CHAPTER 1

INTRODUCTION

1.1 Research Background

Several decades after Islamic financial sector gained its presence in international discourses, the Islamic financial system is now regarded as less common to the western society. Currently, this system has been in place for over 30 years in Malaysia since the first *sukuk* issuance in the country as an Islamic bond in 1990. While in Dubai, United Arab Emirates, the system had been established for over 40 years since the first *sukuk* issuance in 1975, when the country set up the world's first modern Islamic Bank. Nowadays, *sukuk* financing is fast increasing as there are substantial application from many countries, not only from Islamic countries but non-Islamic countries as well. Countries in the North Africa, Middle East and Southeast Asia are found to be participating in issuing *sukuk* as medium of financing in getting international funds. However, the volume of Islamic financing is still small compared to non-Islamic financing (Hassan & Dridi, 2010).

Following the development in the Islamic financial system, the concept was brought up into new chapter since last financial crisis of 2008. Many previous researchers claimed that Islamic financing could substitute non-Islamic financing (conventional) as it is considered to prevent the recurrence of financial crisis or decrease the effect (Adel, 2010). Over the past ten years, it has been confirmed that a huge number of financial crises decreased the financial asset assessments unexpectedly. Many of these crises had extensive effects to other sectors, such as the Euro debt crisis and the Subprime mortgage crisis (Gorton & Metrick, 2012).

As for the consequences, many property firms had difficulty to save their firms during the US Subprime mortgage crisis which lead to unemployment issues. According to Hassan and Dridi (2010), the Islamic law (or also known as *Shariah* law) can prevent the financial crisis. Another author, Adel (2010) stated that 'excess and unprudent loans by the bank in a long period' provoke many of the financial crises. The author also opined that the concept of risk sharing in the Islamic financial system would adjust crisis effect to the investors (Adel, 2010).

In addition, financial markets are known to be important in contemporary economies (Mirzaei, Ramakrishnan & Bekri, 2016). This is because it plays a mediator's role between lenders and borrowers. Thus, the *sukuk* market may play an important role in economic development and support the country's gross domestic product (GDP). This can be achieved by mobilization of savings and then channelling these savings into investment based on Islamic law (Zakaria, Md Isa & Abidin, 2012). Several businesses and policy makers have seen the *sukuk* market as a long-term financing resource. Since they are mechanism of funding for long-term as well as the diversification of their investments, they can fund potential projects in the industry of infrastructure and agriculture (Gorton & Metrick, 2012).

In so doing, many countries are trying to create a long-term financing resource. In the study of Kusuma and Silva (2014), they noted that *sukuk* is the most relevant way to help the states to expand their capital for investment financing and strengthening growth. Thomas (2007) claimed that there is a huge potential for *sukuk* which growth largely depends on the Gulf Cooperation Council (GCC) which has a strong economic base in Asia (Arafat Mansoor, Zairy Zainol & Ahmad Khilmy, 2018). *Sukuk* as an important participant in the Islamic financial markets operates in an external business environment which is dependent on a number of factors related to the society that forms and determines their activities. The external business environment consists of political, environmental, social, macroeconomic, legal and technological factors that influence and create financial markets as well as institutional activities. The *sukuk* issuance is impacted by external business environments that determine the external impact on the company's financial strategy, including debt (Arafat Mansoor et al., 2018).

In the meantime, there are several types of research that have been carried out on the process of capital market development including both equity and debt markets (Salawu & Agboola, 2008; Mohamad et al., 2011; Mu et al., 2013). As such, the development of stock and bond markets is a major theoretical and empirical study subject in developed countries and developing countries from different perspectives (Ahmad & Radzi, 2011), on one hand. On the other hand, the growing interest in *sukuk* market around the world has opened a new research on *sukuk* development in the aspect of factors influencing it as well as defaulted firm (Mohammed Sawkat, Md Hamid & Sarkar Humayu, 2018). However, there are very restricted numbers of literature focusing on the *sukuk* default firm. Thus, there is a dire need for a study on *sukuk* defaulted firms to be conducted.

