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**RISK MANAGEMENT AND FIRM PERFORMANCE: AN ANALYSIS OF
FINANCIAL INSTITUTIONS IN MALAYSIA**

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MASTER OF SCIENCE (INTERNATIONAL ACCOUNTING)

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**RISK MANAGEMENT AND FIRM PERFORMANCE: AN ANALYSIS OF
FINANCIAL INSTITUTIONS IN MALAYSIA**



**Thesis submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In Partial Fulfilment of the Requirement for the Master of Science (International
Accounting)**



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ABSTRACT

This study examines risk management practices in Malaysia by financial institutions. Risk management is highly strengthened by Malaysian Code of Corporate Governance (MCCG) 2017. Specifically, it stresses the role of board and risk management committee. Hence, this study examines the relationship between risk management committee (RMC) structure which are risk management committee size, risk management committee composition and risk management committee meeting frequency with firm performance (ROA) of listed financial institutions in Malaysia from the year 2016 to 2017. Data are collected from the annual reports of 32 sampled firms. Results of this study show that there are no significant relationships between variables such as risk management committee size, risk management committee composition and risk management committee meeting frequency with firm performance. However, the findings show that there is a significant relationship between the firm size as a control variable with the firm performance of financial institutions.

Keywords: corporate governance, firm performance, risk management committee structure, ROA, firm size.



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ABSTRAK

Kajian ini memeriksa amalan pengurusan risiko di Malaysia oleh institusi-institusi kewangan. Pengurusan risiko begitu ditekankan oleh Kod Tadbir Urus Korporat Malaysia (MCCG) 2017. Secara khususnya, ia menekankan peranan lembaga pengarah dan jawatankuasa pengurusan risiko syarikat. Sehubungan itu, kajian ini memeriksa hubungan antara struktur jawatankuasa pengurusan risiko (RMC) yang merupakan saiz jawatankuasa pengurusan risiko, komposisi jawatankuasa pengurusan risiko dan kekerapan mesyuarat jawatankuasa pengurusan risiko dengan prestasi firma (ROA) bagi institusi kewangan yang tersenarai di Malaysia dari tahun 2016 hingga 2017. Data telah dikumpulkan dari laporan tahunan 32 sampel firma. Hasil kajian ini menunjukkan tiada hubungan signifikan antara pemboleh ubah seperti saiz jawatankuasa pengurusan risiko, komposisi jawatankuasa pengurusan risiko dan kekerapan mesyuarat jawatankuasa pengurusan risiko dengan prestasi firma. Walaubagaimanapun, penemuan menunjukkan bahawa terdapat hubungan yang signifikan antara saiz firma sebagai pemboleh ubah kawalan dengan prestasi firma institusi kewangan.

Kata kunci: tadbir urus korporat, prestasi firma, struktur jawatankuasa pengurusan risiko, pulangan atas aset, saiz firma.

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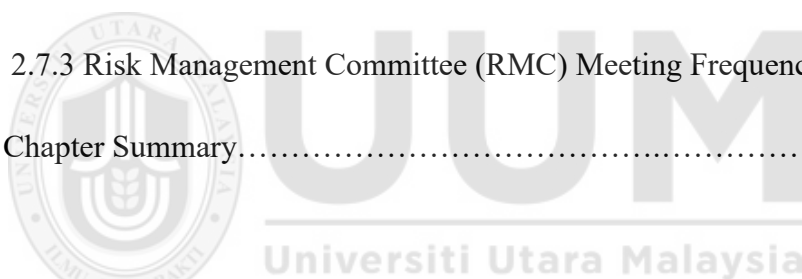
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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The financial system in Malaysia comprise of various types of institutions that each is set up to meet the needs of the national economy. The financial system is a system that covers money exchange and financial transactions between investors, borrowers and lenders. At present, the Malaysian financial system is divided into two main categories, Financial Institutions and Financial Markets (Aimi, Nuraulina, Sakina & Shahdil, 2017). In general, financial institutions are divided into three main types of institutions. First, investment institutions (investment banks, underwriters, brokerage firms). Second, institutional depositors who receive and manage deposits (credit unions, mortgage lender firms and banks). And third, institutional contracts (insurance companies and pension funds) (Callahan & Soileau, 2017).

Financial institutions act as a mechanism for transferring surplus funds to those in need of funds. It also provides financial services to different economic units in the economy. Examples of financial institutions are commercial banks, insurance companies, pension funds, mutual funds, investment banks, and finance companies. Generally, financial institutions facilitate financial transactions that generate economic growth. To gain stability and success in financial institutions, each component plays an important role on their part. In the development and progress of Malaysian financial institutions, various financial intermediaries have been established and various financial instruments have been introduced to facilitate the

flow of funds between savings and investments. To ensure daily economic growth, these financial intermediaries and financial instruments must be controlled and financial institutions have to be sensitive to the risks they may face in order to avoid losses and negative impact on the institutions. Through risk management practices by existing financial institutions, each risk can be managed effectively.

Risk management is about the decision made and not the predetermined decision. In every effort made there will be a risk. Therefore, every plan implemented or the fall of each project depends on the extent of the company's preparation to respond properly and accurately to each anticipated risk. Risk has been defined as an unexpected outcome in the near future that may cause harmful or undesirable results (Kang et al., 2015). In the last two decades, risk management has begun to be seen as a strategic and important management discipline. This development is seen to be greatly influenced by the manager's perspective on such risk (Soltanizadeh, Rasid, Golshan, Quoquab & Basiruddin, 2014). At present, risk management has become a key area and one of the most important critical factors. It is also one of the key skills in identifying risks and expanding successful companies in a changing business environment (Arena, Arnaboldi & Azzone, 2010).

Efficient risk management practices have become a mandatory requirement for every organization today. This is because the risk management technology tools not only enhance the organization's return but also increase the competitiveness of the organization (Mian Sajid et al., 2012). As such, less efficient risk management practices will certainly make the organizational situation worse. However, the primary objective of risk management is not to eliminate all risks of a project. The objective is to create a framework, to support decision makers as well as to manage risks efficiently and successfully. Driven towards the enhancement of financial market

globalization, advances in information technology and the development of new financial instruments, the areas of management that are now seen moving towards financial integration. So, it is important to know that different financial activities usually generate various types of fundamental risks.

Referring to Lopez (2003) explains that, the financial institutions will face four (4) typical types of risks; operational risk, market risk, funding risk and credit risk. According to Lopez (2003) again, the operational risk is the risk of loss as a result of inadequate or internal failures such as processes, people and systems or consequences of external factors. In addition, he refers market risk as the possibility of incurring large losses from adverse changes in financial asset prices, such as stock prices or interest rates. Liquidity risk or funding risk is the risk that a business will have insufficient funds to meet its financial commitments in a timely manner. All businesses need to manage liquidity risk to ensure that they remain solvent. Further, he refers credit risk as the risk of loss by a person or entity that has given credit to another party. According to him, credit risk is considered higher when the borrower does not have sufficient cash flow to pay the creditor, or it does not have sufficient assets to dilute to repay the creditor.

Each financial institutions face the same risk of common goals and some of the risk management techniques used is the same. For example, every firm should have procedures to ensure that independent risk assessments are carried out as well as precautionary measures that need to be taken to limit the amount of risk that individual business units will face. The willingness of financial firms that are willing to face certain risks will increase the added value of the institutions. This is because, the ability of the firm to manage the risks efficiently determines the form of risk that will occur to the firm's financial activities and avoids the risk that damages the

institutions. Another important component is to determine the best way to bear the desired risks and actions required to minimize the undesirable risk by transferring them to third parties. Financial institutions protect themselves from risk by setting aside funds to cover losses. Broadly speaking, these funds are known as provisions and capital. Provisions are funds set aside to cover expected (or average) losses, and capital refers to funds set aside to cover unexpected (or extraordinary) losses. Capital takes several forms on the balance sheets of financial firms, but typically it includes such items as shareholder equity. The reliance on provisions and capital varies among financial firms engaging in banking, securities, and insurance activities due to differences in their underlying risks (Lopez, 2003).

1.2 Problem statement

The issue of corporate failures due to the Asian financial crisis in 1997 has become severe because it related to financial institutions which are the main pillars of capital market stability. This is because, financial institutions serve as financial intermediaries for a mortgage, government securities, corporate debt, equity markets, and derivatives. Apart from these, financial institutions are also involving in stock exchanges, currency exchanges, providing liquidity in the market and managing of risks in price changes that are very important for the economy (Kakanda, 2017). Thus, the failure of effective operation of these institutions can be detrimental to other sectors in an economy.

In addition, the Asian economic crisis and the collapse of large corporations have caused great concern on the inadequacy of corporate governance practices and risk management disclosures in the financial markets (Kakanda, 2017). As a result, the

inadequate corporate disclosures on its activities, corporate governance practices, and risk management practices, have a significant effect on the investors' ability in evaluating public companies and its associated risk (Abraham & Shrives, 2014).

