will be accepted, and Fixed Effect model is the most appropriate model to used.

4.1.3.2 Fixed Effects Model

Table 9: Fixed Effects Model for EPS

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	21.056028	(99,882)	0.0000
Cross-section Chi-square	1199.619225	99	0.0000

Cross-section fixed effects test equation:

Dependent Variable: EPS

Method: Panel Least Squares

Date: 08/03/22 Time: 18:52

Sample: 2011 2020

Periods included: 10

Cross-sections included: 100

Total panel (unbalanced) observations: 989

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOARD_SIZE	1.310456	0.789815	1.659194	0.0974 *
PERCENTAGE_OF_INDEPENDENT_D...	34.22556	11.47681	2.982149	0.0029 ***
CEO_DUALITY	-6.462937	2.780994	-2.323967	0.0203 **
NUMBER_OF_BOARD_MEETINGS	-3.541537	0.846208	-4.185183	0.0000 ***
NUMBER_OF_WOMEN_DIRECTOR_O...	2.917552	1.222723	2.386109	0.0172 **
NUMBER_OF_MALAY_DIRECTOR_ON...	6.722026	0.808452	8.314691	0.0000 ***
NUMBER_OF_DIRECTORS_WITH_AC...	-0.541287	1.078378	-0.501946	0.6158
C	-4.104151	9.119276	-0.450052	0.6528
R-squared	0.132233	Mean dependent var	15.72818	
Adjusted R-squared	0.126041	S.D. dependent var	41.08166	
S.E. of regression	38.40551	Akaike info criterion	10.14234	
Sum squared resid	1446959.	Schwarz criterion	10.18194	
Log likelihood	-5007.385	Hannan-Quinn criter.	10.15740	
F-statistic	21.35536	Durbin-Watson stat	0.576083	
Prob(F-statistic)	0.000000			

Note. Significant at ***1%, **5%, *10% level.

Based on Table 9 shown above, the equation formulated as follows:

$$\text{EPS} = -4.104 + 1.310 (\text{BSIZE}) + 34.22 (\text{BIND}) - 6.462 (\text{CDUAL}) - 3.541 (\text{BMEET}) + 2.917 (\text{WDIR}) + 6.722 (\text{MDIR}) - 0.541 (\text{ACDIR}) + 9.119\varepsilon$$

The equation shows that Board Size (BSIZE), Board Independence (BIND, Number of Woman Director (WDIR) and Number of Malays Directors (MDIR) have a positive relationship with EPS. On the other hands, CEO Duality (CDUAL), Number of board meetings (BMEET) and Number of directors with accounting qualifications (ACDIR) have a negative relationship with EPS.

Seven out of six independent variables showed the result that have a significant relationship with EPS. The six independent variables include BSIZE with p-value of 0.0974, BIND with P-value of 0.029, CDUAL with p-value of 0.0203, BMEET with p-value of 0.000, WDIR with p-value of 0.0172 and MDIR with p-value of 0.0000. From the level of significance BIND, BMEET and MDIR are very highly significance on EPS. In the test result, only one independent variable, ACDIR was found have no significant relationship with EPS.

The R-squared value is 0.1322, reveals that 13.22% of a variation in EPS which is explained by the 7 independent variables in regression model. The adjusted R-squared is 0.1260, showing that the independent variable does not generally follow the movement of the dependent variable.

CHAPTER 5

DISCUSSION AND CONCLUSION

This chapter is the discussion and conclusion for this study. In section 5.1 discloses summary of the Hypothesis testing then continue with Section 5.2 elaborate the summary of Test of panel data analysis. In section 5.3 demonstrate the discussion on findings. Section 5.4 and 5.5 stated the limitation and the recommendation for future study. Finally, Section 5.6 conclude the study.

5.1 Hypothesis Testing

5.1.1 Summary of Hausman Test Results for ROA, ROE, and EPS

Table 10: Summary of Hausman Test for ROA, ROE, and EPS

	ROA	ROE	EPS
Hausman Test Probability Value	0.0120	0.3543	0.0021
Model	Fixed Effects	Random Effects	Fixed Effect

