CORPORATE GOVERNANCE AND BANK PERFORMANCE: CONVENTIONAL VS ISLAMIC BANKS IN MALAYSIA

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I hereby declare that:

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

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ABSTRACT

Banks plays one of the vital roles in the country and economics financial hub. Therefore, it is necessary to have proper governance in this sector in order to control the monetary policy of the economy and avoid any financial crisis. The main purpose of this research is to study the effect of corporate governance variables on the profitability of conventional and Islamic banks in Malaysia. A total of 18 banks were selected for the period covering 2013 to 2017 in order to identify the firm performance by the two most popular measurement tools that are ROA and ROE. Eleven variables which include three control variables were selected in order to conduct this research. Based on the descriptive study it is found that board size and other variables of the conventional bank were much higher compared to the Islamic bank. Further, a T-test is conducted in order to find the significance among the variable and found that except ROE, independent directors, foreign directors, and average remuneration all other variables found to be significant with each other including the control variables. Further, the pooled panel regression analysis indicates that all the variables except independent directors, female directors and two control i.e. bank size and customer deposit variable found insignificant with bank performance. Finally, from subsample analysis, for conventional bank, the remuneration of directors, female directors, bank age, board size and foreign directors and for Islamic bank independent directors, female directors, board meeting, bank size, customer deposit, board size, age of directors and education qualification are consistent with the entire sample. Therefore, based on the study it is concluded that there is a relationship between corporate governance variables with bank performance.
CHAPTER 1

INTRODUCTION

This chapter will briefly discuss the effect of corporate governance (CG) mechanism in the bank performance of both conventional and Islamic banks in Malaysia. The chapter is segmented into seven sections. Firstly, the research background will be discussing corporate governance in banking industries in Malaysia. In the second section, the problem statement will be discussed. The research objective will be discussed in the third section. Fourthly the research question and finally the following section will discuss the significance of the study will be explained by the researcher.

1.1 Research Background

The wave of ‘giant’ (e.g. Enron, Tyco, WorldCom, etc.) corporate failure increases the attention to the subject of corporate governance. It is now one of the widely discussed topics in the corporate sectors. In order to secure the confidence and trust of both shareholders and stakeholders, the firm discloses the CG in its annual report. According to Azeem, Kouser, Hassan, and Saba (2015), the idea of corporate governance developed due to economic concern and the complex management structure. And they also added that after the financial crisis the corporate governance became a hot topic for research. The Cadbury code describes corporate governance as “the way a corporation is directed and controlled to maximize shareholders' value.” (Cadbury, 1992)

After several scandals and financial crises (i.e.1997, 2008), Malaysia establishes the MCCG 2000 by maintaining the global standard in order to strengthen the corporate sectors of the country. In the year 2007, the second code was issued
which was a revised version of the first MCCG 2000. The third MCCG code was issued in 2012 by the Securities Commission Malaysia (SSM) with eight principals. Finally, after five years of the latest, the MCCG 2017 came in place with three principles and modified the “comply or explain” approach by “CARE” (Comprehend, Apply and Report).

Due to the higher internal control system, corporate governance in the banking industry system is far more complex than the non-banking firms (Agoraki, Delis & Staikouras, 2010). The rapid change in the effectiveness of corporate governance affects bank performance. Healthy corporate governance practice is needed for long-term survival in the banking industry (Chan & Heang, 2010). The board of directors and the management are accountable to owners including depositors, borrowers, shareholders, clients, bank and also regulators (Pathan, Skully & Wickramanayake, 2007). The role of the bank is to ensure the smooth monetary policy transmission in the developing counties because of it the main source of financing to the business. Therefore, the bank should be careful with the transformation of the asset, if any mismatch happens due to the leverage then the bank will fail which will garble the sound financial system in the country. According to Fah and Hassani (2014) conventional bank act as an intermediary to manage the flow of fund by collect deposits from one party and lent money to other by which bank generate value for the society.

The conventional banking (CB) system is the only banking system that was available until the development of the Islamic Bank (IB) in 1970. IB system was based on Islamic principles as taught in the Quran and Sharia. The main principle of IB is based on the Sharia (Islamic law) and Quran where it restricts the participation in prohibited (haram) activities which include, gambling (maysir), interest-based investment (riba) and uncertainty (gharar) (Fah & Hassani, 2014). IB is growing rapidly in terms of volume as well as geographically. Now the bank is not only limited to the Islamic countries rather it spread to the globe. World’s iconic banks like Citibank, HSBC, and Bank of America, etc. also open the IB branch by creating a separate window which serves both Muslim and Non-Muslim customers. IB became the major player in world finance. Islamic banking is a complete value-based system that purposes are to respect and enrich the moral and
material wellbeing of individuals and society in general. The first IB (Bank Islam Malaysia Berhad) was established in Malaysia based on the Malaysian Islamic Banking Act 1983. For developing the CG standard of IB different IFIs regulatory bodies improve the regulatory and supervisory framework. Accounting and auditing Organizations of Islamic Financial Institutions (AAOIFI), the Islamic Financial Services Board (IFSB) and the Central Bank of Malaysia (BNM) are the few examples of CG guidelines and standard issuer by respecting the Sharia principals for addressing the governance of IFIs.

Corporate governance and bank performance share a direct relationship where the supremacy of corporate governance determines the performance of the banks. This is because the corporate governance with higher-level contribute better management with allowing a bank to make right decision and choices which will enable the improvement of the overall performance of the banks (Wasiuzzaman & Gunasegavan, 2013). Therefore, this research will focus on the impact of corporate governance and bank performance for both Islamic and conventional banks in Malaysia.

1.2 Problem Statement

Bank with poor governance can carry huge costs, one of which is banking crises. Mohammed, Sanusi, and Alsudairi (2017) in their study mentioned that due to the failure of bank credit management the bank’s assets portfolios decline which results in the global financial crisis. Moreover, Levine (2004) mentioned that the banking crisis is the main culprit of diabolized economics, damage government, and strength poverty.

For the last few decades, the Malaysian banking industries come a long way under the supervisor of government and the central bank of Malaysia (or the Bank Negara Malaysia). The two main sections in the Malaysian banking industry are conventional banking and Islamic banking. According to, Wasiuzzaman and Gunasegavan (2013) mentioned that there are several industrial and external
factors acknowledged by previous works of literature that affect the performance of banks. Therefore, it is important to see, “Is the corporate governance affect the bank performance in both conventional and Islamic banks in Malaysia?”

A number of research studies have studied the topic of corporate governance and bank performance in the Malaysian context covering the duration for 2002 to 2011 (Fah & Hassani, 2014; Grassa & Matoussi, 2014; Lassoued, 2018; Wasiuzzaman & Gunasegavan, 2013). The purpose of this study is to cover the study gap on the topic of corporate governance effect and bank performance in both conventional and Islamic banks in Malaysia covering the duration of 2013 to 2017. Further, additional corporate governance variables such as remuneration of directors, education qualification of directors, and the average age of directors will be tested in this research compared to the previous study. As mentioned earlier that during 2012 and 2017 MCCG revealed code on corporate governance and for that reason, the duration of this research was selected in a way to cover this period to inspect the impact of corporate governance on bank performance.

1.3 Research Objective

The objective of this study is to inspect the effect of corporate governance variables in relation to bank performance of both conventional banks and Islamic banks of Malaysia within the period of 2013 to 2017. The objectives are accomplished by examining the CG mechanisms of both conventional and Islamic banking industries in Malaysia and to determine the bank performance based on profitability.

1.4 Research Questions

Based on the research objective, the following research questions are bought in:
• How effective corporate governance mechanisms are?
• Does the corporate governance variables have a significant relationship with the performance of both conventional and Islamic bank of Malaysia?

1.5 Significance of the study

This study will be significant in various ways. Firstly, it will show the clear picture of whether the corporate governance variables are persuasive to explain the profitability of both CB and IB of Malaysia. This is significant because the banking industry has a positive effect on the economy which basically increases the growth and stabilizes the Malaysian financial sectors. Secondly, it will assist the directors and managers to improve the corporate governance of the banks. Finally, this research will contribute the managerial knowledge that will help the bank manager to shape up there decision-making process and also for the policymakers in relation to corporate governance.

1.6 Chapter Layout

This study comprises of 5 chapters as described below, chapter one focus on the introductory part which covers the background of the study, problem questions, research objectives, and significance of the study. The second chapter will provide the literature review in both theoretical understandings of corporate governance and on both dependent, independent and control variables. Further, the research framework and research hypothesis development are also discussed in chapter two. In chapter three deals with the data and methodology of where the research design, data collection method, the sample used, variable definition and data analysis will be discussed. In chapter four the results of descriptive statistics, t-test, correlation and panel pool regression analysis, sub-sample analysis of collected data were discussed. Finally, chapter five is concluded with results, implications, limitations, and recommendations for future research was discussed.
1.7 Summary

To summarize, this chapter provides a brief idea about the background of the study. As discussed in the introduction that banking industries play an important role in shaping the country’s economy therefore, it is essential how the corporate governance mechanism affects bank performance. This chapter highlighted the research problem, research objectives and the significance of the study all will be cover. In short, the chapter overview the overall research.
CHAPTER 2

LITERATURE REVIEW

In this chapter, several works of literature are reviewed for the relevant study variable. The review consists of different journals, books mainly from online and library studies based on secondary sources. This section is mainly divided into two parts where the relevant theoretical model will be studied first and secondly it covers the related study variables that are independent, dependent and control variables. The following sections cover the research framework and development of the hypothesis and end with a conclusion.

2.1 Relevant Theoretical Model

Different corporate governance framework has been developed over time regarding the nature and significance of corporate governance, and which includes, agency theory, stakeholder theory, and stewardship theory, etc. below is a brief discussion about these theories.

2.1.1 Agency Theory

The agency theory is used as a tool to explain different issues in corporate governance. The main idea behind the agency theory is that the agency relationship, which indicates that one party delegates the work to another party to perform the work (Eisenhardt, 1989). Jensen and Meckling (1976) are the founders of the agency theory who inspired by the tactic of Alchian and Demsetz, define the firm as a node of contracts. The author defines that an agency relationship takes place when a person enjoys the services of another person on behalf of performing any stain.
The soul of this theory is the separation of ownership and control in a large corporation. The shareholder invests their money on the basis of investment and bears the risk, on the other hand, the manager uses the money and make the decision to maximize return to the shareholders (Fanta, Kemal & Waka, 2013). The conflict of interest occurs when the appointed agent did not perform well for the principal (Bozec & Bozec, 2007).

In respect of the bank the theory act as the relationship between the bank’s shareholders and its manager. By believing that agency theory will be beneficial economically, but it can boost up the conflict of interest among executives and shareholders. The conflict originates between the principal and agent, when there is a difference in goals and objectives due to mismatch in the extent of information possessed by either party where most of the time agents having more information than principal (Bebchuk & Fried, 2005). For example, the excessive use of managerial incentives and diversification strategies to increase firms size associated with their (manager) prestige (Jensen & Meckling, 1976). Furthermore, one of the assumptions in the agency theory is that managers will satisfice instead of profit maximization (Eisenhardt, 1989).

According to Eisenhardt (1989), there are two critical issues that rotate around an agency relationship. Firstly the mismatch of goals between principal and agent and secondly lack of mutual interest due to different risk preferences. Bozec and Bozec (2007) found that principal and agent are independent which drive the agent to influence the goals of principals. To sustain mutual interest, extra cost take place known as agency cost which includes bonding cost, monitoring cost and residual loss (Jensen & Meckling, 1976). Therefore, according to the agency theory, the key role of the board is to control these costs and maximizing shareholders' wealth.
2.1.2 Stewardship Theory

The stewardship theory is formulated from the principles of psychology and sociology characteristics (Fanta et al., 2013) which can affect managers’ decisions (Sulaiman, Majid & Arifin, 2015). The agent in the stewardship theory usually looks for growth, achievement, and self-actualization which certainly achieve the organizational goals rather than self-interest (Glinkowska & Kaczmarek, 2015).

This theory is quite similar to the agency theory where it explains the relationship between principal and agent. The organization is the steward of the principal where the agent struggles to achieve a common goal which is shared with the principal (Davis, Schoorman & Donaldson, 1997). In this theory, the agent protects the interest of the principal and also maximizes their wealth. Moreover, Fanta et al. (2013) mentioned in their study that stewards (managers) are motivated and satisfied after achieving organizational success even at the expense of their personal goal. Sulaiman et al. (2015) relate the theory from the Islamic point of view by indicating Tawhid, Khilafah, and brotherhood.

