

CHAPTER 3

LITERATURE REVIEW

3.1 Introduction

Sukuk is a new and broad subject for study, and can be viewed from all perspectives, which includes *sukuk* default firms. This subject gets special interest from many parties, particularly researchers, regulators and policy makers in Islamic finance. Thus, this chapter reviews the academic literature relating to related theories, *sukuk* and three main indicators influencing *sukuk* default firms which are; liquidity risk, solvency ratio and corporate governance indicators. This chapter is organised as follows. Section 3.2 explains Islamic financial system. Section 3.3 briefly elaborates the Islamic economic system. Section 3.4 discusses on financial crisis and *sukuk* default while Section 3.5 discusses on the theories or model related with predictability of *sukuk* default firm which consist of Failure Prediction Model, the Agency Theory and the Stakeholder Theory. Then, Section 3.6 elaborates the factors that contribute to the predictability of *sukuk* default which includes liquidity risk, solvency ratio and corporate governance. Discussion and elaboration on theories, model and factors underlying *sukuk* defaulted firms lead to formulation of the Research Framework of this study as mentioned in Section 3.7. Section 3.8 discusses on research gap, Section 3.9 elaborates on *Shariah* Screening Methodology while the summary of the chapter is made in Section 3.10.

3.2 Islamic Financial System

In this study, it is crucial to highlight on the Islamic financial system as *sukuk* represent Islamic financial system. Before further discussion on Islamic financial system,

briefly discussed on the financial system (conventional), which include different subsystems of intermediary institutions (financial institutions), markets (currency and capital markets), individuals (savings) and users (fund borrowers and investors). Obviously, the financial system acts as an intermediary between savers and users by facilitating the flow of funds from surplus to deficit. Its role as a channel to mobilize resources and provide funds for productive economic activities, the effective operation of the financial system is essential. Meanwhile, the Islamic financial system supports by the legal and commercial infrastructure, the range of participants and the diversity of tools that are key attributes for creating an enabling environment for a dynamic Islamic financial system. In contrast with the conventional financial system, the Islamic financial system has two distinctive features: (i) Banning *riba* can eliminate debt in the system; (ii) A risk-sharing model for transactions that aims to share risks and rewards with fairer reasons (Askari, Iqbal, & Mirakhor, 2015).

Meanwhile, the conventional financial system mainly focuses on the economic and financial aspects of transactions, while the foundation of the Islamic financial system does not only include ethics, wealth distribution, social and economic justice, and the role of the state. Further, the Islamic financial system encourages risk sharing, promotes entrepreneurship, discourages speculation, avoids prohibited activities, financial inclusion, and promotes economic or social development through charity. The comprehensive Islamic financial system includes Islamic banking, Islamic insurance, Islamic capital markets, regulatory and supervisory frameworks, and *Shariah* law frameworks. These are key components of Islamic financial infrastructure and can effectively promote economic growth (Iqbal, 1997).

The internal dependence of these components has created a comprehensive enabling environment for the Islamic financial system to effectively play its role as an effective channel for mobilizing resources and providing funds for productive economic activities. This

structure also enhances the flexibility and robustness of the Islamic financial system against financial shocks and contributes to the overall stability of the Islamic financial system. Most countries where Islamic finance exists, Islamic financial institutions operate in a dual financial system. Both Islamic finance and conventional financial systems operate simultaneously. Currently, only Iran and Sudan are the two countries with complete Islamic financial systems. Malaysia, Indonesia, the Gulf Cooperation Council (GCC) and other countries have also adopted dual financial systems. Therefore, the financial stability of these markets now depends on the normal operation and resilience of their domestic Islamic financial sector (Lone & Alshehri, 2015).

By adopting a four-pronged strategic approach, Malaysia has the most comprehensive and advanced Islamic financial system in the world: regulatory framework development, legal and Islamic law framework, product and market development, and enhancement of knowledge and expertise (Global Islamic Finance Report, 2016). In the early stages of development, the focus of Islamic financial policy was to further strengthen the basic foundation of the Islamic banking system to support the development of a healthy and progressive Islamic banking industry based on these four strategic approaches.

Furthermore, as outlined in the Financial Sector Master Plan (2001-2010) developed by Bank Negara Malaysia, Islamic banking is considered to be one of the main potential growth sectors, and it is set that Islamic finance will account for 20 per cent of the financial sector by 2010. The second master plan is the Financial Sector Blueprint (2011-2020). The plan is based on the results of the first master plan, but the focus is on the diversification of domestic Islamic financial industry participants, a wide range of Islamic finance products and services, innovative financial solutions to meet the increasingly complex investment needs of

increasingly affluent people (especially in Asia and the Middle East), and larger cross-border financial businesses.

3.3 Islamic Economic System

In order to have a better understanding on the underlying reasons that contribute to *sukuk* defaulted and *sukuk* defaulted firms in Malaysia from 2006-2011, it is also rationale to explore the Islamic economic system perspective in Malaysia. Malaysia is an Islamic state with the vast majority of about 61.3 per cent of the population are Bumiputera (DOS, 2016). The Islamic economic system is developing alongside the conventional economic. The Islamic economic system is a accumulation of rules and standards based on the Islamic order as recognized in the Quran and Sunnah (Audretsch et al., 2007). Islamic rules in conducting business are discussed within *fiqh muamalat* (rules related to the economic transaction), which includes an explanation on the social relationship between humans and other creations (Abdullah et al., 2011). In relation with this, Imam Al Ghazali (as cited in Mohammad and Abdul Azim, 1997) outlined several manners in Islamic rules of any business dealing as follow:

- (i) Act Islamically with true intention of one's commerce such as to support themselves and one's obligations, and to get the way and strength of performing one's religious obligations, including assistance for the needy,
- (ii) Seek the fulfilment of communally or socially obligatory duties (*fard kifayah*) while doing business,
- (iii) The desire to succeed in material terms should not be forgetful of one's against success in the future,
- (iv) Not greedily transact one's business, and

- (v) Stay away not only from illegal activities (forbidden), but one's also needs to be careful over all its activities, remembering at all times that one's is responsible in the presence of Allah Al-Mighty for all of them.

3.3.1 Economic Principles Guidelines

Sukuk is *Shariah*-compliant. Therefore, *sukuk* issuer firms should imply the economic principles guidelines in their business activities. There are three key principles underlying the economic guidelines (Zakaria et al., 2013). These guidelines are used to determine the central structure of Islamic economics as well as assisting in regulating financial and business transactions. These principles are referred in this study as follows:

1. The first is the principle of *riba*. In Arabic, *al-riba* is literally referred to an addition or increase. Conversely, it is interpreted in Islam as a loan or as *usury* with the conditions that the borrower will return to the lender better or over the amount borrowed. Thus, this *riba* act is prohibited in Islam as many verses exist in different chapters of the Al-Quran that make *riba* illegal or *haram*. From this ruling of charging of interest/prohibition of *riba* there are two significant implications, (i) in the absence of interest there exist no "debt based" contracts, and (ii) without interest, focuses will be on the value of an "asset", instead of the value of "money", since money acquires its value through interest (Mohd Yahya et al., 2012).
2. The second aspect is the principle of *gharar*. There is a multiplicity of meanings associated with the Arabic word "*gharar*", such as risk, deception as well as uncertainty hazards. Unlike *riba*, *gharar* is not extensively as well as not explicitly defined. Additionally, while there is an absolute rule associated with the prohibition of *riba*, some amount of uncertainty or *gharar* is acceptable in the framework of Islam. However, there

must be total avoidance of the conditions of excessive *gharar*. This includes *qimar* or *maysir* that are known to be any games of chance or gambling.

