

Sustainability of *Sukuk* and Conventional Bond during Financial Crisis: Malaysia's Capital Market

Wahida Ahmad* and Rafisah Mat Radzi**

It is well known that the recent global financial crisis has adversely affected the world's economy and in particular the banking industry. Islamic finance (sukuk) has also not been spared, although it has been enjoying tremendous growth since its debut in the 1970s. It had not shown any sign of slowing down until the recent global financial crisis. Sukuk has a different underlying structure and provisions in comparison to conventional bonds and it is a challenge to evaluate its sustainability during the recent global financial crisis. This paper attempts to investigate the sustainability of sukuk issuance as well as conventional finance during the recent economic downturn by focusing on the Malaysian debt capital market. Malaysia's sukuk market has grown remarkably in recent years, surpassing the outstanding amount of conventional debt securities issued in the domestic market. Despite the global economic downturn, Malaysia is still considered one of the leaders in sukuk issuance and has in fact proved to be an innovator in the development of sukuk structure. This paper examines three variables concerning the sustainability of sukuk and conventional bond issuance for the period 1990-2009; (i) GDP, (ii) foreign exchange, and (iii) market liquidity. By using ordinary least squares regression, the findings reveal that both sukuk and conventional bond issuance in Malaysia consider foreign exchange to be the major cause of bond issuance. On the other hand, unlike sukuk, conventional bond issuance does not consider the economic condition as proxied by GDP and market liquidity as a driving force. These imply insensitivity of the issuance of conventional bond compared to sukuk with regards to current economic conditions.

JEL Codes: G10, G01

1. Introduction

The Islamic finance industry has expanded enormously in response to a profusion of investment products, a scenario that has been fuelled by an increasing demand for investments that comply with Islamic law. Of all the rapidly growing Islamic capital market securities none are gaining in popularity as much as *sukuk*, which in some respects has a different underlying structure compared to the conventional models. The world has witnessed a strong growth in global *sukuk* issuance in recent years, underscored by its tremendous growth since its debut in 1970s. However, the *sukuk* market did not do well when the recent subprime crisis in the United States erupted. It resulted in global *sukuk* issuance declining by more than 50% by the end of 2008.

* Wahida Ahmad, School of Economics and Finance, La Trobe University
Email: wahmad@students.latrobe.edu.au
Faculty of Business and Management, Universiti Teknologi MARA, Malaysia

** Rafisah Mat Radzi, School of Commerce, University of South Australia
Email: matry014@students.unisa.edu.au
School of Distance Education, Universiti Sains Malaysia, Malaysia

This has demonstrated that the growth momentum of *sukuk* has not been insulated from the current global crisis, albeit the effects of the crisis have been far greater on its conventional counterpart. Due to this financial crisis, Malaysia has been the hardest hit in terms of deterioration of *sukuk* issuance, followed by the Gulf Cooperation Council. Considering the recent financial crisis has had a strong impact on global financial sector including Islamic finance industry, this study investigates the sustainability of *sukuk* as well as conventional bonds issuance resulting from the recent financial meltdown.

2. Literature Review

2.1 Financial Crisis

Over the past thirty years, major financial disruptions have taken place approximately every three years. There has been a series of financial crises and these began with the stock market crash of 1987 (Amihud, Mendelson & Wood 1990), and the savings and loans collapse and credit crunch of the early 1990s (Bernanke, Lown & Friedman 1991). These were followed by recurring episodes of turmoil, most notably originating in Mexico at the end of 1994, in East Asia between 1997 and 1998, in Russia during the summer of 1998, in Brazil in 1999, in Turkey in 2001, and then in Argentina during 2001/2002 (Pasquariello 2008). It is probable that the recent subprime crisis in the United States may go down in history as the worst financial catastrophe, arising from the collapse of the mortgage market.

The present financial crisis, which has been dubbed the worst since the Great Depression of the 1930s, has not only affected the United States' banking system but that of the entire world. To date, most established and emerging markets are affected, and the performance of the Islamic financial institutions is no different. The Islamic finance industry, particularly the *sukuk* market is relatively new in that it really only began to forge ahead during the mid-1980s but experienced a stunning fall from the peak of USD46.65 billion in 2007 to only USD15.8 billion in 2008 (RAM 2009). The decline in *sukuk* issuance by more than 50% by the end of 2008 is due to the credit crunch, which forced investors to step aside from the fixed income market, including the Islamic model (Damak & Volland 2010). Debates over *Shariah* compliance of some *sukuk* structures and the rising cost of borrowing (Hijazi et al. 2009) led to the declining in the issuance. Nonetheless the impact of the world financial crisis on the *sukuk* market was not as great as what happened to conventional bonds. The fact is that *sukuk*'s relative security has received increased scholarly attention due to certain core principles that have contributed to insulating it from global financial disasters (Aziz, RPA & Gintzburger 2009).