1.2 Problem Statement

The *sukuk,* which complies with Islamic *Shariah* laws (Wilson, 2008), is an interesting investment instrument for Islamic insurance firm (Takaful), Islamic banks, and finance based-*Shariah* which is contrary with non-Islamic finance that involves interest payment or *riba*. *Sukuk* enhances the constancy of the financial institutions by giving them liquidity, enhanced briefcase, and risk management tools. In addition, *sukuk* becomes in high demand due to the increase in high net worth of Muslims all over the world who want to hold their assets while complying with the Islamic law (Zakaria et al. 2012). Therefore, based on the literature, *sukuk* is an instrument that is almost immune to default (Ahmad & Radzi, 2011; Saad et al., 2016).

However after global crisis in 2007-2008, some major *sukuk* issuance countries like Malaysia, Saudi Arabia, Qatar, United States of America (US) as well as United Arab Emirates (UAE) have experienced default and near default. This made the issuance of *sukuk* default as highly motivating to be explored and discussed. Interestingly, the issue of *sukuk* default was also highlighted by Harvey and Cosgrave (2012). According to the authors, many investors who bought *sukuk* prior to year 2008 were convinced that *sukuk* was a product which was almost immune from default. The opinion was also supported by Ardiansyah and Qoyum (2013), who stated that *sukuk* was seen as an Islamic instrument that was asset-based and was not precise to be default problem. *Sukuk* default is a term used when *sukuk* issuer fails to comply with the obligations. From previous researches, it is shown that the study on *sukuk* default is relatively still untouched, hence this situation clearly suggests the need for new studies.

In recent years, some of the large *sukuk* have raised several questions about the basic structure and the *sukuk* viability as a preferred financing facility (Alam et al., 2018). One riveting impression about *sukuk* is that this instrument is a share of profit and loss, so no default arises in what is intended as an instrument (limited liability) alike equity. In addition, *sukuk* is made public as a security which is supported by real assets. In such cases, investors only need to be protected from capital loss risk, risks arising from volatility in the market basic asset value, and periodically return (rental) generated by these assets. But there is no default of the total *sukuk*, as the *sukuk* holder is deemed to have taken action on the *sukuk* asset, making it the authorised holder of the asset. The *sukuk*, which is advertised by religious impressions, is considered to be in a more transparent process. However, the default also occurs, and not all have been resolved in line with the expectations raised by this new capital market instrument (El Mosaid & Boutti, 2014).

A series of high-profile *sukuk* defaults occured in the Gulf company countries, such as Investment Dar *Sukuk* (Kuwait) in 2009, Dubai World Nakheel *Sukuk* (UAE), Saad Group Golden Belt *Sukuk* (Saudi Arabia) and East Cameron Gas Company *Sukuk* (US) shocked the market's confidence in the global Islamic market. The financial industry has sparked debates about investor protection and rights. Although Islamic bonds are based on physical requirements, they are claim to be safer than conventional bonds. *Sukuk* are assets based on transactions but due to near default events in 2009, *sukuk* were then considered have lost the credibility of feasibility, and feasibility of Islamic long-term project financing tool. In Malaysia, despite being a leader in the Islamic bond market, Malaysia has also recorded cases of default of Islamic bonds such as in the case of Johor Corporation, Ingress Sukuk Berhad, Tracoma Holdings Berhad and Nam Fatt Corporation Berhad. Although the issue of Malaysia's *sukuk* default has not yet been widely discussed, it has aroused people's attention in the aspect of protection of the investors and the survival of the Malaysian capital market in the future.

When practitioners and academicians reviewed the default of *sukuk*, concerns have been raised about the reliability of *sukuk*. *Sukuk* as Islamic bonds may not be safer than traditional bonds in terms of investor protection and handling of breach of contract. It can also damage reputation of Malaysian capital market since Malaysia was recognized as the centre of Islamic capital global market. Unlike the high-profile default cases in the Middle East, Malaysia's *sukuk* default has been reduced by criticism and scrutiny from global industry participants.