3. The third aspect that is the principle of *zakat*. *Zakat* is one of the five keys in Islamic pillars. It could be referred to as a form of tax in Islam, thus making it an optional requirement for every Muslim to give some specified percentage of their earnings to a charitable cause, provided such wealth or income is above a defined amount as stipulated in Islam. *Zakat* payments during the Islamic period were collected by the state and the funds were used to cater for the needy and alleviated all manners of human distress, which did not exclude freeing the slaves by paying off their masters. The main objective of *zakat* is to remove a portion of the wealth of the rich, and then to distribute it evenly within the needy as well as the poor. Although, this must be dependent on the wealth or income (cash, minerals, capital invested, cattle, agricultural produce in industry, as well as business). The amount of *zakat* varies from 2.5 per cent up to 10 per cent.

3.4 Financial Crisis and Sukuk Default

Based on the result from preliminary findings on *sukuk* defaulted firms by Ahmad et al., (2013), the paper stated that the years of default correlate with the world financial crisis. Therefore, the subtopic of financial crisis is relevant to be discussed in this study. The 2007-2008 world financial crisis in Malaysia was dissimilar from the Asian financial crisis which occurred in 1998. The Asian financial crisis that started in Thailand endured the declining of Gross Domestic Product (GDP) growth. The 2007-2008 world financial crisis did not occur in Malaysia, however because of delicateness in US financial industry, it increased into a nasty world wide financial crisis which caused severe deterioration in global trade by the end of 2008. World's key economies, such as the European, US and Japanese countries, suffered

from the worst economic crisis since the Great Depression of 1930's (European Commission, 2009).

Since the circle of 2007-2008 global financial crisis fell within the time frame under study which are 2006-2011, it is crucial to discuss whether the financial crisis impacted Malaysia or not. From the economic report of Quarterly Bulletin of Bank Negara Malaysia (BNM, 2009), in the first quarter of 2008, Malaysia was not influenced by the financial downturn. The economic environment and financial worsened in the second quarter of 2008 and the first fourth month of 2009. The actual GDP increased only 0.1 per cent from year-to-year (YoY) in the fourth months of 2008 compared to a 4.7 per cent growth in the third and fourth month of the same year. Average GDP growth was 5.9 per cent within the first nine months of 2008 (BNM, 2009).

Malaysia was not exempted from external shock due to small exports (Abdul Majid, et al., (2011). Negative daze was sent to the Malaysian economy in the fourth quarter of 2008. Industrial products, exports and investment declined. Consumer attitude was also severely affected. GDP growth was crucially lower at 0.1 per cent in the fourth quarter of 2008 as compared to an average of 5.9 per cent in the prior nine months of the year. It was fortunate that the Bank Negara Malaysia (BNM) made demolition to securities relating to loans. Financial and bank institutions in Malaysia were doing better compared to the Asian financial crisis. However, the leading local economies predicted that even though Malaysia may not have witnessed deterioration compared to 1998, longer economic decline than in 1998 was expected.

Like other Asian countries, Malaysia endured from capital flights since the second fourth month of 2008 (Abdul Majid, Shahimi & Abdullah, 2011). Financial institutions and banks in the US (California, Oregon, Washington) and the West reduced their international

businesses and focused on their home markets. There was a significant decline in funds flowing into Malaysia with financial flow and net capital fell from -RM37.7 billion in 2007 to -RM118.5 billion in 2008. At the end of the 2008 season, the risk-weighted capital ratio of the banking system (RWCR) and the core capital ratio (CCR) was maintained at a high level of 13.1 per cent and 10.6 per cent. Non-performing loans (NPL) were at a healthy level. They ridged along Asian financial crisis at 18.5 per cent after that the ratio decreased to 2.6 per cent in 2008. However, given the weak enterprises environment and the intended increase in unemployment, loans that have not been paid by the banking system were expected to increase (BNM, 2008).

Malaysian GDP fell by 6.2 per cent in the first quarter of 2009 which was the first negative growth since 2001. The miserable performance in the first four months of 2009 persistent the expectation that Malaysia had faced a full-blown economic decline for the year 2009. The decline happened because of drastic decrease in the exports value in January 2009. It occurred particularly in the manufacturing area, which stated 19.1 per cent in the first four months of 2009. It was transferred to Malaysia primarily through trade channels and financial system (James et al., 2008).

The impact of the crisis towards the Malaysian banking system was moderate as domestic banks had given exposure to loan products. Domestic banks were reinforced and built an important structure for decades after Asian financial crisis (AFC). In the domestic economic activity, the overall loan application in the country showed a decending trend. It decelerated the household and business sector. However, applications from the storage, transportation, communication, insurance, financial, and business services sectors were retained. Loan approvals also declined in line with the diminish in the loan applications as a whole. From the economic scenario, the crises in financial forced the government to take

stringent approaches that forced the firms to fulfill their payment obligations from three months to one month that impacted firms' liquidity and later solvency (Khidmat & Rehman, 2014).

3.5 Theory and Model Related to Predictability of Sukuk Default Firm

The underpinning theories and model are discussed in this study. Amongst the theories and model that explained factors influencing *sukuk* default are; Failure Prediction Model, Agency Theory and Stakeholder Theory. Discussions of the theories and model mentioned are as follows.

3.5.1 Failure Prediction Model

The Failure Prediction Model was introduced by William H. Beaver (1966). He explained about the corporate failure in his paper published in 1966 and since then his paper had become the main referral for various researches in predicting default firm. The scholar defined the term 'failure' as the inability of a firm to pay its financial obligations as they mature (Beaver, 1966). The founder explained that, a firm is said to default when any of the following events have occurred: bankruptcy, default bond, or not paying for stock dividend option. The similarities between bond and *sukuk* were discussed earlier in Chapter 2. In his study, Beaver used the financial ratios which regulate from financial statement as the tool to analyse the corporate failure. Beaver also stated that 'the financial ratio' is one item of two numbers, where both numbers contain the financial statement item.

Almost 50 years later, post-millennium (Keener, 2013) suggested that with the current economic climate, predicting defaulted firm financial using financial ratios models may still be more useful than ever. The author believed that various financial ratios and bankruptcy

prediction methods have been used along the process to show the most precise prediction model.

According to Kiragu (1993) in different research, the prediction of defaulted firm employed the use of price adjusted in accounting data, through a sample comprising 10 non-failed as well as 10 failed firms, respectively. In the study, financial ratios were determined from price level, adjusted for financial statistics. As such, developed discriminant model reveals that 8 ratios indicative of high defaulted firms. Furthermore, the study also showed that Edward Altman's financial distress prediction model was found to be applicable when 8 out of 10 failed firms that were analysed indicate eighty per cent successful prediction of the model. Conversely, out of 10 non-failed firms that were analyzed, 9 of them proved that Edward Altman's financial distress prediction model was successful, thus showing a 90 per cent model validity.

Previous researches by Altman (1968) and Kimura (1980) stated that liquidity ratios possess significant influence in the prediction of default risk. In relation with this, Keige (1991) in his study on the business failure prediction where he employed discriminate analysis mentioned that the types of ratios that will best be used to discriminate between failing companies and successful ones tend to differ from place to place. For example, there is fixed charge coverage in Kenya current ratio that can be used successfully in predicting for a period up to years before it occurs. Keige (1991) concluded that ratios can be used to predict company failure. Therefore, stakeholders should pay concern to leverage and liquidity (Zeytinoglu & Akarim, 2013).