Accordingly, the risk management process can be regarded as an integral part of the management of all existing institutions in the world. Additionally, the history of previous financial institutions has shown how failure to address risks has had a major impact on the country's economy, especially small countries like Malaysia. The use of risk management is essential for a complex environment. This is because financial institutions face a wide range of risks (Acharyya & Mutenga, 2013). The significance of risk management is evident through the increased review of risk management over the years. The implementation guidelines for risk management committees between the companies are outlined by MCGG 2017. The MCGG 2017 suggests that at least half of the board comprises non-executive directors and non-executive directors shall not exceed 9 years but the approval of the annual shareholders waived only for 9-12, after which the two-stage polling process should be adopted. However, there are still organizations that do not practice risk management. Most organizations do not have well-documented risk management policies. This situation causes these organizations to be unable to address the risks systematically and sometimes face the negative impact on the systematic approach they have taken (Salman Saleem & Zain-Ul-Abideen, 2011). Efficient risk management clearly improves the performance of an institutions. Financial institutions that have the ability to effectively manage risk can improve their operating performance against competitors in the same industry (Callahan & Soileau, 2017; Florio & Leoni, 2016).

Therefore, there is a need to investigate the relationship between risk management practices and firm performance specifically in the financial institutions in Malaysia.

As such, this study examines the relationship between risk management committee structure (risk management committee size, risk management committee composition and risk management committee meeting frequency) and firm performance.

1.3 Research questions

This study tries to examine the relationship between risk management structure and firm performance of listed financial institutions in Malaysia. In particular, this study attempts to address the following research questions:

1. What is the structure of risk management practices by the listed financial institutions in Malaysia?
2. What is the relationship between risk management committee structure (risk management committee size, risk management committee composition, and risk management committee meeting frequency) and firm performance of the listed financial institutions in Malaysia?

1.4 Research objectives

The main purpose of this study is to examine the relationship between the risk management structure and the firm performance of listed financial institutions in Malaysia from 2016 to 2017. Therefore, in order to answer the previous section, the following objectives are:

1. To examine the structure of risk management practices by the listed financial institutions in Malaysia.

2. To examine the relationship of risk management committee structure (risk management committee size, risk management committee composition, and risk management meeting frequency) and firm performance of the listed financial institutions in Malaysia.

1.5 Significance of study

The study aims to reveal the relationship between the structure of risk management and financial institutions performance. This study also can create awareness among the directors about the importance of risk management committee in helping the companies to enhance their performance.

This study is significant in several aspects. The study will in a long way provides the treasured information needed by the management of corporate entities to make appropriate decisions regarding the practices of corporate governance in their companies. Specifically, the management will know the relationship between risk management committee structure (size, composition, meeting frequency) with performance of listed financial institutions in Malaysia.

Furthermore, this study will provide information about the effectiveness of risk management committee structure in the Malaysian financial services sector. By this, the relevant authorities (for instance, Securities Commission) will know the extent of application of the MCCG 2017 by the financial service firms, which may be used as a basis of assessment.

The study also adds to the already limited literatures on risk management committee in Malaysia by examining the relationship of risk management committee structure

(risk management committee size, risk management committee composition, and risk management meeting frequency) on firm performance in the listed financial institutions in Malaysia.

1.6 Scope of study

This study concentrates on the relationship between corporate governance represented by risk management committee structure (size, composition, and meeting frequency) and firm performance (return on assets) with the listed financial institutions in Malaysia. The study sample was chosen from quoted financial institutions actively operating in the Bursa Malaysia. This study covers 2-year period spanning from year 2016 to 2017. The study used secondary data available from the annual report, Bursa Malaysia database.

In term of risk management, the variable tested in the study is the structure of risk management in the financial institutions. While for firm performance, return on assets (ROA) is used to measure performance. ROA is used to measure the performance because it shows how efficient is the assets was used to generate earning by management. In other words, it shows how profitable a company is relative to its total assets.

1.7 Chapter Summary

This chapter discusses the introduction of the study specifically on the background of the research, statement of the research problem, research questions, research objectives, the significance of the study and the scope of the study.

CHAPTER TWO

LITERATURE OVERVIEW

2.1 Introduction

This chapter describes the theory used in this study and the findings found in studies conducted by previous researchers. To meet these goals, this chapter focuses on the concepts and theories about corporate governance, risk management, firm performance, resources dependence theory. As well as the workings that relate dependent variable and independent variables.

2.2 Corporate Governance in Malaysia

Corporate governance is a unique subject and covers many aspects and fields. The objective of corporate governance is to gain competitive advantage in the free market knowledge economy especially for a rapidly developing country like Malaysia. This competitive advantages will be able to expand the potential of Malaysia financial institutions if corporate governance can increases its value through exploiting all available resources. This is because, good corporate governance practices ensure operational efficiencies, better decision-making, and waste reduction (Muhammad Abdul Majid & Sulemen Aziz, 2013). Corporate governance has become one of the key factors that determine a healthy system for an organization and its ability to survive in the economic shock especially for Malaysia. Financial institutions in Malaysia can use corporate governance to attract investors and ensure companies run for the benefit of investors. While capital allocation can be mobilized by promoting

efficient use of resources in larger companies and economies through effective corporate governance practices. It also helps attract more cost of investment capital to improve the confidence of domestic and international investors (Abdullahi, 2016). This situation clearly demonstrates the importance of corporate governance in the development of dynamic organizations in Malaysia in general and to financial institutions in particular.

The issues of corporate governance in Malaysia have been a hot talk of the 1997 financial crisis which has threatened Asian countries including Malaysia. From time to time after forming Malaysian Institute of Corporate Governance (MICG) in 1998, the corporate governance code adopted in Malaysia has gone through several revolutions. This code was used as a guideline for the implementation of corporate governance improvements in Malaysia after being hit by the financial crisis in 1997. It was first released in March 2000. The purpose of Malaysian Code of Corporate Governance (MCCG) is highlighted in four dimensions in governance which are the directors' remuneration, board of directors, audit accountability and shareholders. Part 1 of the MCCG briefly defines the principle of practical practice pragmatic flexibility and diversity, while part 2 focuses on assets regarding guidelines that can help the company in providing their own approach to corporate governance.

The codes were first revised in 2007 to ensure that the principles and proposals were associated with business and market growth. MCCG (Revision, 2007) strives to improve the structure of corporate governance and internal processes thereby identifying and explaining the best values and best practices of best governance in Malaysia. This code incorporates the responsibilities of the board with the obligation to influence the performance of the institution, by monitoring and controlling the systems of internal control of companies and dealing with the strategy of the

company's strategy. In July 2011, MCCG revised further to achieve excellence in corporate governance in strengthening self and market control and promoting good compliance and culture of corporate governance. MCCG 2012 focuses on explaining the role of the board in providing the best leadership, improving the board's efficiency through changing the composition and strengthening its independence (Sharifah Nabihah, 2017). This code also gives companies confidence to set corporate disclosure policies that symbolize high quality disclosure principles. The latest MCCG code was issued on 26 April 2017 by the Securities Commission (SC) aimed at strengthening corporate culture with accountability and transparency (Sharifah Nabihah, 2017).

The newly revised code has emphasizes on the need of having strong internal control and risk management functions (Mohamad Naimi & Suhaimi, 2017). According to the code, risk management should concentrates on identifying business threat and opportunities meanwhile the internal control function should capitalizes the business opportunities available to enhance companies' performance. This enable the companies to make sound business decision and incorporating the level of risk that they willing to accept and execute necessary action to achieve business objectives. The newly revised code also suggest the board to establish risk management committee (RMC) which consist of independence directors. Prior study found that factors such as non-executive directors, separation role of Chief Executive Officer (CEO) and chairman might lead to establishment of RMC (Yatim, 2010). By doing so, the committee is able to effectively monitor the risk management framework of the company and its related policies. The existence of this committee might lessen the workload of existing audit committee.

By looking at the versions of code of corporate governance, there are several major changes or improvement in the risk management practices in Malaysia. The first

version of the code focuses on the role of board in managing the risk. Meanwhile the second version (i.e. MCCG 2007) looks on the role of internal audit to monitor and manage the risk. As for MCCG 2012, the code recommended for the companies to establish a clear framework on risk management. In MCCG 2017, it is expected the company to establish the separate board committee to handle risk management affairs of the company.

2.3 Risk Management Practices

Risk can differ from each different view of meaning and application. The concept of risk can be determined based on various attitudes, views and experiences. Risk is a matter of tendency, injury or loss, failure and danger. Hence, risk management is seen as a strategy to avoid losses and use potential opportunities and potential risks (Martin, 2006). The strategy is in the face of the risk of demanding an organization to take appropriate precautions and judgments against the possible future scenarios and decisions are made in the hope of eliminating all risks and using all opportunities. Risk management is characterized as a key factor for business competitiveness. It makes it easy for firms to develop unique strategies to minimize potential losses and open doors for new opportunities exploit (Songling Yang, Muhammad Ishtiaq & Muhammad Anwar, 2018). Risk management is defined as the techniques and procedures used by the organization to address risks or seize opportunities related to achieving their goals (Sharifah Nabihah, 2017). Due to the uncertainty of global economic growth that has a major impact on business performance around the world, the role of the audit committee in monitoring risk can be a representation of the risk management committee. This specific community is set up to assess the potential

risks of avoiding risk threats and reducing their negative effects. The committee is more focused on managing risks for the company. In a finance company, the risk management committee (RMC) plays an important role in monitoring the firm's performance (Kallamu, 2015). Risk management is indeed a dynamic tool that must persist throughout the investment cycle made, and it is based on past experience of intuitions and experience for a high degree of judgment. There are three key processes in risk management, namely risk identification, risk analysis, and risk reactions (Hamzah Abdul Rahman, Chen Wang, & Farhanim Sheik Mohamad, 2015).