2.2 Gross Domestic Product

It is widely accepted that financial crises have adverse consequences for the economy as a whole. A large body of theoretical work explores how financial intermediaries and financial markets facilitate businesses' investment choices and, hence, promote economic growth (Levine 1997; Kroszner & Strahan 2005; Levine 2005). During non-crisis periods, Kroszner, Laeven and Klingebiel (2007) found that sectors that are relatively more reliant on external finance grow disproportionately more quickly in countries with deeply entrenched financial systems, but they experience the reverse during crisis periods. Financial crises have a

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disproportionately negative impact on sectors of the economy that rely heavily on external sources of finance in countries with long-standing financial systems.

Fink, Haiss and Hristoforova (2006) presented evidence of a correlation between either stock or debt market growth and gross domestic product (GDP) growth for seven of the G8 countries (the exception being Germany). They also found a link between domestic credits and output as well as stock market growth and output growth for Japan. However, Favara (2003) emphasised that growth in the financial sector has had no first order effect on GDP growth. Although a positive connection between capital market growth and economic development has been established empirically, the causal relationship between these variables and their long-term equilibrium remains ambiguous. The fact that there exists a strong relationship between financial and economic growth does not necessarily imply a causal relationship. The relationship of these two ends may vary depending on the circumstances of each country (Colombage 2009).

2.3 Exchange Rate Stability

Exchange rate stability is another factor that has an impact on the bond market. According to Silva (2008), the most direct effect of exchange rate changes is through domestic inflation. The changes in exchange rate affect the price of imported goods, which in turn, are important determinants of business firms' costs and the retail prices of many goods and services. The volatility in exchange rates also leads to an uncertainty in the foreign exchange market. This adds to the risk premium on forward market transactions and these uncertainties adversely affect foreign participation in domestic bond markets and also influence the development of a benchmark yield curve. If there are no markets to hedge then the price risks foreign investments may be declined. Areskoug (1980) estimated that exchange rate stability, along with general acceptability in domestic or international payments, is an important currency attribute in long-term international capital markets.

Cohen (2005) discovered that aggregate issuance of international bonds is significantly higher in strong currencies than in weak ones. Kedia and Mozumdar (2003) noted that US firms issuing foreign currency debt also tend to have significant foreign income, as well as characteristics suggesting that exchange rate hedging improves their ability to exploit growth opportunities. Keloharju and Niskanen (2001) obtained similar results in their analysis of Finnish firms. Researchers at the European Central Bank (in Cohen 2005) found a strong positive relationship at the firm level between having subsidiaries in a currency area and bond issuance in that currency.

2.4 Market Liquidity

There is no standard definition of financial market liquidity. According to Choudhry (2009), there is a general understanding of the nature of liquidity, in that academics and practitioners use a number of commonly accepted definitions and measures. Essentially, a liquid market can be defined as a market where it is possible for participants to buy or sell transactions at any time (during opening hours) according to size, at no extra cost, without this transaction causing prices to move (O'Hara 1995).

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The outstanding amount in issue for a bond is another factor; one expects this to have an influence on liquidity and Fisher (1959) observed this in a very early study. McCauley and Remolona (2000) reported how a number of Organisation for Economic Cooperation and Development (OECD) governments continued to maintain gross issuance in an effort to preserve market liquidity, despite budget surpluses removing the need to issue debt. This reflects the importance of the government bond market to all market participants, including investors, traders and brokers. The authors emphasise the importance of a liquid market in government bonds. Harrison (2002) investigated the impact of liquidity shocks on the composition of firms that entered the corporate bond market. He indicated that a severe liquidity shock (during Russia's default in 1998), is in some ways as bad for the corporate bond market as a severe credit quality shock (2000-01). In both cases credit spreads widen, even though in the case of the credit quality shock spreads widen even more. However, issuance was more strongly curtailed in the case of the liquidity shock in Russia during 1998. This finding simply emphasises that the effect of liquidity on the corporate bond market goes well beyond the secondary market by also affecting the primary market. The impact of illiquidity on investors, and on trading activity, may well be more troublesome than the impact on issuance.

3. *Sukuk*, as an Alternative Source of Financing, Has Different Underlying Structure and Provisions Compared to Conventional Bonds

The Islamic capital market has emerged extensively with *sukuk* playing a substantial role in the industry. As reported by Damak and Volland (2008), *sukuk* totalled less than \$500 million in 2001, but it more than doubled each year until 2007 and had by then exceeded \$60 billion. Growth of the *sukuk* market is being fuelled mainly by corporations, sovereigns and financial institutions. Although corporations find that *sukuk* is an alternative form of financing for businesses or projects, banks are turning to these financial instruments to sustain growth using stable funding sources and to curb maturity mismatchesⁱ.

The Islamic debt securities market was developed to meet diverse risk-return profiles and the needs of issuers and investors who looked for a type of asset that complied with *Shariah* (Islamic law). Conventional bonds that yield interest, or *riba*, are of course prohibited under *Shariah* law. Furthermore, those who buy and sell conventional bonds are rarely interested in what is actually being financed through the bond issue, which could include activities and industries that are deemed *haram* (or forbidden) such as the production or sale of alcohol. Companies that are highly leveraged with bank debt may seek refinancing through issuing bonds, but such companies are not regarded as suitable for Muslim investors. Considering the fact that bond issuance is an important means of investment in the modern economic system, Muslim jurists and economists are striving to find the Islamic alternative.