In addition, in a failed prediction model developed by Sori et al., (2001), industrial sector listed firms that discriminated among 24 non-failed as well as failed firms between the period of 1980 to 1996, where the study found the model to be correct as well as significantly

classified 89.3 and 91.1 per cent of the firms respectively. These models further predict failure up to four years before the actual event.

From the above discussion, the researchers (Keige,1991; Kiragu 1993; Sori et al., 2001; Keener, 2013; Zeytinoglu & Akarım, 2013) who had tested the model agreed that financial ratios can be used in predicting corporate failure model.

3.5.2 Agency Theory

One of the pioneers in Agency Theory are Jensen and Meckling (1976). They explained Agency Theory as: the managers of the company are ‘agents’ and the shareholders are the ‘principal’. Jensen and Meckling (1976) further offered that the firm should be thought as being a group of security holders with different interests rather than as a single agent as traditional theories had suggested. Therefore, they continue to emphasize on two conflicts; the first is between shareholders or entrepreneurs and bond holders, while the second is between shareholders and managers.

In conjunction with that, previously Berle and Means (1932) have discussed on the dispersion of shareholding which led to a separation of ownership and control causing ‘agency problem’, on one hand. Solomon (2004) on the other hand, stated that shareholders who are the owner or ‘principal’ of the company, delegate day to day decision making in the company to the directors, who are the shareholder’s ‘agents’. But there is always a problem of the system of corporate ownership, where the agents are not required to necessarily carry out a decision that has to do with the interests of the principal. The author further explained that one of the key fundamental assumptions of agency theory is that the objective of the primary and agents conflict. The primary objective for firms based on financial theory is shareholder wealth maximization, but in practice, the firm managers prefer to achieve the objectives, such

as aiming to get the highest bonuses possible. This caused the firm managers to focus on the project and firm investments that give high short-run profits instead of maximization of long term projects of shareholder's wealth investment.

The second agency problem that Jensen and Meckling (1976) emphasized is the problem of effort. This can be reflected between the context of the shareholders and bondholder-entrepreneurs' problems. For example, if the manager has a no-effort and salary utility, then they will have incentives to shirk rather than act in the interest of shareholders. It is therefore important that the manager's incentive is in line with its shareholders.

Meanwhile, Myers (1977) pointed to other significant agency problems, called the overhang, was not constructed, and stated that if a firm has a large amount of outstanding debts, then the result of any new secured project will flow to the existing bond holders. Consequently, if the company acts in the interest of the shareholders, it will not be ready to receive a safe project even if they have a positive net value.

The prominent scholars in Agency Theory, Berle and Means (1932), Jensen and Meckling (1976), Myers (1977) and Solomon (2004) argued that if shareholders are utility maximizers, the agency problem becomes more obvious. It is due to the agency may not always act in the best interests of the principal. The degree of consistency between the interests and the interests of the company's agents who control the company's main decisions is important. If ignored, each type of stakeholder will pursue its own interests, which may harm the interests of the other party. Agency Theory essentially recognizes that in agency relations, there must be agency conflicts. Therefore, since the principal and the agent often have different goals and different inclination to risk, the welfare of the principal may not be maximized.

3.5.3 Stakeholder Theory

After conducting the deductive approach in literature review, Stakeholder Theory is applied in this study. Stakeholder Theory argues that every stakeholder participating in the activities of a firm should focus on obtaining interest. The priority of the interests of all stakeholders is not self-evident. Stakeholder Theory is view to understand the corporate governance perspective. Freeman (1984) mentioned that this theory was applicable in the management discipline, and was used in incorporating firms' accountability to various stakeholders, such as shareholders, employees, suppliers, customers, creditors, communities around the operations of the company and the public. Besides incorporating this from a more social-oriented perspective on corporate governance (Solomon, 2004), this theory was also used in incorporating philosophy, ethics, political theory, economics, law and organizational social science (Wheeler et al., 2002). Therefore, the theory is suitable for the present study to determine the perspective of corporate governance.

The role of firms in the society is receiving increasing attention over time (Solomon, 2004). Therefore, corporate governance that envisages processes as well as a set of systems must make sure that firms are managed in the best interests of all stakeholders and shareholders (Presveits & Bricker, 1994). This is because neglecting the stakeholders' requirement can translate to lower financial performance as well as even corporate failure.

Nowadays, there is a likelihood to have an appropriate management system by a firm that is well managed, including engagement based on level of management. Nevertheless, poor management and poor financial performance may influence relationship among stakeholders.

Table 3.1: Table of Summary of Literature on Theories and Model

No.	Variables	Literature
1.	Failure Prediction Model	William H. Beaver, (1966) Altman, (1968) Kimura, (1980) Keige, (1991) Kiragu, (1993) Sori et al., (2001) Keener, (2013) Zeytinoglu & Akarim, (2013)
2.	Agency Theory	Berle & Means, (1932) Jensen & Meckling, (1976) Myers, (1977) Solomon, (2004)
3.	Stakeholder Theory	Freeman (1984) Presveits & Bricker, (1994) Wheeler et al., (2002) Solomon (2004)

3.6 Factors Contributing to the Predictability of *Sukuk* Default

Statistically, there are limited number of studies conducted on the predictability of *sukuk* default as compared to conventional bond defaults. Based on true Islamic principles as reviewed in Chapter 2, *sukuk* is regarded as ethically protected from turning bad (Zhang, 2005). On that point, discussion on factors that contribute to the predictability of *sukuk* default firms should be taken into consideration in current study. Those factors are; liquidity risk indicators, solvency ratio indicators and corporate governance characteristics. The discussions are as follows.

3.6.1 Liquidity Risk Indicators

Liquidity is an important key to verify the stability of a firm. Albrech et al., (2008) stated that liquidity is a crucial factor in any type of firms. They also stated that liquidity may be described as the firm's ability or ability to settle current liabilities (short term) when

requested. If a firm is unable to fulfill the request, this will make the firm difficult to survive for the long term. Liquidity refers to existing cash for the foreseeable future, after taking into account the financial.

Sukuk defaulted firms are affected by profitability (Astuti, 2017; Pranoto et al., 2017; Melzatia et al., 2017). The profitability of the company is contrived by liquidity risk. Liquidity risk arises when a company is unable to fulfill its business commitment (Jenkinson, 2008). Liquidity risks as risks cannot lay a timely position at equitable prices due to financial crisis. In addition, mismatching the liabilities and current assets are also some of the triggers of liquidity problems that will lead to extreme liquidity crisis (Mishkin et al., 2006).

A firm that cannot pay the creditor at a given time and continues not to respect its obligations to credit providers, services, and goods may be declared as a sick company or bankrupt company. The inability to meet short term liabilities may affect the operation of the company and in many cases, it may affect its reputation as well. The lack of cash or liquid assets in hand can force the company to release the incentives given by credit providers, services, and goods.

The empirical evidence from previous studies reveal that liquidity risk is very important beyond the effect of market risk, as the presence of liquidity risk is felt strongly during the 2007 global recession. According to Chacko (2005), before 2007 financial crisis, liquidity risk existed insignificantly. The outbreak of liquidity risk in 2009 put people in the conventional financial system puzzled, particularly when most mega firms and large corporations were affected by the financial crisis. This is based on the fact that, these firms were immune to any financial risks due to their excellent tools in the contemporary financial models (Grunewald, 2009). In other studies, Bongaerts et al., (2011) found that liquidity risk is very important despite the little impact on the economy.