The stewardship relation is a kind of relationship that mutually benefits both principal and agent. According to Eddleston and Kellermanns (2007), the ultimate
concept of this theory is to encourage principal and agent participation and eradicate the conflict of interest. Taylor mentioned (as cited in Waters, 2011) that the prime argument among organizational economics and stewardship theory is the duality of chief-executive. In the agency theory, the shareholders' interest was protected by splitting board chair and CEO and the stewardship theory explain the shareholder interest will be maximized by not separating board chair and CEO as this will provide more responsibility and autonomy to the CEO as a steward in the organization (Fanta et al., 2013). Therefore, the bank will need to be very cautious in structuring their corporate chart.

2.1.3 Resource Dependency Theory

The resource dependency theory seams from sociological research which deals with the distribution of power in the firm (Zahra & Pearce, 1989). Several studies were done on this topic to understand the significance of board individualities to company performance (Bhatt & Bhattacharya, 2015). The theory explains the acquiring and transferring of resources by the board of directors to different companies using the external environment. The resources include the legitimacy, advice and counsel, mediums for communicating information, and special access to supports outside the company. For example in the banking industry, the board can appoint a director with marketing background who can brings more business to the bank by implementing different marketing strategies.

Instead of relying on external resource support, the board should be capable of facing challenges that can be done appointing qualified directors which can eventually improve the company performance. In resource, the main objective is to segregate the directors into insiders, business professionals, support experts and community prominent. The role of each director will be different from each other, that is, the insider director will be in charge of general direction and financial regulation, business professionals will advise different business strategies and solving business-related issues; support expert include marketers, bankers, advocates who provide their knowledge and experience and finally the community prominent include politician and leaders of the community where they use their
social platform to improve the performance of the company. In the research of Hillman and Dalziel (2003) found that a large board will enhance the performance of the company. Moreover, it allows facing different environmental changes by altering the board composition and appointing independent director which have a positive influence on the company. The strategic contingency theory of board composition was developed on the basis of this theory. Where the theory describes that the board serves as a ‘co-operative’ mechanism for a company by protecting resources from the external environment. The board and the business organization are interdepend because by using board business organization grab the external factors. The conclusion of this theory is that the new director will appoint in the board who will perform best for the company with his experience, knowledge, and popularity among the community and also face the different external challenges.

2.1.4 Stakeholder theory

Unlike agency theory, the stakeholders’ theory gives privilege to the stakeholder interest instead of shareholders' interest. According to Friedman and Miles (2006), stakeholder plays a vital role in the success of an organization by having clear relationship-exchange with an organization. Stakeholders play an important role in corporate governance without them it is not possible for the bank to exist due to the contribution that is made by the stakeholders in order to run business operations smoothly (Harrison, Bosse & Phillips, 2010). Stakeholders and bank are interrelated, that is bad practice in banks can affect the stakeholders, and stakeholders also can do the same (Fanta et al., 2013). The stakeholder theory allows bank management to be efficient and effective based on morals and values (Gooyert, Rouwette, Kranenburg & Freeman, 2017). Banks are able to understand their stakeholders’ interests and process of fulfilling the interest.

In the traditional bank or organization only focus on the interest of shareholders, due to the stakeholders' theory it is possible to provide the same interest to the stakeholders which includes, customers, employees, communities, political parties, trade unions, government organizations, etc. Further, Mitchell, Agle, and
Wood (1997) classify stakeholders into three categories based on attributed possession namely, expectant, latent and definitive stakeholders. There are many criticisms happened for stakeholder theory, however, it is premised on the concept of business existence. According to Freeman and Reed (1983) are two types of stakeholders namely, wide and narrow type. The wider type denotes the power of a single person to influence the organizational goal. On the other hand, narrow type indicates the recognizable group of people which the trust is for organization sustainability. Harrison & Wicks (2013) state that to satisfy the utility, stakeholders are not wholly relying on the economic value of the company.

2.1.5 Managerial-hegemony theory

Corporate management is responsible for running and controlling the company. This theory denotes that the board of directors is a legal person who is dominated by the management and reduces the issue of agency between management and shareholders (Kosnik, 1987). Therefore, the board act as de jure, but not the de facto governing body of the organization. The main outline of the managerial-hegemony theory is the focus on the term ‘control’; where an increase in the size of the institution by increasing the share capital, dilutes the power of large shareholders which allows managers to have more control over the board.

Mace (as cited in Wooi & Ming, 2009) said that ‘CEO is created by the boards’. A very strong argument on this issue, that denotes, insider work for the CEO and report to him on regular basis and also depends on the CEO for their career advancement and reward, therefore, it is quite impossible for the subordinate directors to remove the CEO at the board meeting. Further, Taylor mentioned (as cited in Waters, 2011) that, the outside or independent directors are hired by the management for having control of the board, but most likely they did not criticize the management, as a result, the problem remains stated. This will lead the board to become a ‘rubber-stamping’ function mentioned by Herman (as cited in Kosnik, 1987). Further, the author added that a large board is a weak board because boards make improbable exhaustive discussion and upsurge the prospect
for diversity and fragmentation. Therefore, the role of the board in the managerial-hegemony approach is limited by the domination of the CEO. Moreover, Taylor (as cited in Waters, 2011) stated that the board has no input in the decision making which draws the image of an ineffective board among the shareholders.

2.2 Rise of Corporate governance

The rise of corporate governance was in late 1980 when managers wanted to set themselves in office by means of anti-takeover devices, includes, poison pills, greenmail, and golden parachutes, and not bothering the interest of shareholders mentioned by Taylor (as cited in Waters, 2011).

In 1992 the Cadbury Report set a few rules and standards by considering financial reporting and auditing and for the best practice in board structure and composition. However, this report was objected to executive pay by Greenbury report (1995) where it argued that executive pay is closely linked with directors earing from the corporate performance. Also, a successor to Cadbury, Hampel Report (1998), mentioned that the board is responsible for the wealth maximization of the company. Later, the London Stock Exchange Combined Code where it introduced and recommended that one of the responsibilities of directors to be effective in risk management to their organization.

Corporate governance can be described as the set of rules, policies, and processes that are implemented to direct, administer and control the organization. Bandsuch, Pate, and Thies (as cited in Sulaiman et al., 2015) mentioned that owners, directors, and management use a set of formalized values and procedures to communicate with the shareholders. According to Holder-Webb, Cohen, Nath, and Wood (as cited in Sulaiman et al., 2015) CG denotes as an endowment of an effective board, strong shareholder rights, and board disclosures in managing a business. The topic of CG became a wide term in the business world which has both direct and indirect impacts on the financial process of the firm. Corporate governance demonstrates all the departments of the organization which consists of
authority, accountability, leadership, direction, stewardship, and control (Commonwealth Department of the Australian Prime Minister, 2009). CG also plays a vital role in producing leadership using strategic decisions and authorized power.

Many authors focus on the transparency and disclosures relating control of agency risk which results from the separation of owner and control. With the help of good CG, it is possible to reduce the agency risk which results from lopsided information. According to Adams and Mehran (2005) mentioned that there is a difference between banking governance and unregulated nonfinancial firms. Ahmed, Imamuddin, and Siddiqui (2013) state that Islamic CG does not differ much from the concept of CG as their main objectives are to protect shareholders’ interest. In respect of Islamic financial institution (i.e. Islamic Bank) need a particular assurance to the stakeholders that their operations are done on the basis of Sharia. The main concern about the Sharia is the right of shareholders are projected in equally. However, Grassa and Matoussi (2014) argued that CG in IB is different from conventional banks by practicing sharia and Islamic law.

The Malaysian companies act was originated from both the English Companies Act and the Australian Uniform Companies Act, this is because the country was under the British colony for almost two centuries until 1957.

2.3 Corporate Governance in Conventional Bank

The corporate governance in the banking section is much more complex compared to other firms. It is essential due to the separation of ownership and control in public listed companies. As a result, the board of directors plays a vital role in the corporate governance of banks. Fanta et al. (2013) mentioned that corporate governance in Conventional banks' corporate governance of banks is different from other business enterprises due to the presence of depositors, shareholders, and many government regulations. Further, he added that corporate governance is divided into two sectors internal and external among the internal governance
variables board size and composition are frequently used and the external corporate governance includes the creditors, customers, supplier etc.

Several studies found the relationship between corporate governance and bank performance. Kajola (2008) studied the corporate governance and Nigerian listed firms considering the variables which are board size, CEO status, board composition, and audit committee and found different results for different variables. Board size and CEO status are positively significant with ROE and board composition and the audit committee found to be insignificance. In another study conducted by Leng and Mansor (2005) on corporate governance and Malaysian listed firms where the author concluded that the internal corporate governance variables that are CEO duality, size of firm are significantly related to firm performance. Based on the past study it is essential to see the effect of corporate governance variables with bank performance.

2.4 Corporate Governance in Islamic Bank

According to Sulaiman et al. (2015), there is insufficient literature on IB compare to CB despite rapid growth in this sector. From the last three decades after the establishment of IB in 1975, the number of IFIs increased over 300 operating in more than 75 countries around the world concentrating mostly in the Middle East and Southeast-Asia regions also growing in Europe especially in UK and USA (Qorchi, 2005). Islamic financial institutions (IFIs) are growing rapidly therefore, it essential to practice good corporate governance. It is important for Islamic banks to develop their regulatory structure in order to play a significant role in the country, by which they can supervise the fraud, corruption and un-Islamic behavior in banking practice. It will be easier to win the public (Stakeholders) confidence for IFIs by practicing strong corporate governance. According to Grais and Pellegrini (as cited in Sulaiman et al., 2015), the protection of the shareholders' rights is the main goal of efficient corporate governance.
The transparency (CG disclosure requirement) in the annual report of the firm allows the stakeholders to make wiser decisions in every step and also gives the idea about the banks' future performance. Therefore, as to the development of CG in the non-Islamic organization pushed the IFIs regulatory bodies includes, Accounting and Auditing Organizations of Islamic Financial Institutions (AAOIFI), the Islamic Financial Services Board (IFSB) and the Central Bank of Malaysia (BNM) to improve their Sharia-based regulatory and supervisory framework for the purpose maintenance standard.

CG is the set of processes, policies, and laws by which an organization is directed, administrated and controlled. It is a global issue where different prior studies (e.g. Shrives & Brennan, (2014)) were done to control the agency risk by check and balance the transparency and disclosure modules relating to CG mechanisms. Practicing good CG is essential for any organization because it reduces the agency risk which results from irrelevant information. The concept in the CG also not differ much from the Islamic perspective as for both the types the main objectives are for shareholders' interest (Ahmed et al., 2013). According to Grais and Pellegrini (as cited in Sulaiman et al., 2015) that success in financial performance, corporate stability, and ability to an intermediate source of finance all hinge on shareholders' confidence in the firm. Therefore, it is necessary for the IFIs to convey the message to the stakeholders that, their financial trading and transactions are conducted compiling with Sharia law. For IFIs abiding the rules of Sharia is compulsory where the main concern is stakeholders equal right in terms of equitable protection.

For the Islamic bank, the governance structure is slightly different from the non-Islamic bank. Habib and Chapra (as cited in Matoussi & Grassa, 2014) stated the objective of CG in IB is ensuring fairness and transparent and accountable to the stakeholders. In CG of IB does allow the interest as a result, after each transaction it is being studied deeply to ensure that the transaction is acceptable according to Sharia (Kusuma & Ayumardani, 2016). According to Akhter (as cited in Matoussi & Grassa, 2014) IB is governed on the basis of two principal elements, firstly the faith-based approach which conducts the business according to Islamic law and secondly the profit-motive approach which permits to invest to do business and
maximize wealth. Therefore, the whole features of CG of IB are based on Sharia compliance which produces two internal structures; Board of Directors and Sharia Supervisory Board. The board of directors is responsible for protecting the stakeholders' interest and the Sharia Supervisory board will be responsible for inspecting the business functions and protect the Islamic community.

It is mandatory for any IFIs to set a Sharia Supervisory Board (SSB) who ensures the business operation is conducted according to Islamic principles. Moreover, there are few other important characteristics CG of IFIs which includes, the safeguards of the interest of investment account holder, business operating on sharia base, govern and risk management of Mudarabah and Musharaka contract and finally, create a comprehensive framework that indicates the fiduciary responsibilities of the board and senior management. Iqbal and Greuning (as cited in Sulaiman et al., 2015) suggest that implementing these characteristics boost up the public and stakeholders' confidence and trust within the Islamic banking industry which will ensure the sustainability of the firm.