Malaysia had also recorded several cases of sukuk defaults such as of Johor Corporation, Tracoma Holdings Berhad and Nam Fatt Corporation Berhad. The issue of sukuk default is very crucial since it affects the welfare of its stakeholders. Tracoma is another case of sukuk defaults in the Malaysian capital market. Tracoma's vast experience and good track record as one of the leading local manufacturers of automotive components, and its commendable financials was reflected in November 2004, when MARC assigned an initial rating of AID to the issue. In October 2006, premised on Tracoma's delay in depositing the monthly amount in the PSA required for the upcoming profit payments due in January 2007, MARC placed Tracoma's RM100 million BaIDS on a negative outlook. Due to Tracoma's tight liquidity position and limited financial flexibility, exacerbated by it's weaker than expected cash flow, a couple of downgrades had been instituted during the annual rating reviews on the BaIDS. In late January 2009, due to Tracoma's.

Data on Nam Fatt is one of an example of sukuk default is bad. Nam Fatt is a multinational group with over 1,000 personnel employed in thirty-one subsidiaries and four associated companies. This company has international presence in six countries through their worldwide offices and have gone beyond Malaysian shores, to Singapore, Brunei, Indonesia, Thailand, Vietnam, China, Japan, Turkmenistan, Sudan and the Middle East This 250 million Malaysian Ringgit sukuk used the Islamic financing principle of Murabahah, a secured financing of an asset on a deferred payment basis with a pre-agreed payment period. Rating of Nam Fatt is droped from Initial rating is A+ID/ MARC- 1_{ID} to final rating is $D_{ID.}$

Therefore, the study on what are the factors affecting the reasons for *sukuk* defaulted firms should be done. Among the researchers in *sukuk* defaults, Khnifer (2010); Abdul Majid et al., (2011), Ardiansyah and Qoyum (2013), Raja Abd Aziz (2010), Ab. Hamid et al., (2014) as well as Zaher and Wijnbergen (2013) agreed that the discussion on *sukuk* defaulted Islamic capital market firms is under-represented and not well-discoursed as compared to conventional bond default firm. Zaher and Wijnbergen (2013) raises some doubt on the possibility of default arising given that *sukuk* are structured as bona fide risk-sharing enterprises. Meanwhile, previous studies on *sukuk* defaulted firms only studied their risks, structures, role in the resources for *Shariah*-compliant firms and also on camparison with conventional bond defaulted firm (Godlewski et al., 2013; Grassa & Gazdar, 2014; Ahmad et al., 2012; Shahida & Sapiyi, 2013). Therefore, there is a huge gap in *sukuk* default studies especially in *sukuk* defaulted firms in Islamic countries, which attracts the interest and motivation of the current study. Malaysia currently is the centre for Islamic financing and ranks as the highest *sukuk* issuance countries in the world. This study can meet the gap by investigating factors affecting *sukuk* defaulted firms in Malaysia.

Initially, s*ukuk* defaulted firm was first registered as default in Malaysia in 2002 by the Johor Corporation, nearly three years after its first issuance in 1999. Since then, another 34 *sukuk* issuer firms were registered as default by Malaysian Rating Corporation Berhad (MARC) and Rating Agency Malaysia Berhad (RAM). Year 2009 was when *sukuk* default was at its peak since *sukuk* was first defaulted in 2002 in Malaysia. The following table indicates the trend. The number of default *sukuk* started to increase in 2006, and the highest number recorded was nine altogether in 2009. Therefore, these figures confirm that year 2009 is tested as the default year for the global *sukuk* market as well as in Malaysia when Malaysia as the main issuer in *sukuk* industry also experienced the highest number of s*ukuk* default in that year (Khnifer, 2010).

Based on the Islamic Finance Information Services or IFIS (2002-2004) and Bondstream (2005-2014) as shown in Table 1.1, in total there are 35 *sukuk* defaulted firms from year 2002 until 2014 in Malaysia.