Somehow, Longstaff (1998) argued that the new rapid development of new market trading activities and repeated unrest in the market had driven liquidity risk to the front line of market risk management research. In addition, new work in the asset price has shown how liquidity plays an important role in the optimum safety assessment and portfolio options that effectively impose endogenous loans and short-selling constraints.

However, Bangia et al., (1998) suggested that not paying attention to liquidity risk can pose a significant estimate on the overall risk, especially emerging market securities. Therefore, ignoring liquidity risks will lead to overall risk estimation, under capitalisation, and too many violations. Thus, the Bank for International Settlements (BIS), either intentionally or not, is appropriate enough to monitor liquidity risk, and require regulators to also do so.

Moreover, Bielecki and Rutkowski (2002) also explained that it is not uncommon to suggest that the credit spread inherent in many financial instruments could be more aptly described as being brought about by the presence of liquidity risk, rather than the credit risk. This evidence is supported by Gefang et al., (2011), in their research as their empirical results indicated that liquidity and credit risks, play an essential role in the financial crisis. Furthermore, their study discovered how important the role of liquidity risks in one and three-month term. According to Gefang et al., (2011), at a year term, credit and liquidity risks, both have crucial role. The liquidity risk factors are much more variable than the credit risk factor where their variation is associated with familiar events in the financial crisis.

Saunders and Cornett (2011) also stated that the financial crisis of 2008-2009 was in part, due to liquidity risk. As O'Hara (2003) suggested, the failure in dealing with this issue may cause adverse effects, including the fall of banking, and in advanced, financial system stability. This is also the reason why regulators are very concerned about the liquidity position

of financial institutions and thought during the enforcement centers of the regulations around the strengthening of the liquidity framework. Therefore, it becomes even more crucial to understand it in the current financial crises (Mehmood, 2010) as *sukuk* are exposed to these risks (Haider & Azhar, 2010). It is therefore relevant to do research in liquidity risk indicators.

Further, management of liquidity is very urgent for every firm that expects to pay for business obligations for example short term operational and financial expenses. Under critical circumstances, adequate liquidity is lacking even in the insolvency of firms (Khidmat & Rehman, 2014). The liquidity risk focused for this study is quick ratio and cash to asset ratio.

Quick ratio shows the level of cash and other current assets that are readily convertible to cash as a comparison to short-term obligations of an organization. A quick ratio of 0.5 would suggest that a company is able to settle half of its current liability immediately. The ratio is different from the current ratio where the current assets that cannot be exchanged for cash are exempted from such calculations as inventories and deferred tax credit because the conversion of such assets may take some time.

3.6.2 Solvency Ratio Indicators

The second indicator is solvency ratio. Solvency indicates capability of paying the amounts due and other expenses incurred in the business of the firm as compared to the total equity of the owner invested in the business (Langiemer, 2004). The deductible ratio provides business capability indication to pay all financial responsibilities if all assets are sold. Solvency describes the amount of debt and other expense obligations applied in a company's business. It is relative to the amount of owner's equity in the company's business. It indicates the ability to meet long term financial obligations (Dahiyat, 2016).

Therefore, if a firm is unable to meet its obligations, it is said to be insolvent and must undergo the declaration of bankruptcy to be liquidated or reorganized. Excessive debt can be dangerous to the company and its investors. Uncontrolled debt levels can cause credit ratings to decline or even worse. On the other hand, most debts can be unsafe for firms and investors. Unmanageable debt levels tend to downcredit or worsen grades. Instead, too little debt can also raise questions.

There are several solvency ratios that analysts can use. Some of these ratios are technically of use primarily by auditors or corporate analysts. Others are easily assessed by accountants, business owners, and investors alike such as debt to equity ratio and interest coverage ratio (Langiemer, 2004). From an Islamic point of view, the problem with debt in corporate capital structure is that debt is based on interest. For example, a company that has debts through *Murabahah* has no such restrictions. Borrowing is not allowed, so it is necessary to limit borrowing to a tolerable level. In some cases, the Islamic doctrine considers insignificant amount that have no effect on the allowable rate. In addition, there are many indications in Islamic law that “one-third” is “abundant” and less than one-third is “trivial.” Although this distinction is made under different circumstances, many contemporary *Shariah* scholars consider it important and believe that a debt to equity ratio of less than 1/3 is tolerable. Debt to equity ratio represent the relationship between funds supplied by creditors (debt) and investors (equity).

Thus, the debt to equity ratio and interest coverage ratio are used as indicators to measure the solvency of the company in order to stabilize the company's financial status (Mehdi & Mohammed, 2014). Hence, the ratio of debt and debt to the equity ratio is used as indication of measuring whether the firm has the ability to make its financial state in a stable position.

In addition, the solvency problem tends to be long term compared to the previously stated liquidity issue. The difference between the liquidity and the level of ability lies in the fact that a liquid firm does not imply that it is solvent while a solvent firm does not mean that it is liquid (Mehdi & Mohammed, 2014). Another researcher (Goodhart, 2008), said that illiquid firms can quickly become insolvent, and a firm that does not persist. A liquidity is sufficient but not a necessary condition for the default. In the end, the capital bear the loss. Instead, under the same condition, adequate liquidity can be a single factor that most firms survive from financial crisis.

For this study, the solvency ratio is formed by a debt to equity ratio and interest coverage ratio. Those are examined by using data from firms' annual reports and database. The explanation of the measurement variables are as follows.

i. Debt to Equity Ratio (DtER)

Debt to Equity Ratio (DtER) is used to evaluate a firm's financial leverage. It differentiates a firm's total debt to total equity. It shows the percentage of firm financing that comes from creditors and investors. Higher DtER indicates that more creditor financing (bank loans) is used than investor financing (shareholders). The formula of DtER is as below:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

*Note: different source uses different accounting term

From accounting perspective, each industry has a different debt to equity benchmarks, as some industries tend to use more debt funding than others. The 0.5 debt ratio means that there are half of the liability of any equity. In other words, the firm's assets are financed at 2 : 1 by investors to the creditor. This means that investors have 66.6 cents per dollar assets of the company while the creditor only owns 33.3 sen on the dollar.

Meanwhile, a debt to equity ratio of 1 would mean that creditors have the same interest in business assets. A lower debt to equity ratio usually suggest a more financially stable business. Firms with a higher debt to equity ratio are considered riskier to creditors and investors than firms with a lower ratio. Dissimilar with equity financing, the debt ought to be repaid to the lender. As debt financing also requires the debt service or fixed interest payment, the debt can be a much more expensive financing than the equity financing. Therefore, firms leveraging on large amounts of debt may not be able to make payments.

From the creditors perspective, creditors see higher debt to equity ratios as risky as it suggests that investors do not finance the operations of any creditors. In other words, investors do not have as many skin in the game as creditors do. This may mean that investors do not want to finance business operations because the firm does not perform well. Performance shortage is also possible because the firm is looking for additional debt financing.