Sharia law restricts the few activities which are interest-based debt transactions, deals with a not pure financial transaction which detaches the real economic activities, not allows any types of transaction activities where there is mistreatment of any party and finally any activities that are harmful to the society said by Grais & Pellegrini (as cited in Sulaiman et al., 2015). The main variable that is not acceptable in the sharia law is the riba (interest) which indicates, the pre-determined fixed rate of return on capital where uneven risk is transferred, that is, one party takes the risk and another party simply receive the profit. Moreover, Sulaiman et al. (2015) mentioned that this banking interest system making poor people more poor and rich people richer. This is the main reason IFIs prohibits riba. The alternative solution for IFIs to avoid interest is by dealing with the profit-sharing contract which is allowed in the eye of Sharia law. According to Bashir (as cited in Sulaiman et al., 2015), these contracts ensure the justice and equitable sharing of profits and risks in investments. Gharar (Uncertainly) is another restricted principle of Sharia law (Chazi, Khallaf & Zantout, 2018).
Malaysia is one of the booming countries in the establishment of an Islamic financial system alongside conventional banking in the Asia-Pacific. According to Matoussi and Grassa (2014), the total Malaysian Sharia assets are more than 86 billion USD which ranked third of countries by sharia-compliant assets. The country also occupies the world's largest Islamic bond market. After the Asian financial crisis 1997/1998, the Islamic bank gets popularity due to the nature of its business of sharing risk (Ibrahim, Salim, Abojeib & Yeap, 2019). The first IB in Malaysia was established in 1983 and now dominates with three institutions out of 25 Islamic banks around the world and also holds over 7% of total assets. The banks are regulated by the Islamic Financial Services Board (IFSB) which is based in Kuala Lumpur.

2.5 Independent Variables – CG Mechanisms

2.5.1 Board size

Board size is a crucial factor that consists of directors who are responsible to control and monitor the firm management and ultimate performance (Kusuma & Ayumardani, 2016; Naimah & Hamidah, 2017). This can be defined simply as the number of directors sitting on the board. Board size is the essential governance tools for consideration (Fanta et al., 2013). The issue in the board size is one of the vital in the field of finance and economic literature with respect to solving agency issues. However, there are not sufficient financial press or academic journals to provide conclusive evidence on board size and firm performance (Gafoor, Mariappan & Thyagarajan, 2018). Researchers claimed that a larger board size will bring diverse talent and decisions with the mix of directors' educational background, technical knowledge, talent, and skills, etc. (Abeysekera, 2010). There are mainly two contrasting ideas on board size and firm performance. Stakeholder theory indicates that an increase in the number of boards of directors will enhance the degree of stakeholders’ representation, as a result, it will be difficult for individuals or minor groups to dominate the decision of board (Ghayad, 2008). The large board size is suitable for the complex firms
where more advice is needed for corporate performance which can be attained from a wide range of skillful and knowledgeable experts who can improve the board decision (Chan & Heang, 2010). Further due to larger board costs became higher which certainly makes ineffective corporate performance. According to Kyereboah-Coleman and Biekpe (2008) described a large board can dilute the power of CEO which certainly improves the board performance. Mak and Kusnadi (2005) in their study on 400 Malaysian and Singapore companies found that board size and firm performance are inversely correlated. They found that large board falls due to ineffective decision-making, higher directors’ remuneration and dismissal in directors’ role.

However, Handa (2018) found that the performance of the board can be hampered with the increment of board size. This is because the growth might increase the communication barrier when many executives involved in the decision-making process (Lassoued, 2018). Referring to the agency theory larger board size can create conflicts of interest among directors and managers due to free-riding leaders (Hajer & Anis, 2018). In a study, it was found that in US public corporations, smaller boards are produced favorable financial ratios. Eisenberg, Sundgren, and Wells (1998) studying 879 Finnish companies conclude that companies higher ROA are achieved with smaller boards.

Aktan, Turen, Tvronavičienė, Celik, and Alsadeh (2019) in their study conducted on financial firms of Bahrain found that board size, ownership concentration, and auditor’s reputation have a positive and significant impact on firms’ return on assets. By using pooled panel data a positive relationship was also found by Gafoor et al. (2018) on the study conducted on 33 commercial banks’ performance of India for the period of 2001 to 2014. Handa (2018) also found a positive relation to bank performance when the board is larger. A study conducted by Kiel and Nicholson (2003) on Australian public listed companies and results that board size and corporate performance has a positive relationship.

Wasiuzzaman and Gunasegavan (2013) studying on 14 banks consist of 5 Islamic and 9 conventional banks in Malaysia for the period of 2005-2009 analyzing on the basis of three tests, descriptive, t-test and regression analysis and found that
board size (indicating as board characteristics) as insignificant in affecting the profitability. Further Sakawa and Watanabel (2018) found a negative relationship between board size and Japanese bank performance. A study conducted by Hajer and Anis (2018) on the impact of governance on Tunisian bank performance where the author concludes that the size of the board is insignificant with bank performance. Pathan et al. (2007) studies on the Thai banking industry and found a negative relationship between board size and bank performance.

Lipton and Lorsch (1992) suggest that 8 members are enough for effective board performance. Some literature also supports the board size should be an odd number. However, according to Fanta et al. (2013), the size of the board should be created in such a way that it is good for corporate governance as well as the performance of the firm.

### 2.5.2 Female Director

Nowadays, women play an important role in the corporate zone by showing their knowledge, creativity, and problem-solving skills and which increase the interest of several researchers to study on this variable. According to Carter, Simkins, and Simpson (2003) women are crucial for the organization due to their capabilities of providing a solution to the problem. Further, Catalyst (as cited in Chan & Heang, 2010) stated that the presence of female directors enhances the performance of the organization. According to Chan and Heang (2010) female is lesser to have attendance problem in board meeting In MCCG 2017, practice no 4.5 encourage the board to practice gender diversity where it mentioned that for public listed companies there should be at least 30% of women present in the board. This initiative allows women to stay in top management and take part in decision making. A study conducted by Mahadeo, Soobaroyen, and Hanuman (2012), on board composition and financial performance on listed companies in Mauritius where it found that female directors are still poorly represented on the board.
Owen and Temesvary (2017) studied on the female presence on the board and bank performance using the data of 90 US bank holding companies covering the period of 1999 to 2015. The author found a positive relationship in the presence of the female on the board with bank performance. However, a positive relationship was found in the majority of capitalized banks. Setiyono and Tarazi (2014) studied the diversity of board members on performance and risk using the sample of Indonesian banks covering the period of 2001 to 2011. The result found that the presence of female and professional diversity reduces the risk. Further, Handa (2018) studied on corporate governance and financial performance on selected Indian banks for the period of 2008 to 2015. The author applied panel regression analysis with a small sample of 70 banks and found that the female director as a significant influencer of bank performance.

Akpan and Amran (2014) studied the board characteristics and company performance in Nigeria covering the period of 2010 to 2012. The author uses multiple regression analysis of 90 sampled firms and found that female directors are negatively significant with companies’ turnover. In a study, Endraswati (2018) examines the gender diversity in the board and Indonesian sharia banks for the period of 2011 to 2015. Multiple regression analysis was used on a sample of 11 sharia banks and results from women as directors have a negative effect on bank performance. Further, Chan and Heang (2010) studied the board size and composition on the cost and profit efficiency of Malaysian commercial banks covering the period of 2000-2009. Using the Tobit regression analysis the author found that the female director has no significant effect on the cost and profit efficiency of Malaysian commercial banks.

2.5.3 Independent directors

The literature highlights that it is not enough to appoint more directors to maintain the ability of supervision and advising. Based on agency theory, the business performs better with the presence of independent directors on the board (Fama & Jensen, 1983). Directors are basically anticipated to be independent of the
management and act as a trustee to the shareholders of the firms. For that, they are having all the insider information of the firms and have the freedom to question where required (Aktan et al., 2019). According to Harris and Raviv (2008), the independent director should be endowed with knowledge, inducements, and abilities to advise managers, monitoring them in discipline manure which enables the directors to lessen conflicts of interest among insiders and shareholders. Therefore, independent directors are the non-executive outside directors who do not participate in the regular operation of the organization (Lassoued, 2018). Numbers of literature claims that independent directors are independent that enable better decision making in the organization (Gafoor et al., 2018). The literature of corporate governance is silent regarding the appointment of independent directors (Bhagat & Bolton, 2008), however, MCCG 2017 suggests that half of the board should consist of independent directors. According to Andres and Vallelado (2008), an excessive portion of independent directors can hamper the advisory role of a board that might hinder the joining of the executive director on the board. Further, lack of proper communication made it difficult for the independent director to find out the inside information as the majority of them are used by the executive directors (Harris & Raviv, 2008). Therefore, it can be concluded that previous research on independent directors consists of mixed results.

In a study conducted by Lassoued (2018) on Islamic banking institutions in Malaysia covering the time period of 2005 to 2015, using the panel regression model it is found the significant positive relationship among the percentage of independent directors on the financial stability of Islamic banks. Further, Gafoor et al. (2018) studied the board characteristics and bank performance of 36 commercial banks in India period covering 2001 to 2014 found that board independence (refer as the percentage of independent directors) is positive and significantly related to bank performance. Liang, Xu, and Jiraporn (2013) studied the impact of board characteristic on bank assets quality consisting sample of 50 Chinese banks for the year 2003 to 2010. The findings show that independent directors are a significant positive impact on bank asset quality.
A study conducted by Aktan et al. (2019) on the financial firms of the Kingdom of Bahrain for the period covering 2011 to 2016 found that the percentage of independent directors has a negative and significant impact on firms' returns on equity (ROE). Mustafa, İşıl, and Ceylan (2016) studied corporate governance and the efficiency of Turkish banks using a sample of 10 depository banks for the period of 2005 to 2015. Using panel regression analysis the author found that board independence has a significant negative impact on the efficiency of the banks. Further, a study using panel regression analysis covering the period of 2001 to 2006, on the pay-performance framework on Malaysian Government Linked Companies (GLCs) conducted by Wooi and Ming (2009) found a negative relationship between the independent directors and Malaysian GLCs. The author concludes that independent directors failed to comply with their fiduciary duty toward shareholders.

2.5.4 Education qualification of directors

Directors sitting on the board are responsible for monitoring management on behalf of shareholders. Therefore, it is the duty of shareholders to ensure the board is staffed with educated members so that their investment won’t be wasted by poor decisions (Akpan & Amran, 2014). A highly educated and professional workgroup can handle the resources more effectively and control and monitor operational costs wisely (Isik & Hassan, 2003). According to Mahadeo et al. (2012), there is comparatively less research on educational qualification and impact on board performance compare to age and gender. The study on education qualification is crucial for decision making. Several researchers found a positive relationship between directors’ education qualification and firm performance.

A study by Setiyono and Tarazi (2014) on the diversity of board and performance and risk-taking in the banking industry of Indonesia found that education qualification is positively related to bank performance. Further, a study conducted by Endraswati (2018) on women directors in Indonesian sharia banking for the period of 2011 to 2015 found that women's education background has a positive
effect on sharia banking performance. Akpan and Amran (2014) in his study on board characteristics and company performance in the Nigerian firm found a positive relationship between board education and firm performance. Yermack (2006) found that directors having qualifications in the area of accounting and finance trend to react positively to the share price. However, Gottesman and Morey (2010) found no relationship between CEO education background and firm financial performance.

2.5.5 No of the board meeting

Board meeting allows the members to come together for the discussion and exchange of ideas for making strategies to operate and monitor managers. Recurrent board meeting denotes the ability of the board to offer regular monitoring and recommendation roles to the managers in the firms. It is considered the primary monitoring tool of the board. Masulis, Wang, and Xie (2012) suggest that an increasing number of board meetings can benefit the firm with better inspection of management and decision approval policies. Further, Aktan et al. (2019) mentioned that a lower number of board meetings grow the autonomy in management decision-making. In the banking business, the complexity and the importance of information both upsurge the significance of boards’ advisory role. A frequent meeting has both positive and negative impacts on firm performance (Andres & Vallelado, 2008).

According to Lipton and Lorsch (1992), the board should meet at least bimonthly and the meeting should continue for a full day which should include the committee sessions and other related activities. Further, the annual general meeting should consist of strategic sessions for two or three days and directors should spend sufficient time for the preparation for the meeting. The author also suggests that directors should spend 100 hours in a year for meeting purposes (excluding special meeting). According to Yermack (2004), the number of board meetings is closely related to the directors' remuneration because an array of minor compensation is received in the form of meeting fees. Further, fixed annual
retainers i.e. meeting fees can be deferred in a company-sponsored plan to circumvent income taxation. For the Malaysian perspective, the code is suggested to have seven meetings per year (Grassa & Matoussi, 2014).

Chauhan, Lakshmi, and Dey (2016) studied the effects of board meetings on firm performance for the Indian listed firms. The result concludes that there is a positive relationship between board meetings and firm performance. This indicates that frequent board meetings build the relationship between the committee and enhance firm performance. Further, in a study conducted by Andreou, Louca, and Panayides (2014) on the relationship between corporate governance and maritime companies considering board meeting as the independent variables. The study found that there is a strong correlation between board meetings and financial decisions and performance. Naimah and Hamidah (2017) in their study found that audit committee meetings influence positive profitability.