To date, only a few studies have been conducted on the RMC especially in Malaysia. The fact that studies have been carried out in Malaysia that pay attention to the establishment of RMC in the financial sectors (Yatim, 2009), a study on the RMC focusing on the insurance division (Ng et al., 2013) and the RMC's effect on the performance of financial institutions (Kallamu, 2015; and Sharifah Nabihah, 2017) in Malaysia. A study by Yatim (2009) examined the relationship of the characteristics of the audit committee with the establishment of RMC of 690 firms for the year 2003. The results show strong support for the relationship between the establishment of the RMC with the audit of the committee's independence, the size of the audit committee, and the diligence of the audit committee. The establishment of the RMC also shows positively and significantly in relation to firm-specific variables such as firm operating complexity, firm size and the use of the audit firm Big Four. Ng et al. (2013) were investigating the relationship between RMC's characteristics known as size, independence and total number of meetings and risk taking by Malaysian insurance companies in the years 2003 to 2011. The results show that all these features appear to be associated with underwriting risk. Kallamu (2015) investigates RMC's collision of the firm's financial performance. The survey was conducted in 2007 to 2011 covering

37 companies listed on Bursa Malaysia for the financial sector. The result shows that the existence of independent directors in RMC represents a significant negative relationship with ROA. The majority independent directors in the committee can positively increase the firm's market assessments and provide effective accounting returns. The result also shows that the appearance of independent board seats is positively possible to increase the return on accounting and market assessments. Sharifah Nabihah (2017) conducted a study on the effect of the existence of a risk management committee on the firms performance collected from 154 companies in financial year 2015. Findings show that the composition of the risk management committee has negative relationships with performance firms. However, the results show no significant relationship between the existence of a risk management committee and the firm performance.



2.4 Financial Institutions Performance

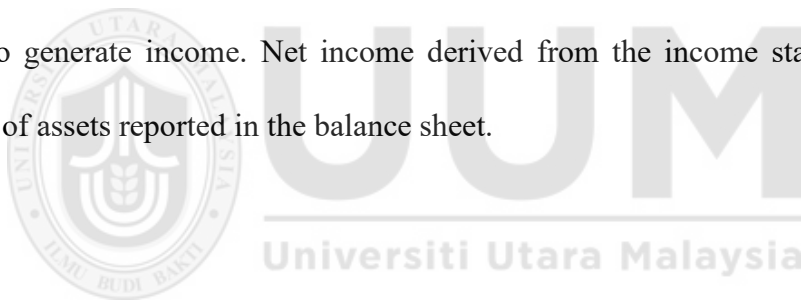
Financial institutions are descriptive corporate companies in the financial sector and know that strong systems are capable of creating good governance. Through good governance, it can determine the type of strategy that will be used by the management, to implement appropriate internal controls and risk management instruments, to prove the effectiveness of ethical principles, conduct general disclosures as a whole under various external exposure guidelines in the external ordinary and transparent way in the activities of the boards (Adenike & Ayorinde, 2009). In line with the standards of corporate governance, financial institutions deals with the rights and obligations of its shareholders, clients, employees and other related parties by using the general principles of transparency, equality, responsibility and accountability included within

the point of view of efficient management and control system. The primary purpose of financial institutions is to increase returns by meeting the financial institutions' expense and maximizing the shareholders' wealth (Mian Sajid et al., 2012).

Performance is defined as the capability of an organization to acquire and manage resource through a variety of methods to achieve competitive advantage (Iswatia & Anshoria, 2007). Therefore financial institutions performance is as a level of success of the institutions. Each financial institutions has a goal to enhance its yearly performance in order to increase its level of success. Institutions performance can be calculated by variables which involved profitability, productivity, growth and also customer's satisfaction. In assessing the performance level of financial institutions, financial measurement is used to identify institutional strengths, weaknesses, opportunities and threats. Financial measurement that normally used in calculation performance are residual income (RI), return on asset (ROA), dividend yield, return on equity (ROE), earning per share (EPS), return on investment (ROI), price-earnings ratio, market capitalization and growth in sales (Sharifah Nabihah, 2017). ROA is defined as net income generated before interest expense for fiscal year divided by total assets for the same year. The establishment of a corporation is certainly aimed at generating profits to attract stakeholders primarily through efficient operating activities and returns on individual assets (Usman, 2017). Klein (1998) applied for return on assets (ROA) while Lo, Wong & Firth (2010) used return on equity as a measure of performance gauge. Researchers such as Kakanda (2017) use ROE and ROA as performance indicators as well as Brown and Caylor (2009).

Profitability is the main objective of financial management which is to maximize the interests of the owners. Heikal, Khaddafi and Ummah (2014) said the financial performance is used to measure the efficiency of the company in generation profits

through the use of the assets. This will give the indication of the management level in managing the assets. Higher financial performance is good for the company because investors have the confidence to make investments that will generate the company's profit. Sambasivam et al. (2013) in their study on the performance of insurance companies in Ethiopia, had used multiple regressions method to study the performance of the company through profitability as a dependent variable. The profitability is a proxy of financial performance. Tugas (2012) in his research regarding ratio analysis said that financial performance is the important tool because it measures the level of company's efficiency in managing their investment of assets and use them to generate profits. It measures the amount of profit earned from investment made assets. A high ratio indicates a company efficient in managing their assets to generate income. Net income derived from the income statement and the amount of assets reported in the balance sheet.



2.5 Resource Dependence Theory

This theory was developed by Pfeffer (1973) and later revised by Pfeffer and Salancik (1978) with the idea of highlighting the significant responsibility take part by the board members in giving equal access to the available resources which could enhance firm's performance and protecting the company from any external factors. Companies need resources to achieve its targeted strategic objectives in some areas like finance, human, information, communication and technology, technical, and also for it functioning properly.

Daily et al. (2003) hypothesis that the access to company resource is flexible, it will enhance organization performance, function and survival. However, Hillman et al.

(2000) disagree with that, on his view the theory mainly focuses the responsibilities that the managing directors collaborates in providing or protecting the wealth of the company via their relationship with environment or society. Thus, the board allows institutions to source or minimize dependence. Corporate boards not only provide important relationships with other companies but also guarantee good business transactions among these companies (Zahra & Pearce, 1989). Bazerman and Schoorman (1983) report that the board's balance of impact in this situation is to ensure enhanced coordination among institutions, increasing access to important information and resources, and assist in reducing transaction costs. Most companies depend on each other for other transactions because they form the largest percentage of the company's customer base, meaning the performance of one organization can greatly affect the financial performance of each of the companies either positively or negatively. For that director or management need to increases or bring resources or opportunities for the company in the form of skill, vital information and admittance to key constituent such as customers, legislatives, suppliers, social group, and community as well as government authorities.

Since resource dependence theory is the concept that the board provides resources (advice, legitimacy, information access, and support) to the firm to ensure its success, it is expect that it will have an influence on the company's performance. Therefore, this study will use the resource dependence theory in showing the relationship between the variables in this study.

2.6 Concept of Corporate Performance and its Measurement

2.6.1 Concept of Performance

The concept of firm performance has been a central idea of a debate in both literature and practice. This is because it is an essential requirement for an organization's survival and growth. However, Kakanda et al. (2016), Marn & Romuald (2012), and Yasser, Entebang & Mansor (2011), view firm performance as the process by which the limited amount of resources available to an organization, are effectively and efficiently managed in achieving its predetermined objectives for both short and long-term periods. In addition, firm performance is the increase in wealth of a shareholder from the beginning of a given period to the end of another period (Berger & Patti, 2002).

To Berger & Patti (2002), the financial performance of a firm can be determined using ratio derived from financial reports, which are mainly a statement of financial position and statement of comprehensive income. Performance measurement helps corporate executives to know whether the firm is moving in the planned direction, which is also the expectation of shareholders, and other parties that have a stake in the company.

2.6.2 Firm Performance

Firm performance denotes the dependent variable of this study, with ROA taken as the indicator of the performance of the firm. ROA generally differs in numerous firms and it embodies the measurement of effective use of assets. Miller et al. (2001) assert that ROA demonstrates a measure for gauging the general efficiency means whether

the utilization of the assets of the firm is in line with the objectives of the firm. With regard to this, ROA measures the effective management of capital allocation.

ROA has widely been employed in corporate governance studies (Baysinger & Butler, 1985; Brown & Caylor, 2004; Haniffa & Hudaib, 2006; Chen et al., 2007). A satisfactory and good corporate governance plays a vital role in a firm's performance. In addition to increasing a firm's value, corporate governance also prevent mismanagement. Over the last 20 years, business globalized and most international firms begin to accept corporate governance in their effort to enhance their firm's performance and to attract as many investors from numerous countries in the world. The linkages between corporate governance mechanism and firm's performance are found to be positive by several scholars (Chen, 2008; Young et al., 2008; Ghazali, 2010).



2.7 Risk Management Committee (RMC) Structure

Risk in the business can be seen as a negative effect that occurs from an event, determined by combining the likely occurrence of events that will occur with the effect of the event. In this regard, companies need to manage risks efficiently to ensure that the goals set by them are achievable. Consequently, risk management is considered as one of the major facets of corporate governance, especially in the instance of financial institutions (Karatzias, 2011). Therefore, this study use the MCGG 2017 for the internal mechanism of corporate governance represented by risk management committee structure (risk management committee size, risk management committee composition and risk management committee meeting frequency).