Table 1.1: Numbers of *Sukuk* Default Based on Year of Default

Year of Default	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 *	2013 *	2014
No. of Default firm	1	2	1	2	4	8	3	9	3	1	0	0	1

Note: Year of default started from 2002 until 2014, with 35 *sukuk* firms defaulted.
* No default in 2013 and 2014

The table shows that in 2003, two *sukuk* were defaulted. In 2004, one *sukuk* was defaulted and another two *sukuk* were defaulted in 2005. The number started to increase in 2006 when four *sukuk* were defaulted. Nine firms were recorded as the highest number of *sukuk* default in 2009. While from 2007 to 2009, almost 57.7 per cent (20 over 35 firms) of the *sukuk* defaulted firms were subscribed in 2007-2009. The trend also indicates that the numbers of defaulted *sukuk* firms in 2007-2009 were related to the global financial crisis. These numbers of defaulted *sukuk* firms were reduced to one respectively in 2011 and 2014. However, from 2012 to 2013, there was no *sukuk* reported as being default. Until 2021, none of the *sukuk* firms are registered as default by respective rating agencies in Malaysia.

Possible reasons for sukuk default apart from global financial crisis (2007-2009) driven by the market and credit risks (Vogel and Hayes, 1998; Tariq and Dar, 2007).Underlying reason that lead to sukuk default during financial crisis was caused mainly due to the deteriorating credit positions of the issuers or companies' failure. Furthermore, even though bond and sukuk have some similarities, there are some fundamental differences that exist between the two instruments which lie mainly in the very underlying nature or purpose of funding as well as the way they are structured.

The global financial crisis in 2007-2008 also revealed that liquidity risk plays an impact to world financial systems. The current literatures (Grunewald, 2009; Khnifer, 2010; Gefang et al., 2011; Castagna & Fede, 2013) stated that liquidity risk (conventional financial system) and *sukuk* default (Islamic financial system) which occurred in the same year of 2009 were regarded as two concurrent outbreaks that impacted both world financial systems. Liquidity risk has since becomes one of the prominent risks in global financial systems that needs to be observed by various parties.

Sukuk firms default are due to many factors, including liquidity risk, solvency ratio and corporate governance (Castagna & Fede, 2013; Enekwe et al., 2014; Roshima et al., 2014). Failure to address the issue may affect cash flow of banking and financial institutions. The previous default cases involved the well-known *sukuk* issuance firms in the said countries. Among the firms were the Kuwaiti Investment Dar *Sukuk* from Kuwait, Saad Group Golden Belt *Sukuk* from Saudi Arabia, the East Cameron Gas Company from the US, Ingress Berhad, Tracoma Holdings Berhad and Oilcorp Berhad firms from Malaysia (Khnifer, 2010; Abdul Majid et al., 2013). The abovementioned firms are the major players in industries and sectors in construction, investment, oil and gas as well as other economic activities not only in their countries but also around the world. Their lucrative investments on development and constructions for mega infrastructure projects involve large investment and financing, which require the issuance of *sukuk* that is worth billions of dollar and ringgit.

Following that latest development on *sukuk* default events, after 2009, *sukuk* default issues have gained distinct attention from many parties of the *sukuk* industry (Khnifer, 2010; Harvey & Cosgrave, 2012). The said parties are those involved in the policy makings, regulatory bodies and researchers in various Islamic financial institutions world wide. Among the *sukuk* investors which received direct effect from the crisis are Saad Group Golden Belt *Sukuk*, a Saudi Arabian firm, the Kuwaiti Investment Dar *Sukuk*, a Kuwaiti firm, the East Cameron Gas Company, a US firm and other affected firms.

From the default and near-default cases mentioned earlier, Khnifer (2010) considered the year 2009 as the 'default year' for the global *sukuk* market, with 15 default cases which later rose to at least 34 default cases in 2011 (Bondstream, 2005-2011). Meanwhile, Harvey and Cosgrave (2012) stated that prior to 2008, *sukuk* investors were convinced that *sukuk* was a product that was almost immune to being defaulted. Further, the researchers pointed out that much have been written in support of this idea but this has proven not to be the case as many abovementioned high-profile examples have shown. Other than that, there is a misbelief that *sukuk* is default-free compared to bonds as *sukuk* is governed by concept and principles in *Shariah* (Zaheer & Wijnbergen, 2013).