Johl, Johl, and Cooper (2015) studied on the impact of board characteristics on Malaysian firm for the year 2009 and found that the coefficient of the frequency board meeting adversely related with significant at 5% level which means, the frequency meeting of board results negative effect on the firm performance. Moreover, Aktan et al. (2019) found a negative and significant impact on firms’ return on equity (ROE) on Bahraini financial firms. The result indicates that board meetings in those selected firms are not constructive rather they are destructive. Finally, Andres and Valdelado (2008) also found a negative relationship and conclude that higher meeting reduces bank performance in present terms.

### 2.5.6 Directors’ remunerations

Remuneration of the directors is used as the inducement that affects decisions made and strategies planned by directors that cause a great impact on firm performance and profitability. In other words, remuneration can be defined as the reward that is received by the directors by means of their efforts thus this
motivates directors to work hard and take responsibility on behalf of their shareholders. The total remuneration consists of several mechanisms that include both short term incentives and fixed pay portions (Razali, Yee, Hwang, Tak & Kadri, 2018). The remuneration of the directors can be related to the agency theory where it indicates that directors are the agent of shareholders, who work for the betterment of company and principal (Shareholders) by taking certain remuneration.

The remuneration policy is one of the crucial factors in organizational success. However, the majority of the organization did not emphasis on this matter due to its controversial issue both in public and policymakers. Disclosure of directors’ remuneration is much more conservative and absences of transparency as compared to the developed countries like the United States (US), Australia and the United Kingdom (UK) (Razali et al., 2018). However, the latest MCCG 2017, in practice 7.1 instructed to disclose the directors’ remuneration in detail including fees, salary, bonus, benefits in kind and other emoluments. Therefore, this will assist the firm to be more transparent and allow the stakeholders to know their investment status.

Based on the study conducted by Razali et al. (2018) on directors’ remuneration on firm performance and profitability of Malaysian listed companies found a positive relationship with firm performance. The author suggests that higher remuneration motivates and retains directors to perform their responsibility and work harder for the best interest of the shareholders. Further, Awan and Jamali (2016) studied using Tobin’s Q and return on assets as a measurement tool and also found a positive relationship in compensation earnings. In a study conducted by Handa (2018) on the role of board structures in the financial performance of the banking firms in India over a time span of 2008 to 2015 and found that average remuneration of the director as a significant influencer of bank performance. This result signifies that directors get motivation and work for the best interest of their stakeholders, with the amount of remuneration or benefits that they receive. According to Lipton and Lorsch (1992), directors’ remuneration should increase on the basis of the time they spend.
Aduda (2011) applied a regression model to examine the relationship between Kenya's commercial bank’s executive compensation and firm performance and found a negative non-significant relationship between executive compensation and financial performance. Abdullah (2006) studied the extent of directors' remuneration related to firm performance and found no relationship with firms’ profitability. Further, a negative and significant association was found between the dependent and independent variables. The author also found that directors’ remuneration is positively related to firms’ growth and size. In addition, a study by Wooi and Ming (2009) on the pay-performance framework of Malaysian Government Linked Companies and found a significant negative relationship between directors' remuneration and ROE. In contrast, Kutum (2015) found no significant relationship exists between CEO remuneration and bank performance in Canadian Banks except a weak positive relationship with return on assets (ROA).

2.5.7 Foreign directors

Foreign directors have many positive implications for firm performance. According to Hajer and Anis (2018), foreign directorship allows better access to the capital market which certainly opens huge opportunities for the company or banks and also allows to access new information and techniques. Masulis et al. (2012) stated that foreign directors hinder the managerial performance and decision making due to lack of knowledge regarding the local accounting policies, laws and regulations, management methods and governance codes.

Choi and Hasan (2005) examine the effect of ownership, governance and Korean bank performance including the sample of 77 banks covering the period of 1998 to 2002. Using the OLS model the result indicates that foreign director is significantly related to bank return and risk. A study conducted by Hajer and Anis, (2018) found negative but no significant impact which certainly accepts the hypothesis that the percentage of foreign directors has a positive effect on firm performance. The study consist of a sample of 8 Tunisian listed commercial banks
covering the period of 2000 to 2011. The author justifies the result by speculating that these foreign directors are ignored in the Tunisian economy which made it difficult for the banks to apply proper corporate governance. Grassa and Matoussi (2014) studied the impact of corporate governance between conventional and Islamic banks both the Gulf Cooperation Council (GCC) and Southeast Asian banks. The sample consists of 85 conventional banks and 77 Islamic banks covering the period of 2000 to 2009. Using the regression analysis the result indicates that foreign directors are positively significant on the bank performance. Further, Oixelheim and Randøy (2003) found a positive relationship between foreign directors and firm performance. In their study, the authors added more than 200 Sweden and Norwegian companies covering the period of 1996 to 1998. The authors argued that investors perceive as the signal of transparency and improvement in governance if the foreign director is present on the board.

Foreign directors also can be less effective monitors (Masulis et al., 2012). Talavera, Yin, and Zhang (2018) in their study on board diversity and bank profitability and risk of 97 Chinese banks for the period of 2009 to 2013 and found that the percentage of foreign directors is negatively and significantly associated with ROA and no relationship with ROE. According to Douma, George, and Kabir (2006) foreign director spends most of the time and energy in selling the share of the underperforming company which creates a negative influence on firm performance.

2.5.8 Age of directors

Board with different age groups can be beneficial and provide a competitive advantage which certainly enhances the sustainability of the banks. Despite the benefits, very little attention is given on this variable in the finance literature compare to the other attributes of directors i.e. ethnicity and gender (Talavera et al., 2018). Age diversity is crucial for countries that have transformed significantly over a short period of time. There are mixed views on the impact between the age of directors and the performance of the banks. According to
Grove, Patelli, Victoravich, and Xu (2011), senior directors are more knowledgeable and experienced which can reduce the agency cost. On the other hand, senior directors may fail to monitor the managers due to a lack of incentive and energy. However, the prime focus on this topic is given only on the developed countries (Farag & Mallin, 2016). Age diversity can have both positive and negative effects on the profitability of the bank. According to Talavera et al. (2018), the experience, knowledge, resources, and networks of the board may be improved by age diversity which can lead to bank profitability. However, cognitive conflicts and lower group cohesion can arise due to age diversity which can the profitability of banks. Ting, Chueh, and Chang (2017) found in their study that in a bank the directors with the CEO with structural power are older, on the other hand, directors with the CEO with ownership power are younger.

Grassa and Matoussi (2014) studied the effect of corporate governance mechanisms on the performance of 85 conventional banks and 77 Islamic banks in both GCC countries and Southeast Asia countries from 2000 to 2009 and found a positive and significant relationship between CEO ages on the financial performance. These results suggest that higher experience helps older CEOs to perform better management than younger colleagues. Further, Mahadeo et al. (2012) testified a positive connotation between different age groups on board and company performance. Measuring by ROA, Dagsson and Larsson (2011) found a positive and significant relationship on age diversity which improve corporate performance. Based on prior research that majority proportion of young directors on board is positively related to performance (Akpan & Amran, 2014).

A study conducted by Talavera et al. (2018) on Chinese commercial banks found that the age of directors has a significant and negative impact on bank profitability that is ROA and ROE. The author concludes the reason that diversity of age in a board is more likely to agonize from communication barriers and create interpersonal frictions and conflicts in the boardroom which may affect negatively the bank performance. Akpan and Amran (2014) found an insignificant relationship between the age of directors and Nigerian company performance. The result indicates that due to lack of experience and managerial skills the young directors were failed to enhance the firm performance. However, Grove et al.
(2011) found a concave relationship between the average age of directors and financial performance. Due to the complexity, it is beneficial to have a more knowledgeable and experienced person in the directors. However, at certain age directors might not be able to cope up with complex financial products and might absence the incentives and energy to be effective monitor, worsening agency problems (Grove et al., 2011).

2.6 Control variable

2.6.1 Bank size

The modern financial intermediation theory denotes that economic of scale drive the bank efficiency that is associated with bank size and entails the large bank with higher profit (Flamini, McDonald & Schumacher, 2009). Bank size is related to several factors of the board characteristics, as a result, this variable is used as the control variable to identify the relevant characteristics. The bank size denotes the use of the total assets of the bank (Aktan et al., 2019). Larger bank size performs better than the smaller bank due to the diverse investment opportunities, better management and advance technology (Camilleri, 2005). Several authors found that bank size is positively associated with directors' remunerations (Abdullah, 2006; Zhou, Georgakopoulos, Sotiropoulos & Vasileiou, 2011). Therefore, it is much arguable that the size of the bank is associated with economies of scale of maneuvers of the banks.

Siddik, Kabiraj, and Joghee (2017) studied the impacts of capital structure on Bangladeshi bank performance. Using panel pooled ordinary least square regression model on a sample of 22 banks covering the period of 2005 to 2014 found that board size is significant and positively correlated with ROE, ROA, and EPS. This result indicates that bigger banks based on total assets perform better compared to smaller banks. Fanta et al. (2013) conducted studied on corporate governance impact on Ethiopian bank performance covering the period of 2005 to 2011. The author uses 9 commercial banks among them two are state-owned and
rest are private. Using Panel regression analysis the author concludes that bank size is a statistically significant and positive effect on bank performance. This indicates that larger banks gain more profit compared to smaller banks. Further, Wasiuzzaman and Gunasegavan (2013) in their comparative study on corporate governance and bank performance between conventional and Islamic banks in Malaysia found that bank size is significant and positively associated with banks' profitability. The author also concludes that the bank size of conventional banks is bigger compared to an Islamic bank.

Besides of positive relationship, Aktan et al. (2019) studied the corporate governance and financial firm performance of Bahrain and noted that bank size is negative and insignificant to ROA, ROE and Stock return (SPR). Obamuyi (2013) studied on the determinant of Nigerian bank profitability for the period covering 2006 to 2012. The author uses the fixed effect regression model on 20 Nigerian banks and found that bank size is negatively associated with banks' profitability.

2.6.2 Customer deposit

As financial intermediaries generate income from lending activities, therefore, customer deposit is one of the prime sources of bank funding (Adusei, 2011). Larger the customer deposit strong the firm funding capabilities. In this research, the customer deposit is considered as the control variable which will allow the researcher to identify the use of customer deposits wisely to generate profitability. According to Errico and Farahbaksh (as cited in Sulaiman et al., 2015) suggest that the depositors of Islamic banks are keener to assess the performance of banks since the capital value and return on investment are not fixed. Alkassim (2005) studied the profitability of conventional and Islamic banks in GCC covering the period of 1997 to 2004. The author uses multiple linear regression and results conclude that deposits have a positive relationship with the profitability of conventional banks and negative relationships with an Islamic bank. This indicates that the Islamic bank is getting a lower profit from deposit compared to a conventional bank. This is because of the nature of business as Islamic prohibits
interest and accept risk-sharing. Further, Hassan and Bashir (2004) studied the worldwide Islamic banks covering the period of 1994 to 2001 and found that deposit is negatively related to profitability.

2.6.3 Bank age

Isik and Hassan (2003) mentioned that older bank can manage their operations and be efficient compared to newer banks. Further, Adusei (2011) added that older banks perform better due to the learning effect. In a study conducted by Ajili and Bouri (2018) on the quality of corporate governance of Islamic banks based on performance covering the period of 2010 to 2014, found that age is insignificant to financial performance. Maroua (2015) also found no relationship with the performance of European cooperative banks. Further, Zeitun (2012) mentioned Bank age does not assist in improving performance for Islamic and conventional banks.

2.7 Dependent Variables – Financial Performance

The banking sector has a significant role in national economies in many countries (Mustafa et al., 2016). The stability of the bank can be measured with financial measurement. Using the measurement tools an owner and stakeholders want to know the utilization of assets and the proportion of profit generates from the assets. Poor financial performance can damage the bank of losing its customers and stakeholders and sometimes leads to dissolution. Further, as the days past the measurement for performance are getting more complexes (Naushad & Malik, 2015). There are different measurements use to check the financial performance but most commonly used by several pieces of research are ROA and ROE. Plenty of literature support that practicing well corporate governance can enhance firms’ performance (Freeman, Wicks & Parmar, 2004). Also, there are other few studies where found no relation with good CG and bank performance said by Young (as cited in Kajola, 2008).
This study will identify both IB and CB performance related to practicing good corporate governance. Therefore, the most important two variables are taken to measure the firm performance ROA and ROE. This measurement involves pooled panel data analysis of the correlation between dependent and independent variables.