Risk management committee structure has now become an important issue with a lot of emphases, and activities on risk management are regarded as part of the significant audit committee functions (Ng et al., 2012). Therefore, this prompts the need for risk management committee structure (risk management committee size, risk management committee composition, risk management committee meeting frequency) to oversee and implement risk management programs of firms (Ng et al., 2012).

2.7.1 Risk Management Committee (RMC) Size

The MCCG 2017 encourages companies' board of directors in establishing a risk management committee separate from the audit committee, but it does not specify the exact required size of a risk management committee. However, studies on the risk management committee are limited and remain inconclusive (Ng et al. (2012). Abubakar (2018) found that risk management committee size has a positive insignificant relationship with firm performance. The author also express existence of large board size gives more opportunities to discover directors with needed expertise to organise and be in charge in a sub-committee dedicated to risk management.

Particularly, a study by Ng et al. (2012) found that risk management committee size is negatively associated with underwriting risk of insurance companies in Malaysia. The study obtained data from published financial reports of 37 insurance companies licensed (under the insurance Act 1996) in Malaysia from 2003 to 2011. For analysis purpose, Pearson's correlation, panel regression model and pooled ordinary least squares regressions are utilized in the study. One of the limitations of the study is the use of a sample from insurance companies only, and a link between risk management committee size and firm performance is not explored in the study.

2.7.2 Risk Management Committee (RMC) Composition

The MCCG 2017 requires that board committee of publicly traded companies should compose of a majority of non-executive directors, and also be chaired by a non-executive directors. Ng et al. (2012) suggest that independence (composition) of committee members is a significant instrument in corporate governance. This is because independent directors are vital in overseeing management actions (Fama & Jensen, 1983), and have no self-interest in the company, which permits them to make an objective judgement without prejudice or fear (Kakanda, 2017).

Pantamee (2014) finds that risk management committee composition is positively associated with corporate social responsibility disclosure. The researcher collected data from annual reports of 7 sampled firms in petroleum marketing industry for the period of 2008 to 2012. For analysis purpose, the author uses descriptive statistics, correlation analysis, fixed effect and random effect regressions. The limitation of the study is the use of small sample size, no link between risk management committee composition and firm performance.

On the other hand, Ng et al. (2012) find that risk management committee composition is negatively associated with underwriting risk of insurance companies in Malaysia as shown by correlation result. The study obtained data from published financial reports of 37 insurance companies in Malaysia from 2003 to 2011. Pearson's correlation, panel regression model and pooled ordinary least squares regressions are utilized for analysis purpose. One of the limitation of the study is using a sample from insurance companies only, and the study also did not link risk management committee composition with performance.

2.7.3 Risk Management Committee (RMC) Meeting Frequency

Generally, not specifically stated by MCCG 2017 the number or frequency of meetings of the risk management committee but it stipulates that senior management members should attend a risk management committee meetings. The International Finance Corporation (2010) states that directors of companies should make sure that boards and committee meetings are well- ordered, and that directors should fully participate in the meetings of the board of directors. Meeting provides an opportunity to risk management committee to freely communicate, deliberate, and attained a common goal in monitoring and control of a firm's risk (Ng et al., 2012).

The frequency of meetings of risk committee has a positive and significant impact on bank performance as found by Kakanda (2017). This means that risk management committee that meets more frequent appears to be beneficial to the performance of financial services in the Nigeria. The study obtained data for a sample of 55 financial services for the year 2016. For analysis purpose, descriptive statistics, t-test, and regression are used.

In contrast, the study by Ng et al. (2012) which aimed at investigating the association between characteristics of risk management and risk taking of insurance companies in Malaysia, reported that the frequency of risk management committee meetings has no significant association with risk taking. Pearson's correlation, panel regression model and pooled ordinary least squares regressions are utilized for analysis purpose. The study concentrates on insurance firms only without considering other financial institutions like banks, and it doesn't show any link between risk management committee meetings frequency with firm's performance.

2.8 Chapter Summary

The overview of this chapter deals with the development of corporate governance in Malaysia, and the performance of financial institutions in Malaysia. Moreover, underpinning theory (resource dependence), the concept of corporate performance and its measurements are discussed, where accounting-based performance measure is considered. The chapter also looks at the concept of corporate governance, mechanism of corporate governance like risk management committee structures (RMC size, RMC composition and RMC meeting frequency).



CHAPTER THREE

RESEARCH FRAMEWORK AND METHODOLOGY

3.1 Introduction

This chapter provides theoretical framework of the study and hypotheses based on the theory and evidence associated with empirical research. The next section provides operational definitions, measurement of study variables, the research methodology related to data collection, sampling, data collection procedures, and data analysis techniques.

3.2 Research Framework

The research framework provides a basic understanding of the background of the study. It explores, describes and analyzes phenomena that shaping the background of the study for better understanding. This study examines the relationship between risk management committee structures (RMC size, RMC composition and RMC meeting frequency) and firm performance. The RMC structures are considered independent variables, while dependent variable comprises performance of financial institutions (ROA).

The research framework shown in Figure 3.1 explains the relationship between independent variables and dependent variable.

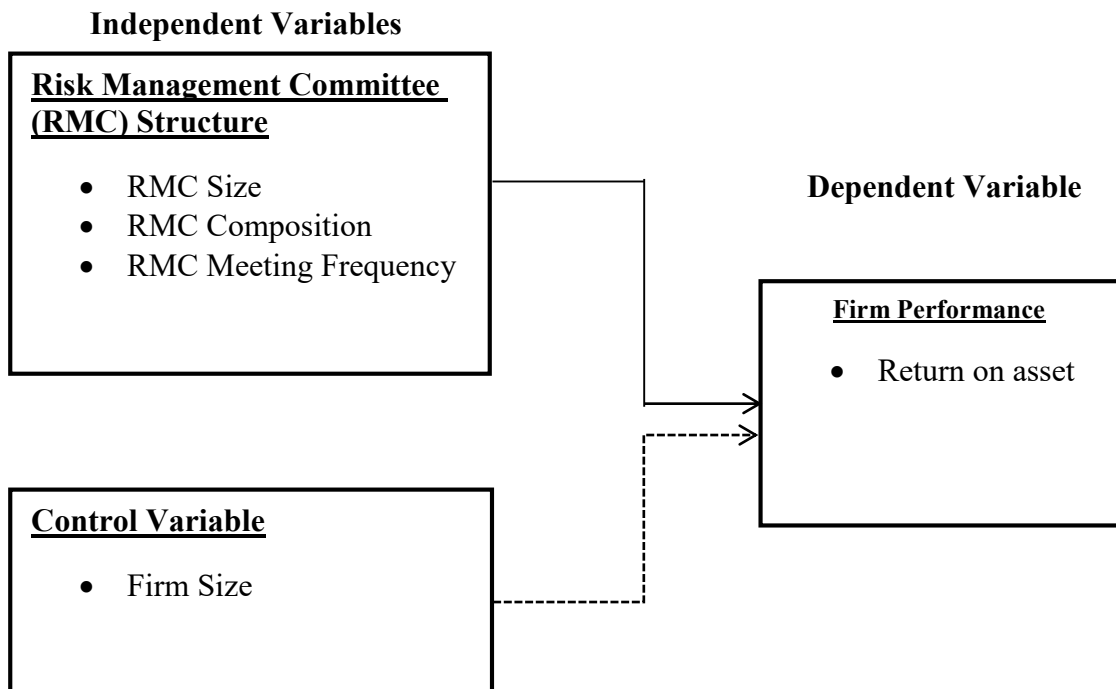


Figure 3.1

Research Framework: Risk Management and Firm Performance



3.3 Research Hypotheses

This section discusses the hypotheses of this study for the purposes of assessing the relationship between corporate governance mechanisms as risk management committee structure (RMC size, RMC composition, RMC meeting frequency) and firm performance of financial institutions listed on the Bursa Malaysia. The development of the hypothesis is based on the theoretical framework in Figure 3.1.

3.3.1 Risk Management Committee (RMC) Structure and Firm Performance

3.3.1.1 RMC Size and Firm Performance

In financial institutions, risk management is regarded as one of the key aspects of corporate governance. It has been argued that “Boards that establish a stand-alone committee that focuses solely on the risk management function demonstrates their commitment to improving the overall corporate governance structures of their firms” (Yatim, 2010). The efficiency of risk management committee characteristics to corporation performance has been noted by prior studies (Karatzias, 2011; Ng et al. 2009) have reported that empirical evidence on RMC and factors associated with it remains little in literature. This is also consistent with Ng et al. (2012) who opined studies on the risk management committee are limited and remain inconclusive.

Although the company’s board of directors in establishing separate risk management committees from the audit committee has been proposed by MCCG 2017, but the actual size required by the risk management committee is unspecified. The size of the board RMC should be determined based on the complexity and needs of the company. The larger board size may require more resources for the board to allocate. For example, more board members in the board, more opportunities to find directors with the skills needed to coordinate and engage in sub-committees devoted to risk management.

Based on resource dependence theory which aims at provision of intangible resources by board of directors to the firm (Hillman & Dalziel, 2003), so as to enhance firms’ performance, the size of boards is expected to contribute to better operations and performance of companies.