Note. Developed for this research

5.1.2 Summary of P-values for ROA, ROE, and EPS

Table 11: Summary of P-values for ROA, ROE, and EPS

	Probability Values (p-values)		
	ROA	ROE	EPS
(Constant)	0.8148	0.1654	0.6528 (+)
BSIZE	0.0605* (+)	0.6184 (+)	0.0974 * (+)
BIND	0.4872 (+)	0.8853 (+)	0.0029 *** (+)
CDUAL	0.8267 (+)	0.5345 (+)	0.0203 ** (-)
BMEET	0.0272 ** (-)	0.0000 *** (-)	0.0000 *** (-)
WDIR	0.1395 (+)	0.1818 (+)	0.0172** (+)
MDIR	0.2699 (+)	0.0038*** (+)	0.0000*** (+)
ACDIR	0.9687 (-)	0.4574 (+)	0.6158 (-)

Remarks: Significance of level, p-value <0.01***; p-value<0.05 **; p-value<0.1*
Note. Developed for this research.

5.1.3 Summary of Hypothesis Testing

Table 12: Summary of Hypothesis Testing

Research Questions	Research Hypothesis	Panel Data Analysis	p-value
1. Does the board size significantly affect firm performance?	H1a: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Accepted	0.0605* (+)
	H1b: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a relationship on firm performance (ROE)	Rejected	0.6184 (+)

	H1c: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0974 * (+)
2. Does board independence affect firm performance?	H2a: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Rejected	0.4872 (+)
	H2b: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Rejected	0.8853 (+)
	H2c: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0029 ***(+)
3. Will CEO duality affect firm performance?	H3a: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Rejected	0.8267 (+)
	H3b: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Rejected	0.5345 (+)

	H3c: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0203 **(-)
4. Does firm performance improve with the number of board meetings?	H4a: Number Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Accepted	0.0272 ** (-)
	H4b: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Accepted	0.0000 ***(-)
	H4c: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0000 ***(-)
5. Does number of woman directors affect firm performance?	H5a: Number of woman directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Rejected	0.1395 (+)
	H5b: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Rejected	0.1818 (+)

	H5c: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0172**(+)
6. Does the number of Malays directors contribute to firm performance?	H6a: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)	Rejected	0.2699 (+)
	H6b: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Accepted	0.0038*** (+)
	H6c: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Accepted	0.0000***(+)
7. Will firm performance enhance if directors have the accounting qualifications	H7a: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and	Rejected	0.9687 (-)

	Services sector has a significant relationship on firm performance (ROA)		
	H7_b: Number Directors with A/C qualification of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)	Rejected	0.4574 (+)
	H7_c: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)	Rejected	0.6158 (-)

Note. Developed for this study.

Hypothesis 1

H1_a: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H1_b: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H1_c: Board Size of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of Board Size (BSIZE) on firm performance (ROA)

The results of panel data analysis showed that BSIZE has a positive relationship on ROA, with p-value of 0.0605 which significant level reach at the 10%. Thus, the BSIZE has a positively significant with ROA. The result is constant with studies conducted by Masruki et al., (2019), Ng (2016), Abdullah (2016) and Hussain and Hadi (2017).

Analysis of Board Size (BSIZE) on firm performance (ROE)

From the outcomes, it is shown that BSIZE is positively correlated with ROE. However, the p-value is 0.6184 which is insignificant at the 1%, 5% or 10% level. Hence, there is no association between BSIZE and ROE which also aligned with Zabri et al. (2016) study showed that insignificant to ROE.

Analysis of Board Size (BSIZE) on firm performance (EPS)

The results of the relationship between BSIZE and EPS revealed that there was a positive relationship, and the p-value was 0.0974 which met the significant level of 10%. So, the hypothesis is accepted and clarified that the relationship between BSIZE is positively significant for EPS. The outcome is same with Shittu et al. (2016).

Hypothesis 2

H2_a: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H2_b: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H2_c: Number of independent boards of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of Board Independence (BIND) on firm performance (ROA)

The relationship between BIND and ROA was tested and showed a positive relationship. However, the p-value was 0.4872 which resulted in a no association between BIND and ROA which aligned with the study of Zabri et al. (2016) and Kumar et al. (2013).

Analysis of Board Independence (BIND) on firm performance (ROE)

The result of the analysis of the relationship between BIND and ROE also tested positive, but with a p-value of 0.8853, which exceeded the significance level of 1%, 5% or 10%. Thus, the analysis showed no association between BIND and ROE. Likewise, the results aligned with Zabri et al. (2016) that no association between BIND and ROE.

Analysis of Board Independence (BIND) on firm performance (EPS)

The hypothesis was accepted and revealed a very significant positive relationship between BIND and EPS with a p-value of 0.0029. The outcome is constant with Adebayo et al. (2013) who found no significant correlation between BIND and EPS.