A well-known investor service in market share, Moody's Investors Service (2014) found in their study that the Gulf Cooperation Council (GCC) and Malaysia account for 90 per cent of the USD274 billion worth of outstanding *sukuk*, making it a key driver behind the Malaysian large market share where the country has been in deep *sukuk* investor base. The data indicate that Malaysia investment in the global *suku*k is 57 per cent, followed by the United Arab Emirates (12 per cent), Saudi Arabia (11 per cent), Qatar (6 per cent), Indonesia (4 per cent), Turkey, Pakistan and Bahrain (2 per cent) respectively, while other countries are at 4 per cent. Also, Malaysia owns more than 50 per cent *sukuk* issuers in sovereign *sukuk*. Available data indicate that Malaysia is the largest *sukuk* issuer (59 per cent), followed by Indonesia (13 per cent), Qatar (10 per cent), Turkey (6 per cent), United Arab Emirates (5 per cent), Pakistan (3 per cent), and other countries (4 per cent). Currently, *sukuk* is ranked as top three in the investment markets in Malaysia, the United Arab Emirates and Saudi Arabia.

As reported by the Securities Commission (SC), between the year 2000 to 2008, about RM336 millions of the value of firm debt securities and Islamic bonds were escalated by the private sector to finance, including long-term infrastructure projects SC in AFIS, (2014). Significant improvement in publication statistics shows that the evolution of *sukuk* and the development of their transactions are very crucial to the Malaysian capital market in the move of the adequacy capital (Mohamad & Mohd Saad, 2012). Investments in the Malaysian Islamic finance increase due to high demand factor from both listed and unlisted firms. In the Malaysian context which majority is Muslim, there exists a growing awareness and understanding of the concept of Islamic banking operations among Muslims, as well as non-Muslims. The introduction of Islamic banking system has been motivated by the demands and needs of Muslim clients who are looking for alternatives in obtaining financing and investment products which comply with their religious beliefs (Yahya et al., 2012).

According to Zaheer and Wijnbergen (2013), despite all the success stories recorded in *sukuk,* the major defaults in *sukuk* occurred as a result of the world wide credit crisis which engulfed the world since 2007. Another study on the profile of *sukuk* defaulters showed that *sukuk* defaulted firms occured mostly in year 2009 (Zakaria et al., 2012; Ardiansyah & Qoyum, 2013; Kamarudin et al., 2014). Malaysia recorded the highest number of *sukuk* default throughout the year 2002 to 2014. During this period, there were around 35 cases of corporate *sukuk* default by 35 issuers, which was worth more than eight billion Malaysian Ringgit (Sugianto, 2018). This has made Malaysia as the main contributor in the issuance of defaulted *sukuk* among other countries of the world (Khnifer, 2010; Abdul Majid et al., 2011, Ardiansyah & Qoyum, 2013). As a result, the increasing number of default *sukuk* cases may affect the reputation of the country as the hub for global Islamic finance (Abdul Majid et al., 2011), particularly with the involvement of large firms. The profiling of the 35 *sukuk* defaulted firms in Malaysia from 2002 until 2014 is in Appendix 1.

Liquidity risk is described by the inefficacy of selling (or buying) an asset that is timely and cost effective. The default happens when a firm's assets fall below a threshold level (Zhang, 2005). According to Genakoplis (2003), liquidity risk can contribute to many losses to market participants in a short period. It can cause credit risk cases. The liquidity risk has gained an attention after Castagna and Fede (2013) analysed how the outbreak of liquidity risk management in Italy was initiated on August 9, 2007. These authors wrote in their book that it started when the news wires reported the declaration by some of the BNP funds Paribas to the liberation of redeeming, and having difficulty in assessing their assets because of the liquidity in the Subprime mortgage market. The situation led to Central Banks injecting large amount of money into the system to settle the daily payment obligations. This major outbreak manifested the major loophole in the financial industry that calls for urgent refinery from every party involved. Since then, liquidity risk has captured the interest of many people, such as the global experts, academics and practitioners. The book was the first published on liquidity risk in finance.

