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# FACTORS INFLUENCE FINANCIAL PERFORMANCE OF THE TAKAFUL INDUSTRY IN MALAYSIA



Research Paper Submitted to
Othman Yeop Abdullah Graduate School of Business,
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(International Accounting)



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#### **ABSTRACT**

Takaful is an Islamic insurance based on Sharia compliance. Takaful industry is an industry that contributes to the development of Malaysia. Thus the stability of the financial performance of the takaful industry is very important. This study is carried out due to the unstable financial performance of the takaful industry in Malaysia. The main objective of this study was to determine the relationship between leverage, size, equity capital and liquidity with the financial performance. This study is a quantitative research and data used are secondary data taken from the audited financial statement. This study is made up of all takaful operators in Malaysia for a period of five years from 2011 to 2015. When the study was conducted, a total of 11 takaful operators were registered with Bank Negara Malaysia (BNM). The financial performance is measured by Return on Assets (ROA). Leverage and liquidity was measured by ratio analysis whilst the size and equity capital was measured using a natural logarithm. To obtain the results of the study, the Statistical Package for the Social Sciences (SPSS) was used which consisted of descriptive statistics, normality test and multiple regressions analysis. The result of normality test was presented using histogram and p-p plot. The study found leverage and liquidity was not significant to the financial performance. Size have a significant and positive relationship with financial performance and equity capital have a significant but negative relationship with financial performance. The implications of this study can guide investors in making their investment decisions, customers in selecting favorable takaful policies and government in developing the takaful industry in Malaysia.

Keywords: financial performance, leverage, size, equity capital, liquidity

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#### ABSTRAK

Takaful merupakan insurans berasaskan islam dan memenuhi konsep patuh syariah. Industri takaful merupakan sebuah industri yang menyumbang kepada pembangunan negara. Oleh itu kestabilan prestasi kewangan amat penting. Prestasi kewangan yang tidak stabil bagi industri takaful di Malaysia mendorong kepada kajian ini dibuat. Objektif utama kajian ini adalah untuk mengetahui hubungan antara leveraj, saiz, modal ekuiti dan kecairan dengan prestasi kewangan. Kajian ini adalah kajian kuantitatif dan data yang digunakan adalah data sekunder iaitu daripada penyata kewangan beraudit syarikat Kajian ini dibuat ke atas semua pengendali takaful di Malaysia bagi tempoh lima tahun mulai tahun 2011 hingga 2015. Ketika kajian ini dibuat, sebanyak 11 pengendali takaful yang berdaftar dengan Bank Negara Malaysia (BNM). Prestasi kewangan diukur oleh pulangan atas aset. Leveraj dan kecairan diukur dengan menggunakan analisa nisbah. Manakala saiz dan modal ekuiti diukur menggunakan logarithma. Analisa statistik SPSS yang terdiri daripada statisik deskriptif, ujian kenormalan dan analisa regresi berganda digunakan bagi mendapatkan hasil kajian. Hasil ujian kenormalan dipersembahkan dalam graf histogram dan p-p plot. Hasil kajian mendapati leveraj dan kecairan adalah tidak signifikan dengan prestasi kewangan. Saiz mempunyai hubungan yang signifikan dan positif dengan prestasi kewangan dan modal ekuiti mempunyai hubungan yang signifikan tetapi negatif dengan prestasi kewangan. Implikasi daripada kajian ini dapat memberi panduan kepada pelabur dalam membuat pelaburan, pelanggan dalam memilih polisi yang menguntungkan dan kerajaan dalam membangunkan industri takaful di Malaysia.

Kata kunci: prestasi kewangan, leveraj, saiz, modal ekuiti, kecairan

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#### LIST OF ABBREVIATIONS

BNM Bank Negara Malaysia

CAR Capital Adequacy Ratio

CEO Chief Executive Officer

GDP Gross Domestic Product

GNI Gross National Income

ITA Income Tax Act

MIT Malaysia Institute of Takaful

PA Participants Account

PSA Participants Special Account

RBC Risk Based Capital

ROA Return on Assets

SPSS Statistical Packages of Social Sciences

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#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background of the Study

The contribution of the takaful industry was RM5.94 billion in 2015 said the chairman of Malaysian Takaful Association (Arumugam, 2016). The development of this industry was constantly monitored as it involves public interest (Yusof, Wee & Osman, 2015). To ensure that the financial position is stable, strong, and able to compete takaful operators need to have adequate capital. According to the Chief Executive Officers (CEO) of Syarikat Takaful Malaysia, the capital requirements for takaful operators in ASEAN is between USD12 million to USD15 million (Yusof, 2016). Bank Negara Malaysia (BNM) has been enforcing the Act through the introduction of minimum capital requirements for takaful operators in Malaysia which began in 2014. Takaful operators are required to have at least 130% of supervisory Capital Adequacy Ratio (CAR) (Yusof et al., 2015).

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In addition, the takaful industry was found to have problems in terms of development as compared to the insurance industry, causing the Malaysian Institute of Takaful (MIT) to organize the 4<sup>th</sup> Annual World Conference which was held on 19 June 2013. More than 500 agents and all the takaful operators came together to discuss strategies to develop the performance of the takaful industry in Malaysia (Zawya, 2013).

The Chief Secretary of Treasury Malaysia, Ybhg. Tan Sri Dr Mohd Irwan Siregar in his speech at the conference said the global financial crisis that occurred gave different impact where excessive leverage and the rapid development of financial activities separate from the foundation of the real economy could cause economic

instability and a benchmark regarding the true potential of Islamic finance. He also said that the Islamic finance industry in Malaysia should have a solid foundation because it has been in existence for more than 30 years (Zawya, 2013).

CEO of Etiqa Takaful Berhad reported that the takaful industry in Malaysia is expected to grow by 20% a year for the next two years as various efforts have been made; such as changes in regulations that gives strength and stability to the sharia compliant industry (Nee, 2014). To ensure the stability in takaful industry, BNM has introduced a Risk Based Capital (RBC) framework (Lai, 2011). RBC is a rule that sets the minimum liquid reserves required by the takaful operator must be at least 130%, which aims to protect companies, investors, customers and the economy (Yusof et al., 2015).

Although the takaful industry in Malaysia is growing but it still lags far behind by the insurance industry as stated by the CEO of Takaful Ikhlas. The market penetration rate for 2010 for the takaful industry was 10% versus 40% of the insurance industry. In 2013, the market penetration of family takaful is only 13% as compared to 55% for life insurance (Ernst & Young, 2014). The Country Managing Partner from Ernst & Young Malaysia said that takaful industry should strive to improve the standards of performance to be at par with the conventional insurance industry. Table 1.1 shows the Gross Domestic Product (GDP) for the insurance industry including takaful.

Table 1.1 Statistical Data of the GDP for Insurance Industry.

| Year | GDP in Million (RM) | % Changes |  |
|------|---------------------|-----------|--|
| 2011 | 15,227              |           |  |
| 2012 | 17,824              | 17.06%    |  |
| 2013 | 18,373              | 3.08%     |  |
| 2014 | 19,301              | 5.05%     |  |
| 2015 | 19,264              | -0.19%    |  |
|      |                     |           |  |

Source: Malaysia Statistic Department (2016)

Table 1.1 shows the percentage change in GDP for the insurance industry in Malaysia. Statistics show the percentage change in a very unstable where in 2012 the percentage change was 17.06% and decreased to 3.08% in 2013. In 2014, there was a slight increase in GDP of 5.05% and declined again in 2015 of -0.19%. Changes and inconsistencies may result in instability in the financial performance of the insurance industry.

Table 1.2 Statistical Data of the GNI between Insurance and Takaful

|      | Insura                 | nce                       | Takaful                |                           |  |
|------|------------------------|---------------------------|------------------------|---------------------------|--|
| Year | GNI in Million<br>(RM) | Percentage<br>Changes (%) | GNI in Million<br>(RM) | Percentage<br>Changes (%) |  |
| 2011 | 36,430.70              |                           | 4,863.00               |                           |  |
| 2012 | 39,621.20              | 8.79%                     | 5,887.80               | 21.07%                    |  |
| 2013 | 42,094.30              | 6.24%                     | 6,207.90               | 5.44%                     |  |
| 2014 | 45,403.10              | 7.86%                     | 6,330.60               | 1.98%                     |  |
| 2014 | 75,705.10              | 7.8070                    | 0,550.00               | 1.90/                     |  |

Source: Malaysia Statistic Department (2015)

Table 1.2 shows statistical data on gross national income (GNI) of insurance and takaful industry from 2011 until 2014. To the best of our knowledge, there was no statistics provided by Malaysia Statistic Department for the year 2015. In 2012, the takaful industry showed a significant increase of 21.07% as compared to 8.79% for conventional insurance. The insurance industry showed the percentage change was more stable. A percentage change in takaful industry was inconsistent which shows a decline in 2013 and 2014 which is 5.44% and 1.98% respectively.

Based on the reasons stated above, it shows that the takaful industry is still unstable in terms of financial performance compared to its counterparts. Thus, this study is to find out the factors that could influence the financial performance of the takaful operators in Malaysia.

#### 1.2 Problem Statement

Financial performance of the takaful industry should be equally stable and expanding to that of the conventional insurance industry. However, the performance of the takaful industry does not reflect its stability as shown in the Table 1.1 and Table 1.2.

Measurement of financial performance gained significant attention, particularly in the fields of business and strategic management (Almajali, Alamro and Al-Soub, 2012). Financial performance is also very important to the various parties in the organization as it directly affects the company's ability to survive. A country's economy also impacted from the result of the excellent financial performance because it reflects the effective management and efficient use of resources (Naser and Mokhtar, 2004).

Afrasiabishani, Ahmadinia and Hesami (2012) found that the capital structure which includes leverage, assets, equity and liquidity were related to the financial performance. Thus this study will use these factors to determine whether it can affect the financial performance of the takaful operator in Malaysia. Company with high leverage may face the problem of bankruptcy if it is unable to service their debt (Almajali et al., 2012) and eventually would affect the financial performance of the company.

Takaful is part of the important components in financial services. In Malaysia, the developments of the takaful industry have seen relatively slow and unstable performance as mentioned in Table 1.2. From 1984 till presently, only 11 operators had been established. Among 11 takaful operators operating in Malaysia, the size of each company differs. Referring to a study by Almajali et al. (2012) referring to the determinants of Jordanian Insurance market, the size of each company was measured by natural log of total assets, and how it affects the company's financial performance through a variety of ways in which large-sized companies can exploit economies of scale and operate more efficiently than smaller sized companies. This could take place because large companies have the ability to increase its revenue and minimize their costs through efficient management of operating costs (Ismail, 2013). Therefore this study will investigate the effect of size to the company's financial performance.