Consequently, MCCG 2017 has determined that the size of the board committees of publicly traded company become the optimal size. Therefore, this study finds it is reasonable that the size of an optimum board committee can lead to the effectiveness of committee members in performing their functions more effectively. In this effect, this study proposes the hypothesis as follows:

H1: RMC size has a positive relationship with firm performance.

3.3.1.2 RMC Composition and Firm Performance

The size and composition of the board play an important role towards the achievement of the board's mandate. The size of an organization's board is about the number of executive and non-executive directors. On the other hand, board composition is the proportion of the non-executive directors (independence) to the number of directors in the organization. Fama and Jensen (1983) argue that boards with significant outside directors will perform their duty effectively and have better decisions than a board that is dominated by inside directors. However, the MCCG 2017 requires that board committees of publicly traded companies should form a majority of non-executive directors.

Based on resource dependence theory perspective, companies that invite and appoints powerful community members into their boards acquired vital resources from the external environment which may lead to performance increase (Provan, 1980).

According to the MCCG 2017 requirement and based on resource dependence theory that the risk management committee dominated by a large number of non-executive

directors stand a better chance to be more effective and acquire vital resources from the external environment. Thus, this study suggests the following hypothesis;

H2: RMC composition has a positive relationship with firm performance.

3.3.1.3 RMC Meeting Frequency and Firm Performance

The board holds meetings on behalf of the company to discuss past, present and future issues related to the company, and resolutions are passed during board meetings (Kakanda *et al.*, 2016). Pearce and Zahra (1992) has insisted that the more board meetings to be held, the better for a company as the board will have more opportunities to make efficient and effective decisions.

Although MCG 2017 does not specifically specify the frequency of risk management committee meetings, it has suggested that a member of senior management, chief executive officers, executive directors, and heads of internal audit units should attend risk management committee meetings. Accordingly, the directors of the company must ensure that board and committee meetings are well organized and held on a regular basis, and the director must fully participate in the board of directors' meeting (IFC, 2010). Therefore, this study is reasonably suggestive of the following hypothesis:

H3: RMC meeting frequency has a positive relationship with firm performance.

3.4 Control Variable

The control variable play an important role in quantitative research and it is controlled by a researcher to determine the actual effects of the independent variables (IVs) to the dependent variable (DV) (Zaman Sahib, 2015).

3.4.1 Firm Size

Firm size has been used as a control variable by various studies that examined the relationship between corporate governance mechanism and corporate performance (Kakanda, 2017). Firm size is measure using natural logarithms of a firm's total assets. Total assets are considered to be the best measurement for the firm size because it reflects the total amount of wealth at risks (Sharifah Nabihah, 2017).

3.5 Methodology

3.5.1 Research Design

To achieve the aim of the research, to examine the relationship between risk management committee structure (RMC size, RMC composition, RMC meeting frequency) and firm performance (which is determined and measured by ROA), descriptive analysis, correlation analysis, and regression analysis are conducted.

3.5.2 Population of the Study

The population for this study are 32 financial services companies listed on the Bursa Malaysia operating in the year 2016 to 2017. The financial institutions are presented in Table 3.1 below:

Table 3.1

Listed Financial Institutions in Malaysia.

No	Institution Name	No	Institution Name
1.	Alliance Bank Malaysia Berhad	2.	Kenanga Investment Bank Berhad
3.	Aeon Credit Service (M) Berhad	4.	Lpi Capital Bhd
5.	Affin Bank Berhad	6.	Maa Group Berhad
7.	Allianz Malaysia Berhad	8.	Manulife Holdings Berhad
9.	Ammb Holdings Berhad	10.	Malayan Banking Berhad
11.	Apex Equity Holdings Berhad	12.	Malaysia Building Society Berhad
13.	Bimb Holdings Berhad	14.	Mnrb Holdings Berhad
15.	Bursa Malaysia Berhad	16.	Mphb Capital Berhad
17.	Cimb Group Holdings Berhad	18.	Osk Ventures International Berhad
19.	Ecm Libra Financial Group Berhad	20.	Pacific & Orient Berhad
21.	Elk-Desa Resources Berhad	22.	Public Bank Berhad
23.	Hong Leong Bank Berhad	24.	Rce Capital Berhad
25.	Hong Leong Capital Berhad	26.	Rhb Bank Berhad
27.	Hong Leong Financial Group Berhad	28.	Ta Enterprise Berhad
29.	Insas Berhad	30.	Syarikat Takaful Malaysia Keluarga Berhad
31.	Johan Holdings Berhad	32.	Tune Protect Group Berhad

Source: Bursa Malaysia Stock Exchange (2017).

3.5.3 Sample Size of the Study

For the purpose of this study, all 32 financial services companies listed on Bursa Malaysia actively operating until the end of 2016 to 2017 were used as samples.

3.5.4 Method of Data Collection

This study used companies' annual reports (secondary data) that were mainly downloaded from Bursa Malaysia website. Data on dependent variable and control variable which is ROA and firm size were extracted from data stream, also from the statements of comprehensive income and statement of financial position of the companies' annual reports. While data on RMC size, RMC composition, and RMC meeting frequency were gathered from annual reports on companies' profile regarding corporate governance and risk management.

3.5.5 Definition and Measurement of Variables

The variables in this study include ROA as dependent variable while independent variables are represented by RMC size, RMC composition, and RMC meeting frequency. Moreover, the firm size is included in this study as control variable.

3.5.5.1 Dependent Variable

The dependent variable for this study is the performance of firms represented by accounting based performance measurements comprising Return on Assets (ROA).

3.5.5.1.1 Return on Assets (ROA)

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA provides managers, investors, or analytical ideas on how a company's management uses its assets to generate revenue. It is usually measured as net income divided by total assets (Mubin, Iqbal & Hussaini, 2014). It is mathematically determined as follows:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \times 100 = X \%$$

3.5.5.2 Independent Variables

The independent variables of this study include board attributes represented by risk management committee structure (RMC size, RMC composition, and RMC meeting frequency). Their measurements are provided in the subsequent subtitles.

3.5.5.2.1 Risk Management Committee (RMC) Size

For the purpose of this study, risk management committee size will be measured as the number of directors serving on the RMC. This is consistent with (Kakanda, 2017).

3.5.5.2.2 Risk Management Committee (RMC) Composition

The composition of committee members is a significant instrument in corporate governance (Ng et al., 2012), and non-executive directors are vital in overseeing

management actions (Fama & Jensen, 1983). Therefore, risk management committee composition is measured in this study as the number of non-executive directors serving on the risk management committee as consistent with Pantamee (2014), SEC (2011), and Tao and Hutchinson (2013).

3.5.5.2.3 Risk Management Committee (RMC) Meeting Frequency

The frequency of meetings can indicate how committee members are dedicated their time in solving organizational problems in turn driving towards achieving predetermined objectives. As in the case of board meetings, risk management committee is also measured as the number of meetings held by RMC during a financial period (Kakanda, 2017).

3.5.5.3 Control Variable

3.5.5.3.1 Firm Size

To follow the norms of other studies, firm size is measured as the natural logarithm (L_n) of a company's total assets (Sharifah Nabihah, 2017). However, to better understand the variables in this study, the following table provides the acronyms and measurement of the variables.

Table 3.2

The acronyms and measurement of the variables.

No.	Variables	Acronym	Measurement
<u>Dependent Variable (DV)</u>			
1.	Return on Assets	ROA	Net income divided by total assets.
<u>Independent Variables (IVs)</u>			
2.	Risk Management Committee Size	RMCS	The number of directors serving on the RMC.
3.	Risk Management Committee Composition	RMCC	The number of non-executive directors serving on the RMC.
4.	Risk Management Committee Meeting Frequency	RMCM	The number of meetings held by RMC during a financial period.
<u>Control Variable (CV)</u>			
5.	Firm Size	FSZ	The natural logarithm (L_nTA) of a company's total assets.

Source: Developed by (Kakanda, 2017).

3.6 Data Analysis

The data obtained in the study were analyzed using descriptive method and inference method using SPSS (Statistical Package For The Social Sciences) version 23. The summary of data analysis techniques based on the objectives of the study is shown in Table 3.3.

Table 3.3

Data Analysis Technique Based on Study Objectives

Objectives	Analysis Technique
a. To examine risk management structure by the listed financial institutions in Malaysia	Mean Analysis
b. To examine the relationship between the risk management committee structure (risk management committee size, risk management committee composition, and risk management committee meeting frequency) with firm performance of the listed financial institutions in Malaysia.	Mean Analysis Correlation Pearson Analysis Multiple Regression Analysis

The descriptive analysis used includes the process of analysis of the mean and percentages to see the risk management committee size, risk management committee composition, risk management committee meeting frequency, return on asset and firm size.



3.6.1 Descriptive Analysis

Descriptive analysis analyzes the mean values, minimum and maximum values of the data set, the standard deviation and variance of all the variables used in this study.

3.6.2 Correlation of Variables

This research establishes the interrelationship between and among variables. The outcomes of correlation analysis depict the natures, directions and significance of the mutual linear association among involved variables that are employed in this study.

Pearson's correlation coefficient is used to determine the mutual linear association.