According to the Auditing Organisation for Islamic Financial Institutions (AAOIFI), '*sukuk*' is defined as:

*"... certificates of equal value representing, after closing subscription, receipt of the value of the certificates and putting it to use as planned, common title to shares and rights in tangible assets, usufructs and services, or equity of a given project or equity of a special investment activity."*ⁱⁱ

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In certain respects *sukuk* is similar to conventional bonds in that it is a security instrument that provides a predictable level of return. However, it has different underlying structure and provisions. While a bond represents the issuer's pure debt, *sukuk* represents certificates of equal value with undivided beneficial (proportional to the investor's participation) ownership in the underlying assets (both tangible and intangible), usufruct, services or investment in particular projects or special investment activities (Kamil 2009, p.23). Returns on *sukuk* derived either from the performance of an underlying asset or the contractual agreement that is based on this asset (Nanaeva & Mammadov 2010).

4. Development of the Malaysian *Sukuk* Market

The growing needs of the Muslim population in Malaysia for *Shariah* compliant products as an alternative to conventional banking and capital markets' financial instruments accelerated the development of an Islamic capital market. Demand for an Islamic debt instrument, which accounted for only 7% of total bonds raised in 1999, grew to 25% in 2000 and subsequently to 76% in 2005, primarily due to awareness of alternative funding sources (Ashhari, Chun & Nassir 2009).

The Malaysian *sukuk* market took off in 1990, when the world's first *sukuk* was issued by a non-Islamic corporation, Shell MDS (RM125 million) (Laldin 2008). In 2002, Malaysia achieved a further significant milestone when the government issued the first global sovereign *sukuk*, raising US\$600 million. With this issuance, it became an international benchmark for issuing of global *sukuk*. The *sukuk* issue was listed on the Luxembourg Stock Exchange, Labuan International Financial Stock Exchange and Bahrain Stock Exchange (Aziz, ZA 2007). There have since been further sovereign issues in the global capital market. Malaysia has pioneered many of the world's innovative *sukuk* structures (Table 1) that are in fact 'world firsts'.

The Malaysian *sukuk* market has grown exponentially in recent years, with an average annual growth rate of 21% between 2001 and 2008. This has surpassed the outstanding amount of conventional debt securities issued in the domestic market in 2007 (Figure 1). In Malaysia the *sukuk* market now plays an important role in financing the economy accounting for more than half of the country's total debt, both in terms of balance outstanding and issuance. Demand for Malaysian *sukuk* has been mainly driven by infrastructure and utilities which account for more half of the Islamic debt market (RAM 2009).

At an international level, there has been exceptional growth in the global *sukuk* market in which the issuance of *sukuk* increased rapidly from USD 1 billion a year in 2002 to USD34 billion in 2007 (IFSL 2010). Malaysia itself has emerged as the largest Islamic securities or *sukuk* market in the world, with 68.9% of the globally outstanding *sukuk* originating in Malaysia (Noor & Mohideen 2009). However, due to the subprime crisis in 2008, Malaysia was the hardest hit in that there was a marked deterioration in *sukuk* issuance to almost half when compared to 2007, followed by Gulf Cooperation Council (GCC) (Hijazi et al. 2009). The Malaysian *sukuk* market had been on the rise since the early 2000s but the global financial crisis clearly stunted its growth. *Sukuk* issuance in Malaysia fell from RM58 billion as reported in 2007 to RM20.8 billion in 2008 (Abdullah, Burhan & Shah 2009).