2.7.1 Return on Assets (ROA)

ROA indicates the firm’s ability to generate profits by using its assets. It indicates the internal performance that enhances shareholder value. According to Hakimi, Rachdi, Mokni, and Hssini (2016), ROA is considered as the basic measure of bank profitability and it indicates how managers are utilizing the assets for generating profit for the increase of shareholders wealth. Many researchers use this variable to identify the firm’s financial performance based on corporate governance mechanisms (Aktan et al., 2019; Chazi et al., 2018; Hakimi et al., 2016; Wasiuzzaman & Gunasegavan, 2013). The formula of this variable is net income after tax divided by total assets (Aktan et al., 2019; Chazi et al., 2018)

2.7.2 Return on Equity (ROE)

ROE measures the firm ability to generate profit from using share capital. It is an important ratio that indicates the banks earning performance. This measurement basically focuses on internal performance indicating shareholders' value. According to Hakimi et al. (2016), a good level of ROE signpost good amount of profitability with limited capital similarly weak ROE reflects lower profitability of the bank which needs specialties to advise to strength up the level of equity. The disproportionate amount of debt in a capital structure would result in a smaller equity base and for that, the investor needs to be aware of the structure. As a result of this, smaller net income can generate higher ROE off a diffident equity base and this issue is vital for the banking industries due to the high leverage (Aktan et
al., 2019). This variable is measured by net income after tax divided by total equity. This measurement tool was also used by several researchers in order to identify the firm performance (Aktan et al., 2019; Chazi et al., 2018; Siddik et al., 2017; Wasiuzzaman & Gunasegavan, 2013). According to Hajer and Anis (2018) the corporate stakeholders feel that ROE is a reliable measurement to identify firm performance.

2.8 Research Framework

Based on the literature study the following framework is made.

Fig 2: Research Framework
2.9 Hypothesis Development

Based on the literature studies the following hypothesis is made.

Hypothesis 1
$H_0$ : There is a significant relationship between board size and bank performance
$H_1$ : There is no significant relationship between board size and bank performance.

Hypothesis 2
$H_0$ : There is no significant relationship between Gender Diversity and bank performance.
$H_1$ : There is a significant relationship between Gender Diversity and bank performance

Hypothesis 3
$H_0$ : There is a significant relationship between Independent Directors and bank performance.
$H_1$ : There is no significant relationship between Independent Directors and bank performance.

Hypothesis 4
$H_0$ : There is no significant relationship between education qualification and bank performance.
$H_1$ : There is a significant relationship between education qualification and bank performance.

Hypothesis 5
$H_0$ : There is a significant relationship between no. of the board meeting and bank performance.
$H_1$ : There is no significant relationship between no. of the board meeting and bank performance.
Hypothesis 6

\[ H_0 \]: There is no significant relationship between Directors Remuneration and bank performance.

\[ H_1 \]: There is a significant relationship between Directors Remuneration and bank performance.

Hypothesis 7

\[ H_0 \]: There is a significant relationship between Foreign Director and bank performance.

\[ H_1 \]: There is a significant relationship between Foreign Director and bank performance.

Hypothesis 8

\[ H_0 \]: There is no significant relationship between average age and bank performance.

\[ H_1 \]: There is a significant relationship between average age and bank performance.

Hypothesis 9

\[ H_0 \]: There is no significant relationship between bank size and bank performance.

\[ H_1 \]: There is a significant relationship between bank size and bank performance.

Hypothesis 10

\[ H_0 \]: There is a significant relationship between customer deposits and bank performance.

\[ H_1 \]: There is no significant relationship between customer deposits and bank performance.
Hypothesis 11

$H_0$ : There is no significant relationship between bank age and bank performance.

$H_1$ : There is no significant relationship between bank age and bank performance.

2.10 Summary

The connection between corporate governance and bank’s performance is complex as there are concerns such as the board of directors, education qualification of directors, gender diversity, their size, etc. in addition to the bank size, bank age which affects governance and bank’s performance. The result of these above discussed literature found to be mixed. Based on the discussion eleven hypothesis have developed to test the selected governance variables and their relationship with the bank performance.
CHAPTER 3

DATA AND METHODOLOGY

This chapter discusses the data and methodological approach that will be applied for the research process by the researcher. The chapter consists of 6 sections. Accordingly, the sections begin with research design and followed by sample used, data collection method, variable definitions, data analysis methods and finally a conclusion.

3.1 Research Design

A research design is a general plan by which a researcher uses to answer his research questions. Besides, the plan also directs the work of how the objectives are fulfilled (Kilani & Kobziev, 2016). The main aim of this study is to determine the corporate governance variable affect both conventional and Islamic banks in Malaysia on profitability performance based on ROA and ROE for the period of 2013 to 2017.

According to Kilani and Kobziev (2016), there are two ways to collect and analyze data that are qualitative or quantitative. Qualitative research is focused on non-numeric data and quantitative research focuses on numeric data. For this study, numeric data are used to determine the corporate governance mechanisms with bank performance and data will be collected from the annual report of the banks' website and Bursa Malaysia between 2013 to 2017.
3.2 Sample Used

This research includes the financial statement and corporate governance information of both Islamic and conventional banks in Malaysia. For Islamic banks, both full-fledged Islamic banks and conventional banks with Islamic banking windows were considered. A total of 18 banks were selected out of which eight conventional banks and ten are Islamic banks. The list of banks is indicating in Table 1.

A total of eight corporate governance variables that are considered as the independent variables that are selected for this study which are, the board size, foreign director, gender diversity, independent directors, number of the board meeting, the average age of directors, education qualification of directors and directors’ remuneration. Furthermore, these independent variables are supported by the bank control variables as bank size, deposits of customers and bank age (Razali et al., 2018). Finally, the dependent variables are the profitability ratios that are ROA and ROE were selected (Aktan et al., 2019). Further, to distinguish the effect of corporate governance variables on conventional and Islamic bank a dummy variable is used to indicate Islamic banks.

In this research, the researcher starts in 2013 and end in 2017 that is covering 5 years period. Similar literature was conducted by Wasiuzzaman and Gunasegavan (2013) but they cover for the period of 2005 to 2009. Further, additional corporate governance variables such as remuneration of directors, education qualification of directors, the average age of directors were tested in this research compared to the previous study. Since old MCCG 2012 is replaced by MCCG 2017, therefore, the research period is selected in such a way that it can cover the effect to MCCG i.e. 2012 and 2017 with the performance of the bank.
Table 1: Lists of Banks for the Study

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Conventional Banks</th>
<th>Serial No.</th>
<th>Islamic Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Affin Bank</td>
<td>1</td>
<td>Affin Islamic Bank Berhad</td>
</tr>
<tr>
<td>2</td>
<td>Alliance Bank Malaysia Berhad</td>
<td>2</td>
<td>Alliance Islamic Bank Berhad</td>
</tr>
<tr>
<td>3</td>
<td>AmBank (M) Berhad</td>
<td>3</td>
<td>AmBank Islamic M Berhad</td>
</tr>
<tr>
<td>4</td>
<td>CIMB Bank Berhad</td>
<td>4</td>
<td>CIMB Islamic Bank Berhad</td>
</tr>
<tr>
<td>5</td>
<td>Hong Leong Bank Berhad</td>
<td>5</td>
<td>Hong Leong Islamic Bank Berhad</td>
</tr>
<tr>
<td>6</td>
<td>Malayan Banking Berhad</td>
<td>6</td>
<td>Maybank Islamic Berhad</td>
</tr>
<tr>
<td>7</td>
<td>Public Bank Berhad</td>
<td>7</td>
<td>Public Islamic Bank Berhad</td>
</tr>
<tr>
<td>8</td>
<td>RHB Bank Berhad</td>
<td>8</td>
<td>RHB Islamic Bank Berhad</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>9</td>
<td>Bank Islam Malaysia Berhad</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>10</td>
<td>Bank Muamalat Malaysia Berhad</td>
</tr>
</tbody>
</table>

3.3 Data Collection Method

Data collection plays a vital role in the research, inaccurate data can result in invalid results stated by Graziano and Rawlin (as cited in Lancaster, 1965). There are mainly two types of data, primary data, and secondary data. Primary data is data that is collected by a researcher from first-hand sources, on the other hand, secondary data are collected from the other people's research.

It is easy to collect the secondary data, as mentioned above for that reason, for this research the annual report is collected from Bursa Malaysia and bank report. There are mainly two reasons why this research uses secondary data, first of all, the time restriction, as secondary data are easy to collect which helps to complete this research on time and secondly, there is no doubt of falsified information in the annual report of the banks due proper regulation by relevant authorities in Malaysia. Therefore, it can be assured that the information on this research is true and accurate. Moreover, for literature review and framing this study the secondary source namely, Tunku Abdul Rahman’s E-database and Google scholars were used.
For this study, the data are obtained from the annual report of the respective banks from their official website, Bursa Malaysia and Bloomberg. After collecting data from each bank it was then arranged in a single Excel file for the computation. Later the variable was tested using Eviews where reliability test, descriptive analysis, and panel data regression were conducted.

### 3.4 Variable Definition

The construct of instruments is made on the basis of past studies. The following table 2 and 3 defines the selected variables of both Conventional and Islamic banks that will be used to conduct the research.

**Table 2: Independent Variables Definition**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Definition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>Number of Directors in the board</td>
<td>(Chazi et al., 2018)</td>
</tr>
<tr>
<td>Female Directors</td>
<td>% of women directors on the board</td>
<td>(Grassa &amp; Matoussi, 2014)</td>
</tr>
<tr>
<td>Independent Directors</td>
<td>% of independent directors in the board</td>
<td>(Gafoor et al., 2018)</td>
</tr>
<tr>
<td>Education Qualification of directors</td>
<td>No of Directors having Economics, Finance, and business degree</td>
<td>(Endraswati, 2018)</td>
</tr>
<tr>
<td>No of the board meeting</td>
<td>No of the board meeting in a year</td>
<td>(Andres &amp; Vallelado, 2008)</td>
</tr>
<tr>
<td>Directors Remuneration</td>
<td>Average remuneration of directors</td>
<td>(Awan &amp; Jamali, 2016); (Razali et al., 2018)</td>
</tr>
<tr>
<td>Foreign Directors</td>
<td>% of foreign directors on the board</td>
<td>(Grassa &amp; Matoussi, 2014)</td>
</tr>
<tr>
<td>Directors Age</td>
<td>Average age of directors</td>
<td>(Talavera et al., 2018)</td>
</tr>
</tbody>
</table>
Table 3: Dependent and Control Variables Definition

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Formula and Definition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets</td>
<td>$\frac{\text{Net Income}}{\text{Total Assets}}$</td>
<td>(Aktan et al., 2019; Chazi et al., 2018)</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>$\frac{\text{Net Income}}{\text{Total Equity}}$</td>
<td>(Aktan et al., 2019; Chazi et al., 2018)</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank size</td>
<td>No of total assets in the bank</td>
<td>(Zeitun, 2012)</td>
</tr>
<tr>
<td>Customer deposit</td>
<td>No of total deposit of customers</td>
<td>(Adusei, 2011)</td>
</tr>
<tr>
<td>Bank age</td>
<td>Years of Bank establishment</td>
<td>(Ajili &amp; Bouri, 2018; Grassa &amp; Matoussi, 2014; Zeitun, 2012)</td>
</tr>
</tbody>
</table>

3.5 Data Analysis

3.5.1 Descriptive Analysis

Descriptive Statistics compacts with measures of diverse aspects of distribution or population. It indicates the overview image of the population to the researchers. These aspects consist of mean, median, standard deviation or interquartile range as a measure of scale, skewness, kurtosis, and correlation (Bickel & Lehmann, 1975). For this study, this method is used to obtain the minimum, maximum, mean and standard deviation for independent, dependent variables and the control variables.

3.5.2 Reliability Test

According to Hair, Bush, and Ortinau (as cited in Awan & Jamali, 2016), mentioned that the reliability test ensures the researcher about the data accuracy where a similar result will obtain in multiple analyses. In this study, correlation analysis was conducted to ensure data reliability. According to Tabachnick and
Fidel (as cited in Akpan & Amran, 2014), a multicollinearity problem occurs when the correlation exceeding 0.9. Therefore all the variables showed in the correlation table-5 are below the maximum point.

### 3.5.3 Panel Data Regression Analysis

In this study, panel data estimation techniques were used. According to Wooi and Ming (2009), great flexibility in exhibiting heterogeneity constrained in firm-specific performance as well as temporal operating environment changes in firms can be obtained by using panel regression. Further Gujarati (as cited in Ajili & Bouri, 2018) mentioned that pool data both cross-section and time-series provide greater variation, more degree of freedom, more informative and effective. According to Handa (2018) Panel data is the most efficient tool when data comes in time spans and cross-sectional. Finally, with less obstructive assumptions, panel data can identify more sophisticated behavioral models (Baltagi & Li, 2002).