Therefore, in Chapter 5, this study would be able to see the ratio of the firms' debt to equity ratio whether below or over the threshold before defaulted event occurred or whether debt to equity ratio contribute or not to the *sukuk* defaulted and *sukuk* defaulted firms as a lower debt to equity ratio shows a financially stable business. Firm with a higher debt to equity ratio are considered riskier to creditors and investors than firms with a lower ratio.

ii. Interest Coverage Ratio (ICR)

Next discussion is on interest coverage ratio (ICR). The interest coverage ratio is a financial ratio that measures the strength of a firm to perform interest payments on its debt in a manner that is timely (Enekwe et al., 2014). Unlike the debt service coverage ratio, the

liquidity ratio really no ability in making principal payments on the debt itself. It focusses on calculating the firm's strength to afford the interest on the debt.

Based on this, the investors, in regard to creditors, normally employ this calculation to examine the risk as well as the profitability of a firm. For example, an investor is primarily interested to know how his investment in the firm is increasing in value although a huge aspect of this appreciation is attributed to profits as well as operational efficiencies. Therefore, investors want to know that their firm would be able to pay its bills on time and at the same time not sacrificing its profit and operations (Purheidari & Koopaei, 2010).

In a different vein, accreditors employ the interest coverage ratio to determine whether an organization would be capable of supporting additional debt. Thus, in the event that a firm cannot afford to pay the interest of its debt, it will surely incapable of paying the principal payments. Therefore, creditors employ this formula to calculate the risk embedded in lending. The formula of ICR is as below:

$$\text{Interest Coverage Ratio} = \frac{\text{Earnings Before Interest and Taxes (EBIT)}}{\text{Interest Expenses}}$$

Analyzing a coverage ratio depends largely on how much risk the creditor or investor is willing to take. Depending on the desired risk limits, a bank might be more comfortable with a number than another. If the computation is less than 1, primarily it translates that the firm in question is not earning sufficient money to fund its interest payments, thereby neglecting to pay back the principal payments of the debt (Rehman, 2013). Based on this, it is clear that a firm with ICR of less than 1 would not be capable of even paying the interest of its debt. This kind of firm is beyond risky and probably would never find any nature of bank financing.

Conversely, if the coverage equation equals to 1, it also translates that the firm is making an adequate fund to pay its interest. Thus, this scenario is not much better than the last one as the firm is still unable to fund the principal payments. Therefore, it can only cover the interest on the current debt when the due comes.

Also, if the coverage measurement is above 1, it translates to the fact that the firm is profiting more than enough fund to pay its interest obligations with some extra earnings left over to carry out the principal payments. In this case, most creditors search for a coverage that is at least 1.5 prior to accepting any loans. To put it differently, the primary objective of banks is to guarantee that a firm makes at least 1.5 times the amount of their current interest payments (Enekwe et al., 2014).

Therefore, in Chapter 5, this study would be able to see the ratio of the firms' interest coverage ratio whether below or over the threshold before defaulted event occurred or whether debt to equity ratio contribute or not to the *sukuk* defaulted and *sukuk* defaulted firms as coverage measurement is above 1. This shows the fact that the firm is profiting more than enough fund to pay its interest obligations with some extra earnings to carry out the principal payments.

3.6.3 Corporate Governance Characteristics

The third measurement is corporate governance. Corporate governance is defined as the structure and process that is used to manage and direct the business and affairs of the firm towards fostering business luxury and corporate accountability with the ultimate aim of realising the long term shareholder of the current value of the interest of other stakeholders. Corporate governance imparts a framework of control mechanisms that support the firm in accomplishing its objectives, while preventing unpleasant conflicts.

Roshima et al., (2014) defined the corporate governance as the process and structure that is used to direct and manage the business, including the affairs of the company towards enhancing business prosperity and corporate accountability. A definition of the Finance Committee on Corporate Governance in Malaysia in the Report on Corporate Governance (2002) stated that “corporate governance is the process and structure used to direct and manage the business, concluding the affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long term shareholder value, whilst taking account the interests of other stakeholders”. This indicates that corporate governance is not only applied to the shareholders, but the other stakeholders as well. Meanwhile, Solomon (2004) defined corporate governance as “the system of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all their stakeholders and act in a socially responsible way in all areas of their business activity”. Other authors relate corporate governance from the perspective of legal system and internal monitoring. Sunday (2008) viewed that in the recent development, corporate governance has been clearly defined as the legal system and sound approach in which the company is directed and regulated to focus on internal and external corporate structures with the aim of monitoring management actions and the directors, thus reducing the risk of agency that may result from a fault of a corporate officer.

Again, Roshima et al., (2014) in her published book, wrote on corporate governance pillars. According to the authors, corporate governance pillars such as accountability, ethical conduct, sustainability and transparency are crucial to the company's governance and investor capital error. Therefore, the company which holds this principle is more likely to generate long-term value than is less in one or all. The authors also wrote that, corporate governance that is seen as accountability system is mainly directed to the shareholders as well as

maximizing shareholders' welfare. In addition, debates on the issues of disclosure/transparency of corporate governance ultimately the centre around proper accounting standards, their practices and issues, as the accounting standards application provides confidence to corporate management, due to the fact that the exposure will be more effective and ensure good corporate governance.

Therefore, in this study, the researcher believes that from the findings, practice review of accounting standards is an important and relevant issue in good corporate governance in the current environment. As the standard is seen as a technical response to a better calling of accounting and financial reporting, or as a reflection in terms of changes in hope of a society, including vehicles in social and political supervision in relation to enterprise control.

Malaysia is not far from issues involving corporate governance. There are series of corporate failures in Malaysia. Amongst the corporate scandal being reported not long ago are the technology resource industry such as; Bumiputra Malaysia Finance, Malaysia Airlines, Perwaja Steel, and Sime Darby which showed that delicacy in corporate governance led to a corporate failure and economic crisis.

Apart from books and journals written on corporate governance discussed above, the main referral is The Malaysian Code on Corporate Governance. The Malaysian Code on Corporate Governance or MCCG which was introduced in 2000 has become an important tool for corporate governance reform, and has influenced positively on corporate governance practices of the firm. The MCCG became the guidelines for sukuk practitioners, industries and researchers. The guidelines were introduced because of the impact of 1997-1998 Asian Financial Crisis (Castagne & Fede, 2012). Under this guidelines, the board are consulted to give advice on the decision where the firms should refer to. These guidelines are in practise until 2011 by *sukuk* firms. This notion is also highlighted by another author who wrote, "In

addition, the impact of the Asian Financial Crisis 1997 also played a critical role in the changes in corporate governance roles in Malaysia. Consequently, the Malaysian Code on Corporate Governance (MCCG) was introduced in 2000” (Abdifatah, 2014).

Malaysian Code on Corporate Governance (MCCG) of 2000 highlighted the endangered management and responsibility of the Board to perform a reasonable balance between risk and return to shareholders (Ghazali & Manab, 2013). After the Asian Financial Crisis in 1997-1998, Malaysia has leapt to the global corporate governance standards by revising MCCG as a move to strengthen the corporate structure in the country. Subsequently, in 2007, MCCG was amended and MCCG 2007 was proposed which focused on the reinforcing of the Board of Directors, Audit Committee and Internal Audit function (Abdifatah & Sanni, 2015).

Previously, in the first MCCG issued in 2000, there were four forms of proposals that were presented. The proposals which were set out in paragraph 3 of MCCG 2000 included the outstanding principles of corporate governance, advice to other participants and explanatory notes as well as best practices among others. Due to the voluntary policy on the MCCG adaptation, Bursa Malaysia Securities Berhad had revised the Listing Requirements under paragraph 15.26 (Part A of Appendix 9C) to require the stock exchange firms to make certain corporate governance practices to be made known through annual reports for investors and public information.