Many studies related to the financial performance of the bank using equity capital as independent variables that affects the company's financial performance as the study by Lee and Hsieh (2013) and Jaberl and Al-Khawaldeh (2014). Similar studies of the

insurance companies that uses equity capital as factors affecting the company's financial performance was also made by Mwangi and Murigu (2015), Malik (2011) in Pakistan and Sambasivam and Ayele (2013) in Ethiopia. To the best of researcher knowledge, there were no studies yet being carried out using equity capital as the independent variable and its relation to the financial performance of the takaful operator in Malaysia.

Equity capital can determine a company's financial strength. It is the capital contributed by the owners to support the business operations. In the context of takaful business, reserves were also included in the equity capital. If a company raises equity capital through the issuance of shares or so, then the capital raised through debt will be reduced.

In addition, to ensure that companies comply with the regulations issued by BNM related to RBC, the company must obtain optimal capital through various means such as making loans. Therefore, this study was made to meet those needs.

Risk is the main factor that the takaful operators have to handle. They need to ensure that the ability to pay the claims were high. Therefore, the liquidity for every takaful operator is very important. Liquidity refers to a company's ability to resolve its debt obligations in the next 12 months in cash or assets that can be converted into cash (Almajali et al., 2012). If a company cannot manage their debt, it will affect their cash flow and the profitability of the company would probably be reduced. Profitability is

a proxy of financial performance, so this study will determine the effect of liquidity to the company's financial performance.

According to statistics from BNM, the number of branches operating as takaful operators is on a decreasing trend as there were a total of 207 branches in 2011, 213 in 2012, 215 in 2013, 129 in 2014 and 112 in 2015. This is supported by the statistic in Table 1.2 that showed the unstable performance through the GNI of takaful operator. Unstable financial performance would negatively affect many parties, especially shareholders and stakeholders as takaful industry were meant to protect the public interest. The shareholders would withdraw directly from contributed capital whilst stakeholders would probably find other companies that have better financial performance. The long term effect is not good for the industry and the country.

Like other corporate organizations, it is necessary to establish the relationship between performance and the factors that influence it and to determine the relevant variables in determining the performance of an organization and to separate between good and poor performance. (Berger and Humphrey, 1997)

Most of the research done in Malaysia is to compare performance between insurance companies and takaful operators, including the study of Nahar (2015), Yakob, Yusop, Radam and Ismail (2014), Ismail (2013), and Abduh, Omar and Mohd Tarmizi (2012). However, this study will take the population of takaful operator as a whole to visualize a clear picture about the takaful performance itself. Therefore, this study is designed to fulfil the gap through the use of population not sample.

#### 1.3 Research Question

Does leverage, size, equity capital and liquidity has an influence on the financial performance of the takaful industry in Malaysia?

#### 1.4 Research Objective

To determine the relationship between leverage, size, equity capital and liquidity to the financial performance of the takaful industry in Malaysia.

### 1.5 Significance of the Study

Many studies related to the development and performance of the banking industry had been carried out, but very little research had been made on the takaful industry performance. Studies related the financial performance of takaful operators is significant in view of the increasingly challenging of the financial landscape.

# 1.5.1 Theoretical Contributions

This study will contribute to the application of the theory related to the factors that affect the financial performance. Various findings have been obtained by previous researchers related to factors affecting financial performance. In this study, the factors that would be examined include leverage, size, equity capital and liquidity. Studies of Ismail (2013), which compares the financial performance of insurance companies and takaful operators showed a positive relationship, negative relationship and not significant relationship between the independent variables and dependent variables.

Abduh et al. (2012) in his study also compared the financial performance of the insurance and takaful industry. The results of his research found that the insurance industry is more efficient to that of the takaful industry. Both of these studies made comparisons between insurance and takaful but took only a few companies as  $\frac{1}{8}$  samples.

This study differs from previous studies because it would review all takaful operators in Malaysia as a population of the study. This study provides a comprehensive focus on takaful industry. The results will confirm the theory to be referred whether it could be supported or otherwise.

#### 1.5.2 Practical Contributions

This study will help users of financial statements consisting of investors, customers and governments in making decisions regarding the factors that affect the financial performance of the takaful operator in Malaysia.

Investors will see whether leverage, size, equity capital and liquidity have an impact on the financial performance of a takaful operator. This is because investors would ensure their investments are made in companies that can minimize risk and maximize profit. This study can help customers in terms of choice of takaful operators that can offer competitive policy through the stability of company's financial performance.

This study also can help the government in ensuring the stability of the Islamic financial institutions in contributing to the national income. The government through

Bank Negara Malaysia can see whether the policy introduced as the RBC framework can help in improving the financial performance of the takaful operator in Malaysia.

#### 1.6 Scope and Limitation of the Study

This study was limited only to takaful operators in Malaysia that were registered under the Takaful Act 1984. Takaful is selected for this study because of the relatively low and unstable performance compared with its competitors, namely insurance, as shown on the statistical data in Table 1.2. According to the latest records of the BNM, a total of 11 takaful operators are still operating in Malaysia.

Data for this study is from the company's financial statements taken from the company's website for five years beginning from 2011 up to 2015. Five years is a sufficient period for the study and it is supported by the study of Adams and Buckle (2003) and Agiomirgiannakis, Voulgaris and Papadogonas (2006). Ismail (2013) and Tahira and Arshad (2014) studied only for a period of four years. In addition, in connection with the RBC framework issued by BNM for takaful, BNM have indicated that the effective date of implementation was in 2014. Therefore data for this study is limited for five years only on the basis of all the information described above.

#### 1.7 Assumptions of the Study

This study is based on several assumptions, namely:

 The financial statements were prepared by the takaful operator to provide accurate information that could assist in the calculation of the ratio used to measure all the variables in this study.

- The financial statements for each operator were sufficient for the reviewing period, namely from 2011 to 2015.
- All variables used can be measured.

#### 1.8 Organization of the Study

The study is divided into five chapters, namely Chapter One begins by background of the study, problem statement, research questions, research objectives, significance of the study, limitation and scope of the study, assumptions of the study and organization of the study. The second chapter is about literature review consists of introduction, overview of takaful industry, the difference between takaful and insurance, model of the takaful industry in Malaysia, theoretical background, hypothesis development and summary.

The study continued with the third chapter deals with research design and methodology. This chapter starts with introduction, theoretical framework, research design, data collection, sampling design, data analysis method, model specification and variables description and ending with summary. Chapter Four is about results and discussion. This chapter will focus on the statistical analysis using descriptive statistic, normality test, multiple regressions, finding summary and conclusion. The result will be presented in table, histogram and p-p plot. The last chapter is the discussion, conclusion, limitation and recommendations.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

Most studies related to financial performance is more focused on the study of the banking industry and the financial performance of insurance industry is limited (Burca and Batrinca, 2014). Among the earlier studies related to the insurance industry is made by Spiller (1972), Chidambaram (1997), Cummins and Weiss (1998) and Genetay (1999).

For more in-depth knowledge with regard to the research questions raised in the previous section, a literature review has been made. The study begins with knowing the overview of literature relating to takaful industry in Malaysia, the difference in conventional insurance and takaful and model practiced by takaful operators in Malaysia. This chapter also focuses to the theoretical background, followed by hypotheses development and will be end with the summary.

#### 2.2 Overview of the Takaful Industry in Malaysia

Takaful is an insurance based on Islamic principles. Sudan and Saudi Arabia began to introduce takaful industry in the late of 1970s (Abduh et al., 2012). In Malaysia, the takaful industry began in the early 1980s as a result of the needs of Muslims at that time to have an alternative to conventional insurance which complied with the requirements of Sharia and to complement the operations of Islamic bank established in 1983 (BNM).

Malaysian National Fatwa Committee much affect the existence of the takaful industry because they decided that life insurance in its current form is a contract that is not valid because it has elements of *Gharar* (uncertainty), *Riba*' and *Maisir* (gambling).

In 1982, the Malaysian government has set up a task force to study the feasibility of setting up an Islamic insurance company. Thus, in 1984, the Takaful Act was enacted and the first takaful operator was incorporated in Malaysia in November 1984 was Syarikat Takaful Malaysia Berhad (Lim, Idris and Carissa, 2010)). According to Takaful Act 1984 (Handbook of Basic Takaful, 2007), the term takaful means a scheme based on brotherhood, solidarity and mutual assistance that provides financial aid and assistance to participants if necessary where participants mutually agree to give it. Takaful is from the word *kafala* which means to secure, maintain or preserve. Since takaful is a noun derived from the verb *takafala*, so it gives the sense of mutual guarantee, mutual care and nurture each other (Lim et al., 2010).

Referring to BNM Record, at the global level, Malaysia has signed a Memorandum of Understanding (MOU) with the Islamic Development Bank to encourage investment among countries of the Organization of Islamic Conference (OIC), including the development of takaful and Retakaful. Takaful operators also faced the risk from its business operations where it has a policy which may suffer great losses. To protect the interests of business and the life span of the company for the long term, the takaful operator will take the protection plan. Protection plan that is sharing the risk with other takaful operators is known as Retakaful (Billah, 2012).

Abdul Rahman and Redzuan (2009) found that in 1985 the first takaful company in Malaysia was gazetted under the Takaful Act 1984. Takaful industry has been in Malaysia for 25 years and as many as six models have been introduced which is *al-Mudarabah*, *Musyarakah*, *Wadi'ah Yad Dhamanah*, *al-Wakalah*, *Waqf* and *Ju'alah* (Frenz and Soualhi, 2010; Frenz, 2009). However, only two models were practiced in Malaysia, namely *Wakalah* model and *Mudharabah* model (Frenz et al., 2010; Frenz, 2009; Ali, Odierno & Ismail, 2008). Both models can be used by the general takaful and family takaful (BNM, 2010; Ali et al., 2008).

#### 2.3 The Difference between Takaful and Conventional Insurance

Lim et al. (2010) in their study also discuss the differences between conventional insurance and islamic insurance. From the point of view of Islam, conventional insurance is prohibited because there are elements of *riba*, *gharar* (uncertainty) and *maisir* (gambling). However, insurance are allowed in Islam if done jointly (*ta'awun*). In principle, the concept of takaful is based on solidarity, responsibility and brotherhood among the participants (Obaidullah, 2005).

The main difference between conventional insurance and takaful mentioned by Lim et al. (2010) in their study are conventional insurance is a contract of buy and sell between the policyholder and the insurance company where insurance company offers protection based on the premium paid at a certain price. Meanwhile, islamic insurance is a mutual agreement between the takaful operator as a fund manager and participants who are contributors. Participants waive the right of individuals to achieve a collective right of the contributions made. The models used under the

islamic insurance were *mudharabah*, *tabarru* and *wakalah*. In Malaysia, the models used were *mudarabah* and majority the takaful operator were using *wakalah* model.