Further, for finding the best and suitable model between random-effect GLS, OLS estimation and fixed-effect model to analysis, Hausman and Wald test was conducted. According to Adefemi (2017) pooled OLS regression model treats the whole section of data in a single section and fixed effect model is a time-invariant that intercepts which intercept remains all over time and finally the random effect model is also invariant but the effect of single specific data is uncorrelated with independent variables. The Hausman test was conducted to identify the best model between fixed and random. A null and alternative hypothesis is built while conducting the test between the models.

**Hypothesis:** Null hypothesis ($H_0$) Random-effects model is appropriate

Alternative hypothesis ($H_1$) Fixed effects model is appropriate.

**Decision:** $H_0 < 5\%$ (Reject) else $H_0 > 5\%$ (Accept)
In determining the best model among fixed and Pooled OLS, the Wald test is adopted. Here the concept is similar to the Hausman test and the hypothesis consider as-

Hypothesis: Null hypothesis (H₀) Pooled OLS regression model is appropriate
Alternative hypothesis (H₁) Fixed effect model is appropriate
Decision: H₀<5% (Reject) else H₀>5% (Accept)

Therefore, based on the above test Pooled OLS model is used in this research. The following equation model is adopted from (Fah & Hassani, 2014; Chazi et al., 2018; Zeitun, 2012).

Model 1-ROA
\[ \text{ROA}_{it} = \alpha_1 + \beta_1 \text{BS}_{it} + \beta_2 \text{ID}_{it} + \beta_3 \text{FD}_{it} + \beta_4 \text{FemD}_{it} + \beta_5 \text{RM}_{it} + \beta_6 \text{BM}_{it} + \beta_7 \text{DAGE}_{it} + \beta_8 \text{DFQ}_{it} + \delta Z_{it} + \varepsilon_{it} \] (1)

Model 2-ROE
\[ \text{ROE}_{it} = \alpha_1 + \beta_1 \text{BS}_{it} + \beta_2 \text{ID}_{it} + \beta_3 \text{FD}_{it} + \beta_4 \text{FemD}_{it} + \beta_5 \text{RM}_{it} + \beta_6 \text{BM}_{it} + \beta_7 \text{DAGE}_{it} + \beta_8 \text{DFQ}_{it} + \delta Z_{it} + \varepsilon_{it} \] (2)

Where, ROA_{it} and ROE_{it} is the return on assets and return on equity respectively, for bank i as a measure of performance and t as time. The independent variables are BS (Board Size), ID (No. of Independent Directors), FD (No. of Foreign Directors), FemD (Gender Diversity, no of women directors in the board), RM (Remuneration of Directors), BM (No. of board meeting); DAGE (Average age of Directors), DFQ (Directors Foreign Education Qualification), Z is control variables includes bank size (SIZE), bank age and customer deposits. \( \alpha \) is the Regression constant and \( \beta \) is Beta Co-efficient.
3.6 Summary

This chapter has shown a detailed outline and process of the research by explaining research design, sampling used, data collection methods, etc. It also describes the measurement of each variable and analysis methods in detail. Further, a dummy variable is used to indicate the Islamic bank which is used to compare the effect of CG and bank performance between conventional and Islamic banks.
CHAPTER 4

RESULTS

This chapter provides the outcome of the analysis result that was interpretation using the Eviews. The chapter is divided into six sections. Firstly, the descriptive analysis including T-test analysis will be presented. Secondly, the result of the correlation of data will be tested. Thirdly, the panel regression analysis of the entire sample will be interpreted based on the hypothesis. Fourthly, the sub-sample regression analysis will be interpreted based on the research objective and finally, the chapter ends with a conclusion.

4.1 Descriptive Statistics

Table 4 is a summary of descriptive statistics for both conventional and Islamic banks. The table is divided into three parts in panel A consist data of both conventional and Islamic banks (entire sample) and Panel B and C present the data of Conventional and Islamic banks respectively (sub-samples).
Table 4: Descriptive Statistics of Conventional and Islamic Bank

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Panel A: Entire Sample</th>
<th>Panel B: Conventional Bank</th>
<th>Panel C: Islamic Bank</th>
<th>T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>ROA</td>
<td>0.92</td>
<td>0.26</td>
<td>0.39</td>
<td>1.74</td>
</tr>
<tr>
<td>ROE</td>
<td>11.72</td>
<td>3.38</td>
<td>4.54</td>
<td>21.15</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>8.22</td>
<td>2.16</td>
<td>4.00</td>
<td>13.00</td>
</tr>
<tr>
<td>Independent Directors %</td>
<td>54.85</td>
<td>13.43</td>
<td>25.00</td>
<td>80.00</td>
</tr>
<tr>
<td>Foreign Directors %</td>
<td>12.73</td>
<td>14.40</td>
<td>0.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Female directors %</td>
<td>10.57</td>
<td>10.68</td>
<td>0.00</td>
<td>36.36</td>
</tr>
<tr>
<td>Average Remuneration (in Billion)</td>
<td>0.92</td>
<td>1.69</td>
<td>0.09</td>
<td>10.20</td>
</tr>
<tr>
<td>No. of Board Meeting</td>
<td>12.59</td>
<td>3.96</td>
<td>6.00</td>
<td>21.00</td>
</tr>
<tr>
<td>Average Age of Directors</td>
<td>61.97</td>
<td>6.12</td>
<td>45.00</td>
<td>77.00</td>
</tr>
<tr>
<td>Education Qualification</td>
<td>5.77</td>
<td>2.15</td>
<td>1.00</td>
<td>11.00</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Size (in Billion)</td>
<td>141.92</td>
<td>179.87</td>
<td>6.83</td>
<td>765.30</td>
</tr>
<tr>
<td>Customer Deposits (in Billion)</td>
<td>88.30</td>
<td>96.35</td>
<td>5.89</td>
<td>348.52</td>
</tr>
<tr>
<td>Bank Age</td>
<td>34.83</td>
<td>28.67</td>
<td>5.00</td>
<td>112.00</td>
</tr>
<tr>
<td>Total Observation</td>
<td>90.00</td>
<td>40.00</td>
<td></td>
<td>50.00</td>
</tr>
</tbody>
</table>
The descriptive statistics show that conventional bank has mean ROA of 1.07 and ROE of 12.43 which is marginally higher than the entire sample. On the other hand, Islamic bank has mean ROA of 0.79 and ROE of 11.16 which is lower than the entire sample. This indicates that the conventional bank contributes a higher portion of ROA and ROE in the entire sample.

The mean board size in conventional banks is 10 which is higher than the average of the entire sample is 8. On the other hand mean of the board, size is 7 in Islamic banks which are slightly lower than the average of the entire sample. Therefore, it indicates that the bank with higher board size results in higher the ROA and ROE which certainly agree with the result of (Aktan et al., 2019; Handa, 2018).

The descriptive result shows both the banks are having more than 50% of independent directors on board. This indicates good corporate governance practice because as per MCCG 2017 (principal A, section 4.1) suggested that at least half of the board should consist of independent directors. However, the conventional bank has a higher mean of independent directors compare to Islamic bank which certainly disagrees with the result of Wasiuzzaman and Gunasegavan (2013).

The mean percentage of foreign directors is 12.73% for the entire sample. The conventional bank has a higher mean percentage of foreign directors which is 20% compared to Islamic banks 7%. Which certainly indicates that the majority of directors in Islamic bank are local.

The percentage of female directors on the board has a maximum of 29% with an average of 9% at the Islamic banks and a maximum of 36% with an average of 12% at conventional banks.

The mean of Average remuneration in the conventional bank is 1.40 billion which is more than double compared to Islamic banks which are 0.54 billion. This may be due to the higher activities performed by conventional banks rather than the Islamic banks. Further, the entire sample mean of average remuneration is 0.92 billion.
The mean no. of the board meeting is quite similar for both of the banks. The maximum no. of board meeting 21 which similar for in both conventional and Islamic banks whereas, the minimum no of board meetings in a year for Islamic banks is lower than the conventional bank. As most of the board of directors are similar for both of the bank this may be the reason for a minimal difference in the mean and similar in the maximum no.

The average age of directors is 62 for the entire sample, 63 for conventional bank and 61 for Islamic banks. The youngest is 45 years old, while the oldest is 77 years old. Due to lower derivation among the age of directors compared to the profitability of the banks, therefore it can be assumed that the age is not a factor of profitability of banks. This result is supported by Akpan and Amran (2014).

The mean of education qualification of directors is 7 which indicates the majority of the directors have a degree in Economics, Finance, and business degree. However, the mean education level is higher for conventional banks compare to Islamic banks.

Finally, for the control variables, the results indicate that the bank size is 261.12 billion which is higher in conventional banks compare with both the entire sample and Islamic banks that are 141.92 billion and 46.55 billion respectively.

Furthermore, the conventional bank also leads to customer deposits. The conventional bank holds an average of 155.4 billion customer deposit while Islamic bank holds an average of 34.63 billion only. This may be due to the factors of bank age and the awareness of the people regarding the Islamic bank.

Comparing the bank age, the conventional bank is much older than the Islamic bank. The minimum age of conventional banks is 16 years and the maximum is 112 years, on the other hand, the minimum age of Islamic banks is 5 years and the maximum is 34 years.

Based on the descriptive analysis, it is found that conventional bank has higher mean in all sectors and this may be the reason for the longest operation in these financial sectors compare to Islamic banks.
4.1.1 T-Test

The descriptive analysis indicates that there are differences between the conventional and Islamic banks but this analysis is not adequate enough to conclude that the difference is statistically significant for both the banks. As a result, the t-test is conducted in order to examine the significant level between these two banks. Welch’s t-test two samples assuming unequal variances was applied to test the difference among two abnormal distribution. According to Cressie and Whitford (1986), the variables are more consistent when two samples have uneven variance or uneven sample size. Table 4 final column indicates the result of the t-test for all independent and dependent variables.

From the mean shown in the descriptive statistics, Islamic bank was shown to have a lower mean of ROA and ROE compare to the conventional bank and this may be the reason due to higher financing capabilities of conventional banks but the results of the independent t-test were found not significant for ROE and highly significant for ROA. This result supports the partial finding of Fah and Hassani (2014) where the conventional bank has a higher ROA and ROE and both are significant. The board size is also highly significant with (P=0.00) among the two banks and the conventional bank has a higher board size compare to an Islamic bank. However, the percentage of independent directors is not significant and the conventional bank has a higher percentage of independent directors due to the large board size. Moreover, the percentage of foreign directors is also not significant between the two banks. The presence of female directors on the board is highly significant at (P=0.00) between the two banks. Further, the average remuneration is found to be insignificant between the banks. The number of board meetings and the average age of directors are significant but the average age of the director is highly significant. This may be the reason that most of the dual banks have similar directors who are controlling both banks' boards simultaneously. The t-test result regarding the education of directors is 0.09 which found to be not significant. Furthermore, all the control variables that are bank size, customer deposits, and bank size are highly significant at 5 percent level with p-value 0.00 between the two banks.
4.2 Correlation