Hypothesis 3

H3_a: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H3_b: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H3_c: CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of CEO Duality (CDUAL) on firm performance (ROA)

Panel data analysis showed that CDUAL was positively correlated with ROA. But the p-value is 0.8267, which results insignificant relationship between these two variables. Thus, the hypothesis was rejected, and it was concluded that the relationship between CDUAL and ROA was not significant. The result is similar with the literatures conducted by Zain (2016) and Yasser et al (2014).

Analysis of CEO Duality (CDUAL) on firm performance (ROE)

As with the previous hypothesis, although the relationship between CDUAL and ROE was positive, the p-value expressed as 0.5345 which did not reach a significant level. Therefore, this hypothesis was rejected as there is no association between CDUAL and ROE which was consistent with Zain (2016) 's study.

Analysis of CEO Duality (CDUAL) on firm performance (EPS)

The results showed that CDUAL was negatively correlated with EPS. Furthermore, a p-value of 0.0203 has indicates a significant result. Therefore, the CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS). The result was difference with the

study of Yasser et al. (2014) which showed no association between EPS and CEO Duality.

Hypothesis 4

H4_a: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H4_b: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H4_c: Number of Board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of Number of Board Meetings (BMEET) on firm performance (ROA)

From the data analysis result generated that BMEET has a negative relationship on ROA, with p-value of 0.02725 which met significant level. Thus, the BMEET has a negatively significant relationship with ROA. The result did not support the negative insignificantly impact on ROA proven by Chaudhary and Gakhar (2018). But consistent with positive relationship revealed by Francis, al et. (2012).

Analysis of Number of Board Meetings (BMEET) on firm performance (ROE)

The relationship between BMEET and ROE was examined and shown to be negatively correlated. Since the p-value is 0.0000, which implies the significance is high. Therefore, the hypothesis was accepted, and it was concluded that there was a significant negative relationship between BMEET and ROE which consistent with

Chaudhary and Gakhar (2018) findings that the frequency of the meeting has negative impact on ROE.

Analysis of Number of Board Meetings (BMEET) on firm performance (EPS)

The result of the relationship for BMEET and EPS is same as above, indicating that the relationship is negative, and the p-value of 0.000, which means a high level of significance and lead to the acceptance of the hypothesis that the relationship BMEET of 100 shariah-compliant companies in Consumer Products and Services sector has a significant negative relationship on firm performance (EPS). The outcome is same with Abdulsamad et al. (2018) has revealed.

Hypothesis 5

H5a: Number of woman directors of 100 shariah-compliant companies in Consumer Products and Services has a significant relationship on firm performance (ROA)

H5b: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H5c: Number of women directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of Number of Woman Directors (WDIR) on firm performance (ROA)

The data analysis showed that WDIR has a positive relationship with ROA. But p-value of 0.1395 indicates that the relationship is not significant. So, the hypothesis is rejected. This has supported studies by Galluci et al. (2015) while contra to Zain (2016) and Julizaerma et al. (2012) which found the relationship was significant.

Analysis of Number of Woman Directors (WDIR) on firm performance (ROE)

From the result, indicated that WDIR was positively correlated with ROE. However, the p-value is 0.1818 which is insignificant on the 1%, 5% or 10% level. Hence, there was no association between WDIR and ROE. The result is aligned with the previous studies conducted by Galluci et al. (2015) inconsistent with Zain (2016 and Julaizaerma et al. (2012).

Analysis of Number of Woman Directors (WDIR) on firm performance (EPS)

The results showed a positive correlation between WDIR and EPS, where p-value is 0.0172 which is significant. Hence, the hypothesis is accepted and shows that the relationship between WDIR is positively significant on firm performance (EPS). The result consistently with the positive relationship revealed by Ishak et al. (2015).

Hypothesis 6

H6a: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H6b: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H6c: Number of Malays Directors of 100 shariah-compliant companies in Consumer Products and Services has a significant relationship on firm performance (EPS)

Analysis of Number of Malays Directors (MDIR) on firm performance (ROA)

The results showed that there was a positive relationship between these two variables (MDIR and ROA). But a p-value of 0.2699 indicates no significant. Eventually, there was no association between MDIR and ROA which constant with the studies of Ramli et al. (2016) and Zain (2019).