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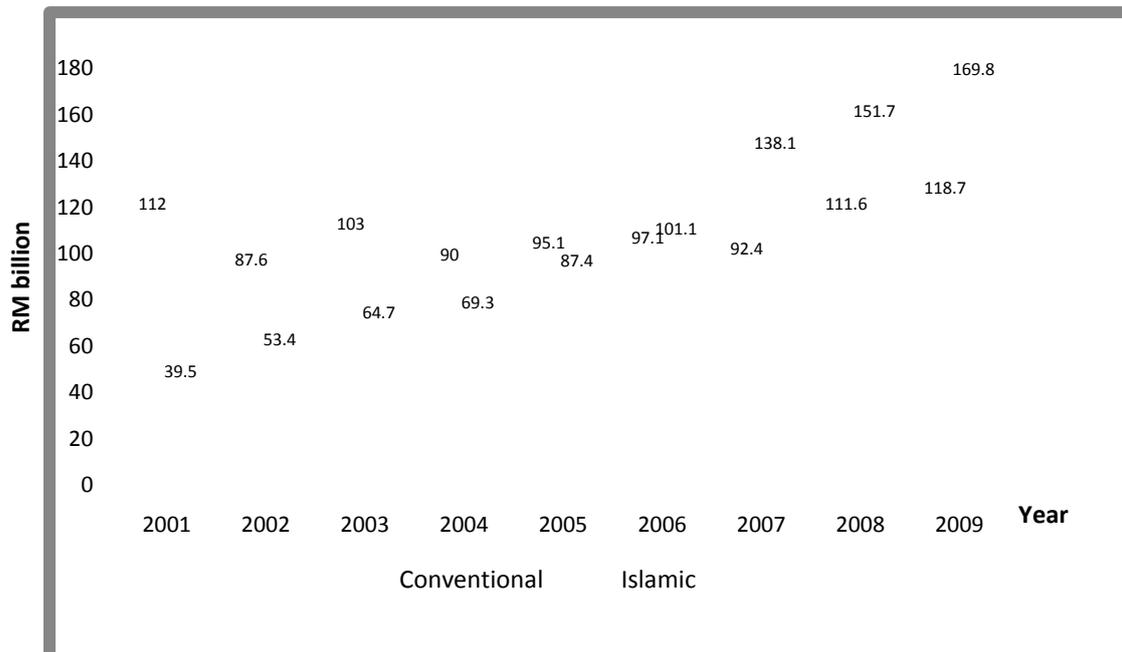
Globally, the year 2009 witnessed Malaysian *sukuk* market well on the road to recovery. The 65 *sukuk* (SC 2009) issues coming out of Malaysia represented approximately 54% of the number of worldwide issues. This amounted to approximately 48% of *sukuk* issued in Malaysian ringgit (Damak, Esters & Maheshwari 2010). Malaysia has become the frontrunner in the development of Islamic capital markets since the 1980s (Jobst et al. 2008), and continued to lead global issuance in 2009.

Table 1: World's first *sukuk* issues

| Year | Issuer | Highlight Feature | Amount (million) |
|---------|---------------------------------------|--|---------------------|
| 1990 | Shell MDS | World's first ringgit <i>sukuk</i> issued by a foreign-owned, non-Islamic company | RM125 (USD33) |
| 2001 | Kumpulan Guthrie | World's first global corporate <i>sukuk</i> | USD150 |
| 2002 | Government of Malaysia | World's first global sovereign <i>sukuk</i> | USD600 |
| 2003 | International Finance Corporation | First ringgit <i>sukuk</i> issued by a supranational agency | RM500 (USD132) |
| 2004 | Cagamas MBS | World's first Islamic residential mortgage-backed securities | RM2,050 (USD\$540) |
| 2005 | PLUS | Complex and innovative structure, conversion of PLUS's existing debts into Islamic financing | RM9,170 (USD2860) |
| 2006 | Khazanah Nasional (Rafflesia Capital) | World's first exchangeable <i>sukuk</i> | USD750 |
| 2007 | AEON Credit Services | First <i>sukuk</i> issued by Japanese-owned company | RM400 (USD125) |
| 2007 | Nucleus Avenue (Malakoff Corp) | World's first hybrid <i>sukuk</i> RM8,000 | (USD2500) |
| 2007 | Khazanah Nasional (Cherating Capital) | Largest equity-linked <i>sukuk</i> issue and highest oversubscription rate | USD850 |
| 2007 | Maybank | First international subordinated <i>sukuk</i> | USD300 |
| 2007 | Binariang GSM | World's largest <i>sukuk</i> issue (at the time of issuance) | RM15,350 (USD4,800) |
| 1H 2010 | Government of Malaysia | World's largest global sovereign <i>sukuk</i> | USD1,250 |

Source: RAM (2010) and BNM & SC (2009)

Figure 1: Outstanding local currency bonds in Malaysia



Source: Bank Negara Malaysia (in *Malaysia-Update* 2009)

5. The Methodology

This study focuses solely on Malaysia's debt market, taking into account the unique features of the country's financial market which had been considered a model for the 'dual financial system' and continued to perform well in terms of issuance even after the subprime crisis erupted. As far as the domestic market is concerned, Malaysia's issuance of *sukuk* is as large as its conventional bonds. However, our sample comprises 20 annual observations of *sukuk* issuance starting from 1990 as Malaysian *sukuk* market only took off in that particular year. Similarly, annual observation of conventional bonds starting from 1990 has also been taken as a sample, as this paper aims to compare sustainability of *sukuk* issuance to conventional finance during the financial crisis.

Our aim is to investigate whether the issuance of *sukuk* compared to conventional bond is driven by current economic conditions. The study sets out to establish how sensitive *sukuk* and conventional bonds issuance are to the economic situation in mitigating future financial crises. Thus the study incorporates macro variables in determining *sukuk* and conventional bond issuance. There variables used to proxy economic condition are: (i) gross domestic product (GDP), (ii) foreign exchange rates (forex), and (iii) international liquidity (liq). The paper also investigates the trends in *sukuk* and conventional bond issuance during the major financial crises particularly the Asian financial crisis 1997-98 and the more recent subprime crisis of 2007.