Table 5 displays the correlation between the selected variables of both conventional and Islamic banks that are used in this model. The main aim of this analysis is to determine the variables of whether there is a multicollinearity problem or not. Multicollinearity indicates a high correlation or association between the variables. According to Tabachnick and Fidel (as cited in Akpan & Amran, 2014) mentioned that multicollinearity problem occurs when the correlation exceeding 0.9, Gujarati and Porter (as cited in Wasiuzzaman & Gunasegavan, 2013) mentioned 0.8 and Anderson, TW, and Hsiao Kennedy (as cited in Zeitun, 2012) mentioned 0.7. However, Hakimi et al. (2016) stated that variables are perfect if it is below 1 and based on this, the result shows no multicollinearity problem in this research. The lowest that is found to be -0.42 between a number of board meetings and the percentage of directors and the highest is 0.97 between customers’ deposition and bank size. Consequently, the result concludes that there is the absence of bi-variable multicollinearity for all models.
Table 5: Correlation between Independent Variables of Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td></td>
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<td>2</td>
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<td>4</td>
<td>-0.12</td>
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<td></td>
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</tr>
<tr>
<td>5</td>
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<td>-0.08*</td>
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</tr>
<tr>
<td>6</td>
<td>0.28</td>
<td>0.13</td>
<td>-0.01***</td>
<td>0.19</td>
<td>-0.05**</td>
<td>1.00</td>
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<td>7</td>
<td>0.45</td>
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<td>-0.15</td>
<td>0.09*</td>
<td>-0.22</td>
<td>0.43</td>
<td>1.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>-0.01***</td>
<td>-0.02**</td>
<td>-0.03**</td>
<td>0.03**</td>
<td>-0.42</td>
<td>-0.07*</td>
<td>0.41</td>
<td>1.00</td>
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<tr>
<td>9</td>
<td>0.28</td>
<td>0.25</td>
<td>-0.17</td>
<td>0.06*</td>
<td>0.03**</td>
<td>-0.13</td>
<td>0.36</td>
<td>0.48</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0.22</td>
<td>0.01***</td>
<td>0.76</td>
<td>-0.15</td>
<td>0.22</td>
<td>0.18</td>
<td>0.01***</td>
<td>-0.13</td>
<td>-0.39</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0.32</td>
<td>0.17</td>
<td>0.49</td>
<td>0.19</td>
<td>0.02**</td>
<td>0.36</td>
<td>0.31</td>
<td>0.23</td>
<td>0.02*</td>
<td>0.50</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.36</td>
<td>0.21</td>
<td>0.50</td>
<td>0.12</td>
<td>0.03**</td>
<td>0.38</td>
<td>0.36</td>
<td>0.22</td>
<td>0.02*</td>
<td>0.53</td>
<td>0.97</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0.45</td>
<td>0.11</td>
<td>0.50</td>
<td>0.10*</td>
<td>0.48</td>
<td>0.25</td>
<td>0.14</td>
<td>-0.14</td>
<td>0.00*</td>
<td>0.48</td>
<td>0.51</td>
<td>0.58</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: Significant level ***1%; **5%; *10%. (1) ROA; (2) ROE; (3) Board Size; (4) % Independent Directors; (5) % Foreign Directors; (6) % Female Directors; (7) Average Remuneration; (8) # of Board Meetings; (9) Average Age of Directors; (10) Education Qualification; (11) Bank Size; (12) Customers Deposit; (13) Bank Age.
The results show that there is a significant correlation between ROA and ROE as these are the variables indicator of profitability in banks and other institutions. The majority of the variables are weak and not correlated significantly. There is a significant correlation between customer deposit and bank size. This shows the majority of bank assets are consist of customers’ deposits. The bank which has a higher amount of customers tends to have larger assets. Further, the number of the board meeting and foreign directors are highly negatively correlated compare to other variables. This indicates that the board meeting gets reduced as the number of foreign directors’ increase in the board. This may be the reason of foreign directors are having difficulties to join all the board meeting due to the inflexibility of traveling. There is also a high correlation between education qualification and board size. The result shows that the board is much capable of identifying qualified people.

4.3 Regression results

It is highly acceptable when R square is comparatively higher. However, in this case, the fixed-effect model has the highest R square but the result did not seem to be acceptable. Therefore in this research, the entire sample is used to check the robustness of panel results on the basis of ordinary least square (OLS), fixed effects and random effect models. Among them, the best model is identified on the basis of the Hausman test and the Wald test. At first, the results were compared between the random effect model and the fixed effect model. According to Malik and Makhdoom (2016), the fixed model is perfect when the p-value is <0.05 else the random effect model is perfect. Table 6 shows the result of the Hausman test between the random effect model and the fixed-effect model. Based on the hypothesis as the probability is less than 5%, therefore, we reject the null hypothesis and accept an alternative that accepts the fixed effect model. Moreover, for further assessment, the panel pooled data were tested on the basis of the fixed-effect model and OLS. This test was done on the basis of the Wald test and the result was shown in Table 7. According to the hypothesis as the probability is more than 5%, therefore, we accept the null hypothesis and reject the alternative hypothesis that is accepting the OLS model.
Therefore, based on all interpretation OLS model is much more robust compared to focuses.

Table: 6 Hausman Test Summary of ROA and ROE.

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>ROA</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Sq. Statistic</td>
<td>27.44</td>
<td>35.60</td>
</tr>
<tr>
<td>Chi-Sq. d.f.</td>
<td>11.00</td>
<td>11.00</td>
</tr>
<tr>
<td>Prob.</td>
<td>0.00**</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

Note: ** indicates a significant level below 5%. The result indicates the Fixed Effect model is appropriate.

Table: 7 Wald Test Summary

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>ROA</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>df</td>
<td>Probability</td>
</tr>
<tr>
<td>t-statistic</td>
<td>-1.42</td>
<td>78.00</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.01</td>
<td>(1, 78)</td>
</tr>
<tr>
<td>Chi-square</td>
<td>2.01</td>
<td>1.00</td>
</tr>
<tr>
<td>t-statistic</td>
<td>-1.42</td>
<td>78.00</td>
</tr>
</tbody>
</table>

Note: **indicate the 5% significance. The result shows Pooled OLS regression is appropriate

The estimated results of Equation (1) and (2) using conventional banks and Islamic banks sample are presented in Table 8 using Panel regression analysis for ROA and ROE as the dependent variables. Based on the Hausman and Wald test it was concluded that the pooled regression model is suitable to use. It is observed that the explanatory power of the R-square and adjusted R-square is 58% and 52% percent respectively when ROA is used as a dependent variable and 38% and 29% when ROE is used as depended variables for the pooled regression model. Based on the analysis it has been found that the percentage of foreign directors, average remuneration of directors, number of board meetings and the average age of directors are statistically significant with ROA and ROE, while board size and bank age also found significant with ROA.
### Table 8: Panel Regression Analysis Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pooled Regression Model</th>
<th>Fixed Effect Model</th>
<th>Random Effect Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROE</td>
<td>ROA</td>
</tr>
<tr>
<td>C</td>
<td>-0.56 (0.58)</td>
<td>0.32 (0.75)</td>
<td>3.38 (0.00)**</td>
</tr>
<tr>
<td>BOARD SIZE</td>
<td>2.81 (0.01)***</td>
<td>1.44 (0.15)</td>
<td>0.35 (0.72)</td>
</tr>
<tr>
<td>INDEPENDENT DIRECTORS %</td>
<td>-1.21 (0.23)</td>
<td>-1.49 (0.14)</td>
<td>-0.28 (0.78)</td>
</tr>
<tr>
<td>FOREIGN DIRECTORS %</td>
<td>-1.98 (0.05)**</td>
<td>-2.38 (0.02)**</td>
<td>-0.79 (0.43)</td>
</tr>
<tr>
<td>FEMALE DIRECTORS %</td>
<td>1.16 (0.25)</td>
<td>-0.02 (0.98)</td>
<td>0.02 (0.99)</td>
</tr>
<tr>
<td>AVERAGE REMUNERATION</td>
<td>4.15 (0.00)***</td>
<td>2.55 (0.01)**</td>
<td>1.40 (0.17)</td>
</tr>
<tr>
<td>NO. OF BOARD MEETING</td>
<td>-3.45 (0.00)***</td>
<td>-4.02 (0.00)***</td>
<td>0.67 (0.51)</td>
</tr>
<tr>
<td>AVERAGE AGE OF DIRECTORS</td>
<td>4.05 (0.00)***</td>
<td>3.76 (0.00)***</td>
<td>-0.41 (0.69)</td>
</tr>
<tr>
<td>EDUCATION QUALIFICATION</td>
<td>2.54 (0.01)**</td>
<td>1.57 (0.12)</td>
<td>1.61 (0.11)</td>
</tr>
<tr>
<td>BANK SIZE</td>
<td>0.81 (0.42)</td>
<td>-0.36 (0.72)</td>
<td>-0.69 (0.49)</td>
</tr>
<tr>
<td>CUSTOMER DEPOSITS</td>
<td>-1.00 (0.32)</td>
<td>0.66 (0.51)</td>
<td>0.32 (0.75)</td>
</tr>
<tr>
<td>BANK AGE</td>
<td>2.06 (0.04)**</td>
<td>-0.57 (0.57)</td>
<td>-2.50 (0.02)**</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.58</td>
<td>0.38</td>
<td>0.83</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.52</td>
<td>0.29</td>
<td>0.75</td>
</tr>
<tr>
<td>F-statistic</td>
<td>9.80</td>
<td>4.27</td>
<td>10.58</td>
</tr>
</tbody>
</table>

Note: Significant level ***1%, **5%, *10%. Probability is in parenthesis.
4.3.1 Board Size and Bank performance:

Board size was found to have a positive and significant impact on ROA but not with ROE. The regression result indicates that to reject the alternative hypothesis which means that there is a positive relationship between board size and bank performance. This result has supported the findings of Aktan et al. (2019), Gafoor et al. (2018), and Handa (2018) where they all found a positive relationship between board size and bank performance. Further, the result also indicates that the larger the board size better the bank performs. This could because larger boards create rooms for several background expertise to join together to make smart decisions. Based on the individual t-test it is found that conventional bank has a higher board of members compare to an Islamic bank.

4.3.2 Female Directors and Bank performance

The research finding denotes that there is no significant relationship between female directors and bank performance. As a result, it was not possible to reject the null hypothesis that is there is no relationship between female directors with ROA and ROE of both conventional and Islamic banks. The current result contradicts the findings of Handa (2018), Owen and Temesvary (2017), and Setiyono and Tarazi (2014) where they studied on female directors on board with firm performance and found positive and significant between the variables. Further, based on the t-statistics the result indicates that conventional bank has a higher number of female directors compare to Islamic banks in Malaysia.

4.3.3 Independent Director and Bank Performance

Independent directors are basically acting as the monitor and advisor of the executive directors. Based on the regression analysis it is found that independent directors are negatively and statistically insignificant for ROA and ROE of both conventional and Islamic banks of Malaysia. The coefficient and t-statistics show negative which
indicates that a higher number of independent directors on the board can hinder the executive directors to make decisions. This result is supported by the research of Aktan et al. (2019) and Mustafa et al. (2016) where they found a negative correlation between the examined variables. Further, the negative t-statistics indicate that the impact on the presence of independent directors is higher in Islamic banks compared to conventional banks.

4.3.4 Education Qualification of Directors and Bank Performance

Based on the expectation it is found that the education qualification is positive and significantly related to ROA at 5% but no relationship found with ROE. T-test indicates that the directors of conventional banks tend to highly educated compared to Islamic banks. In other words, the majority of directors in conventional banks board has a degree in economics, finance, and business. This result partially supports the other researchers' findings Endraswati (2018), and Setiyono and Tarazi (2014) where they found positive relationships among ROA and ROE.

4.3.5 No of Board Meeting and Bank Performance

The number of board meetings found negative and statistically significant at 1% between ROA and ROE of both Conventional and Islamic Banks. Based on the result, it was not possible to reject the null hypothesis which indicates the relationship with banks' performance. This result contradicted the findings of Aktan et al. (2019) and Johl et al. (2015) who mentioned no relationship with the number of board meetings. Further, the result indicates that conventional banks held a lower number of board meetings compare to Islamic banks.
4.3.6 Directors Remuneration and Bank Performance

According to the expectation, the average remuneration of directors found to be a positive and significant relationship between both ROA and ROE at 1% and 5% respectively. This result denotes that directors are motivated by the means of remuneration which leads them to work effectively for increasing the shareholders’ wealth i.e. towards bank performance. The current hypothesis and results are matched with the finding of Handa (2018) and Razali et al. (2018) where the regression method is used on the Malaysian listed companies and banks of India respectively. The result indicates that average remuneration is positively affected by the firm or bank performance. Further, from the t-test, it indicates that directors of conventional banks are paid higher remuneration compare to the Islamic bank. This may be due to the nature of the banks and also the duration of the operation.

4.3.7 Foreign Directors and Bank Performance

Hajer and Anis (2018) found negative and no significant relationship on the other hand Grassa and Matoussi (2014) found a positive and significant relationship between foreign directors and bank performance. In this study, foreign directors are negative and significantly associated with ROA and ROE of both banks. Therefore, it is not possible to reject the alternative hypothesis which is the foreign director has a significant relationship with bank performance. The negative coefficient and t-statistics indicate that presence of foreign directors enhance the profitability in Islamic bank compare to conventional banks.

4.3.8 Average Age and Bank Performance

Regarding the age of directors found to be positive and statistically significant between the profitability of both banks. A previous study conducted by Dagsson and Larsson (2011) found a positive relationship with firm performance. According to Grassa and Matoussi (2014), the older CEO has better knowledge and more
experience compared to a young CEO. Therefore, this result also indicates that higher the age of directors perform better and this is because director with older age tends to be knowledgeable and experience which made possible for a higher return. Moreover, directors in conventional banks tend to be older compared to the Islamic bank.

4.3.9 Bank Size and Firm Performance

There is no relationship between bank size and bank performance. Therefore, the result accepts the null hypothesis where it indicates no relationship between bank size with bank performance variable that is ROA and ROE. The result is supported by Aktan et al. (2019) and Obamuyi (2013) where they found no relationship between the examined variables. Further, the individual t-statistics shows that conventional bank has higher total assets compared to the Islamic bank.

4.3.10 Customer Deposit and Bank Performance

Based on the assumption it is found that there is no significant relationship between customer deposit and bank performance. Therefore, we accept the alternative hypothesis which defines no relationship between examined control variables with bank performance. This result matched with the result of Hassan and Bashir (2004) where they found a negative relationship between customer deposit and bank performance. Further, the analysis indicates that customer deposit is increasing Islamic bank compare to a conventional bank.