Insurers' profit includes the difference between the amount of premiums received against total claims and benefits paid to policyholders, known as underwriting surplus. The basic principle is the company's profit consists of the underwriting surplus and investment income. The management is responsible for determining the distribution of profits and surplus to be distributed. Therefore, conflict of interest would exist between shareholders and policyholders. In islamic insurance, the operator cannot claim underwriting surplus. In *wakalah* model, the management of takaful operators cannot determine the distribution of profits. This can assist in avoiding conflicts of interest (Lim et al., 2010)

Conventional insurance is motivated by profit and its main goal is to maximize revenue for shareholders. The owner is a shareholder of the insurance company. However, the main goal of the existence of islamic insurance is based on the concept of social welfare and protection. Those managing the business are known as takaful operator. Therefore, the takaful operator who acts as agent to the policyholder only received fair compensation through investment gains (Lim et al., 2010)

Lim et al. (2010) also mentioned that if no claim is made in the period of the agreement, policyholders will lose the premium paid to the insurance company in the case of conventional insurance. However, in the case of islamic insurance, if no claim is made within the agreed period, underwriting surplus will be returned to participants

or donated. In the case of life insurance, if the insured risk occurs, the nominee shall be entitled to claim the whole amount specified in the policy, but if the risk does not apply and policy are matured, the policyholder may claim only the amount specified in the policy and its benefits, if any. In the family takaful, if the risk occurs, the nominee is entitled to claim the policy value from the Participant's Special Account (PSA) in addition to the amount accumulated in the Participants Account (PA). If the risk is not occurs, the participant is entitled to claim the amount in the PA. (Billah & Patel, 2003).

In conventional insurance, the investment made using the premiums paid is the absolute right of insurance companies without the involvement of the policyholder. Therefore, there is always an element of riba and gambling in the investments made. This is in contrast with islamic insurance where takaful operator states where and how investments should be made to comply with the Sharia. Takaful operator has the obligation to pay zakat, which was not made by the insurance company (Lim et al., 2010)

These differences are clearly explained that there are significant differences between insurers and takaful operators. In terms of taxation, insurance business is regulated under Section 60 and takaful under Section 60AA of the Income Tax Act (ITA) 1967. According to ITA 1967, the tax rate for insurance and takaful are varies according to the fund and it is shows in the Table 2.1.

Table 2.1

Tax Rate of Insurance and Takaful

| Takaful              | Tax Rate  |
|----------------------|---|
| -                    | 5 %   |
| -                    | 5 %   |
| Family Takaful Fund  | 8 %   |
| General Takaful Fund | 25 %  |
| Shareholders Fund    | 25 %  |
|                      | -<br>-<br>Family Takaful Fund<br>General Takaful Fund |

Source: Income Tax Act 1967

## 2.4 Model of the Takaful Operator in Malaysia

#### 2.4.1 Wakalah Model

In Arabic *Wakalah* means agency. In the *Wakalah* model, an agreement between two parties to running a business through an agency relationship is practically practiced (Yusof, 2011). The takaful operator would acting as an agent or 'wakil' and the participant is the principal. Investment or part of the deposit will be credited to the participant's account (PA), while the contribution will be credited to the Participant Risk Account (PSA) (Htay and Zaharin, 2013). In this model, investment and underwriting surplus belongs to the participant. Takaful operator derives income from *wakalah* fees which is charged once upfront (Abdul Rahman et al., 2009).

The fee is paid by the participant as a part of the takaful contribution. *Wakalah* fee is used as commission expenses and management expenses in managing the takaful fund. Operator and participant, however, do not share the underwriting surplus. Azman (2013) in his paper said that *wakalah* has 4 corner stone which is *muwakkil* 

(Principal), Wakil (Agent), the subject matter and contract language (offer and acceptance).

#### 2.4.2 Mudharabah Model

Macey (2008) found that the earliest takaful model in Malaysia is the *Mudarabah* model. In this model, participants contribute to the family takaful fund (Ali et al., 2008). Investment and savings will be credited to the PA and contributions would be credited to the PSA. Participant contributes the capital and takaful operators are entrepreneurs. All the profits will be shared between the participants and the takaful operator according to a predetermined percentage from the outset. PSA will be used for expenses claims and reserve. The amount of the PA will be collected and paid together with the amount of PSA to the participants agreed upon until maturity or on demand (Htay et al., 2013)

# 2.5 Theoretical Background

This section discusses the Pecking Order Theory which is the underpinning theory and support by the Agency Cost Theory. Both of the theory is related to the capital structure as shows in the Figure 2.1.

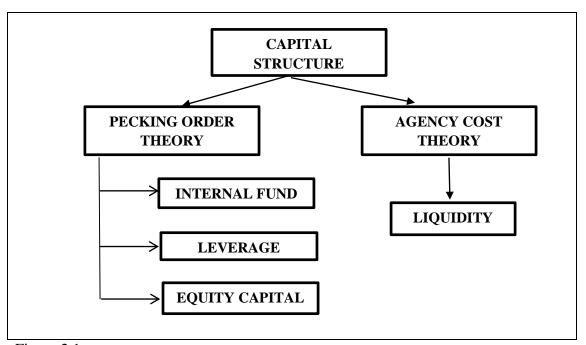


Figure 2.1
The Underpinning and Supporting Theory of the Study

## 2.5.1 Pecking Order Theory

Pecking Order Theory was first introduced by Donaldson in 1961. Myers and Majluf in 1984 have modified the theory. This theory started by the existence of asymmetric information in which the manager has more information regarding the future of the company, the risks and the company's real value compared to outside investors. Asymmetric information would affect the sources of financing for a business to obtain capital either through internal or external financing (Myers and Majluf, 1984).

The Pecking Order Theory is introduced as it relates to the company's funding sources. This theory says the source of financing for obtain the capital is divided into three which is internal financing, leverage or debt and equity financing as shows in the Figure 2.1. Internal financing is the first stage to raise capital and if the internal

resources are depleted, the company will use the debt financing. Financing through equity capital is the last to be made (Myers et al. 1984).

Asset structure is an important factor in determining the capital requirement of the company (Harris and Raviv, 1991). Companies with large asset value will be easy to get a loan because the asset can be utilized as collateral for loans made. The Pecking Order Theory assumes that the company has a large asset value will be less vulnerable to asymmetric information. Goyal (2013) and Arkhavien, Beger and Humphrey (1997) in their study also apply the Pecking Order Theory and found that leverage has a negative correlation with profitability.

Size is measured by the amount of assets owned by the takaful company. This is supported by studies of Hailu (2015) using total assets as a proxy for size in studies of commercial bank of Ethiopia. Total assets are related to the Pecking Order Theory because as explained earlier the company with the large size of assets are easier to get the loan because assets can use as collateral.

Equity capital is the last resort in obtaining the optimum amount of capital required in a business. It will indicate the financial strength of the firm (Obudho, 2014). In takaful industry, the equity capital is the amount of owner's fund that was available to support a business including its reserves. It is directly relevant to the Pecking Order Theory as described above.

#### 2.5.2 Agency Cost Theory

Jensen, Michael, Meckling and William (1976) in their study regarding the firm theory and agency cost stated that Agency Cost Theory is the economic theory refers to fees incurred by the principal when choosing to appoint an agent to act on his behalf. Goal or desire of both parties are different and that the agent has more information than the principal, then the principal is unsure that the agent would act on his behalf.

The cost involved is divided into two. The first is the risk to be borne by the principal if the agent using the organization's resources for personal gain. For example, if company has a high amount of cash, the agent may choose to pay higher incentives than making a profitable investment. This cash surplus can be attributed to the company's liquidity. The second is cost regarding the method used to reduce the problems that exist due to the appointment of an agent to get information on what is being done by the agent. An example is the preparation of financial statements to know the company's financial position and to pay incentives to managers in the form of stock options (Jensen et al. 1976).

Liquidity associated with the Theory of Agency Cost is in terms of the amount of current assets management. Takaful operator as an agent appointed by the policyholder as a principal must ensure the company always has a sufficient cash to face the risks that may occur. Liquidity is the ability of the takaful operator to fulfil their short term commitment without having to increase profit on underwriting and their investment activities. In the study by Hailu (2015) stated that if there is excess

cash flow, the value of the firm could increase. Ismail (2013) said that low liquidity can increase the financial performance because the agency cost will be lower and it will provide incentives for managers to improve their performance. Pottier (1998) in his study showed a high level of liquidity would increase agency costs because they had to provide a high incentive to management. In addition, excess liquidity could also lead to misuse of cash flow by investing in the wrong place (Pottier, 1998).

All of these theories are used to determine the factors that influence the optimal capital structure of a company that influence the value or financial performance of the company. Factors that affect the capital structure are leverage, size, equity capital and liquidity. Optimal capital structure is the amount of capital required for the business. Knowledge of the impact of financing decisions or optimal capital structure of a company's profit will help finance managers in making decisions to meet the company's objectives, namely to maximize the benefit of those owners.

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For the takaful industry, the optimal capital structure is to be used in operating the business as participants contributed the capital has appointed the company to operate the business on their behalf, the company must be smart in determining the amount of funds required to make investments to ensure the interests of all parties are maintained. All the theories is summarised in Table 2.2.

Table 2.2 Summary of Underpinning and Supporting Theories of the Study

| Theory                     | Proposal /Description   | Application                        | <b>Empirical Evidence</b>                       |
|----------------------------|---|------------------------------------|---|
| Pecking<br>Order<br>Theory | This theory states that there are three steps in obtaining the capital for the company which is internal financing, leverage and issuing equity. Size will represent the assets that can be used as collateral in making loan.  | Leverage<br>Size<br>Equity Capital | Hailu (2015) and<br>Obudho (2014)               |
| Agency Cost<br>Theory      | Optimal capital structure is determined by agency cost which results from conflict of interest among different beneficiaries. If the agency cost is lower, the liquidity would be lower and the financial performance would be higher. High level of liquidity will increase the agency cost. | Liquidity                          | Hailu (2015)<br>Ismail (2013)<br>Pottier (1998) |

# 2.6 Hypothesis Development

Profit is an important objective in the financial management as one of the goals is to maximize profits to business owners. Profit refers to good financial performance. In addition, insurance also promote social and financial stability, increases the amount of savings, and support the business and entrepreneurial activities. Insurance also plays an important role in improving the quality of life of individuals and the welfare of all people within a country (Malik, 2011). Hypotheses are developing based on the research questions raised in Chapter One. This hypothesis is consistent with the theoretical framework of the study.

#### 2.6.1 Financial Performance

Performance is defined as the capability of an organization to acquire and manage resources through a variety of methods to achieve competitive advantage (Iswatia and Anshoria, 2007). Profitability is the main objective of financial management which is to maximize the interests of the owners.

MWangi and Iraya (2014) also focus on the measurement of financial performance of general insurance business in Kenya to achieve the study objective on the importance of financial performance. Heikal, Khaddafi and Ummah (2014) said that financial performance is used to measure the efficiency of the company in generating 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.

