

## Market Reactions Towards the Announcement of *Sukuk* Issuance: Evidence from Malaysian Market

(Reaksi Pasaran ke Arah Pengumuman Berkaitan Pengeluaran *Sukuk*:  
Keterangan dari Pasaran Malaysia)

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### ABSTRACT

*Drawing from the significance and implication that investors can use to properly comprehend the trend in market reaction from the new issuance of information, this study aims to investigate the market's reaction toward the announcement of Islamic bond or sukuk. The Islamic bond market provides not only an avenue for more dynamic capital trades and portfolio diversification but also functions as an engine that accelerates the growth of the Islamic capital market. This study specifically aims to investigate whether the announcements of sukuk issuance that carry any new information can create impact on the market's reactions. The overall sample time frame for this study is divided into three event windows; before, during and after the financial crisis in order to ascertain any unusual impact on the market's return during the 2007-2008 financial crises. The stock market return is measured via the FTSE and Bursa Malaysia's KLCI. In order to offer a more robust finding on the returns, this study re-measured the market return using Bursa Malaysia's FTSE EMAS Index as it is a better representation of the sample population. The data collected from Bursa Malaysia, Bloomberg and DataStream database will be then analysed using Brown and Warner's standard event study methodology of Brown and Warner (1985). Based on the 115 sukuk issuances between 2002 and 2013 (a period of 12 years), this study reveals that the effect of the announcement is significantly negative a day before and on the announcement date. On top of that, the result finds that there is a significantly positive reaction 30 days after the announcement of sukuk issuance which indicates that investors take a longer time to absorb the information from the sukuk announcement. The existence of a significantly positive reaction of stock markets during the financial crisis periods could be attributed to the conditions where the Islamic debt issuance might have sent an incredible signal about the financial position of the company, which have helped in solving the financial problem, especially during the economic downturn. However, the EMAS Index shows none of these significant results. The significant findings in this study (i.e., when uses the KLCI) are expecting to contribute clearer evidence and strategies concerning whether the information regarding sukuk can help investors to form a better investment strategy.*

*Keywords: Sukuk; Islamic bond; Islamic finance; market reactions; stock market return*

### ABSTRAK

*Tujuan utama kajian adalah untuk menyasat tindak balas pasaran terhadap pengumuman bon Islam atau lebih dikenali sebagai sukuk dengan mengambil kira kepentingan dan implikasi yang boleh digunakan oleh pelabur untuk memahami dengan betul corak dalam tindak balas pasaran daripada terbitan maklumat baru. Pasaran bon Islam bukan sahaja memberi peluang kepada perdagangan modal dan kepelbagaian portfolio yang lebih dinamik tetapi juga berfungsi sebagai enjin yang mempercepat pertumbuhan pasaran modal Islam. Kajian ini secara khusus bertujuan untuk menyasat sama ada pengumuman terbitan sukuk membawa apa-apa maklumat baru yang boleh memberi impak terhadap tindak balas pasaran. Keseluruhan bingkai masa untuk kajian ini dibahagikan kepada tiga peringkat iatu sebelum, semasa dan selepas krisis kewangan untuk mengkaji samaada terdapat sebarang kesan yang luar biasa ke atas pulangan pasaran semasa krisis kewangan 2007-2008. Pulangan pasaran saham diukur melalui FTSE dan Bursa Malaysia KLCI. Untuk menawarkan penemuan yang lebih mantap, kajian ini mengukur semula pengembalian pasaran menggunakan Indeks FTSE EMAS Bursa Malaysia kerana ia merupakan perwakilan yang lebih baik dari populasi sampel. Data yang dikumpulkan dari pangkalan data Bursa Malaysia, Bloomberg dan DataStream akan dianalisis dengan menggunakan metodologi kajian standard Brown dan Warner (1985). Berdasarkan 115 terbitan sukuk antara tahun 2002 dan 2013 (tempoh 12 tahun), kajian ini mendedahkan bahawa kesan pengumuman itu signifikan negatif sehari sebelum dan pada tarikh pengumuman. Di samping itu, keputusan mendapati terdapat tindak balas positif 30 hari selepas pengumuman penerbitan sukuk yang menunjukkan bahawa pelabur mengambil masa yang lebih lama untuk menyerap maklumat daripada pengumuman sukuk. Kewujudan reaksi positif pasaran saham semasa tempoh krisis kewangan boleh dikaitkan*

dengan syarat-syarat di mana terbitan bon Islam mungkin telah menghantar isyarat yang luar biasa mengenai kedudukan kewangan syarikat, yang telah membantu dalam menyelesaikan masalah kewangan terutamanya semasa kemelesetan ekonomi. Walau bagaimanapun, Indeks EMAS tidak menunjukkan sebarang hasil yang signifikan ini. Penemuan penting dalam kajian ini (iaitu ketika menggunakan KLCI) diharapkan dapat menyumbang kepada keperluan bukti dan strategi yang lebih jelas mengenai apakah maklumat mengenai sukuk dapat membantu para pelabur untuk membentuk strategi pelaburan yang lebih baik.