Analysis of Number of Malays Directors (MDIR) on firm performance (ROE)

From the result, it was shown that MDIR has a positively related with ROE. Moreover, the p-value is 0.0038 which leads significant for relationship between MDIR and ROE. Hence, the results concluded that there was a significant positive relationship between MDIR and ROE. The outcome is consistent with the study proven by Zain (2019).

Analysis of Number of Malays Directors (MDIR) on firm performance (EPS)

The results of the relationship between MDIR and EPS revealed that there was a positive relationship, and the p-value was 0.0000 which met the high significant level of 1%. So, the hypothesis was accepted, and it was concluded that the relationship between MDIR has a positive and significant associate on EPS. The positive correlated results are consistent with the findings of Ramli et al. (2016).

Hypothesis 7

H7_a: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROA)

H7_b: Number of Directors with A/C qualification of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (ROE)

H7_c: Number of Directors with A/C qualifications of 100 shariah-compliant companies in Consumer Products and Services sector has a significant relationship on firm performance (EPS)

Analysis of Number of Directors with A/C qualifications (ACDIR) on firm performance (ROA)

From the test result, we can understand the relationship between ACDIR and ROA relationship showing that the relationship was negative and insignificant with p-value of 0.9687. The outcome is inconsistent with Johl et al (2015)

Analysis of Number of Directors with A/C qualifications (ACDIR) on firm performance (ROE)

From the result, ACDIR has a negatively correlated with ROE. However, the data shows a p-value of 0.4574 which does not meet the 1%, 5% or 10% significance level range. Hence, there was no association between ACDIR and ROE. The result is aligned with study of Ramli et al. (2016).

Analysis of Number of Directors with A/C qualifications (ACDIR) on firm performance (EPS)

The relationship between ACDIR and EPS turned out to be negatively correlated. Furthermore, with p-value of 0.6158 which is not significant. So, the hypothesis was

rejected and indicated that the relationship between ACDIR and EPS was negatively insignificant.

5.2 Summary of Tests

5.2.1 Inferential Analysis

5.2.1.1 Panel Data Analysis (10-years Analysis)

The overview of the results has delivered evidence on the association between corporate governance and company's performance of 100 shariah-compliant companies in Consumer Products and Services sector.

The results showed that Board Size (BSIZE) has a positive relationship with firm performance (ROA, ROE, and EPS) and it was significant with ROA and EPS but no significant associate with ROE.

Analysis from Board Independence (BIND) indicates that it is positively correlated to firm performance (ROA, ROE, and EPS), however only EPS has a significant relationship with BIND.

The relationship between CEO Duality and firm performance has different results on the dependent variables. The relationship between CDUAL with ROA or ROE, in particular, was positive but insignificant. On the other hands, the relationship between CDUAL and EPS was negatively significant.

The Number of board meeting (BMEET) is negatively and significantly correlated with firm performance (ROA, ROE and EPS).

The number of woman directors is positively related with firm performance. Nonetheless, only EPS was significantly related with WDIR.

From the analysis of number of Malays Directors (MDIR) and firm performance it can be concluded that there is a positive in association between MDIR and ROA. However, a significant positive relationship between MDIR and ROE or EPS was found. Finally, the relationship between number of directors with accounting qualifications (ACDIR) and firm performance is negative and the results indicates no association between ACDIR and firm performance (ROA, ROE and EPS).

5.3 Discussion on Findings

The results of the panel data analysis provision the observation that there is a significant association between corporate governance and company's performance. As per findings, the BSIZE has a positively significant with firm performance i.e., the larger board size can improve company performance. Moreover, there is a positive and significant with ROA variable, which also interpreted that the larger board size can better utilize the company' assets thereby increase profit of the company.

The relationship between board independence and firm performance manifests itself in positive effects in this study. The result suggested that a higher proportion of independent directors will improve firm performance as they are more likely to act in best interests of shareholders. This may also be due to the fact that independent director has no conflict of interests and stand a legitimate perspective in maximizing shareholders' benefits. This is in line with the MCCG 2021 guideline that at least half of the board should be independent directors. The increasing number of independent directors could enhance firm performance especially the EPS of the Shariah-compliant companies.

On the other hands, the findings showed that the relationship between CEO Duality of 100 shariah-compliant companies in Consumer Products and Services sector and firm performance variables are mixed where it showed a positive relationship with ROA and ROE but negative impact with EPS. However, in the analysis there is no significant between CDUAL with ROA and ROE. Therefore, the result has concluded that CEO

duality has a negative significant relationship with firm performance (EPS). In other words, it is reasonable to believe that the CEO duality may lead to the lower of firm performance. Based on agency theory and MCCG guideline, it is recommended that separation leadership will lower the agency cost and enhance firm performance.