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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 investments made in 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.

Malik (2011) in a study related to the financial performance of the insurance industry said that insurance plays an important role as it reflects the financial stability and social services, help businesses and improve the quality of life. Therefore, the financial performance of a company is very important in helping to generate the national economy.

Almajali et al. (2011) in a study related to the insurance industry in Jordan also use financial performance to measure the ability of the company. In his study, he defined performance is a concept that is not easy in terms of thermal and measurement. Performance is defined as the result of action and how to measure performance is dependent on the type of organization and the objectives to be achieved.

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There are few previous studies on measuring the financial performance including a review by Akhter and Zia-ur-Rahman (2011) that measures the financial performance of the insurance industry in Pakistan. The study on financial performance is also supported by Almazari (2011), Ali, Akhtar and Ahmad (2011), Clarkson, Richardson and Vasvari (2008), Cohen, Chang and Ledford (1997), Russo and Fouts (1997) and McGuire, Sundgren and Schneeweis (1988).

This study will measure the financial performance which is referring to variables that are directly attributable to the financial statements. Financial performance will be

measured in terms of profitability where the company's revenue is greater than the costs incurred. Financial performance will be measured by ROA.

## 2.6.2 Leverage and Financial Performance

The company's assets can be obtained by using leverage. Leverage is an investment strategy through the use of borrowed money to generate higher investment returns. Ibrahim, Salleh and Awang (2015) in their research found that most companies are using leverage to finance their operation. The rule of thumb is the higher the leverage, the higher the risk that must be faced by a company. The higher the risk, the higher the expected return that can be earned (Borhan, Mohamed and Azmi, 2014)

Almajali et al. (2012) in their study found that, debt leverage shows the degree to which a business is utilizing borrowed money. Companies with high leverage will face the risk of bankruptcy if it fails to pay the debt whilst it would be difficult to obtain loans in the future. In addition, leverage also has a positive effect if properly managed, which can improve a high return on investment to shareholders.

Adams and Buckle (2000) in a study related to the financial performance of the insurance market in Bermuda using panel data for the period of five years from 1993 to 1997. The results of the study are expected to be the high leverage has a positive effect on the company's performance. Several other studies support that leverage has a positive relationship with financial performance is a study by Bashir (2003) and Neri (2001).

Sambasivam et al. (2013) in their study of the performance of insurance companies in Ethiopia found the liquidity ratio and the leverage has a significant but negative relationship with the company's profits. The study is made up of nine insurance companies in Ethiopia for the last nine years from 2003 to 2011.

Foong and Idris (2012) in studies of the effect of leverage on the financial performance has been used all insurance companies in Malaysia for the period of 2006 to 2009 as the study population. The study found, leverage has a negative relationship with the company's financial performance.

The findings of the research by Malik (2011) regarding the financial performance of the insurance sector in Pakistan found that leverage have a negative influence to the profitability of insurers. The study is done on the 35 insurance companies.

Chen and Wong (2004) in a survey conducted to support the theory of capital structure found leverage in excess of an optimal level will lead to a higher risk and thus lowers the value of the firm. Empirical evidence shows that the insurance company has low leverage will report a profit (ROA) high. Leverage has a significant but negative relationship with financial performance.

Innocent, Ikechukwu and Nnagbogu (2013) in their study to determine the effect of financial leverage on financial performance for a period of twelve years starting from 2001 until 2012 found that leverage had no significant effect on financial performance on the companies that are selected as sample. Based on the findings, they suggested

that the amount of debt finance should be at the optimal level to ensure the efficient use of the company's assets.

Some previous studies also found that leverage does not have a significant correlation with profitability that is the study of Amjed (2007), Hall, Hutchinson and Michael (2000) and Long and Malitz (1986). From all the literature stated above, the first hypothesis is:

H<sub>1</sub>: There is a significant relationship between leverage and financial performance.

#### 2.6.3 Size and Financial Performance

Sambasivam et al. (2013) in their study regarding the insurance industry in Ethiopia found that size is positively related with financial performance and the hypothesis they developed was accepted. Al Khatib (2012) in his study regarding the financial performance of Palestinian commercial bank found that size did have a strong positive relationship with financial performance.

Md Saad and Idris (2011) in their study on the efficiency of life insurance companies in Malaysia and Brunei which compared the performance efficiency of both countries by using the sample of nine life insurance company in Malaysia and two insurance company in Brunei. The finding showed that the big companies are more efficient in utilizing their inputs to generate the outputs.

Prasetyantoko and Parmono (2008) made a study related to the determination of corporate performance for listed companies in Indonesia after the economic crisis in

1997. The data used for this study were 238 companies listed on the Jakarta Stock Exchange for the period 1994 - 2004. The study found firm size is directly related to profit.

Agiomirgiannakis et al. (2006) studied the factors that affected the profitability and growth in employment in the manufacturing sector in Greek. The study was on Greek manufacturing firms for 1995 to 1999. The results showed that size did contribute to the development of the firm. This is further supported by the results of the econometric found that size has positive relationship with the financial performance which affect the profitability of the firm.

Chen et al. (2004) in a study related to the determination of the level of the Asian financial insurance company with emphasis on general insurance and life insurance. They found firm size is one of the factors that significantly and positively affect the level of general insurance in the Asian Finance. This clearly shows that size has the significant impact on the level of both types of insurer's namely general insurance and life insurance.

Some previous studies have found that size has a positive relationship with the profitability that represents a company's financial performance. Among those was a study made by Hardwick (1997), which found a large-sized insurance company which was able to diversify risks and to respond quickly to market conditions. Bain (1968) and Scherer (1980) found that large firms have a monopoly power which allows them in setting the price that will lead to the higher profitability.

In studies related to Jordanian Commercial Bank, Almazari (2011) uses size as a factor to measure the performance of the bank represented by ROA. Results of the analysis found that size has a negative relationship with financial performance.

Dawood (2014) found that size and profitability have no significant relationship. This shows that size does not affect the profitability of a bank in which banks cannot obtain an advantage of economies of scale.

Mwangi et al. (2014) in the study on General Insurance in Kenya, using ROA as a proxy to financial performance found that there was no relationship between size and financial performance. Before getting the findings, they expect that size has a positive relationship with financial performance.

Tarawneh (2006) in his study regarding the comparison of the performance of the commercial banking sector in Oman use a total of five commercial banks were used as samples. The finding shows that the higher the total assets do not always have a good profitability performance. This shows that size is not a factor which determines the profitability of a company. All the literature review above leads to the formation of the second hypothesis which is:

H<sub>2</sub>: There is a significant relationship between size and financial performance.

## 2.6.4 Equity Capital and Financial Performance

Equity capital plays an important role in a business. It will indicate the financial strength of the company. Obudho (2014) in his study regarding the relationship between financial risk and financial performance of insurance companies in Kenya stated that equity capital is the amount contributed by the owners of the company that gives them the right to receive dividends in the future. His research found that the equity capital has a positive relationship with ROA. This means that companies with large capital can generate high profits and maximize the wealth of the owner.

Wanjugu (2014) in his study on the financial performance in general insurance companies in Kenya got a same finding with Obudho (2014). He found that insurers with more capital adequacy will have competitive advantage to increase their ROA. There are positive relationship between equity capital and financial performance.

Lee et al. (2013) have made studies on the effect of capital on profitability of the bank in Asian. The study involved 42 Asian countries for the period 1994 to 2008. The study found a significant impact of capital to banks in countries with low income per capita and the low but positive impact of capital to profit as of investment bank. Capital does have a significant effect and positively related to the profitability of banks in the Middle Eastern Countries.

Malik (2011) in studies on factors affecting the profitability of insurance companies in Pakistan has used 34 insurance companies in Pakistan as a sample for a period of five years from 2005 to 2009. ROA is used to measure profitability. The results have

improved the understanding of the performance of financial in Pakistan. Equity capital has a significant affects and have a positive relationship with the company's profits.

The study of 10 banks in Jordan for the years 2001-2010 has been done by Imad, Qais and Thair (2011). Profitability was used as dependent variables and equity capital is a factor that was being tested to identify whether profitability of bank in Jordan depends on adequate capital or not. Adequate capital which is equity capital has a negative relationship with profitability of banks in Jordan. Tarawneh (2006) in his finding shows that a good profitability does not depend on a higher equity capital. There are negative relationship between equity capital and profitability.

Jaberl et al. (2014) has made a study related to factors affecting the profitability of commercial banks in Jordan. The study found that equity capital was not significant with the profitability of commercial banks in Jordan. From the above literature, the third hypothesis is:

H<sub>3</sub>: There is a significant relationship between equity capital and financial performance.

## 2.6.5 Liquidity and Financial Performance

Tugas (2012) in the study of financial ratio analysis in Philippines stated that liquidity ratio refers to the firm's ability to meet short-term cash needs often within one year. The ratio is always associated with the company's liquidity are the current ratio. The main component in this current ratio is current assets and current liabilities.

Tugas (2012) also in his research classify current assets include cash and assets that can be converted into cash such as marketable securities, accounts receivable, inventory and so on. Current liabilities also include all obligations that must be paid within one year, including accounts payable, accrued expenses and etc. The company's liquidity level is essential to know because it is an indication that the company is able or not to pay debts when they fall due. This ratio is important because failure to meet their obligations will make the firm become bankrupt. Adequate liquidity position is important to meet the demands of creditors. Lower liquidity level will affect the supplier confidence in the ability of firms to pay their debts and also firms may be difficult to obtain credit facilities in the future.

Tahira et al. (2014) in their article of comparative performance of Islamic and conventional insurance companies in Pakistan also used the financial ratio to measure the performance with the liquidity. The sample for their study was four takaful operator and 15 insurance companies for the year of 2008 until 2011. The results showed that the Islamic insurance company's has a positive relationship between the liquidity and financial performance.

In the article of financial performance of Jordanian insurance companies by Almajali et al. (2012) used the ROA to measure the effect of liquidity to the performance on 25 insurance companies in Jordan for the year of 2002 until 2007. The results showed that liquidity has a significant and positive relationship with the financial performance of insurance companies.

Mohammadi and Malek (2012) in their research regarding financial performance evaluation of a Malaysian manufacturing company found that financial ratios can be used to determine the strengths and weaknesses of the firm in terms of liquidity and profitability. It can reflect whether the firm operates on the right track and if not, thus corrective action can be taken. Furthermore, financial ratios facilitate firm for audit, budget bankruptcy, company rankings and the actual situation of the firm.

Mohammadi et al. (2012) also found that manufacturing firms in Malaysia experienced a decline in 2011 and shareholders also did not get a satisfactory dividend in the same year. The study shows that liquidity has a positive relationship with profitability.

Companies with high liquid assets can perform better because they have sufficient cash to meet its obligations when necessary and less exposed to liquidity risk (Shiu, 2004). A company faced with a high number of claims that will have a problem if they do not have the sufficient cash or liquid assets. The study showed there are a positive relationship between liquidity and financial performance.