Later, the Securities Commission (SC) issued the Corporate Governance (CG) action Framework 2011 in year 2011. The Blueprint of CG 2011 underlines self and market regulations to complete the comprehensive regulatory framework as well as to boost good corporate fulfillment, and governance culture. One of the recommendations of CG 2011 Proposals is that the directors who are allowed to hold directorships in public firms listed

should not be more than five persons. Eventually on 31 March 2012, the Malaysian Code on Corporate Governance 2012 (MCCG 2012) was issued. MCCG 2012 Sets 8 principles and 26 matching proposals. Several studies have emphasised the relationship between corporate governance and performance of the firm. In Malaysia, the latest study conducted by Abdifatah and Sanni (2015) reviewed the correlation between the performance of the firm and corporate governance before (2006) and after the amended Code (2008-2010).

Before that, two researchers, Hussin and Othman (2012), in their studies at 100 companies listed in Bursa Malaysia Stock Exchange (FTSE) has found that companies with independent chairman have more positive impact on the company's performance. Duru et al., (2016) found that when the board independency is small, the negative impact to the chief executive officer of the company's performance is apparent.

Meanwhile, Abdullah et al., (2008) stated that the executive officers were unable to clarify their relationship to the quality of the audit. Afterward, Ghazali (2010) analysed 87 firms in the composite index and concluded that the CEOs have no significant impact on the company's profit. Mustapa et al., (2015) resumed that the dissolution of the dual role of 800 Malaysian listed firms is not significant to describe the firm's performance (Abidin et al., 2009; Yusoff & Alhaji, 2012).

Ameer et al., (2010) reviewed the samples of 277 non-financial Malaysia listed companies in 2002 to 2007 and resumed that the boards with a greater percentage of the independent directors have a positive significant effects to the firm's performance. In addition, Mustapa et al., (2015) in their studies of 800 Malaysian listed firms have resumed that the independent directors materially affect the firm's profits. In line with other researchers, Ghazali (2010) has found that the composition of the board is not important to

settle profits in 87 non-financial companies in 2001. This finding is in line with other previous studies (Ararat et al., 2010; Rahim et al., 2010).

Hussin and Othman (2012) concluded that the higher the board's size, the worse the company will undertake. Larger board size may increase the likelihood of conflict of interest among directors who ultimately prevent monitoring functions to be carried out effectively. Mak and Kusnadi (2005) in their studies of 460 firms in Singapore and Malaysia found that higher board's size deteriorated steadily in the firm's performance. They were found to be ineffective in decision making, directors' remuneration and weaknesses in the role of directors as a large board.

Similar to the discussion on the relationship of *sukuk* default and liquidity risk, this section discusses the relationship of *sukuk* default and corporate governance. Looking at corporate governance from the economic perspective, it can be seen as an essential element of achieving an allocated efficiency, where limited funds with the highest returns taking on the investment project. Practically, efficiency is attained when at a given level of risk, an investment project offers the highest return that exceeds its cost of capital. Based on this, failure to regulate good corporate governance efficiently would affect the mobilization of funds.

Corporate governance also had its turning point. Initially, it was the Asian Financial Crisis of 1997 and later followed by 2007-2008 Global Financial Crisis. However, since the high-profile collapsed of a number of large corporations during 2001-2002 and 2007-2009, there had been renewed interest in the corporate governance practices of modern organisations, particularly in relation to accountability. These have brought about a renewed interest in the corporate governance practices in modern corporations, particularly concerning

to accountability, since there was a large number of collapse in high-profile corporations during the year 2001-2002 and 2007-2009 periods.

Amongst the high profile cases were the collapsed of Enron, one of the most successful accounting firms in the world. The collapse was due to corporate governance issue. This was because the mechanisms of corporate governance, such as the function of non-executive directors, auditors, the internal audit committee and the board of directors all failed in certain aspects. The fall of Enron accelerated the global agenda for corporate governance reform (Solomon, 2004) and had prompted the efficacy of existing corporate governance practices in encouraging transparency and accountability (Sunday, 2008).

Apart from MCCGs, the best governance that can be used to explain the corporate governance characteristics for this study is Committee Governance Guidelines to financial institutions of Islamic *Shariah* (GPSI) of 2004 and *Shariah* governance. In the *Shariah* Governance Framework (SGF) of 2011, it is stated that it will be the duties and responsibilities of the internal *Shariah* Committee in advising the respective Islamic Financial Institutions (IFIs) on *Shariah* matters at the industry level. However, this duty and obligations were further deliberated in the Guidelines on the Governance of *Shariah* Committee for the Islamic Financial Institutions issued in 2004. Currently, the SGF 2011 is the guidelines in practice, and are superseded in light of new developments in Islamic finance as well as the higher expectation of the key stakeholders of the IFI pertaining to the *Shariah* compliance process.

Table 3.2 indicates the roles, responsibilities and characteristics of MCCG 2000-2007 and SGH 2011. These roles, responsibilities and characteristics are used for measurement.

Table 3.2: Malaysian Codes of Corporate Governance (MCCG) and *Shariah* Governance Framework (SGF)

Malaysian Code on Corporate Governance (2000-2007)	<i>Shariah</i> Governance Framework (2011)
Board Structure	Board of directors (BoD)
CEO is Chairman of Board of Director (CEO Duality)	<i>Shariah</i> supervisory board (SSB)
Board Size	<i>Shariah</i> risk management (SRM)
Independent Board of Directors	<i>Shariah</i> research (SR)
Professionalism/ Qualifications	Management (M)
Board Meeting	<i>Shariah</i> secretariat (SS)
Board Committee	n.d.
Remuneration	n.d.
Transparency and Disclosure	n.d.
Alliances and Mergers	n.d.

Note: From Researcher's Analysis

Additionally, the responsibility of alignment of the firms' activities and its specified objectives must be ensured by the board of directors. This is because it is the responsibilities of the board to make sure that the top managers are discharging their duties and responsibilities accordingly to a way that will provide the optimal value for shareholders (Coles et al., 2001). The Malaysian Code of Governance (MCCG 2007) prescribed no maximum number of directorships. However, a number of directorship restriction of persons was listed and adopted in Bursa Malaysia requirements in 2002, which stated that a director may only hold not more than 10 directorships of a listed public firms and not more than 15 directorships in non-listed firms. The rationale for this is for the director to perform his/her duties effectively with less available time, resources and commitments.

In line with this, Coger et al., (1998) suggested that board meeting time is an important resource in improving the effectiveness of a board. Study by Adams and Mehran (2002) on one hand focused on the board meeting of financial and non-financial firms which suggested that bank holding firms should meet slightly more frequently than manufacturing firms. According to them, 8.45 is the average number of board meetings per year (Adams &

Mehran, 2002), which in a year is close to 7.45 meetings (Vafeas, 1999). Although it is difficult to explain such differences, one can argue that the choice of bank directors could be influenced by regulations on the number of meetings. As such, it can be said that the quality of directors willing to serve these boards could be potentially affected by regulations. However, a negative correlation between the number of board meetings and performance was discovered (Vafeas, 1999). This depicts that a regular meeting with a board represents a value less in the market, because of the notion that higher board meetings follow poor performance. However, there are few studies which indicated that operating performance would rise following a year of abnormally high meeting frequency. Such findings concluded that boards' respond to poor performance will require raising their level of board activity that will be associated with improved operating performance. Therefore, MCCG 2007 recommended that the board should meet regularly and the number of meetings in a year together with the director's attendance should be disclosed. Even though there is no stipulation on the number of meetings, the recommendation specified that it is difficult to positively explain if the board of a company has less than four meetings in a year.