The sample consists of 20 annual observations on each *sukuk* and conventional bond issuance in Malaysia from 1990 to 2009. The data were obtained from the Monthly Statistical Bulletin by Bank Negara Malaysia (BNM), which is the central

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bank of Malaysia. Islamic bond is referred to as *sukuk* and straight bond represents conventional bond issuance. In addition, economic data were collected from IMF International Financial Statistics (IFS).

Simple regression analysis using ordinary least square (OLS) is tested with *sukuk* and conventional bond for each independent variable. White heteroscedasticity and correlogram residuals squared test evidence there is no heteroscedasticity and autocorrelation problem in the data. The full definitions of variables are specified in Table 2.

Table 2: Dependent and Independent variables

| | <i>Definition</i> |
|-------------------------------|---|
| <i>Dependent variables:</i> | |
| <i>Sukuk</i> | Islamic bonds issuance |
| Conventional bonds | Straight bonds issuance |
| <i>Independent variables:</i> | |
| GDP | Malaysian Gross Domestic Product |
| Forex | Malaysian exchange rate (MYR/USD) |
| Liq | International liquidity (Reserves minus gold) |

Table 3 provides descriptive statistics on the dependent variables used in this study. The mean and standard deviations for *sukuk* issuance are smaller than conventional bond issuance. Nonetheless as presented in Table 4, average growth of *sukuk* issuance is higher than conventional bond issuance at 53% and 47% respectively. Conventional bonds are positively skewed more than *sukuk*. In reference to the kurtosis, *sukuk* values are more evenly spread around the mean with a thin-tailed distribution. On the other hand, conventional banks have fat-tailed distribution where the values are scattered widely around the tail.

As shown in Figure 2, except for some years (1995, 2000, 2002 and 2009) the issuance behaviour of *sukuk* and conventional bonds are opposed to each other. In the early years of *sukuk* issuance, its growth trends are not corresponding to the growth in conventional bonds issuance. The same trends occur during the Asian financial crisis of 1997 with contradictory growth characterising Islamic and conventional bonds issuance. The scenario repeats itself again in 2001 and 2003, probably due to the bursting of the technology bubble and the collapse of Enron respectively. The subprime mortgage crisis in 2007 will be significant to the economy and thus to the *sukuk* issuance during this period of crisis.

Table 3: Descriptive Statistics of Dependent Variables

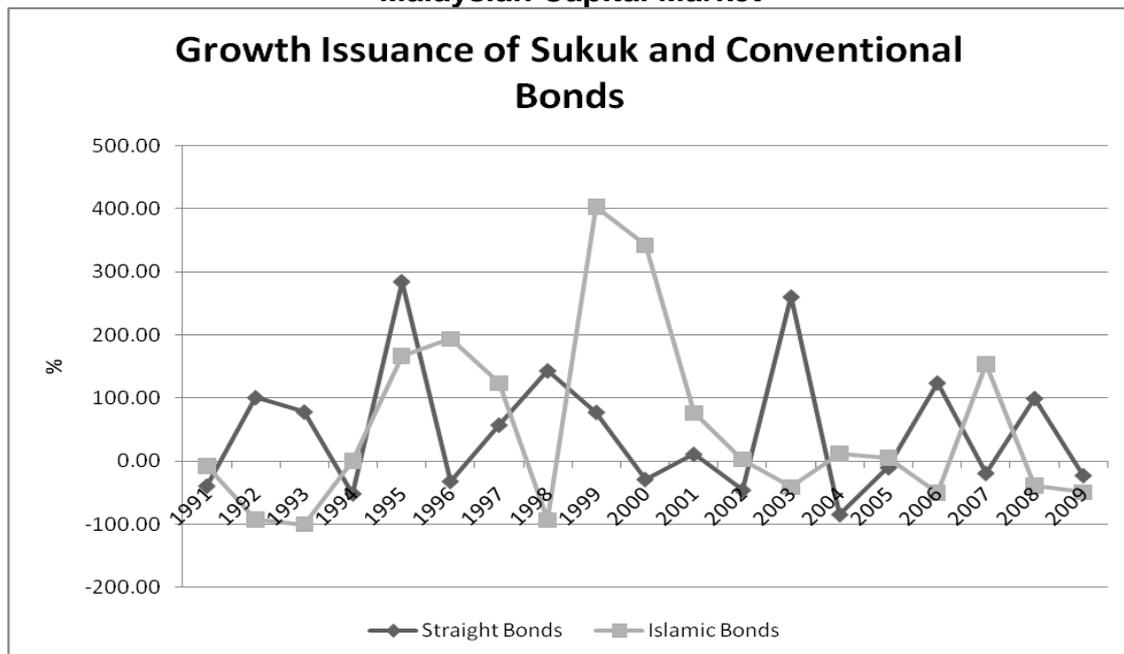
| | <i>Sukuk</i> | Conventional |
|-----------|---------------------|---------------------|
| Mean | 5340.74 | 7839.85 |
| Std. Dev. | 4759.27 | 7039.27 |
| Skewness | 0.43324 | 1.25451 |
| Kurtosis | 1.86791 | 4.32757 |