Wanjugu (2014) in the study of financial performance in general insurer in Kenya stated that liquidity has a negative relationship with financial performance. Dawood (2014) in his study regarding the performance of the commercial banks in Pakistan found that liquidity has a significant but negative relationship with profitability. High level of liquidity means that bank does have lower deposits and short-term borrowed funds.

Ismail (2013) uses liquidity as independent variables in studies of the general takaful and insurance companies in Malaysia. The finding shows that liquidity had a negative relationship with financial performance. This study is consistent with the study by Adams et al. (2003) regarding the general insurance in Bermuda and Browne, Carson and Hoyt (1999) regarding the life insurance business in U.S.A. Low liquidity will improve financial performance as agency costs will be reduced and this gives opportunities to the management to improve the company's profitability.

Kosmidou (2008) regarding the determinants of bank profit in Greece during the period of EU financial integration found that liquidity has a significant but negative relationship with profitability. This finding is also support by the study of Molyneux and Thornton (1992).

Akter and Mahmud (2014) in a study of the banking industry in Bangladesh, also measured the relationship between liquidity and profitability. The study is made up of 12 banks for a period of six years (2006-2011). The study found that liquidity and profitability has no significant relationship.

Ahmed, Ahmed and Usman (2011) in the study of insurance company in Pakistan found that the relationship between liquidity and performance is not significant. The forth hypothesis is formed as a result of the studies presented in the above literature is:

H<sub>4</sub>: There is a significant relationship between liquidity and financial performance.

Table 2.3
Summary of Relationship between Independent Variables to Dependent Variable from Previous Literature.

| Independent<br>Variables | Relationship with financial performance | Previous Literature  |  |  |  |
|--------------------------|---|--|--|--|--|
| Leverage                 | Significant and positive (+)            | Ibrahim et al. (2015), Borhan et al. (2013), Almajali et al. (2012), Bashir (2003), Neri (2001) and Adams et al. (2000).   |  |  |  |
|                          | Significant but negative (-)            | Sambasivam et al. (2013), Foong et al. (2012), Malik (2011) and Chen et al. (2004)   |  |  |  |
|                          | Not significant                         | Innocent et al. (2013), Amjed (2007), Hall et al. (2000) and Long et al. (1986).   |  |  |  |
|                          | Significant and positive (+)            | Sambasivam et al. (2013), AlKhatib (2012), Md<br>Saad et al. (2011), Prasetyantoko (2008),<br>Agiomirgiannakis et al. (2006), Chen et al. (2004),<br>Hardwick (1997), Scherer (1980) and Bain (1968) |  |  |  |
| Size                     | Significant but negative (-)            | Almazari (2011)  |  |  |  |
|                          | Not significant                         | Dawood (2014), Mwangi (2014) and Tarawneh (2006)   |  |  |  |
| AR TO                    | Significant and positive (+)            | Obudho (2014), Wanjugu (2014), Lee et al. (2013) and Malik (2011)  |  |  |  |
| Equity Capital           | Significant but negative (-)            | Imad (2011) and Tarawneh (2006)  |  |  |  |
|                          | Not significant                         | Jaberl et al. (2014)   |  |  |  |
|                          | Significant and positive (+)            | Tahira et al. (2014), Almajali et al., (2012), Mohammadi et al. (2012) and Shiu (2004)   |  |  |  |
| Liquidity                | Significant but negative (-)            | Wanjugu (2014), Dawood (2014), Ismail (2013), Kosmidou (2008), Adams et al. (2003) and Carson et al. (1999)  |  |  |  |
|                          | Not significant                         | Akter et al. (2014) and Ahmed et al. (2011)  |  |  |  |

## 2.7 Summary

In summary, this chapter discusses the literature related to studies. Table 2.3 shows the summarization of the relationship between the independent variables to dependent variable from the previous studies.

The theory underlying the study is The Pecking Order Theory and Agency Cost Theory. The Pecking Order Theory is related to the capital structure which is a factor in raising the value of the firm and increases the company's profits. The source of fund consists of internal financing, leverage and equity. Size is representing the total asset also related to the Pecking Order Theory. It is because assets can be collateral in order to obtain a loan. Equity capital is directly related with Pecking Order Theory because it is one of the ways to generate capital.

Agency Cost Theory is associated with liquidity when liquidity is high agency cost will increase as the excess cash will be used to pay incentives to managers. This in turn will reduce the rate of profit and thus the financial performance will also be reduced.

#### **CHAPTER THREE**

#### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction

The previous chapter discusses the literature review along with a knowledge gap that led to this study need to be done. The main purpose of this chapter is to discuss the methods to be used in the study to achieve the objectives that have been set. This chapter is prepared as follows: The first part begins with a theoretical framework and followed by research design that will be used to identify the relationship between leverage, size, equity capital and liquidity to financial performance. It is continued by the source of data and collection method, sampling design, data analysis method, model specification and variables description. The final part of this chapter tells a summary of the variables used in relation to the data source and the expected results.

## 3.2 Theoretical Framework

Hair, Money, Samouel and Page (2007) stated that theoretical model is a diagram that connects theory and logic based on variables to give a clearer picture of the hypotheses to be tested. This model has four independent variables namely leverage, size, equity capital and liquidity. Dependent variable, the main purpose of the study is financial performance. The theoretical framework of this study is shown in Figure 3.1. The summary of the hypothesis that will be tested which are develop in the previous chapter to meet the four objectives of this study are stated in Table 3.1.

Table 3.1 *Summary of Hypothesis* 

|                | Hypothesis  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|
| H <sub>1</sub> | There is a significant relationship between leverage and financial performance.       |  |  |  |  |  |
| $H_2$          | There is a significant relationship between size and financial performance.           |  |  |  |  |  |
| $H_3$          | There is a significant relationship between equity capital and financial performance. |  |  |  |  |  |
| $H_4$          | There is a significant relationship between liquidity and financial performance.      |  |  |  |  |  |

# INDEPENDENT VARIABLES

# **DEPENDENT VARIABLE**

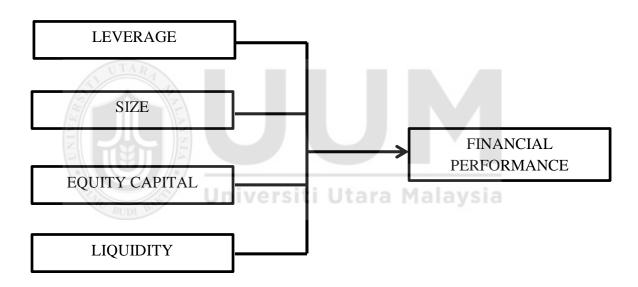


Figure 3.1 *The Theoretical Framework of the Study.* 

# 3.3 Research Design

Parahoo (1997) stated the research design as a plan that describes when, where and how data will be collected and analysed. Burns and Grove (2003) define research

design as a blueprint in conducting a study with maximum control on the factors that would interfere with the validity of the findings.

Referring to the problem statement and the research objectives, this study is a quantitative research. According to Given and Lisa (2008) a quantitative research is a systematically and scientifically research of the phenomenon that is characterized by quantitative and have the relationships between these phenomena. The data used were from 11 takaful operators in Malaysia for a period of five years which is from 2011 to 2015. The 11 takaful operators are mentioned in Table 3.2.

Table 3.2
List of Takaful Operators in Malaysia

| No. | List of Takaful Operator in Malaysia |  |  |  |  |  |
|-----|--------------------------------------|--|--|--|--|--|
| 2/1 | Syarikat Takaful Malaysia Berhad     |  |  |  |  |  |
| 2   | Etiqa Takaful Berhad                 |  |  |  |  |  |
| 3   | MAA Takaful Berhad                   |  |  |  |  |  |
| 4   | Hong Leong MSIG Takaful Berhad       |  |  |  |  |  |
| 5   | Ammet Life Takaful Berhad            |  |  |  |  |  |
| 6   | Prudential BSN Takaful Berhad        |  |  |  |  |  |
| 7   | Great Eastern Takaful Berhad         |  |  |  |  |  |
| 8   | AIA Public Takaful Berhad            |  |  |  |  |  |
| 9   | HSBC Amanah Takaful Berhad           |  |  |  |  |  |
| 10  | Takaful Ikhlas Berhad                |  |  |  |  |  |
| 11  | Sun Life Malaysia Takaful Berhad     |  |  |  |  |  |

Source: Bank Negara Malaysia (2016)

#### **3.4** Source of Data and Collection Methods

In achieving the objectives and in line with the research methodology used, the data used is a secondary data. Compared with primary data, secondary data have better quality, higher reliability and validity of the data is more accurate (Li, 2007). This is because the data is fixed and does not change and can be reviewed by other users and the level of dependency data is relatively higher. Most studies were made on the measurement of financial performance, which also uses secondary data review by Sambasivam et al. (2013), Almajali et al. (2012), Malik (2011) and Tarawneh (2006).

Data for this study were collected from the audited financial statements for each takaful operator. Data collected through the website of each takaful operator and BNM's website. To maintain the validity of the data, the data is taken from the statement of financial position and income statements that were audited by a qualified auditor. This study was performed on 11 takaful operators for a period of five years which led to the study conducted over 55 observations.

## 3.5 Sampling Design

The study population was on all takaful operators that were registered with Bank Negara Malaysia (BNM). According to data of BNM, the number of takaful operators registered in this period [2016] amounted to 11 companies. Eight takaful operators carried on their business of general takaful and family takaful whilst three others ran the family takaful business only. Family takaful is similar to life insurance.

In generalization from sample to population and to ensure that the data is accurate, only the takaful operators operating before 2011 and have the audited financial statements for the years before 2011 above were only taken as the study data. Takaful operators that do not have audited financial statements for the year 2011 had been removed from the sample. Thus, of the 11 takaful operator, only 10 have the audited accounts from 2011 to 2015, namely as stated in Table 3.3.

Table 3.3
List of Takaful Operators in Malaysia that have Financial Statement from 2011 to 2015

| No.       | List of Takaful Operator in Malaysia |  |  |
|-----------|--------------------------------------|--|--|
| 1         | Syarikat Takaful Malaysia Berhad     |  |  |
| 2         | Etiqa Takaful Berhad                 |  |  |
| 3         | MAA Takaful Berhad                   |  |  |
| 4         | Hong Leong MSIG Takaful Berhad       |  |  |
| 5         | Prudential BSN Takaful Berhad        |  |  |
| 6         | Great Eastern Takaful Berhad         |  |  |
| 7 UDI BAR | AIA Public Takaful Berhad            |  |  |
| 8         | HSBC Amanah Takaful Berhad           |  |  |
| 9         | Takaful Ikhlas Berhad                |  |  |
| 10        | Sun Life Malaysia Takaful Berhad     |  |  |
|           |                                      |  |  |

Souce: Bank Negara Malaysia (2016)

From the Table 3.3 above, Ammetlife Takaful Berhad is excluded because the business is only started at 2012 (Annual Report, 2012). A total of 90.9% of the sample could only be used. Thus, it is believed to make generalization from sample to population.