4.3.11 Bank Age and Firm Performance

Maroua (2015) did not found any relationship with bank age with the performance of the European bank, similarly, this research shows that there is no significant relationship between bank age and ROE. However, there is a 5% significant relationship between bank ages with ROA. Therefore, we reject the alternative
hypothesis and accept the null hypothesis. Further, the result indicates that conventional banks are much older than Islamic banks.

4.4 Subsample Regression Analysis

Table 9 indicates the subsample pooled OLS regression analysis for conventional and Islamic banks. It is observed that the explanatory power of the R-square and adjusted R-square is 55% and 38% percent respectively when ROA is used as a dependent variable and 56% and 38% when ROE is used as depended variables for conventional banks. Further, the explanatory power of R-square and adjusted R-square is 55% and 42% respectively for Islamic bank performance when ROA is used as dependent variables and 69% and 60% respectively when ROE is used as dependent variables.
Table: 9 Pooled OLS regression analysis for Sub-Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Conventional Banks</th>
<th>Islamic Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROE</td>
</tr>
<tr>
<td>C</td>
<td>1.482</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>(0.150)</td>
<td>(0.314)</td>
</tr>
<tr>
<td>BOARD SIZE</td>
<td>-0.028</td>
<td>0.123</td>
</tr>
<tr>
<td></td>
<td>(0.978)</td>
<td>(0.903)</td>
</tr>
<tr>
<td>INDEPENDENT_DIRECTORS %</td>
<td>-2.311***</td>
<td>-2.760***</td>
</tr>
<tr>
<td></td>
<td>(0.028)***</td>
<td>(0.010)***</td>
</tr>
<tr>
<td>FOREIGN_DIRECTORS %</td>
<td>-1.563</td>
<td>-2.343**</td>
</tr>
<tr>
<td></td>
<td>(0.129)</td>
<td>(0.027)**</td>
</tr>
<tr>
<td>FEMALE DIRECTORS %</td>
<td>-0.588</td>
<td>-1.659*</td>
</tr>
<tr>
<td></td>
<td>(0.562)</td>
<td>(0.108)*</td>
</tr>
<tr>
<td>AVERAGE REMUNERATION</td>
<td>3.110***</td>
<td>2.737***</td>
</tr>
<tr>
<td></td>
<td>(0.004)***</td>
<td>(0.011)***</td>
</tr>
<tr>
<td>NO. OF BOARD MEETING</td>
<td>-1.385</td>
<td>-1.479***</td>
</tr>
<tr>
<td></td>
<td>(0.177)</td>
<td>(0.150)</td>
</tr>
<tr>
<td>AVERAGE AGE OF DIRECTORS</td>
<td>0.130</td>
<td>0.640</td>
</tr>
<tr>
<td></td>
<td>(0.897)</td>
<td>(0.527)</td>
</tr>
<tr>
<td>EDUCATION QUALIFICATION</td>
<td>1.041</td>
<td>0.970</td>
</tr>
<tr>
<td></td>
<td>(0.307)</td>
<td>(0.340)</td>
</tr>
<tr>
<td>BANK SIZE</td>
<td>2.441</td>
<td>2.354</td>
</tr>
<tr>
<td></td>
<td>(0.021)***</td>
<td>(0.026)***</td>
</tr>
<tr>
<td>CUSTOMER DEPOSITS</td>
<td>-2.614***</td>
<td>-2.343</td>
</tr>
<tr>
<td></td>
<td>(0.014)***</td>
<td>(0.027)***</td>
</tr>
<tr>
<td>BANK AGE</td>
<td>1.698</td>
<td>1.908</td>
</tr>
<tr>
<td></td>
<td>(0.101)*</td>
<td>(0.067)*</td>
</tr>
<tr>
<td>No of Observations</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.552</td>
<td>0.558</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.377</td>
<td>0.384</td>
</tr>
<tr>
<td>F-statistic</td>
<td>3.14</td>
<td>3.21</td>
</tr>
</tbody>
</table>

Note: Significant level ***1%; **5%,*10%. Probability are in parenthesis.
4.4.1 Regression Analysis of Conventional Bank

From the individual sample analysis, it is found that the average remuneration of directors of conventional banks is highly significant at 1% with ROA and ROE which is consistent with the result of the entire sample. Therefore, directors in conventional banks are highly motivated by means of remuneration. Further, the percentage of foreign directors only found to be negative and significantly associated with ROE not with ROA comparing with the entire data. The bank age of conventional banks is also positive and significant at 10% with ROA which is consistent with the entire result.

The board size of the conventional banks found to be negative and insignificant with ROA and positive and insignificant with ROE. However, the result of the entire sample found a positive and highly significant relationship at 1% with ROA and no relationship with ROE. Further, the number of board meetings and the average age of directors are insignificant while significant for entire data. The education qualification of directors is also found positive and insignificant with ROA and ROE however, it is found positive and significant with ROA for the entire sample.

The percentage of independent directors and customer deposits found to be negative and significant at 1% and 5% respectively with ROA and ROE. However, the overall sample is insignificant with the variables. This indicates that lower the number of independent directors on the board better the performance for conventional banks. This may be an excessive portion of the independent director who can hamper the advisory role of the board and also increase the monitoring cost (i.e. directors’ fees). The bank size is positive and significantly related to 5% with ROA and ROE whereas, no significant relationship found in the overall sample.

In short, average remuneration, percentage of female directors, and bank age are the three variables of conventional banks that are consistent with ROA of the entire sample. On the other hand, the board size, foreign directors and average remuneration are the variables of the conventional bank that are consistent with ROE of the entire sample.
4.4.2 Regression Analysis of Islamic Bank

From table 9 the regression results of Islamic bank indicates that the number of the board meeting is negative and statistically significant at 1% with the bank performance variables which is consistent the entire sample analysis. The results indicate that the frequency of board meetings can have a negative impact on Islamic bank performance. Further, the average age of directors is positive and significant with ROE and insignificant with ROA in an Islamic bank. However, the variable is significant for both ROA and ROE of the entire sample.

The female directors of an Islamic bank are positive and statistically significant with ROE but not with ROA and the bank age is negative and significant with ROE and positive and insignificant with ROA of Islamic bank both of these variables are inconsistent with the entire sample.

Percentage of foreign directors, percentage of independent directors, education qualification and bank size found to be negative and insignificant with ROA and ROE for Islamic banks. On the other hand, board size and customer deposits are positive and insignificant with bank performance variables. Moreover, the average remuneration is negatively associated with ROE and found no relationship with ROA. This result is partially consistent with the entire sample result where the average remuneration is positively associated with ROA and ROE.

To sum up, the percentage of independent directors, female directors, number of board meetings, bank size and customer deposits are the variables of Islamic banks that are consistent with ROA of the entire sample. Conversely, the board size, percentage of independent directors, number of the board meeting, the average age of directors, education qualification, bank size, and customer deposit are the variables of Islamic banks that are consistent with ROE of the entire sample.
### 4.5 Summary of Hypothesis Results

**Table: 10 Summary of the hypothesis of entire Sample**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>$H_0$: There is a significant relationship between board size and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>$H_0$: There is no significant relationship between Gender Diversity and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>$H_1$: There is no significant relationship between Independent Directors and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>$H_1$: There is a significant relationship between education qualification and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>$H_0$: There is a significant relationship between no. of the board meeting and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>$H_1$: There is a significant relationship between Directors Remuneration and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>$H_0$: There is a significant relationship between Foreign Director and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>$H_1$: There is a significant relationship between average age and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>$H_0$: There is no significant relationship between bank size and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 10</td>
<td>$H_1$: There is no significant relationship between customer deposits and bank performance.</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 11</td>
<td>$H_0$: There is a significant relationship between bank age and bank performance.</td>
<td>Accept</td>
</tr>
</tbody>
</table>
4.6 Summary

In this chapter, all the hypotheses were tested and analyzed with different measurements. Further, the results of interpretation are given in the form of a table and also identified the significant variables by marking them. The result summary will be represented in the upcoming chapter.
CHAPTER 5

CONCLUSION AND RECOMMENDATION

This chapter is divided into four parts. Firstly, it starts with the implication of the study. Secondly, the recommendation is provided. Thirdly, the limitations and future studies are discussed and finally, the conclusion of the study is presented.

5.1 Implication

The current study examines the virtuous effect of corporate governance on the profitability of both conventional and Islamic banking sectors in Malaysia. The findings of the results show a mix of results where some of the corporate governance variables are related to bank performance. Therefore, the results can help the bank managers to build a proper corporate governance framework for the banks.

This research also assists the practitioners and regulators to develop and apply appropriate code on corporate governance. As found in the research as the number of independent directors increases the bank profitability decrease for conventional banks. This can use an indicator for the development of future code.

Further, the research result also assists the stakeholders to make a decision on investment. The shareholders can identify a suitable bank with a qualified corporate governance team that can certainly enhance the value of the investment.

The study also contributes from the academic perspective. The research found that the remuneration of directors plays a vital role in the profitability of the banks. This provides an indication that people are motivated by the amount of money.
5.2 Recommendation

It will take time for the Islamic banks to catch up on the conventional bank due to the huge platform that conventional banks already created. Therefore, based on the research, Islamic bank should continue their ongoing business operation and come up with new financial products which can attract more customers by maintaining the sharia compliance. Further, they need to build awareness among the stakeholders more compare to conventional banks regarding their operations activities. This is because the nature of the Islamic bank is based on profit sharing rather than interest, therefore, a margin of risk involve in the deposits of customers.

Based on the study another suggestion is provided that, foreign directors do not improve the profitability for both banks. This due to the reason that foreign directors are not well known with the country rules and regulations. Therefore, if banks want to hire foreign directors they should hire someone by ensuring their education status. Finally, Islamic banks should appoint more female directors as they have a positive effect on conventional bank performance.

The conventional bank should continue its existing operations and try to reshape the board structure. The results found that the majority of the directors of the conventional bank are above 60 years of age therefore, the bank needs to reshape their board with a mixed age of directors.

5.3 Limitations and Future Study

This research only tested the accounting variables where it does not include the market indicators. Further, the sample size for this research was relatively lower which is not that effective for using panel analysis. Moreover, as the variables include some new corporate governance mechanisms, therefore, it was quite difficult to find data of the Islamic bank board of directors. Only common corporate governance variables were conducted in this research which leads to another limitation.
This research is important for the stakeholders to see the difference between the corporate governance of the two banks and their performance. As this research focuses on 5 years’ time-series, therefore it is suggested that research for a longer period of time. It also recommended testing the sharia governance and other board committees for future study. Further, it is also suggested to interpret the data using other methods of analysis such as multiple linear regression, CAMELS test, etc.

5.4 Conclusion

Many studies have conducted to identify the relationship of corporate governance with bank performance. However, not all come up with the same result, the main aim of this research is to investigate the corporate governance variables with bank performance in both conventional and Islamic banks in Malaysia. To achieve this objective, the corporate governance variables of both conventional banks and Islamic banks are examined and compared.

A total of 18 banks were selected for the period covering 2013 to 2017 in order to identify the firm performance by the two most popular measurement tools that are ROA and ROE. Based on the descriptive study it is found that board size and variables of the conventional bank were much higher compared to the Islamic bank. Further, a T-test is conducted in order to find the significance among the variable and found that except ROE, independent directors, foreign directors, and average remuneration all other variables found to be significant with each other including the control variables. This result indicates that there is a significant difference in the variable between conventional banks and Islamic banks.

The regression analysis was carried out to fulfill the research objectives that is to see the relationship between the corporate governance variables and the performance of conventional and Islamic banks. All the variables except independent directors, female directors and two control i.e. bank size and customer deposit variable found insignificant with bank performance. Further, contradict and the interesting result was identified in the ROA of two banks. The descriptive statistics indicate that
conventional bank is much profitable compare to Islamic bank but the regression result indicate the opposite. This can be due to two factors firstly, the data inconsistencies or customer deposits enhancement in Islamic banks. This result matched with the previous research conducted by (Wasiuzzaman & Gunasegavan, 2013) on corporate governance and both Islamic and conventional bank performance based on Malaysia.

From the subsample analysis the percentage of female directors, average remuneration and bank age of conventional banks found to be consistent with ROA of the entire sample and board size, foreign directors, average remuneration and education qualification of the conventional bank are consistent with ROE of the entire sample. On the other hand, percentage of independent directors, percentage of female directors, number of board meeting, bank size and customer deposits of Islamic bank found to be consistent with ROA of entire sample and board size, percentage of independent directors, number of board meeting, average age of directors, education qualification, bank size and customer deposit of Islamic bank found to be consistent with ROE of entire sample. Finally, from the analysis, it can be said that there is a relationship between corporate governance and performance among the two banks.
REFERENCES


Gottesman, A. a, & Morey, M. R. (2010). CEO educational background and firm