Table 4: Growth Rate of *Sukuk* and Conventional Bonds Issuance for the Malaysian Capital Market

| End of Period | % | |
|---------------|--------------------|---------------|
| | Conventional Bonds | Islamic Bonds |
| 1991 | -39.35 | -7.53 |
| 1992 | 100.80 | -92.86 |
| 1993 | 78.06 | -100.00 |
| 1994 | -51.57 | 0.00 |
| 1995 | 284.64 | 166.67 |
| 1996 | -31.92 | 193.75 |
| 1997 | 57.32 | 123.39 |
| 1998 | 143.24 | -93.43 |
| 1999 | 77.59 | 402.61 |
| 2000 | -28.83 | 342.10 |
| 2001 | 10.97 | 76.12 |
| 2002 | -45.94 | 2.43 |
| 2003 | 260.48 | -41.12 |
| 2004 | -84.59 | 11.81 |
| 2005 | -10.29 | 4.75 |
| 2006 | 124.02 | -49.87 |
| 2007 | -19.14 | 153.67 |
| 2008 | 99.44 | -38.42 |
| 2009 | -22.71 | -49.32 |
| Average | 47.49 | 52.88 |

Source: Bank Negara Malaysia (at <http://www.bnm.gov.my/>)

Figure 2: Growth Rate of *Sukuk* and Conventional Bonds Issuance for the Malaysian Capital Market



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In order to investigate the relationship between *sukuk* and conventional bonds issuance with economic factors of Malaysian capital market, our study specifies the following hypotheses:

Hypothesis 1:

H_a: GDP has significant effect on sukuk and conventional bonds issuance

Hypothesis 2:

H_a: Forex has significant effect on sukuk and conventional bonds issuance

Hypothesis 3:

H_a: Liq has significant effect on sukuk and conventional bonds issuance

The hypotheses were tested using the following functions and equations:

$$\begin{aligned} \text{Sukuk} &= f(\text{GDP}) & \text{Conventional Bonds} &= f(\text{GDP}) \\ \text{Sukuk}_t &= \beta_0 + \beta_1 \text{GDP}_t + \varepsilon_t & \text{Conventional Bonds}_t &= \beta_0 + \beta_1 \text{GDP}_t + \varepsilon_t \end{aligned}$$

$$\begin{aligned} \text{Sukuk} &= f(\text{Forex}) & \text{Conventional Bonds} &= f(\text{Forex}) \\ \text{Sukuk}_t &= \beta_0 + \beta_1 \text{Forex}_t + \varepsilon_t & \text{Conventional Bonds}_t &= \beta_0 + \beta_1 \text{Forex}_t + \varepsilon_t \end{aligned}$$

$$\begin{aligned} \text{Sukuk} &= f(\text{Liq}) & \text{Conventional Bonds} &= f(\text{Liq}) \\ \text{Sukuk}_t &= \beta_0 + \beta_1 \text{Liq}_t + \varepsilon_t & \text{Conventional Bonds}_t &= \beta_0 + \beta_1 \text{Liq}_t + \varepsilon_t \end{aligned}$$

6. The Findings

Table 5 summarises regression results of the OLS estimates for the study. From the regression, we present the following equations:

$$\text{Sukuk}_t = -103.6681 + 0.0146 \text{GDP}_t \quad \text{Conventional Bonds}_t = 2075.78 + 0.016 \text{GDP}_t$$

$$\text{Sukuk}_t = -12414.36 + 5360.016 \text{Forex}_t \quad \text{Conventional Bonds}_t = -19761 + 8426 \text{Forex}_t$$

$$\text{Sukuk}_t = 2043.286 + 0.0217 \text{Liq}_t \quad \text{Conventional Bonds}_t = 4855.5 + 0.0202 \text{Liq}_t$$

Table 5: Coefficient and statistics for the OLS estimates

| Sukuk | Constant | Coefficient | Std. Error | t-Statistic | Prob. | R-squared |
|-------|-----------|-------------|------------|-------------|--------|-----------|
| GDP | -103.6681 | 0.014596 | 0.005004 | 2.916913 | 0.0096 | 0.333552 |
| FOREX | -12414.36 | 5360.016 | 1635.481 | 3.277333 | 0.0044 | 0.387187 |
| LIQ | 2043.286 | 0.021706 | 0.008956 | 2.423483 | 0.0268 | 0.256774 |

| Conventional | Constant | Coefficient | Std. Error | t-Statistic | Prob. | R-squared |
|--------------|----------|-------------|------------|-------------|--------|-----------|
| GDP | 2075.778 | 0.015881 | 0.007956 | 1.996179 | 0.0613 | 0.181250 |
| FOREX | 19761.84 | 8426.486 | 2180.420 | 3.864616 | 0.0011 | 0.453473 |
| LIQ | 4855.503 | 0.020188 | 0.014360 | 1.405883 | 0.1768 | 0.098942 |

From ordinary least square estimates, all the t-statistics of independent variables for *sukuk* issuance are significant at 5% significance level. From the above statistics

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(P-value < 0.05), we reject the null hypotheses 1, 2 and 3. It implies that there are significant effects of GDP, forex and international liquidity (reserves less gold) in the issuance of *sukuk* for Malaysian capital market throughout the study period.