From revisions made to the 50 observations, AIA Public Takaful Berhad incurred a loss for the period of five years (2011-2015), Great Eastern Takaful Berhad suffered losses for the past four years, MAA Takaful Berhad loss for the year of 2014 and Hong Leong MSIG Takaful Berhad experience losses for 2011 and 2012. This loss will create a negative of Return on Assets (ROA).

## 3.6 Data Analysis Method

To achieve the study objectives, data for 10 takaful operators was used for five years (2011 to 2015). Data collected was analysed using Microsoft Excel to calculate the ratio analysis. To determine the relationship between variables, the SPSS program was used. The analysis used is descriptive statistics, normality test and multiple regressions.

Descriptive statistics were used to present a set of data in a form that is more easily understood. It will give an overall summary of the study data that provide a specific meaning which is mean, standard deviation, minimum value and a maximum value of the data. Data screening has been done and found no outliers.

To ensure that the data is a normal distribution, the normality test was made. Result will be presented in the form of histogram, bell shape curve and p-p plot. This test is one of the assumptions while doing the regression analysis.

Multiple regressions methods were used to get the best set of variables that gave meaning to the dependent variable. This method is used to predict the value of a variable based on the value of two or more other variables. The variables to predict should be recognized as a dependent variable or criterion variable. The variables used to determine the value of the dependent variable is known as the independent variables or explanatory variables. This method will also determine whether the leverage, size, equity capital and liquidity are the main factor that determines the company's financial performance. Multiple regressions models was selected for use because there are previous studies that were similarly used by Mwangi et al. (2014), Sambasivam et al. (2013) and Malik (2011).

# 3.7 Model Specification and Variables Description

## 3.7.1 Variables Description

This research uses explanatory variables such as profit before tax to total assets, total liabilities to total equity, current assets to current liabilities, total assets and total equity. Description of each of the variables is set out below:

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# 3.7.1.1 Dependent Variable

#### 3.7.1.1.1 Financial Performance

Financial performance will be measured by Return on Assets (ROA). ROA is selected to measure the profitability of the company referred to as financial performance because it is the most used method of quantifying financial performance. ROA was developed in 1919 by Dupont. There are few previous studies have used ROA to measure financial performance including a review by Sambasivam et al. (2013), Akhter et al. (2011) that measures the financial performance of the insurance industry in Pakistan. Almajali et al. (2011) in a study related to the insurance industry in

Jordan also used ROA to measure the financial performance of the company. The use

of ROA is also supported by Mwangi et al. (2014), Almazari (2011) and Ali et al.

(2011) to measure the financial performance.

The formula used to calculate the ROA was:

 $ROA = \underline{Profit \ Before \ Tax}$ 

**Total Assets** 

3.7.1.2 Independent Variable

**3.7.1.2.1** Leverage

The company's assets can be obtained by using leverage. Leverage is an investment

strategy through the use of borrowed money to generate higher investment returns.

Ibrahim et al. (2015) in his research found that most companies are using leverage to

finance their operation. Almajali et al. (2012) in their study found that, debt leverage

showed the degree to which a business utilizes borrowed money. Companies with

high leverage will face the risk of bankruptcy if it fails to pay the debt while it would

be difficult to obtain loans in the future. In addition, leverage also has a positive effect

if properly managed, which can improve a high return on investment to shareholders.

Previous study that are used a similar ratio as a proxy to the leverage ratio were

Ibrahim et al. (2015), Hamid, Rahman, Ya'amob and Yakob (2010), Hamid, Osman

and Nordin (2009), Zou and Adams (2006), Zou, Adams and Buckle, (2003), Daniel

and Paul (2003) and Hoyt and Kang (2000). The formula to calculate the leverage

was:

Leverage = Total Liability

**Total Equity** 

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#### 3.7.1.2.2 Size

Wanjugu (2014) in his study on the financial performance of the general insurance companies in Kenya uses size as the independent variables. The formula that was used to calculate size is natural log of total assets. Ismail (2013) used natural log of total assets to measure the company size. It is also supported by the study from Tabari, Ahmadi and Emami (2013) regarding the effect of liquidity on the banks performance. Some previous studies have found that size has a positive relationship with the profitability that represents a company's financial performance. Among these is the study by Hardwick (1997), which found large-sized insurance companies are able to diversify risks and to respond quickly to market conditions. Bain (1968) and Scherer (1980) found that large firms have a monopoly power which allows them in setting the price. Ismail (2013) used natural log of total assets to measure the company size.

The formula to calculate the size was:

Size = Natural Log of Total Assets

# **3.7.1.2.3 Equity Capital**

Obudho (2014) in his study regarding the financial performance of insurance companies in Kenya used equity capital as independent variables. He used the natural log of total equity to calculate the equity capital. Wanjugu (2014) also used the same formula with Obudho (2014) to measure the equity capital. Malik (2011) stated that the volume of capital or equity capital as the book value of equity. It is measured by the natural log of total equity. Too few studies were made in connection with the insurance industry which uses the equity capital as independent variable. Most studies

that use equity capital as a factor affecting the financial performance is on banking

industry and it is were proven by the study of Berger and Bounman (2011). Therefore,

in this study, equity capital will be measured as follows:

Equity Capital = Natural Log of Total Equity

**3.7.1.2.4** Liquidity

Wanjugu (2014) in his studies on factors affecting the financial performance of

insurance companies in Kenya use liquidity as an independent variable. The formula

used is in line with the formula used in this study. The same formula was used by

Ferrouhi (2014) in his study of the relationship between financial performance and

liquidity in the banking system in Morocco. It is also supported by the study from

Bhunia and Mukhuti (2011). Kumbirai and Webb (2010) in the study of Commercial

Bank Performance in South Africa also used the same formula to calculate the

liquidity. Companies with high liquid assets can perform better because they have

sufficient cash to meet its obligations when necessary and less exposed to liquidity

risk (Shiu, 2004). A company faced with a high number of claims would have

problems if they do not have the sufficient cash or liquid assets. The formula to

calculate the liquidity is:

Liquidity = Current Assets

**Current Liabilities** 

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Table 3.4
Summary of Variables Used in the Study, the Measurement and Previous Researchers Measurement.

| eusuremeni.              |                   |   |   |  |
|--------------------------|-------------------|---|---|--|
| Category                 | Variables         | Measurement / Ratio used                | Authors   |  |
| Dependent<br>variable    | ROA               | Profit before tax /<br>Total Assets     | Mwangi et al. (2014),<br>Sambasivam et al. (2013),<br>Akhter et al. (2011), Almajali et<br>al. (2011) Almazara (2011) and<br>Ali et al. (2011). |  |
|                          | Leverage          | Total Liability /<br>Total Equity       | Ibrahim et al. (2015), Hamid (2010), Hamid et al. (2009), Zou et al. (2006), Adams et al. (2003), Daniel et al. (2003) and Hoyt et al. (2000).  |  |
| Independent<br>Variables | Size              | Natural log of total assets             | Wanjugu (2014), Ismail (201 and Tabari et al. (2013)  |  |
| UTA                      | Equity<br>Capital | Natural log of total equity             | Obudho (2014), Wanjugu (2014), Berger et al. (2011) and Malik (2011).   |  |
|                          | Liquidity         | Current Assets /<br>Current Liabilities | Wanjugu (2014), Ferrouhi (2014), Bhunia et al. (2011) and Kumbirai et al. (2010).   |  |

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# 3.8 Summary

This section describes the research methods used to achieve the objectives. Theoretical framework used to indicate the relationship between independent variables (leverage, size, equity capital and liquidity) to the dependent variable (financial performance). This relationship refers to the Pecking Order Theory and supported by the Agency Cost Theory. Four hypotheses developed to ensure the objectives are achieved. This research is a quantitative research and data used for this study is secondary data obtained from the financial statements of takaful operators. Data collected were analysed using Ratio Analysis and the formula used is supported

by the previous study as shown in Table 3.4. To get the findings, the multiple regression analysis was used. The statistical results of this will be explained in the next chapter.



#### **CHAPTER FOUR**

#### RESULTS AND DISCUSSION

#### 4.1 Introduction

Previous chapter is the presentation on the relevant research methods used to achieve the objectives. This chapter will discuss the findings and analysis of the results. This chapter is divided into four sections, beginning with descriptive statistics analysis and is followed by the analysis of normality. To determine the relationship between variables (leverage, size, equity capital and liquidity to financial performance) multiple regression method is used. Lastly is a summary of the findings

# 4.2 Summary of Statistics

As discussed in the previous section, this study used 10 Takaful operators as population studies for a period of five years that is from 2011 to 2015. From the data collected, ROA is a proxy to the financial performance is the dependent variable in this study while leverage, size, equity capital and liquidity is the independent variables.

# **4.2.1** Descriptive Statistics

Descriptive statistics is used to describe the data that have been collected. Table 4.1 summarizes the descriptive statistics regarding the dependent and independent variables for five years (2011-2015). There are 50 numbers of valid cases or 'N' for each variable.

Table 4.1 *Descriptive Statistics* 

| Variables         | N  | Min    | Max    | Mean   | Std.<br>Deviation |
|-------------------|----|--------|--------|--------|-------------------|
| ROA               | 50 | -0.003 | 0.066  | 0.006  | 0.036             |
| Leverage          | 50 | 0.220  | 11.157 | 4.586  | 3.190             |
| Size              | 50 | 19.029 | 23.296 | 20.878 | 1.271             |
| Equity<br>Capital | 50 | 17.914 | 21.150 | 19.001 | 0.881             |
| Liquidity         | 50 | 0.360  | 5.320  | 1.999  | 1.216             |

Table 4.1 shows a summary of descriptive statistics on each variable. It summarizes the minimum value, maximum value, mean and standard deviation for each variables N is the number of valid cases for this study or observation. Mean is an indicator that shows the average for each variable.

The financial performance is proxy by ROA. Table 4.1 shows the range for ROA is between -0.003 to 0.066. The standard deviation for ROA is 0.036 and the mean is 0.006. The mean for leverage is 4.586 and the standard deviation is 3.190. The range for leverage is from 0.220 to 11.157. Size with the minimum value of 19.029 and maximum value is 23.296. The mean for size is 20.878 and the standard deviation is 1.271. The range for equity capital is between 17.914 until 21.150. This contributes the mean for equity capital is 19.001 and standard deviation is 0.881. The last variable is liquidity with the mean of 1.999 and standard deviation is 1.216. Minimum value for liquidity is 0.360 and the maximum value is 5.320.