As such, it must become a mandatory requirement for proper disclosure, transparency, and governance of the IFI through appropriate regulations and laws, in order to increase the quality of their products as well as to be able to protect the financial system. Moreover, disclosure concerning to reporting by the IFI needs to comply with the highest international standards and practices for non-financial as well as financial reporting. Additionally, Khir et al., (2008) stated that an accurate and timely manner is needed for the disclosure of the relevant information. Similarly, their governance system is required to be stronger than the conventional one. This is due to ethics that cannot be separated from the operations of IFI. Simply put, as argued by Chapra (2008), Aziz (2008) as well as Walsh, (2007), there is a

moral principle that is based on *maslahah* (public interest) guiding the affairs of the Islamic governance, thereby requiring all business operations to be taken into account, such as their activities which involve social implications view that public interest comes first.

Based on the above discussions, the IFI could take this as an opportunity to reduce reliance on debt-like-products, as well as risk sharing instruments, and shift towards equity-based. However, regardless of the industry executed choice, the need for an efficient regulatory and supervisory framework would always be required that will stay ahead of the market. This is why Aziz (2008), as well as Mirakhor and Krichene (2009), believed that it will no doubt prevent regulatory arbitrage from making significant inroads in the market. As such, the need for the construction of an effective system is required for checks and balances that will remove the institutions in making similar mistakes like the ones which brought about the ongoing crisis. A study by Chapra (2008) put forward three critical steps; (i) strengthening market discipline which will curb leverage, excessive derivatives and lending, (ii) establishing moral constraints on greed so as to maximize wealth, profit, as well as consumption, (iii) reforming the system's structure and combine it with prudential supervision as well as regulation to prevent crises, protect social interest and achieve sustainable development.

In a broad sense, independent directors are non-executive directors who do not have any relationship with the firm which could affect the freedom of judgment. An independent director is a non-executive director who does not have any relationship with the company, organiser, senior management or associate, not related to the organiser or senior management, and/or is not an executive with a company in the previous three financial years. It is also said that an independent director shall not be a partner or executive director of the auditors/solicitors/consultants of the company within the past three years or may not hold two (2) per cent or more shares of the company.

However, even though many variables serve as corporate governance indicators, this study considers the existence of audit committee and independent directors as corporate governance indicators. It is due to many previous studies which examined significant relationship between corporate governance and firm performance in non defaulted firms (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; Al-Ajmi, 2009; Haniffa & Hudaib, 2006). They stated that corporate governance in the terms of existence of audit committee and independent directors have significant impact to the performance of the company in no default. Existing audit committee plays an important role in corporate governance on the direction, control and accountability of the organization. As a representative of the Board and a key part of corporate governance mechanisms, the audit committee is engaged in the organization for internal and external audits, internal controls, accounting and financial reporting, regulatory compliance and risk management.

On other side, MCCG emphasizes the need for the independent director to confirm transparent and accountable management. As such, MCCG recommends that the independent directors form at least one third of the Board's membership. Lahlou Navette, (2013) documented that majority of independent directors in the Board are also the independent directors among the Board of Directors. In addition, the independent directors play a key role in overseeing the financial performance of the company and assisting the company in terms of long-term strategy development, risk management and remuneration planning (Kumar & Singh, 2012). Thus, this study takes audit committee and independent director into consideration as corporate governance indicators in examining corporate governance.

Therefore, this study is carried out to see the impact of corporate governance to *sukuk* defaulted firms based on the Malaysian Code on Corporate Governance or MCCG 2000 and

2007, Guidelines on the Governance of *Shariah* Committee for the Islamic Financial Institutions issued in 2004 and *Shariah* Governance Framework 2011.

3.7 Research Framework

A number of literatures have been referred in order to explain and analyse the relationship between *sukuk* default firm with liquidity risk, solvency ratio and corporate governance (Adalelessossi, 2015; Khelifa, 2017; Enekwe et al., 2014); Trujillo-Ponce et al., 2014; Brindescu-Olariu, 2016; Purheidari & Alfatuni, 2007; Roshima et al., 2014; Castagna & Fede, 2013; Stenbäck, 2013; Kamarudin et al., 2014; Sugianto, 2018). This study uses liquidity risk, solvency ratio and corporate governance characteristics as the independent variables (IV); and *sukuk* default non-default as the dependent variables (DV). The summary of literatures on variables is shown in Table 3.3.

Table 3.3: Summary of Literature on Unit of Measurements

No	Unit of Measurements	Literature
1.	<i>Sukuk</i> Default Firm	Khniifer (2010); Gefang et al., (2011); Oseni (2014); Zaheer & Wijnbergen (2013); Moody's Investors Service (2014); Zakaria et al., (2012); Ardiansyah & Qoyum (2013); Kamarudin et al., (2014); Hafizi et al., (2011); Sugianto (2018)
2.	Liquidity Risk	Adalelessossi (2015); Khelifa (2017); Castagna & Fede (2013); Stenbäck (2013)
3.	Quick Ratio	Adalelessossi (2015); Khelifa (2017); Harvey & Cosgrave (2012)
4.	Cash to Asset Ratio	Adalelessossi (2015); Khelifa (2017); Lakshan & Wijekoon (2013)
5.	Solvency Ratio	Enekwe et al., (2014); William H. Beaver (1966); Altman (1981); Belkai (1980); Chhabra & Blecker (n.d.); Keener, M. H. (2013)
6.	Debt to Equity Ratio	Enekwe et al., (2014); Trujillo-Ponce et al., (2014); Brindescu-Olariu (2016); Lakshan & Wijekoon (2013); Ardiansyah & Qoyum (2013)
7.	Interest Coverage Ratio	Enekwe et al., (2014); Purheidari & Aflatuni (2007); Lakshan & Wijekoon (2013); Ardiansyah & Qoyum (2013)

8. Corporate Governance: Independent Director Audit Committee Roshima et al., (2014); Sori et al., (2001); Solomon (2004)
-

For the liquidity risk, the defined factors based on the previous discussion are quick ratio and cash to asset ratio. Meanwhile, debt to equity ratio and interest coverage ratio for the solvency ratio were explained. Next, independent director (ID) and Audit Committee (AC) for corporate governance characteristics for the predictability of *sukuk* default firm were discussed. This is illustrated in Figure 3.1 below.