In addition, a study on the Profiling of Liquidity Risk on *Sukuk* Default Firms in Malaysia[1] by Ahmad et al. (2013) found that, there is a tendency that the number of bankruptcies among privately-owned *sukuk* issuance firms in Malaysia will increase and that the trend will affect the banking and financial institutions in Malaysia, particularly when the years of default correlate with the world financial crisis. Factors contributing to this trend are; (i) nature of business, because available data showed that manufacturing firms were affected less than investment firms, and (ii) liquidity risk.

As mentioned above, *sukuk* is being assumed default-free compared to ordinary bond as *sukuk* is regulated by Islamic fundamentals or concepts (Zulkhibri, 2015). However, similar to conventional financial tool, *sukuk* is also susceptible to default risk, credit risk, market risk

[1]The paper has been presented at the 5th (iECONS) 2013, 4-5 September 2013 at Berjaya Times Square, Kuala Lumpur.

and liquidity risk (Abdul Majid et al., 2011). Therefore, the *sukuk* market players, such as the original owner, service providers, publishers, special purpose entities and shareholders are found to divert risks, such as risks associated with repurchase (binding promises), default non-defaults, liquidity, bankruptcy as well as solvency (Zaheer & Wijnbergen, 2013). Previous studies have shown that liquidity risk (Zhang, 2005; Gefang et al., 2011; Castagna & Fede, 2013) and *sukuk* default (Khnifer, 2010) has become prominent issue after the 2007-2008 global financial crisis. Therefore, this study needs to be done to see the relationship between liquidity risk and *sukuk* default firms.

Sukuk is one of the Islamic financing tools used to propel the success of Islamic capital market. In staggering a series of *sukuk*'s high profile at GCCs, such as the investment of Dar Saad Group and the firm in Dubai Nakheel, 2009, *sukuk* is said to have lost its credibility as the qualifying Islamic Long Term project financing instrument (King of tea) which is eligible and advancedly competent (Maimunah, 2010). Meanwhile, Enekwe et al., (2014) highlighted that the near-default case occurred in 2009 after 2007-2008 financial crisis impacted the default firm. According to that study, solvency ratio is the term that refers to an enterprise's state of financial healthency. This ratio indicates the degree of financial leverage being used by the business which includes both short-term and long-term debt. A rising debt to equity ratio implies higher interest expenses, and beyond a certain point, it may affect a company's credit rating, making it more expensive to raise more debt. Therefore, solvency ratio with debt to equity ratio as one unit of measurements for solvency ratio is involved as variable in this study.

Many prior studies determined significant relationship between corporate governance and non-default firm performance (Roshima et al., 2014; Hassan & Halbouni, 2013; Gardner et al., 2013; Latif et al., 2013; Khan, 2013; Abdolmohammadi & Lenz, 2012; Mollah et al., 2012; Lin & Hwang, 2010; Haniffa & Hudaib, 2006). Latif et al., (2013) stated that corporate governance has a significant effect to the performance of firm in no default cases. In addition, Rashid and Lodh (2011) revealed that the application of good corporate performance practices is a decisive performance-efficient firm.

A group of researchers, Gardner et al., (2013) found that there is a positive relationship between corporate governance (the existence of directors, members of the audit and independent committee) and the company's performance as evidenced from 82 companies listed on the ACE market of Malaysia. The finding of Mollah et al., (2012) stated that the existence of the audit committee and the strong performance of directors are positive in the non-default field. Haniffa and Hudaib (2006) as well as Mollah et al., (2012) indicated that predominance board (members of the board) has no relationship with corporate performance (Lin & Hwang, 2010). The audit committee and the existing independent directors are required to reduce the hazard of material misstatement or elimination as well as the level of creative accounting and income management. Al-Ajmi (2009) conducted study on three hundred credit and financial analysts in which he showed that the existence of audit committees and audit firms give the best quality that lead to better corporate performance.

Further elaboration on corporate governance is the Malaysian Code on Corporate Governance (MCCG). MCCG emphasizes on the need for the board to guarantee accountability and transparency of management which includes board leadership. Good corporate governance comprises independent director and audit committee (Abdifatah & Sanni, 2015). MCCG recommended at least half of the board members to comprise independent directors. For large companies, the boards are to comprise majority of independent directors. Meanwhile, audit committee plays a key role in predicting the financial performance of the company which supports the company in terms of risk management, long-term strategy development, and compensation planning (Singh, 2012). Thus, this study takes into consideration audit committee and independent director as unit of measurements for corporate governance variable.