## 4.2.2 Normality Analysis

Another data screening test used in this study is the normality analysis. The normality analysis is performed to make sure that the distribution of variable scores is 'normal'. The variable is considered as normal if it is a symmetrical, bell-shaped curve, which has the greatest frequency of scores in the middle and with smaller frequencies towards extremes (Pallant, 2007).

The normality analysis was done to each variable using Explore in SPSS. It is to analyze the tabulation of the independent variables and the dependent variable to ensure that all data are normally distributed and reliable (Garson, 2012). The normality of the variable can be seen in the histogram and p-p plot. Most of the variables appear to be reasonably normally distributed. A reasonably straight line suggests a normal distribution. One of the assumptions that are necessary for using the method of multiple regressions is to be normally distributed data. Thus, normality test is something that must be done.

Table 4.2 *Frequencies* 

| reque           |         | ROA    | Leverage | Size   | Equity<br>Capital | Liquidity |
|-----------------|---------|--------|----------|--------|-------------------|-----------|
| N               | Valid   | 50     | 50       | 50     | 50                | 50        |
|                 | Missing | 0      | 0        | 0      | 0                 | 0         |
| Skewn           | ness    | -2.630 | 0.568    | 0.290  | 0.939             | 0.814     |
| Std. E          |         | 0.337  | 0.337    | 0.337  | 0.337             | 0.337     |
| Skewn<br>Kurtos |         | 9.423  | -0.897   | -0.679 | -0.187            | 0.372     |
| Std. En         |         | 0.662  | 0.662    | 0.662  | 0.662             | 0.662     |

Table 4.2 shows that there is little skewness and kurtosis of the data used. Skewness is the amount and direction of skew (departure from horizontal symmetry), and kurtosis is how tall and sharp the central peak is, relative to a standard bell curve.

# 4.2.2.1 Histogram

The histogram shows the distribution of data for each variable.

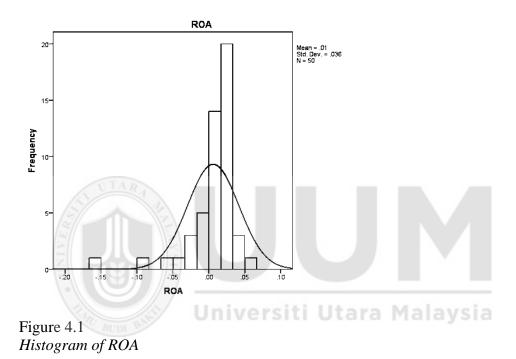


Figure 4.1 show the histogram of the ROA and the distribution curve is normal. It indicates that data meet the assumption of normality. The mean for ROA is 0.006 and the standard deviation is 0.036.

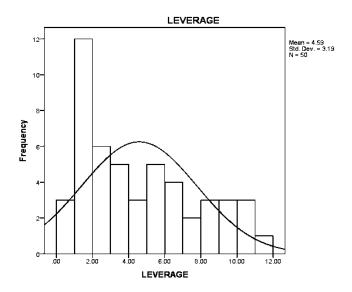


Figure 4.2 *Histogram of Leverage* 

Figure 4.2 show the histogram of the leverage and the distribution curve is normal. It indicates that data meet the assumption of normality. The mean for leverage is 4.586 and the standard deviation is 3.190.

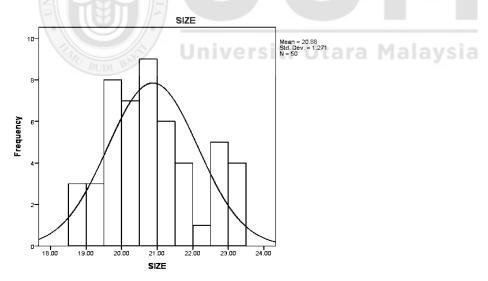


Figure 4.3 *Histogram of Size* 

From the Figure 4.3 shows that there is no problem of normality for size. It indicates that data meet the assumption of normality. The mean for size is 20.876 and the standard deviation is 1.271.

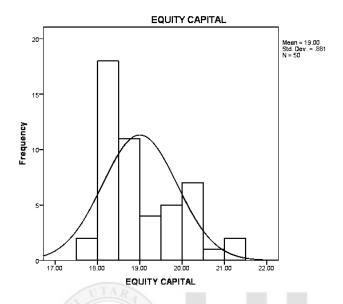


Figure 4.4
Histogram of Equity Capital

Figure 4.4 show the mean for equity capital is 19.001 and the standard deviation is 0.881. The distribution curve of the above histogram is normal and this indicates that data meet the assumption of normality.

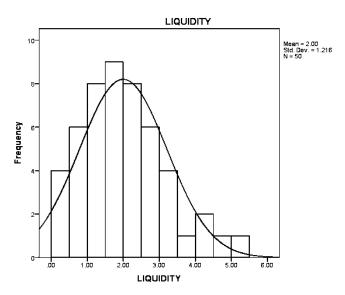


Figure 4.5 *Histogram of Liquidity* 

From the Figure 4.5, the mean for liquidity is 1.999 and the standard deviation is 1.216. The distribution curve shows the bell shape that indicates the data meet the assumption of normality.

# 4.2.2.2 P. P Plot

P-P plots or probability - probability plot is used to assign how closely the two data sets were located. It is a graphical representation of p-p plot that could determine whether the data is normally distributed or otherwise.

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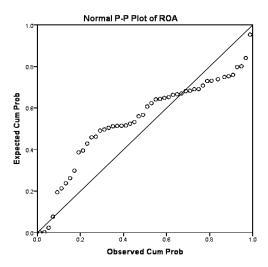


Figure 4.6 *P-P Plot of ROA* 

Figure 4.6 indicates that data for ROA is normally distributed around a straight line. This meets normality assumptions. It is possible to conclude that the inferences that the researcher will made about the population parameters from the sample is somewhat valid.

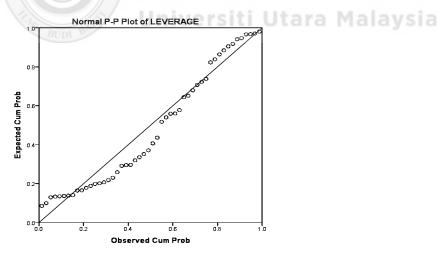


Figure 4.7 *P-P Plot of Leverage* 

From the Figure 4.7, it is possible to conclude that the inference about the population parameters from the sample is somehow valid. This is indicates that the data for

leverage is normally distributed around a straight line. This meets the normality assumptions.

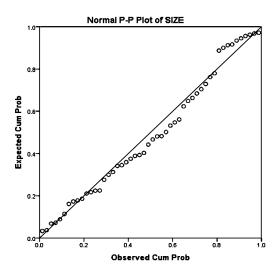


Figure 4.8 *P-P Plot of Size* 

The data for size is normally distributed around a straight line as shown in Figure 4.8. This meets the normality assumption. It is possible to conclude that the inferences that the researcher will made about the population parameters from the sample is somewhat valid.

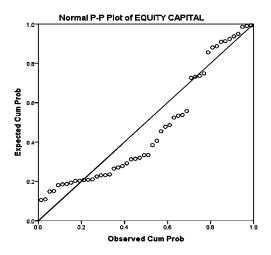


Figure 4.9 *P-P Plot of Equity Capital* 

From the Figure 4.9 above, it is possible to conclude that the inferences that the researcher made about the population parameters from the sample is somewhat valid because the p-p plot meets the normality assumptions. It is proven by the data that is normally distributed around the straight line.

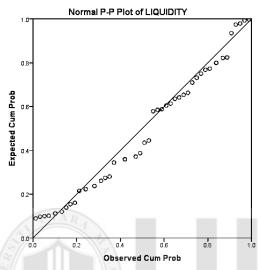


Figure 4.10 *P-P Plot of Liquidity* 

Figure 4.10 indicates that data for liquidity is normally distributed around a straight line. This meets normality assumptions. It is possible to conclude that the inferences that the researcher made about the population parameters from the sample is somewhat valid.

# 4.2.3 Multiple Regressions

The multiple regressions analysis was performed in this study by analysing the relationship between the independent variables and dependent variable. According to Saleem and Rashid (2011), regression analysis is used as one of the hypotheses testing to analyse the relationship among independent and dependent variable. Therefore in

this study, the independent variables of leverage, size, equity capital and liquidity were analysed to see the effect of these variables towards the ROA. The result from the multiple regressions is presented in Table 4.3 and Table 4.4.

Table 4.3 *Model Summary* 

| Model | R           | R      | Adjusted | Std.     | R      | Change Statistics |     | Statistics |        |
|-------|-------------|--------|----------|----------|--------|-------------------|-----|------------|--------|
|       |             | Square | R        | Error of | Square | F                 | df1 | df2        | Sig. F |
|       |             |        | Square   | the      | Change | Change            |     |            | Change |
|       |             |        |          | Estimate |        |                   |     |            |        |
| 1     | $0.650^{a}$ | 0.422  | 0.371    | 0.028    | 0.422  | 8.228             | 4   | 45         | 0.000  |
|       |             |        |          |          |        |                   |     |            |        |

a. Predictors: (Constant), Leverage, Size, Equity Capital, Liquidity

Table 4.3 shows the R square of 0.422. It shows that 42.2% variation in the dependent variable or ROA is described by the independent variables. After adjusting for errors, the adjusted R square shows that the variation is about 37.10% of ROA. The standard error of the regression is 0.028 which means the average distance of the data points from the fitted line is about 2.8% of ROA.

Table 4.4

Multiple Regressions

### Coefficients<sup>a</sup>

| Sig.        |
|-------------|
| 0.104       |
| 0.212       |
| 0.000       |
| 0.037       |
| 0.424       |
| 9<br>6<br>4 |

a. Dependent Variable: ROA

A multiple regressions was performed to assess the leverage, size, equity capital and liquidity to predict the ROA which is presented in Table 4.4. Preliminary analyses were performed to ensure there was no violation of the assumption of normality. Based on Table 4.4, it shows that size does has a significant and positive relationship with ROA,  $\beta$ =0.038, p =0.000. The study also revealed that equity capital has a significant but negative relationship with ROA,  $\beta$ =--0.031 p=0.037. Meanwhile, leverage and liquidity has insignificant relationship with ROA. It is shows by the ( $\beta$ =-0.002, p =0.212, p>0.05) for leverage and ( $\beta$ =-0.003, p =0.424, p>0.05) for liquidity.

Since the regression coefficient of leverage and liquidity are not statistically significant and therefore their beta regression coefficients were not different from zero, a regression model can be constructed from the regression analysis are:

$$ROA = -0.188 + 0.038$$
size- 0.031equity capital

As a conclusion to this analysis, result of this study provides evidence that not all of the variables tested have significant effect on ROA. The variables of size and equity capital have significant effect on ROA. Leverage and liquidity that has been tested and the result shows that leverage and liquidity do not have a statistically significance relationship with ROA.