In this study, the relationship between board meetings of 100 shariah-compliant companies in Consumer Products and Services sector has found strong positive correlation with firm performance (ROA, ROE and EPS). The outcome supports the more frequent of board meetings manage to increase firm financial performance. As the communication among BOD in board meetings can effectively adjust the direction of the company performance and reduce uncertainty.

As per findings, the number of women directors has positively affected firm performance, especially significant with dependent variable, EPS. This explains that an increase in the number of women directors can enhance firm performance especially the EPS in the Shariah-compliant companies. With the evolution of social ethics, female workforce has made significant contributions to society. By having women directors in board can bring other resources to improve firm performance. Following Resource Dependency theory that these are the value-added resources such as different sets of skills, experience and expertise that could reduce uncertainty.

The number of Malays directors on boards has a positive impact on firm performance in term of ROE and EPS. These suggest that better governance can be led in Shariah compliant companies by having Malays directors on board. The prior literature pointed out that the impact of ethnic diversity in the boardroom can increase effectiveness and efficiency of management, and promote implementation of accountability (Hassan and Marimuthu, 2016). Moreover, directors with Shariah knowhow will increase Muslim confidence on the firm's goods (Masruki, 2019). Therefore, by examine in the context of shariah-compliant companies in Consumer Products and Services sector can conclude that Malays directors on board can improve the firm performance by its ethnic background in Malaysia.

Finally, the result between the relationship of the number of directors with accounting qualifications and firm performance is mixed and overall insignificant in this study. As per findings, number of directors with accounting qualifications has a positively correlated to ROE and negatively correlated to ROA and EPS. As the result is overall insignificant, therefore the assumption of the relationship is rejected. In any case, according to the Resource Dependency theory, directors with different skills are an added value to company, as the broader knowledge could show the board's competency and accountability thereby gain confidence from stakeholders.

5.4 Limitations of the Research

This study is exposed to some limitations. The first limitation is the time constraint in collecting the information and generating the result as the data collected for 100 companies with a 10 years' time period. The second limitation is the variables implemented in this study may unreliable, as the result is inconsistent with past studies and some of the analysis result is weak. The reason for the inconsistency is due to the variables used in this study are expressed by different measure as given in the past literatures.

5.5 Recommendations for Future Research

It is encouraging that the future scope of the research using different variables and different sectors such as Industrial Products and Services sector to investigate the efficacy of applying corporate governance on firm performance such as audit committees. Moreover, a comparative study of Shariah-compliant companies and non-shariah compliant companies can be applied to find out the significant of being qualified as Shariah-compliant companies and whether there are any differences in term of firm performance.

5.6 Conclusion

The empirical tests on the relationship between the corporate governance and company performance are mixed. Some findings are consistent with theory, others are not. This may be due to the many ways in which a company's performance is measured, and additional factors such as legal background, management style, and culture can all lead to different results. After the research and analysis, it is recommended that the corporate governance structure should be adhere more diversity in boardroom. To emphasize, the purpose of this study is to explore whether there is any association between CG and financial performance of Shariah-compliant companies in Consumer products and services sector listed on Bursa Malaysia and whether they exhibit good governance. The analysis clearly showed that companies that applied MCCG practices in their operations improved their performance overall. The presence of BSIZE, BIND, BMEET, WDIR and MDIR have positive impact on the financial performance. On the other hands, presence of CEO Duality has significant negative impact on the firm financial performance. It can be concluded that Shariah-compliant companies in Consumer products and services sector listed on Bursa Malaysia has exhibit good governance.

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APPENDICES

Appendix A: List of Shariah-Compliant Securities in Consumer Products and Services and Services Sectors