3.6.3 Multiple Linear Regression Analysis

This study employs the multiple linear regression analysis to investigate the dependency of dependent variable. The analysis includes predictors or explanatory variable that control the effects of control variable in the regression analysis. The output of the regression analysis is obtained through the following equation:

$$\text{FIRMPFC} = \beta_0 + \beta_1 \text{RMCS}_{it} + \beta_2 \text{RMCM}_{it} + \beta_3 \text{RMCC}_{it} + \beta_4 \text{FSZ}_{it} + \varepsilon_{it}$$

Where :

β_0 = Intercept (constant)

FIRMPFC = firm's performance

RMCS = risk management committee size of firm i in time t

RMCM = risk management committee meeting frequency of firm i in time t

RMCC = risk management committee composition of firm i in time t

FSZ = firm size of firm i in time t

3.7 Chapter Summary

This chapter discusses the research framework which shows the direction and relationship between the variables in this study. Besides that, the research hypotheses were formulated indicating the expected results. The research methodology was also presented comprising research design, population, sample size, and the method of data collection. Additionally, the data analysis involves the statistical technique of correlation, descriptive analysis and regression analysis.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results from data analysis and findings associated with the research framework and the developed model of this study as presented in the previous chapter. Explicitly, the chapter is split into subsections, starting with the analysis of the sample used as well as the descriptive statistics of the study variables. Furthermore, the Pearson correlation analysis and summary of the finding relating to the hypothesis testing between the risk management variables and firm performance variables are reported.

4.2 Analysis of the sample used

As initially stated previous chapter, the population of the study will be maintained as the sample, which comprises of 32 financial institutions listed in the Bursa Malaysia from the year 2016 to 2017, and those data are available for the said period. The data on risk management committee structure and firm performance were collected from the annual reports of the 32 sampled financial institutions from 2016 to 2017. The analysis of the sample is shown in Table 4.1 as thus:

Table 4.1*Analysis of Sample Used*

Year of Financial Report	Status of Institutions	No. of Institutions	Percentage
2016 to 2017	Available	32	100 %

4.3 Descriptive Statistics

This subsection presents the descriptive statistic for dataset as used for this study. Descriptive statistics such as the mean and standard deviation enable us to summarize a set of data (Perry, 2014). In addition, a good descriptive statistics enable us to understand data by reducing a large set of sizes to some summary steps that provide a good and rough picture of the original measurement (Ott & Longnecker, 2010). Therefore, Table 4.2 presents the descriptive statistics.

Table 4.2*Descriptive Statistics for Full Sample (N = 32)*

Variable	Unit	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
ROA	Ratio	0.037	0.037	0.003	0.120	1.550	1.966
RMCS	Number	3.593	1.811	0.000	9.000	-0.005	2.417
RMCC	Ratio	0.921	0.245	0.000	1.000	-1.608	0.751
RMCM	Number	5.156	0.414	0.000	17.000	1.218	1.733
FSZ	Log _n	16.000	2.435	11.920	20.440	0.244	-1.010

Note: RMCS = risk management committee size; RMCC = risk management committee composition; RMCM = risk management committee meeting frequency; FSZ = firm size. ROA = return on assets.

In view of performance measures, the mean value of return on asset (ROA) is 0.037, a minimum of 0.003, and a maximum of 0.120. The standard deviation is 0.037 depicting a slight variation in the return of assets across the sampled firms in the study. In essence, the mean value of 0.037 for ROA depicts that 3.7% of profits of the sample institutions was generated from the company's assets. This situation illustrates that the management of the company has used their resources wisely in generating returns. While the minimum value of ROA is 0.003, meaning that 0.3% shows generated as return from the assets of the sample institutions during the study period. Moreover, the maximum value of 0.120 indicates that 12% was generated as returns (ROA) from the assets of listed financial institutions in Malaysia. On the overall, it can be said that corporate managers of listed financial institutions in Malaysia are effectively performing their relationship with the shareholder of the companies.

Considering the risk management committee size (RMCS), the result from Table 4.2 shows that it has an average score of 3.593. With minimum and maximum of 0.00 and 9.00 respectively, and standard deviation of 1.811. MCG 2017 encourages companies on the establishment of risk management committee but, the size of the committee is based on the size and requirement of the institution. The findings show that companies such as AEON Credit Service (M) Berhad, ELK-Desa Resources Berhad, Insas Berhad and TA Enterprise Berhad show no risk management committee established. While CIMB Group Holding Berhad has the highest risk management committee size of 9 directors hired.

Moreover, the result from Table 4.2 demonstrates that the mean value of risk management committee composition (RMCC) is 0.921, a minimum score of 0.00, with a maximum value of 1.00, and standard deviation of 0.245. As such, the outcome specifies that the risk management committee of financial institution in Malaysia

comprises of both executive and non-executive directors. The result shows that non-executive directors on the committee constitute an average of 92.1%, a minimum of 0.00% and a maximum of 100%. The findings show that many companies have not appointed non-executive directors serving on their risk management committee. For example, companies such as AEON Credit Service (M) Berhad, ELK-Desa Resources Berhad, Insas Berhad, Johan Holding Berhad and TA Enterprise Berhad. Additionally, data also shows that 24 companies have appointed full non-executive directors to serve in their risk management committee. This indicates only companies such as OSK Ventures International Berhad and Pacific & Orient Berhad who have not fully appointed non-executive directors serving on their risk management committee.

Regarding risk management committee meeting frequency (RMCM), the descriptive result in Table 4.2 displays that it has an average value of 5.156, a minimum and maximum score of 0 and 17 respectively, with a standard deviation value of 0.414. The result indicate that the committee meets averagely 5 times per annum, However, there is a company that does not had any committee meets in period under review. However, the maximum time that the risk management committee of listed financial institutions in Malaysia meet is 17 times per annum. This finding shows that there are still companies that have never held a risk management committee meeting such as AEON Credit Service (M) Berhad, ELK- Desa Resource Berhad, Insas Berhad, Johan Holding Berhad and TA Enterprise Berhad. This is because these companies have no risk management committee. While companies such as Alliance Bank Malaysia Berhad and Public Bank Berhad are the most frequently held risk management meetings with 17 and 16 meetings a year.

However, the descriptive output from Table 4.2 delineates that firm size (FSZ) has average score of 16.000. With minimum and maximum of 11.920 and 20.440 respectively, and standard deviation of 2.435.

4.4 Annual Mean Descriptive from 2016 to 2017

The mean descriptive statistics for the study variables for every year covered by the study period is presented in Table 4.3 as thus:

Table 4.3

Mean Descriptive Statistic from 2016 to 2017 for Institutions Performance

Variable	2016	2017	Overall
ROA	0.038	0.035	0.037
N	32	32	64

Considering institutions performance, the descriptive statistics from Table 4.3 shows that the percentage of return on assets (ROA) is somewhat stable over the study period with 0.038 (3.80%) in 2016 and 0.035 (3.50%) in 2017 indicates a slight increase. The overall mean of ROA is 0.037 (3.70%). The stability in ROA is an indication of an effective and efficient utilization of limited resource at the corporate managers' disposal which is favorable to the expectations of the shareholder.

4.5 Correlation analysis

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables (Fauzi et al., 2014). In this study, Pearson correlation analysis was carried out to determine the extent and direction of the relationship between the study variables as provided in Table 4.4. The strength of the relationship among variables is usually ascertained by the correlation coefficient denoted by (r) of the variables.

The index value of +1 to -1 will be used in the Pearson correlation to interpret size and relationships. The + and - sign indicates the direction of the relationship that is formed. +1 values show a perfectly positive relationship, whereas the value -1 indicates the perfect negative relationship while the value 0 indicates no relationship of the variable.

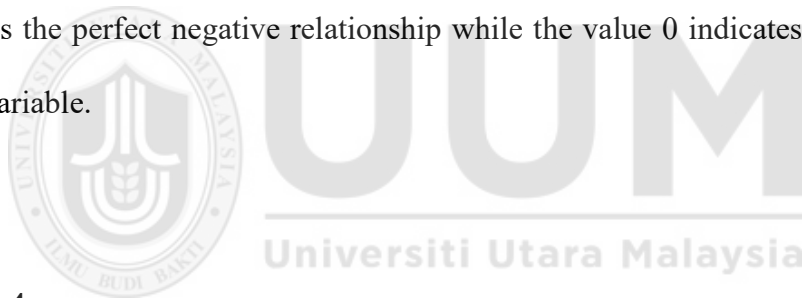


Table 4.4

ROA Correlation Matrix (Pearson)

Variable	ROA	RMCS	RMCM	RMCC	FZS
ROA	1				
RMCS	-.122	1			
RMCM	-.220	.346	1		
RMCC	-.136	.614**	.539**	1	
FSZ	-.527**	.251	.531**	.361	1

** Correlation is significant at the level of 0.01 (2-tailed).

* Correlation is significant at the level of 0.05 (2-tailed).

Based on table 4.4, the independent variables such as Risk Management Committee Size (RMCS) ($r = -0.122$), Risk Management Composition (RMCC) ($r = -0.136$) and Risk Management Committee Meeting Frequency (RMCM) ($r = -0.220$) have negative correlation relationships which are weak but not significant to ROA. This finding is seen to be contrary to the findings obtained by Kakanda (2017), indicating firm size (FMS) ($r = -0.527^{**}$) have a negative and significant correlation relationship with Return on Assets (ROA).