# 4.3 Summary of Findings

This study was made to determine the factors that affect the financial performance of the takaful industry in Malaysia. The independent variables tested were leverage, size, equity capital and liquidity. Secondary data was collected through the audited financial statements of 10 takaful operators in Malaysia. Data were entered into an Excel spreadsheet and imported into SPSS for analysis.

Data screening showed there are no outliers. Descriptive statistical analysis found that mean for ROA is 0.006. The mean for leverage is 4.586, the mean for size is 20.878, mean for equity capital is 19.001 and the mean for liquidity is 1.999. Normality test shows data for all variables were normally distributed. This is proven by the bell shape curve and the data distribution around the line of the p-p plot.

Multiple regressions analysis showed that only size and equity capital alone has a significant relationship with financial performance measured by ROA. This resulted in the regression equation as follows:

ROA = -0.038 + 0.038 size - 0.031 equity capital

The findings were summarized in the Table 4.5.

Table 4.5 Summary of Findings

| Category                 | Variables      | Findings                              |  |  |
|--------------------------|----------------|---------------------------------------|--|--|
| Dependent variable       | ROA            | NA                                    |  |  |
|                          | Leverage       | Insignificant relationship            |  |  |
|                          | Size           | Significant and positive relationship |  |  |
| Independent<br>Variables | Equity Capital | Significant but negative relationship |  |  |
| variables                | Liquidity      | Insignificant relationship            |  |  |

Table 4.5 shows the relationship between size and financial performance is significant and positive. Equity capital has a significant but negative relationship with the financial performance. The other two variables which were leverage and liquidity showed the insignificant relationship with the financial performance.

## 4.4 Conclusion

This chapter discusses the findings through analysis performed. The analysis begins with a discussion of the results of descriptive statistics and continues with normality tests performed and presented through the histogram and p-p plot. Testing the hypothesis that was developed, the multiple regression analysis was done. This analysis describes the relationship between the dependent and independent variables and the impact on financial performance. Of the four variables tested, only two, namely size and equity capital did have a significant relationship with financial performance. The subsequent chapter will discuss the whole study, conclusions, limitation and recommendation for future research.

#### **CHAPTER FIVE**

## DISCUSSION, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter will discuss, conclude and recommend based on the findings from the previous chapter. This chapter is divided into three parts, starting with a discussion, followed by conclusion and ending with a limitation and recommendations for future research.

## 5.2 Discussion

Table 5.1 shows the summary of this study. Unstable financial performance for the takaful industry in Malaysia is the gap to this study. This study involved the entire takaful operators in Malaysia that has audited financial statements for the period of five years from 2011 to 2015. In order to ensure the objectives were achieved and to test the hypothesis developed, multiple regressions analysis was used. The objective of the study and the results of the study are summarized in Table 5.1.

The study found that leverage has no significant relationship with financial performance. This is consistent with findings from Innocent et al. (2013), Amjed (2007), Hall et al. (2000) and Long et al. (1986). Thus, the first hypothesis developed ( $H_1$ ) is rejected due to insignificant relationship between leverage and financial performance, ( $\beta$ =-0.002, p=0.212).

The second hypothesis ( $H_2$ ) will be accepted due to the significant and positive relationship between size and financial performance, ( $\beta$ =0.038, p=0.00) and it is

consistent with the findings from Sambasivam et al. (2013), AlKhatib (2012), Md Saad et al. (2011), Prasetyantoko (2008), Agiomirgiannakis et al. (2006), Hardwick (1997), Scherer (1980) and Bain (1968).

The result of the analysis shows that equity capital has a significant but negative relationship with the financial performance, ( $\beta$ =-0.031, p=0.037). This finding is supported by the study from Imad et al. (2011) and Tarawneh (2006). Thus, the third hypothesis ( $H_3$ ) is accepted.

Liquidity is the ability of the firm to meet its short term obligations. The multiple regressions analysis gave the result that showed the relationship between liquidity and financial performance is insignificant, ( $\beta$ =-0.003, p=0.424). It is consistent with the findings from Akter et al. (2014) and Ahmed et al. (2011). Therefore the forth hypothesis (H<sub>4</sub>) is rejected as shown in the Table 5.1. Based on the explanation above, all the research question and research objectives have been achieved.

Table 5.1
Summary of the Study

| <b>Problem Statement</b>                                       | Research                     | Research Objectives                          | Hypotheses                                     | Findings  | Comments                                     |  |
|--|------------------------------|--|--|---|--|--|
| A financial performance  | Questions  Does leverage,    | To determine the                             | a) There is a significant                      | Reject H <sub>1</sub> due to                            | There is no relationship                     |  |
| indicator is something that is                                 | size, equity                 | relationship between                         | relationship between                           | insignificance relationship                             | between leverage                             |  |
| very important in a business entity. It is an indicator to the | capital and liquidity has an | leverage, size, equity capital and liquidity | leverage and financial performance.            | between leverage and financial performance              | towards financial performance of the         |  |
| shareholders and stakeholders                                  | influence on the             | to the financial                             | performance.                                   | $(\beta=-0.002, p=0.212).$                              | takaful Industry in                          |  |
| of the money they invested.                                    | financial                    | performance.                                 |  |   | Malaysia.                                    |  |
| From statistics issued by BNM, the financial                   | performance?                 |  |  | A II 1  | Ti   |  |
| BNM, the financial performance of the takaful                  |                              |  | a) There is a significant relationship between | Accept H <sub>2</sub> due to significance finding based | There is a relationship between size towards |  |
| industry is not consistent /                                   |                              |  | size and financial                             | on the analysis conducted                               | financial performance of                     |  |
| stable and always shows the                                    |                              |  | performance.                                   | $(\beta=0.038, p=0.00).$                                | the takaful Industry in                      |  |
| decreasing. Thus, this study is to determine whether leverage, |                              |  |  |   | Malaysia.                                    |  |
| size, equity capital and                                       |                              | Unit   | c) There is a significant                      | Accept H <sub>3</sub> due to                            | There is a relationship                      |  |
| liquidity has an influence on                                  |                              | BUDI BASE                                    | relationship between                           | significance finding based                              | between equity capital                       |  |
| the financial performance of<br>the takaful operator in        |                              |  | equity capital and financial performance.      | on the analysis conducted $(\beta=-0.031, p=0.037)$ .   | towards financial performance of the         |  |
| Malaysia.  |                              |  | imanetai performance.                          | (b0.031, p-0.037).                                      | takaful Industry in                          |  |
| •  |                              |  |  |   | Malaysia.                                    |  |
|  |                              |  | d) There is a significant                      | Reject H <sub>4</sub> due to                            | There is no relationship                     |  |
|  |                              |  | relationship between                           | insignificance relationship                             | between liquidity                            |  |
|  |                              |  | liquidity and financial                        | between liquidity and                                   | towards financial                            |  |
|  |                              |  | performance.                                   | financial performance $(\beta=-0.003, p=0.424)$ .       | performance of the Takaful Industry in       |  |
|  |                              |  |  | (b0.003, p-0.424).                                      | Malaysia.                                    |  |
|  |                              |  |  |   | -  |  |

## 5.3 Conclusion

The study concluded that the financial performance of the takaful operator in Malaysia is influenced by the size and equity capital. Size has a positive relationship with financial performance and equity capital has a negative correlation with financial performance. Two other variables tested were leverage and liquidity showed no significant correlation with financial performance.

Leverage is the degree to which businesses uses debt in obtaining capital or assets of the company. Companies with high leverage will face the risk of bankruptcy if the debt is not managed properly. In this case, the takaful operator did not choose debt in optimizing their capital structure that leads to the insignificant relationship of leverage and financial performance.

Size has a significant and positive relationship with financial performance. Size was measured by the natural log of total assets. It shows that large companies can contribute to higher profits and thus increase the value of the firm. Al Majali et al. (2012) said that large size company can enjoy the economy of scale because they can operate efficiently through maximize the profit and minimize the cost. This will support the Pecking Order Theory.

Equity capital had a significant but negative relationship with financial performance. Equity capital is the factor that contributed to the company's profits. Equity capital as measured by the natural log of the total equity shows the capital of the takaful business is contributed by reserved, retained earnings and contributions from

shareholders.

Liquidity also has no statistically significant relationship with financial performance. Liquidity is the company's ability level in managing their short-term obligations. This means that the liquidity is not a factor affecting the profitability of a takaful operator. This factor is due to the amount of reserve that was earned by the takaful operator. The amount of this reserve also caused the takaful operator less borrowing in obtaining capital or assets of the company and catered to pay all the claims made in the short term.

Furthermore, this study is going to help the investor, customer and government in making the decision relating to the takaful industry. Investors are concerned about profits. The results of this study can assist potential investors to make the right investment decisions in order to minimize risks and maximize profit. From this study, investors should choose takaful operator that has a large asset value and size, as measured by the natural log of total assets is directly proportional to its financial performance.

On behalf of customers, they are very concerned about takaful policy taken. Thus the stability of the takaful operator is important. Customers will choose the takaful operator that can make sure they will get proper compensation if anything happened to them. Therefore, through this study, customers will definitely go for the takaful operator with higher assets.

In addition, this study is made up of 10 Takaful operators which have a gain and a loss before tax. From the study data found that most of the takaful operators that get profit are the company that has three funds, namely the general takaful funds, family takaful funds and shareholders' funds. While a company with two funds which is family takaful fund and shareholders fund is getting a loss. This means that size and equity capital is vital in determining the profitability of the business. This can help the government, through Bank Negara Malaysia in creating policies that can improve the financial performance of the takaful operator in Malaysia and contribute to the national income.

#### 5.4 Limitation and Recommendations for Future Research

This study was to determine the relationship between leverage, size, equity capital and liquidity to the financial performance of the takaful industry in Malaysia. The study only involved four factors. Thus, future research can be done by adding other variables to find out whether there are other factors that also affect the financial performance of the takaful industry in Malaysia.

Based on the findings and conclusions made above, it was found that size and equity capital are the factors that contributes to the profitability or financial performance of the company and thus maximize shareholders wealth. The size and profitability of the company has a parallel relationship in which when the size of the company increases, profit would also increase. Size in this study was measured through the natural log of total assets. Total assets were included current assets and fixed assets. This means takaful operator that has a big amount of total assets can increase profits.

Large sized companies can enjoy economies of scale and become more efficient. However, takaful operators also need to ensure that the amount of assets required by the company is at a sufficient level as cash surplus of current assets can lead companies to invest in the wrong place.

Equity capital is also a factor that contributes to the profitability or financial performance. However, the relationship is negative. This means that companies have to ensure the amount of equity capital is at an optimal level and not excessive because the results showed the higher equity capital could reduce the company's financial performance. The efficiency in managing an assets and equity capital will lead the takaful operator to increase the financial performance and give a direct impact on the company's reputation and also can boost confidence among potential investors and customers.

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