1.3 Research Questions

The current research questions are formulated according to the issues discussed earlier, that are associated with the factors influencing the *sukuk* default and liquidity risk; solvency ratio; and corporate governance. The study addresses the following research questions:

i. Is there any impact of liquidity risk to the defaulted *sukuk* issuing firms under study?
ii. Is there any impact of solvency ratio to the defaulted *sukuk* issuing firms under study?
iii. Is there any impact of corporate governance to the defaulted *sukuk* issuing firms under study? And
iv. What is the proposed model of *sukuk* defaulted firms based on liquidity risk, solvency ratio and corporate governance?

1.4 Research Objectives

The present research objectives are constructed according to the issues raised earlier, which are associated with the indicators that contributed to the defaulted *sukuk* firms. The following objectives being addressed in this research are:

i. To determine the profile of defaulted *sukuk*;

ii. To investigate impact of liquidity risk, solvency ratio and corporate governance to the defaulted *sukuk*; and

iii. To suggest appropriate policy to prevent *sukuk* default.

1.5 Research Hypotheses

The research hypotheses for the independent variables are as follows:

H1: Liquidity risk influences the predictability of *sukuk* default

H1a: Quick ratio influences the predictability of *sukuk* default

H1b: Cash to asset ratio influences the predictability of *sukuk* default

H2: Solvency ratio influences the predictability of *sukuk* default

H2a: Debt to equity ratio influences the predictability of *sukuk* default

H2b: Interest coverage ratio influences the predictability of *sukuk* default

H3: Corporate governance influences the predictability of *sukuk* default

H3a: Existance of audit comittee influences the predictability of *sukuk* default

H3b: Independent directors influence the predictability of *sukuk* default

1.6 Scope of the Research

Research scope is to analyse the liquidity risk based on liquidity ratios, solvency ratio and corporate governance indicators with regards to the defaulted and non-defaulted *sukuk* issuer firms in Malaysia. From the 60 firms studied in this research, 30 firms are registered as default by RAM and MARC from 2006 to 2011. Another 30 firms are non-defaulted *sukuk* firms which fell within the same period of time. Furthermore, this study employs MCCG 2000 and 2007 (revised) as well as the internal Guidelines on the Governance of *Shariah*

Committee for the Islamic Financial Institutions issued in 2004 as the measuring parameters. The revised MCCG 2012 is excluded in this study as the firms under study were from 2006 to 2011.

1.7 Significance of the Research

From 2002 to 2014 in Malaysia, there were 35 *sukuk* defaulted firms being recorded. Studies showed that the firms' collective amount of investment amounted to more than USD2,512 million, which is more than RM8,000[2] million contribution to more than 80 per cent of total default events in the global *sukuk* market. This is quite a large amount of investment which could affect the economy of Malaysia, particularly when it occurs at the time of the economic crisis. Based on this, *sukuk* default firms, liquidity risk and corporate governance issues have become a major concern among the industry players in the Islamic and conventional capital market since the series of financial crises that struck the global financial market.

There are many areas in *sukuk* default firms that require further research especially *sukuk* defaulted firms in the current and future *sukuk* issuance firms. Therefore, it is timely for researchers to study liquidity risk and solvency ratio indicators as well as corporate governance characteristics in the case of *sukuk* default firm.

Through this research, it is hoped that a proposed statistical prediction model of *sukuk* default firms can be utilised with regards to liquidity risk, solvency ratio and corporate governance by policy makers in these fields in preventing future default cases. On the same ground, this study hopes to help enhance the implementation of Islamic capital markets in relation to liquidity risk management, financial crisis controlling mechanisms and corporate

[2]USD1=MYR3.18

governance monitoring mechanisms. Hence, it also helps to continuously placing Malaysia as the hub for promoting *sukuk* in capital market.