In contrast, only forex are significant at 5% significance level for conventional bonds issuance. Thus we reject null hypothesis 2 but we are unable to reject null hypotheses 1 and 3 for conventional bonds. The results entail the insensitivity of conventional bonds issuers to economic factors of GDP and international liquidity (reserves less gold).

The factors of economic proxy, GDP, forex and international liquidity (reserves less gold) have a positive relationship to bond issuance in Malaysia. Except for forex, R-squared for conventional bonds are lower than *sukuk*, indicating there are other contributing factors concerning conventional bonds issuance in Malaysia.

7. Summary and Conclusions

This study aims to investigate the impact of economic and market conditions on the issuance of Islamic and conventional bonds in Malaysia's capital market. The study uses 20-year data in testing the hypotheses of the effects of GDP, forex and market liquidity on bond issuance. We found interesting trends of *sukuk* when it was compared to conventional counterparts within the study period. Despite *sukuk* representing finance that is necessary for Muslims but also acting as an alternative for non-Muslims, the trends reveal that for most of the period, growth in *sukuk* and conventional bonds issuance is not parallel, particularly during the Asian financial crisis and subprime crisis.

The results reveal evidence that differently measured factors determined the value of *sukuk* and conventional bonds issuance in Malaysia. *Sukuk* issuers place a premium on current economic factors such as GDP, forex and international liquidity (reserves less gold) in *sukuk* issuance while conventional bonds issuers only consider forex as an important factor in its issuance. It implies the concern of *sukuk* issuers in economic conditions and stability in ensuring a sustainable Islamic capital market. As evidenced by the recent subprime financial crisis of 2007/08, *sukuk* are susceptible to deterioration. However, it is important to note that the effect is considered to be less severe compared to the conventional bond market. Considering the provisions inherent in the *sukuk* structure, its fundamental value is more stable and hence less affected during financial crises. With respect to a financial crisis, *sukuk* growth declined by 38% in 2008 while conventional bonds issuance increased to almost double the 2007 value. It shows that the issuance of conventional bonds is not affected by weak economic conditions. However, the increase in the debt burden could lead to future setbacks in the capital and financial markets vis-a-vis the real estate mortgage crisis.

Endnotes

ⁱ See Islamic Finance Outlook 2010, Standard & Poor's, p.8.

ⁱⁱ AAOIFI Standard 17

References

- Abdullah, ME, Burhan, S & Shah, MAR 2009, *The Bright Side of a Downturn*, Rating Agency Malaysia, Kuala Lumpur.
- Amihud, Y, Mendelson, H & Wood, R 1990, 'Liquidity and the 1987 stock market crash', *The Journal of Portfolio Management*, vol. 16, no. 3, pp. 65-69.
- Areskoug, K 1980, 'Exchange Rates and the Currency Denominations of International Bonds', *Economica*, vol. 47, no. 186, pp. 159-163.
- Ashhari, ZM, Chun, LS & Nassir, AM 2009, 'Conventional vs Islamic Bond Announcements: The Effects on Shareholders' Wealth', *International Journal of Business and Management*, vol. 4, no. 6, pp. 105-111.
- Aziz, RPA & Gintzburger, A-S 2009, 'Equity-Based, Asset-Based and Asset-Backed Transactional Structures in Shari'a-Compliant Financing: Reflections on the Current Financial Crisis*', *Economic Papers: A journal of applied economics and policy*, vol. 28, no. 3, pp. 270-278.
- Aziz, ZA 2007, 'The global Islamic financial market today - Strategic Developments in Malaysia', *BIS Review 74/2007*.
- Bernanke, BS, Lown, CS & Friedman, BM 1991, 'The Credit Crunch', *Brookings Papers on Economic Activity*, vol. 1991, no. 2, pp. 205-247.
- BNM & SC 2009, *Malaysian Debt Securities And Sukuk Market: A Guide for Issuers and Investors*, Bank Negara Malaysia and Securities Commission, Kuala Lumpur.
- Choudhry, M 2009, 'The Value of Introducing Structural Reform to Improve Bond Market Liquidity: Experience from the UK Gilt Market', *European Journal of Finance and Banking Research*, vol. 2, no. 2, pp. 13-35.
- Cohen, B 2005, 'Currency choice in international bond issuance', *BIS Quarterly Review*, pp. 53-66.
- Colombage, SRN 2009, 'Financial markets and economic performances: Empirical evidence from five industrialized economies', *Research in International Business and Finance*, vol. 23, no. 3, pp. 339-348.
- Damak, M, Esters, C & Maheshwari, R 2010, 'The Sukuk Market Is Likely To Show Steady Growth In 2010', in *Islamic Finance Outlook 2010*, Standard & Poor's New York, pp. 13-18.
- Damak, M & Volland, E 2010, 'Islamic Finance Is Likely To Advance In 2010 On Firm Growth And Widening Geographic Reach', in *Islamic Finance Outlook 2010*, Standard & Poor's, New York, pp. 9-12.
- Damak, M & Volland, E 2008, *The Sukuk Market Continues To Soar And Diversify, Held Aloft By Huge Financing Needs*, Standard & Poor's, New York.
- Favarra, G 2003, 'An Empirical Reassessment of the Relationship Between Finance and Growth', *IMF Working Paper No. 03/123*.
- Fink, G, Haiss, PR & Hristoforova, S 2006, 'Credit, Bonds, Stocks and Growth in Seven Large Economies', *Europainstitut Working Paper No. 70*
- Fisher, L 1959, 'Determinants of risk premiums on corporate bonds', *The Journal of Political Economy*, pp. 217-237.
- Harrison, P 2002, 'The impact of market liquidity in times of stress on corporate bond issuance', paper presented at the Third Joint Central Bank Research Conference on Risk Measurement and Systemic Risk, Switzerland.