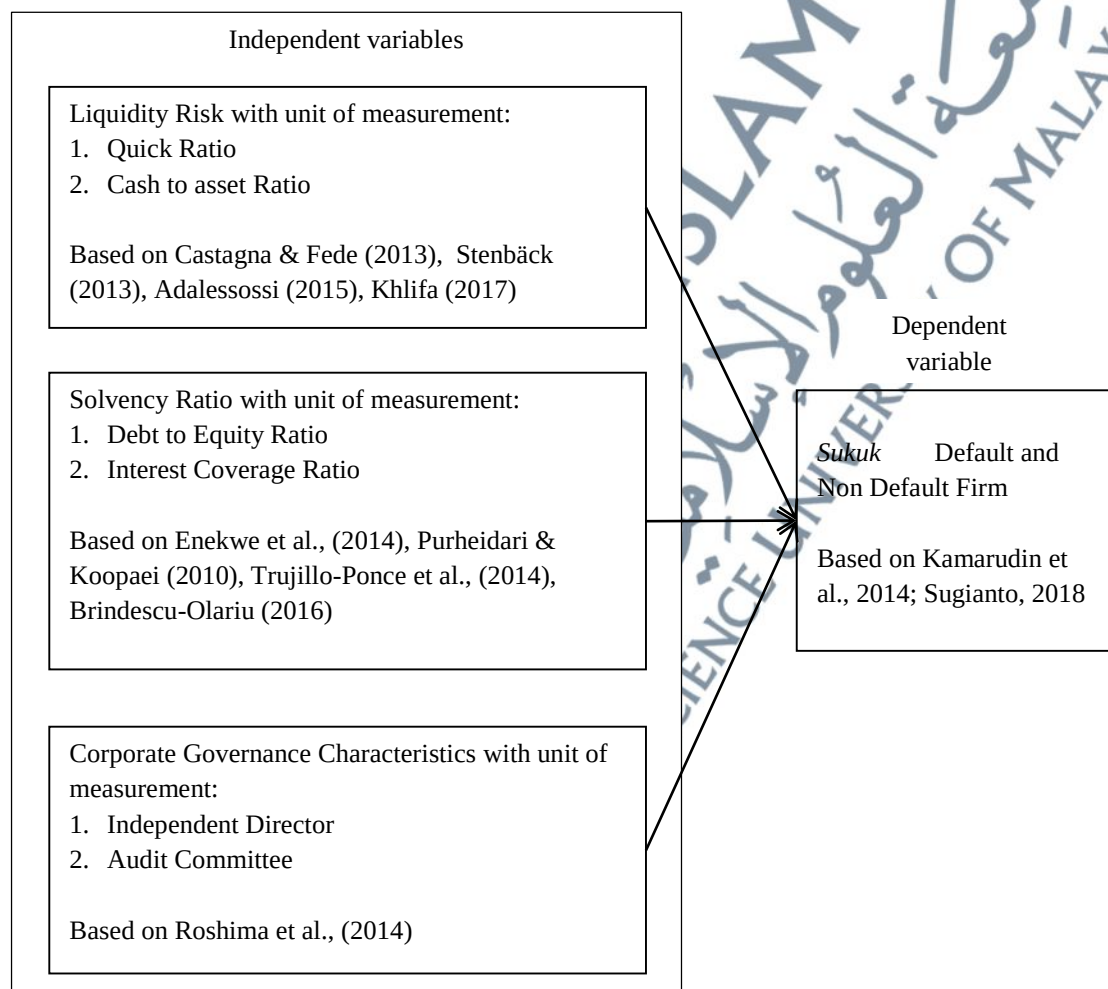


Figure 3.1: Research Framework for the *Sukuk* Default and Non Default Firm

3.8 Research Gap

There are gaps in available pieces of literatures that suggested the study of *sukuk* defaulted firms, liquidity risk, solvency ratio and corporate governance indicators. Additionally, Castagna and Fede (2013) also pointed out that there is a huge gap in the literature on the issues of liquidity risk and the real practises, especially after the 2007-2008 financial crises. A big gap also occurred in the study of corporate governance on *sukuk* defaulted firms. Therefore, the present study focuses on *sukuk* default firms, factors related to their default and attempts to introduce new tools and methods in mitigating liquidity risk, solvency ratio and corporate governance that could be applied in the existing best practices within the contemporary financial environment and Islamic capital market.

3.9 Shariah Screening Methodology

Shariah screening methodology was formulated by the *Shariah* Advisory Council (SAC) of Securities Commission (SC) of Malaysia to assist investors in identifying *Shariah*-compliant securities. This is to ensure that investments are in accordance with *Shariah* principles which prohibit the elements of *riba*, *maysir* and *gharar*. In Malaysia, the SAC of the SC plays an important role in certifying and updating the list of securities that have been classified as *Shariah*-compliant securities. This *Shariah*-compliant certification is done through the input and support received from the SC. To classify security as whether *Shariah* comply or not, SAC will analyse the data gathered by SC from various sources including the annual reports and enquiries made to the companies.

The SAC continuously reviews the *Shariah* status of listed companies. The SAC has applied a standard criterion to evaluate the business activities of the companies and companies whose activities are not contrary to the *Shariah* principles will be classified as *Shariah*-compliant securities. On 18 June 2012, the SAC of SC of Malaysia made an announcement on the adoption of a revised *Shariah* screening methodology to determine the *Shariah*-compliant status of companies which are listed on Bursa Malaysia. This revised methodology adopts a two-tier quantitative approach which applies the business activity benchmarks and the newly introduced financial ratio benchmarks, while maintaining the existing qualitative assessment. The outcome of the revised methodology is reflected in the List of *Shariah*-compliant Securities announced and published by the SAC effective from November 2013 (Securities Commission Malaysia, 2012).

Under the revised methodology, all companies listed on Bursa Malaysia are required to undergo the same screening process which covers two-tier quantitative assessment consisting of a reduced business activity benchmarks and the newly-introduced financial ratio, and also qualitative assessment which qualify the company's image and other matters such as *Maslahah*, `umum balwa, `uruf and the rights of the non-Muslim community that are accepted by Islam. There are no changes made to the existing qualitative assessment. With the revised methodology, the first stage screening now is for the quantitative assessment and the second stage screening is for the qualitative assessment. To be certified as *Shariah*-compliant securities, all companies who issue the securities must fulfil the requirement in both stages of screening process.

The first-tier of the quantitative assessment in the revised *Shariah* screening methodology is the business activity benchmarks. Under the revised methodology, the business activity benchmarks which previously consisting of four benchmarks had been reduced to only two benchmarks. Basically, the contribution of non-permissible activities which are allowed for 10 per cent benchmark under previous methodology had been reduced to 5 per cent. In other words, the contributions from nonpermissible activities that involve the element of *`umum balwa* now must not be more than per cent only. The other benchmark is 25 per cent benchmark which had been reduced to 20 per cent benchmark. It means the contributions from non-permissible activities such as hotel and resort operations, share trading and stock broking now must be lower than 20 per cent.

The newly-introduced financial ratio as the second-tier of the qualitative assessment, each company who issues the securities need to undergo the financial ratio screening. This screening is newly introduced under the revised methodology whereby there was no screening process for this financial ratio under previous methodology. In this assessment, the SAC will calculate cash over total assets and debt over total assets which intended to measure *riba* or *riba*-based elements in the company.

In determining cash over total assets, cash to be included in the calculation includes cash placed in conventional accounts and instruments only. If the company placed the cash in the Islamic account, it should be excluded from the calculation. In determining debt over total assets, debt to be included in the calculation includes interest-bearing debt only. If the company used Islamic financing such as *sukuk*, it should be excluded from the calculation. To fulfil the requirement for this assessment,

each ratio must be less than 33 per cent and only securities issued by company that meet the requirement in all assessments will be classified as *Shariah*-compliant securities (Securities Commission Malaysia, 2013).

3.10 Summary

Based on the above discussion, many literatures such as Beaver (1966) and Keener (2013) supported that the financial ratio can be used to find the most accurate prediction model possible. Therefore, this study suggests that the financial failure of firms using financial ratios may still be more useful than ever. The theories used are also suitable for three variables in this study which are liquidity risk, solvency ratio and corporate governance as this study encompasses all.