1.8 Structure of the Research

This thesis consists of six main chapters. Chapter 1 is the introductory chapter, which concentrates on the background of study, problem statement, research questions, research objectives, research hypotheses, scope of the research, significance of the research, structure of the research, limitations of the research, and summary. Chapter 2 of this study discusses the *sukuk* default profiles in Malaysia which covers the discussion on *sukuk*, default events, *sukuk* default firms, the profiling of *sukuk* default firms in Malaysia, types of industries and sectors, and summary. The *sukuk* default firms profiles is necessary in this study in order to understand the nature of *sukuk* default firms events and type of industries and sectors associated with *sukuk* defaulted firms. This is assumed to help develop the profile of the *sukuk* defaulted firms in Malaysia from 2002 to 2014 and therefore beneficial for future references.

Chapter 3 presents and argues a review of previous literature on *sukuk* default, liquidity risk, solvency ratio and corporate governance in general that are specific to the variables involved in the research (predictability of *sukuk* default as the dependent variable, liquidity risk, solvency ratio and corporate governance as the independent variables). This chapter also develops hypotheses on the relationship between liquidity risk, solvency ratio and corporate governance as well as predictability of *sukuk* default firms. The underpinning theories and model which are Agency Theory, Stakeholders Theory and Failure Prediction Model are also discussed, which allow the identification of a suitable research framework to be employed in the research. In addition, previous researches from 2002 to 2015 are presented in a table to see the methods used and indicators that contributed to the study of *sukuk* defaulted firms.

Chapter 4 identifies and focuses on this study research methodology. This chapter describes the study's research design that guides the appropriate methodology. It also identifies and describes the process for data collection, measurements and data analysis procedure. Determined by the lack of previous research on Malaysian *sukuk* defaulted firms, this research design and methodology are based on the literature review which is mostly derived from conventional bond.

Chapter 5 significantly presents the data and the results analyses on indicators that contributed to liquidity risk, solvency ratio and corporate governance characteristics to *sukuk* defaulted firms. In this study, two methods which are SPSS version 23 and WEKA are used to analyse data which are the secondary data gathered from firms' annual reports. In the first method, this study makes use of SPSS to run logistic regression and descriptive analysis. The second method, WEKA is used to run both logistic regression and decision tree in analysing the predictive variables. Predictive variables are used to measure the relationship between liquidity risk, solvency ratio and corporate governance characteristics. The logistic regression method is employed in this study in order to allow qualitative variables (defaulted) as the dependent variables so as to form a defaulted model. Additionally, the present study also employs the use of descriptive analysis. Conversely, this chapter covers the findings of each hypothesis. Also, the research hypotheses of this study are refuted or confirmed as each variable resulted from the regression model are discussed as well as analysed.

Finally, Chapter 6 concludes and presents some recommendations based on the result of the study. This research is conducted to eventually propose a model for *sukuk* default firms on liquidity risk, solvency ratio and corporate governance; and suggestions for future research. The utilisation of the proposed model is aimed to prevent default events from reoccurring.

1.9 Limitations of the Research

Several limitations are envisaged to be encountered in this study. As such, this research requires many references to help the calculation of liquidity risk, solvency ratio and corporate governance measurement in the *sukuk* default issuer firms. Since this research focuses on the defaulted and non-defaulted *sukuk* issuance in corporate firms, the set of data are duly collected from real data, obtained from the firms' annual reports, interim reports, prospectus as well as RAM and MARC rating agencies for defaulted firms, and from Bloomberg for non-defaulted firms. Due to unavailability and insufficient data as well as some missing elements in the annual reports, the analyses are conducted on 30 firms instead of the 35 firms that were registered as default and 30 firms registered as non-defaulted firms. From this research, it is discovered that materials such as corporate finance books have not yet been published for *sukuk*. In fact, data on *sukuk* non-defaulted firms are only accessible via Bloomberg.

1.10 Summary

Overview of this study is presented in Chapter 3. It covers the research background with lengthy elaboration on factors that trigger *sukuk* default, problem statement that explains *sukuk* default issues related to liquidity risk, solvency ratio and corporate governance, research objectives to be achieved at the end of this study, research questions that need to be answered to fulfill the research objectives, scope of the research, significance and structures of the research, and finally concludes by elaborating the limitations of the research.