- Hijazi, F, Howladar, K, Lotter, P, Hassoune, A & Gribot-Carroz, D 2009, *Global Sukuk Issuance: 2008 Slowdown Mainly Due to Credit Crisis, But Some Impact from Shari'ah Compliance Issues*, Moody's Investors Service, London.
- IFSL 2010, *Islamic Finance 2010*, International Financial Services London, London.
- Jobst, A, Kunzel, P, Mills, P, Sy, A & PDP/08/3 2008, 'Islamic Bond Issuance—What Sovereign Debt Managers Need to Know', *IMF Policy Discussion Paper*, no. PDP/08/3.
- Kamil, WAR 2009, 'Introduction to Sukuk', in *Malaysian Sukuk Market Handbook*, RAM Rating Services Berhad, Kuala Lumpur, pp. 21-49.
- Kedia, S & Mozumdar, A 2003, 'Foreign currency-denominated debt: An empirical examination', *Journal of Business*, vol. 76, no. 4, pp. 521-546.
- Keloharju, M & Niskanen, M 2001, 'Why do firms raise foreign currency denominated debt? Evidence from Finland', *European Financial Management*, vol. 7, no. 4, pp. 481-496.
- Kroszner, R, Laeven, L & Klingebiel, D 2007, 'Banking crises, financial dependence, and growth', *Journal of Financial Economics*, vol. 84, no. 1, pp. 187-228.
- Kroszner, R & Strahan, P 2005, 'Regulation and deregulation of the US banking industry: causes, consequences, and implications for the future', in *Economic Regulation and Its Reform: What Have We Learned?*, ed. NL Rose, The University of Chicago Press, Chicago.
- Laldin, MA 2008, 'Islamic financial system: The Malaysian experience and the way forward', *Humanomics*, vol. 24, no. 3, pp. 217-238.
- Levine, R 2005, 'Finance and growth: theory and evidence', *Handbook of Economic Growth*, vol. 1, pp. 865-934.
- Levine, R 1997, 'Financial development and economic growth: views and agenda', *Journal of Economic Literature*, vol. 35, no. 2, pp. 688-726.
- Malaysia-Update 2009, Asian Development Bank, Manila, viewed 31 August 2010, <http://asianbondsonline.adb.org/malaysia/market_summary/my_market_summary_201003.pdf>.
- McCauley, R & Remolona, E 2000, 'Size and liquidity of government bond markets', *BIS Quarterly Review*, pp. 52-60.
- Nanaeva, Z & Mammadov, R 2010, 'Thoughts on *sukuk* and the risk of default', *Islamic Finance News*, vol. 7, no. 28.
- Noor, LM & Mohideen, MFK 2009, 'The Malaysian Sukuk Market', in *Malaysian Sukuk Market Handbook*, RAM Rating Services Berhad, Kuala Lumpur, pp. 1-18.
- O'Hara, M 1995, *Market microstructure theory* Basil Blackwell Inc., Oxford.
- Pasquariello, P 2008, 'The anatomy of financial crises: Evidence from the emerging ADR market', *Journal of International Economics*, vol. 76, no. 2, pp. 193-207.
- RAM 2010, *Malaysian Islamic Capital Market: An intelligent positioning in an evolving industry*, Rating Agency Malaysia, Kuala Lumpur.
- RAM 2009, *Sukuk Wrap-up 2009*, Rating Agency Malaysia, Kuala Lumpur.
- SC 2009, *Annual Report*, Securities Commission, Kuala Lumpur.
- Silva, A 2008, *Bond Market Development : Monetary And Financial System stability Issues*, The United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand viewed 19 December 2010, <http://www.unescap.org/pdd/projects/bondmkt/5_bond_SL_stability.pdf>.