1	Able Global Bhd	64	Magni-Tech Industries Bhd
2	Advance Synergy Bhd	65	Malaysan Flour Mills Bhd
3	AEON Co. (M) Bhd	66	MBM Resources Bhd
4	AHB Holdings Bhd	67	MESB Bhd
5	AirAsia Group Bhd	68	Milux Corporation Bhd
6	AirAsia X Bhd	69	Minda Global Bhd
7	Ajinomoto (Malaysia) Bhd	70	Mr D.I.Y. Group (M) Bhd
8	Amway (Malaysia) Holdings Bhd	71	MSM Malaysia Holdings Bhd
9	Apollo Food Holdings Bhd	72	Nestle (Malaysia) Bhd
10	Asia Brands Bhd	73	New Hoong Fatt Holdings Bhd
11	Avillion Bhd	74	Ni Hsin Group Bhd
12	Berjaya Food Bhd	75	Niche Capital Emas Holdings Bhd
13	Bermaz Auto Bhd	76	NTPM Holdings Bhd
14	Bonia Corporation Bhd	77	OCB Bhd
15	Brahim's Holdings Bhd	78	Oceancash Pacific Bhd
16	C.I. Holdings Bhd	79	Only World Group Holdings Bhd
17	CAB Cakaran Corporation Bhd	80	Oriental Food Industries Holdings Bhd
18	Caely Holdings Bhd	81	Padini Holdings Bhd
19	CAM Resources Bhd	82	Pan Malaysia Holdings Bhd
20	CCK Consolidated Holdings Bhd	83	Paos Holdings Bhd
21	Cheetah Holdings Bhd	84	Paragon Union Bhd
22	Citra Nusa Holdings Bhd	85	Parkson Holdings Bhd
23	Classic Scenic Bhd	86	PCCS Group Bhd
24	Cocoaland Holdings Bhd	87	Pelikan International Corporation Bhd
25	CWG Holdings Bhd	88	Pensonic Holdings Bhd
26	Cycle & Carriage Bintang Bhd	89	Perak Transit Bhd
27	DKSH Holdings (Malaysia) Bhd	90	Permaju Industries Bhd
28	DRB-HICOM Bhd	91	Petronas Dagangan Bhd
29	Dutch Lady Milk Industries Bhd	92	Poh Kong Holdings Bhd
30	Eastland Equity Bhd	93	Power Root Bhd

31	Emico Holdings Bhd	94	PPB Group Bhd
32	Eng Kah Corporation Bhd	95	Prolexus Bhd
33	Esthetics International Group Bhd	96	PWF Corporation Bhd
34	Euro Holdings Bhd	97	QL Resources Bhd
35	Eurospan Holdings Bhd	98	Rex Industry Bhd
36	Federal International Holdings Bhd	99	Salutica Bhd
37	Fiamma Holdings Bhd	100	Sand Nisko Capital Bhd
38	Formosa Prosonic Industries Bhd	101	Saudee Group Bhd
39	Fraser & Neave Holdings Bhd	102	SEG International Bhd
40	G3 Global Bhd	103	Sern Kou Resources Bhd
41	GETS Global Bhd	104	SHH Resources Holdings Bhd
42	Greenyield Bhd	105	Signature International Bhd
43	Guan Chong Bhd	106	Sime Darby Bhd
44	Homeritz Corporation Bhd	107	Sinmah Capital Bhd
45	Hong Leong Industries Bhd	108	Solid Automotive Bhd
46	Hup Seng Industries Bhd	109	Spritzer Bhd
47	Hwa Tai Industries Bhd	110	SWS Capital Bhd
48	Iconic Worldwide Bhd	111	SYF Resources Bhd
49	InNature Bhd	112	Tafi Industries Bhd
50	IQ Group Holdings Bhd	113	Tan Chong Motor Holdings Bhd
51	Jadi Imaging Holdings Bhd	114	Tek Seng Holdings Bhd
52	Jaycorp Bhd	115	Teo Guan Lee Corporation Bhd
53	Kamdar Group (M) Bhd	116	Three-A Resources Bhd
54	Karex Bhd	117	TPC Plus Bhd
55	Kawan Food Bhd	118	UMW Holdings Berhad
56	Khind Holdings Bhd	119	UPA Corporation Bhd
57	KPower Bhd	120	Wang-Zheng Bhd
58	Latitude Tree Holdings Bhd	121	Warisan TC Holdings Bhd
59	Lay Hong Bhd	122	Wegmans Holdings Bhd
60	Lee Swee Kiat Group Bhd	123	XL Holdings Bhd
61	Lii Hen Industries Bhd	124	Yoong Onn Corporation Bhd
62	Lotus KFM Bhd	125	Zhulian Corporation Bhd
63	LTKM Bhd		

Remarks: Company with **Bold** form are the sample data.

Note. Adapted from Shariah Advisory Council Securities Commission Malaysia (Nov 2021). List of Shariah-Compliant Securities: Consumer Products and Services & Services. P.14-16