4.6 Panel Data Analysis

One of the most popular statistical techniques used is regression analysis, this is because its use can be used in almost every aspect of business decision making and is also the basis of the economic model (Hair et al., 2014). Equally multiple regression is a complex extension of correlation which is used to discover the predictive power of a group of independent variables on a continuous dependent variable (Kakanda, 2017). Therefore, this study uses multiple regression to explore the relationship between independent and dependent variables. However, the basic assumptions required before running a regression analysis that was carried out in this study are outlier, normality, multicollinearity, and autocorrelation.

4.6.1 Outlier Detection

An outlier is considered as a case having an extreme value of particular variable (univariate outlier), an odd mixture of scores on two or more variable (multivariate outlier) which alters statistics (Kakanda, 2017). Outlier detection aims to look for

patterns in data that are incompatible with expected behaviour (Karanjit & Shuchita, 2012).

Percentage distribution that falls at a distance too high or too low is considered as a multivariate outlier. Dealing with multivariate outliers will take care of univariate outlier (a single variable analysis and select as outlier those scores having extreme cases (higher or lower), but treating outlier may not necessarily take care of multivariate outlier (Hair et al., 2014). Nonetheless, multivariate outliers can be detected by the Mahalanobis D^2 measure (Hair et al., 2014). To this effect, the Mahalanobis D^2 measure was used to detect and deal with multivariate outlier in this study.

Furthermore, the Mahalanobis D^2 measure was calculated using linear regression methods with SPSS v23. Given that 32 item were used. There is no outlier in this study. As such, further analysis proceeded. However, the result is presented in Table 4.5 below.

Table 4.5

<i>Multivariate Outlier Detection (Mahalanobis D^2)</i>	
	Mahalanobis D^2
Observations	32
Outliers	0
Non-outliers remaining	32

4.6.2 Normality Test

In almost every multivariate analysis, screening of continuous variable for normality is a very important phases especially when objective is for inference. Even though achieving normality of study variable is not a constant requirement for analysis, but the result is considerably better if the variable are found to be normally distributed. However the result of the analysis will be degrade if the variable deviate from a normal distribution (Tabachnick & Fidell, 2007). Moreover, the normality of variables is usually ascertained using mathematical (statistical) or graphical approach. The most usable mechanisms of normality are skewness and kurtosis. In essence, skewness deals with the asymmetry (centre or mean oriented) of a given distribution while kurtosis look at the peakedness (high or flatness) of the distribution.

For the purpose of this study, the statistical approach (skewness and kurtosis) was employed to test for normality of the data distribution as suggested by Kline (2008) and Hair et al. (2010). According to West et al (1995), skewness and kurtosis values should be less than 2 and less than 7 respectively. While Kline (2011) opines that the total values of skewness greater than 3 and a kurtosis greater than 10 are deemed to be indicators of problems. Therefore all the variables in this study are found to be normally distribute because the value of skewness range from -1.61 to 1.55, while kurtosis value range -1.01 to 2.42 as shown in Table 4.2.

Additionally, normality can also be determined using residual plots of the dependent variables. Thus, the residual plots below show that the variables are not different from normal.

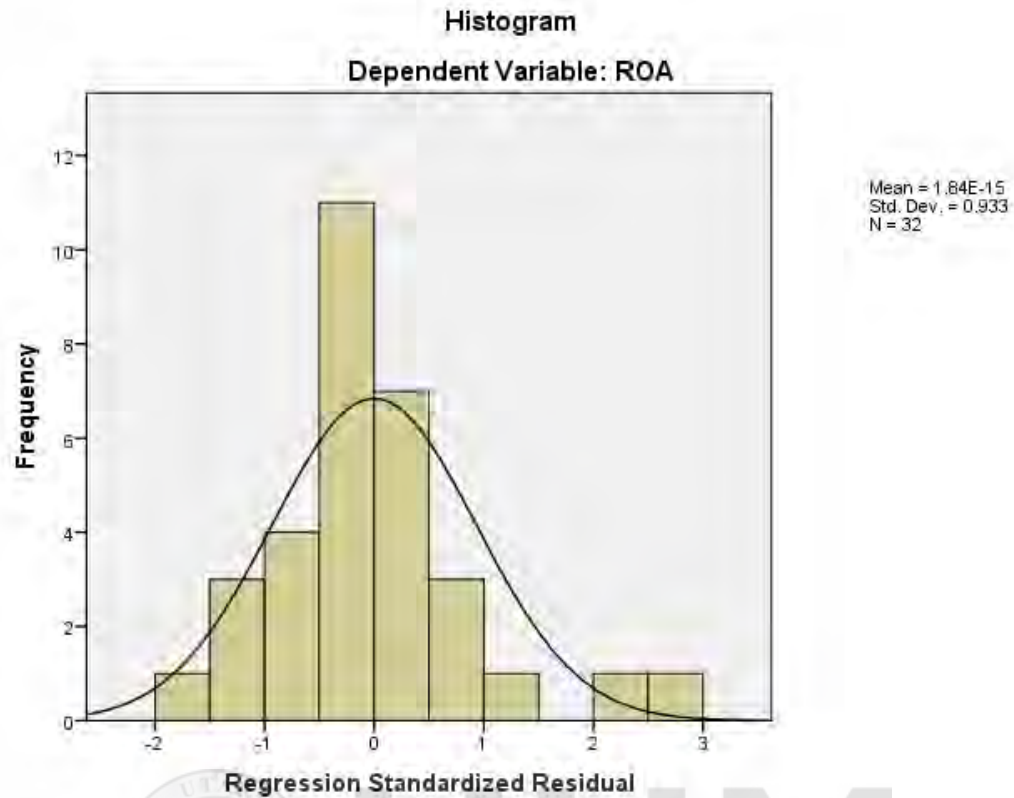


Figure 4.1

Residual Plot for Return on Asset (ROA)

From the residual plots a model (ROA) as Figure 4.1, it can be said that the data is normally distributed, even though the plots have dispersed a little, but yet, no different from a normal distribution.

4.6.3 Multicollinearity Check

Multicollinearity arise where a single explanatory variable is highly correlate with a given set of other explanatory variable (Hair et al., 2014). According to Fauzi et al. (2014), if the VIF value of 1 to 10 indicates no multicollinearity problem. On the

other hand, if the value of VIF <1.0 or >10 there is a multicollinearity problem. Tolerance value $(1-R^2)$ exceeding 0.1 indicates no multicollinearity problem.

Table 4.6

Multicollinearity Test Based on VIF and Tolerance Values

Variables	VIF	1/VIF
RMCS	1.608	.622
RMCM	1.725	.580
RMCC	2.003	.499
FSZ	1.409	.710
Mean VIF	1.686	

4.6.4 Checking for Linearity

Linearity shows the mathematical correlation of function between in the form of straight line. An implicit assumption of all multivariate techniques based on correlation measure of association, including multiple regression logistic regression, factor analysis and structural equation modeling is linearity. Linearity is said to be achieved if standard deviations of dependent variables are greater than the residual values. In this study, linearity is confirmed because the standard deviation of performance variables is considerably higher in comparison to their respective residuals as presented in Table 4.7.

Table 4.7

The Standard Deviation of Dependent Variables and Their Residuals

Variables	Std. Deviation	Residuals
ROA	0.031	.000

4.7 Regression Analysis

By using multiple regression techniques, this section presents an analysis and discussion of the relationship between the existence of RMCS, RMCM and RMCC in financial institutions and firm performance (measured by ROA). It also discusses the control variable which is FSZ with firm performance.

The outcome in Table 4.8 regression analysis of ROA, report that R^2 for the model is 0.285 and the adjusted R^2 is 0.179. This indicated that the model is able of explaining 28.5 percent of the variability in the firm's performance in the sample of this study. It also indicate that only 28.5 percent of the total variance in firm's performance is explained by independent variable and control variables, while the other 71.5 percent is explained by other factors. Moreover, the model is not significant (F-statistic = $0.052 > 0.05$). This suggests that the model not significantly explain the variations in firm's performance of financial institutions in Malaysia.

Based on the ROA equation as stated in Table 4.8, if risk management committee size increase by one, performance of ROA then decrease by about -0.001. If the risk management meeting frequency increases by one unit, the ROA increase by about 0.001. If the risk management composition percentage increases by one unit, the ROA increase by about 0.006. Finally, in relation to control variable; if firm size increase by one, then performance of ROA will decrease by -0.009.

The findings show that risk management committee size negatively affects firm performance is in line with the research done by Kakanda (2017) and Pantamee (2014). The negative effect of risk management committee size on Malaysia's firm performance might result from high administrative cost expended by the companies in running the affairs of members of the committee. This is evident by Pantamee (2014)

that a larger number of member on every board consumes administrative costs that diminish a firm's profitability. Thus, the company might be spending on the members of the committee for them to provide fruitful ideas on management of risk and improvement of performance, but members of the committee may have failed due to the inadequate experience of the nature of risk involve.

While the influence of risk management committee meeting frequency also corresponds to Kakanda (2017) findings which shows the risk management committee meeting has a positive impact on the firm's performance. Concisely, the more the frequency of risk management meeting the healthier for a company, because the board will have more and better chances of making various decisions (Kakanda, 2017). Because of that, with the uncertain economic situation faced by Malaysia, it is important for a company to make effective decisions through the meetings.

The findings also show that risk management composition percentage has a positive effect on firm performance of Malaysia institutions. According to Hermalin and Weisbach (1988), a board that is engulfed by a high proportion of non-executive directors stands a better position to shareholders' interest, may elevate firm performance through an effective oversight function upon the management.

Table 4.8*The coefficients of Multiple Regression Analysis (ROA)*

ROA	Coeff	Std.Err	T	Sig.
RMCS	-0.001	0.004	-0.175	0.863
RMCM	0.001	0.002	0.309	0.760
RMCC	0.006	0.022	0.251	0.803
FSZ	-0.009	0.003	-2.973	0.006
Constant	0.170	0.043	3.928	0.001
R-squared				0.285
Adjusted R-squared				0.179
F				2.690
Sig.				0.052

4.8 Testing of Hypotheses

Overall, the results of hypothesis testing can be summarized in Table 4.9 below which shows a glimpse of the overall results of the hypothesis.

Table 4.9*Summary of Study Findings*

Hypothesis	Hypothesis Statement	Test Result
H ₁	RMC size has a positive relationship with firm performance	H ₁ is not supported
H ₂	RMC composition has a positive relationship with firm performance	H ₂ is not supported
H ₃	RMC meeting frequency has a positive relationship with firm performance.	H ₃ is not supported

4.9 Summary

In this chapter, descriptive correlation analysis and regression analysis were presented and discussed. Correlation analysis was also conducted to provide insight into the correlation among the variables. Based on the findings of the correlation analysis that has been made on independent variables against dependent variable shows that some independent variables are not a convincing factor that drives the performance of an institutions. This can be seen through insignificant correlation relationships between variables such as RMCS, RMCM and RMCC with firm performance. However, the findings show that there is a significant correlation relationship between the FSZ as control variable with the firm performance of financial institutions.



CHAPTER FIVE

CONCLUSION AND FUTURE RESEARCH

5.1 Introduction

In this chapter, the summary of research finding was presented. It is followed by the limitation of the study and lastly, suggestion for future research related to firm performance.

5.2 Summary of the Study

The purpose of the study is to identify the relationship of corporate governance regarding risk management committee structure (size, composition, and meeting frequency) and firm performance of listed financial institution in Malaysia. However, there are still organizations that do not practice risk management. Most organizations do not have well-documented risk management policies. This situation causes these organizations to be unable to address the risks systematically and sometimes face the negative impact on the systematic approach they have taken (Abdurrouf,2011; Saibaba & Ansari, 2011; Nabihah Aminadin, 2013; Abdel Ghani, 2014; Sharifah Nabihah, 2017).

Moreover, it is presumed that the financial reliability and stability, and profitability of a business solely depend on the process and practice of its corporate governance. Companies like financial institutions should be more intelligent in implementing effective governance operations, as it can ensure the long-term value of stakeholders

will be enhanced (Kakanda, 2017). Generally, financial institutions facilitate financial transactions that generate economic growth. To gain stability and success in financial institutions, each component plays an important role on their part. In the development and progress of Malaysian financial institutions, various financial intermediaries have been established and various financial instruments have been introduced to facilitate the flow of funds between savings and investments. To ensure daily economic growth, these financial intermediaries and financial instruments must be controlled and financial institutions should always be sensitive to the risks they may face in order to avoid losses and have a negative impact on the institution. Through risk management practices by existing financial institutions, each risk can be managed effectively. Relatively, investors go after a company with a better performance because it is the essential requirement for an organizational survival and growth (Kakanda et al., 2016). The effectiveness of corporate governance practice to alleviate the conflict and to improve firm performance is still an issue among various companies' stakeholders from a developed or emerging economy.

Nevertheless, most of the prior studies have found that corporate governance have an effect on the performance of firms, although with mixed findings (Ahmed Haruna et al., 2018; Maizatulkama Abdullah et al., 2015; Nabihah Aminadin, 2013; Basiru, 2015; Abdulla & Smith, 2015; Afrifa & Tauringana, 2015; Arora & Sharma, 2016; Elyasiani & Zhang, 2015; Narwal & Jindal, 2015; Reguera Alvarado & Bravo, 2017).

Yet, these studies have failed to establish a relationship between risk management committee structure and firm performance. Therefore, this study extends previous research by examining the influence of corporate governance mechanism on firm performance on quoted financial institutions in Malaysia.

The data utilize in this study was extracted from the annual reports and accounts of 32 listed financial institutions from 2016 to 2017 (amassing a total 64 institutions year observations). Primarily, the concentration of this study is on the relationship between risk management committee structure and the financial performance (ROA) of listed financial institutions in Malaysia.

As a review, the main purpose of this study is to examine the relationship between the risk management structure and firm performance of listed financial institutions in Malaysia from 2016 to 2017. Therefore, in order to answer the previous section, this study has two (2) objectives that include; (1) To examine the structure of risk management practices by the listed financial institutions in Malaysia. (2) To examine the relationship of risk management committee structure (risk management committee size, risk management committee composition, and risk management meeting frequency) and firm performance of the listed financial institutions in Malaysia. Moreover, three (3) hypotheses were developed to examine the relationship between risk management structure and firm performance. The first hypothesis to investigate the relationship between risk management committee sizes with firm performance. The second hypothesis to examine the relationship between risk management composition with firm performance. While the last hypothesis focused on the relationship between risk management committee meeting frequency with firm performance.

In side by side with the stated objectives of the study, this study puts on board to provide empirical answers on two (2) major research questions that are restated as thus: (1) What is the structure of risk management practices by the listed financial institutions in Malaysia? (2) What is the relationship between risk management committee structure (risk management committee size, risk management committee

composition, and risk management committee meeting frequency) with firm performance of the listed financial institutions in Malaysia?

For each question in this study, descriptive and correlation Pearson analyses were conducted to offer empirical answer. The first descriptive result for the full sample, the correlation Pearson analysis show the risk management committee size (RMCS), has an average score of 3.593. Moreover, the result demonstrates that the mean value of risk management committee composition (RMCC) shows that non-executive directors on the committee constitute an average of 92.1%, a minimum of 0.00% and a maximum of 100%. As such, the outcome specifies that the risk management committee of financial institution in Malaysia comprises of both executive and non-executive directors. Regarding risk management committee meeting frequency (RMCM), the descriptive result displays that it has an average value of 5.00. The result indicates that the committee meets averagely 5 times per annum. However, there is a company that does not have any committee meets in period under review such as AEON Credit Service (M) Berhad, ELK- Desa Resource Berhad, Insas Berhad, Johan Holding Berhad and TA Enterprise Berhad.

For the second research question, the result indicate that most of risk management committee structure dimensions have a negative relationship but not significant with ROA such as risk management committee size (RMCS), risk management committee meeting frequency (RMCM) and risk management committee composition (RMCC). Correlation Pearson with not significant ($p > 0.05$) result may be due to the size of the sample being too small that cannot afford a high level of confidence ($p = 0.05$). Moreover for the control variable, Firm Size (FSZ) has a significant and positive relationship with ROA.

However, non-significant correlation relationships illustrate the likelihood of this relationship may occur by chance only due to the size of the sample being too small that cannot afford a high level of confidence ($p = 0.05$). It can therefore be summarized that risk management committee size (RMCS), risk management committee meeting frequency (RMCM) and risk management committee composition (RMCC) have no relationship with firm performance at a credible level. Meanwhile, firm size and firm performance has significant negative relationship. The result concludes that, if firm size is smaller, it will improve firm performance.

5.3 Limitation of the Study

Despite the contribution made by this study in establishing a relationship between risk management committees (RMC size, RMC composition, and RMC meetings) and firm performance in Malaysian financial institutions, however, studies have some limitations related to it. First, in terms of domains, the study only was concerning on the listed financial institutions while neglecting other sectors that also play an important role in the growth and development of the Malaysian economy.

Additionally, this study has failed to scan into other features of risk management committee composition such as financial expert in the committee and professional affiliations of members in the committee which may be as determinants of the committee functions that may ultimately affect performance.

5.4 Future Research

Based on the study limitations and findings, this study suggests future research to conquer the limitations of the study and provides more view into the firm financial performance. The current study uses existence of risk management committee (risk management committee size, risk management committee composition, risk management committee meeting frequency) as an independent variables; therefore, the future study is suggest to focus more on existence of risk management committee in public listed companies in Malaysia in various dimensions such as using a different financial performance analysis, as such, return on equity (ROE), market to book value analysis, return on investment analysis and others.

This study is limited only 32 financial services companies listed on Bursa Malaysia. The future study also could enhance the number of companies study in other sectors and/or other environments which can make more samples of data. Additionally, future studies can add more years of data collected so that enough data can be obtained to aid this study. Finally, future study can explore other features of risk management committee composition like; educational level, financial expertise, and professional affiliations of the committee members.

5.5 Conclusion

This thesis has examined three (3) hypotheses concerning the relationship between risk management committee structure (risk management committee size, risk management committee composition and risk management committee meeting

frequency) and firm performance. By using Correlation Pearson analysis, the result shows that all three hypotheses are not supported.

Moreover, it provides more insight into firm performance by involving variables that have received little attention thus far. This thesis confronts a variety of limitations such as time constraints, firm financial performance measurement and limited sample size. Therefore, future research is suggested to be conducted to overcome the limitations.



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