*Kata kunci:* Sukuk; bon Islam; kewangan Islam; tindak balas pasaran; pulangan pasaran saham

## INTRODUCTION

One of the unique features of the Malaysian financial market is the co-existence of Islamic bonds market, better known as the *sukuk* market, and the conventional bonds. Unlike the more conventional bonds, the Islamic bonds are structured to comply with the *Shariah* principles that prohibits the charging of *riba*' or interest. The history of the *sukuk* market shows Malaysia as one of the pioneering countries in the Islamic bond products when it kicked off in the global *sukuk* arena with the issuance of the Shell MDS Sdn. Bhd. in 1990 (Bloomberg Businessweek 2013). The issuance of the Shell MDS Sdn. Bhd. has become a spectator of the unprecedented proliferation for the *sukuk* issuance especially after the global financial crisis in 2007–2008. The global financial crisis has alerted investors on the significance of other investment alternatives as a means to diversify and minimise the risk of their investment portfolio. To be totally dependent on the equity market might limit the investors' chance to optimise their portfolio returns particularly during the economic downturn. *Sukuk* is viewed as one of the best alternatives for the risk of the diversification strategy.

To date, *sukuk* is reported to be the most active Islamic financial instrument issued in debt market and an important avenue as a fundraising mechanism for companies besides functioning as investment activities for investors. As depicted in Figure 1, even though the

total number of global *sukuk* issuance experienced a temporary drop in 2008, it regained its momentum in 2009. The consistent growth of its issued size from year to year indicates that the global *sukuk* market is gradually developing. In other words, the debt market participants (e.g. firms and investors) have begun to recognise the significance of *sukuk* as an alternative investment channel., Despite a decline in the total amount of *sukuk* issuance in 2008, Malaysia still holds the position as the largest *sukuk* market in the world during and after the financial crisis (Bank Negara Malaysia and Securities Malaysia 2009).

Concurrent with the development of the *sukuk* market over the decade (10 years before year 2014), the number of academic research circulating on the debt market is also expanded. Specifically, past researchers are engrossed on measuring the market reaction toward the releasing of "new" information from newly-issued bonds. Regardless of the markets, previous studies are inclined to scrutinise the market reaction toward the information and the newly issued bond during the intense economic phases or periods (i.e. the financial crisis period). The inclination and wide attention given during the period of crisis is probably due to the possibility of immense adverse implication faced by investors if they fail to astutely read and understand how the market behaves or reacts. The naturally, profit-motivated investors are exposed to zero and/or negative returns on their investment if the market behaviour towards the new issuance is not clearly understood. The

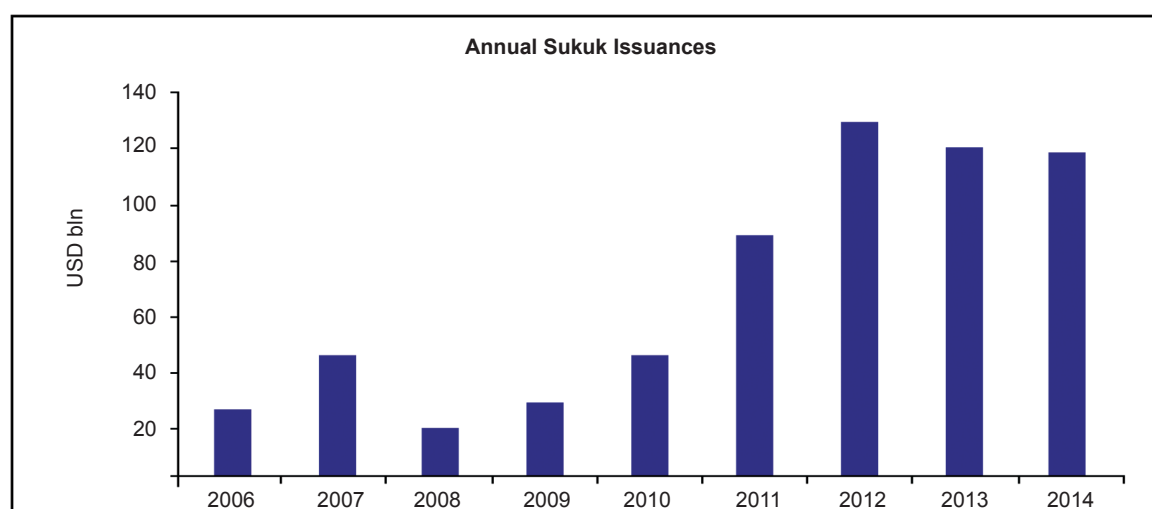


FIGURE 1. Global *Sukuk* issuance, from 2006 to 2014

Sources: ISRA, IFIS, Zawya, Bloomberg

inability to comprehend market reaction and behaviour will cause the investors' prediction on the market to move against them. Consequently, this oversight reduces the investors' opportunity to generate a positive and better income. Such outcome contradicts with one of the transformation programs in the National Key Economic Aspiration (NKEA), which aims to produce a high-income nation and citizens.

Drawn from the implication and significance of investors to fully comprehend the trend in market reaction toward the information that comes with the new issuance, this study aims to investigate market reactions in lieu to the announcement of the Islamic bonds or *sukuk*. The market reaction on the new issuance of *sukuk* is expected to assist investors in executing a better investment strategy, thus, reduces the probability of losing their investment. Additionally, this study aims to fill in the gap to the extent of the literature as studies on how the Islamic debt issuance and the Malaysian stock market progress together are scarce, despite the claim that Malaysia is the largest *sukuk* market in the world. The ability of the *sukuk* market to be an avenue for portfolio diversification and an engine to accelerate growth of the Malaysian Islamic capital market which also directs this study to focus on the trend of the market behaviour toward the announcement of *sukuk*. In a nutshell, this study aims to examine the market reactions (the Malaysian stock price movement) to the issuance of *sukuk*.

This study employs data on the *sukuk* issued in Malaysia from 2001 to 2013 and specifically aims to investigate whether the announcements of the *sukuk* issuance that carry any new information that could create an impact on the market reactions. The data time frame (2001–2013) is divided into three event windows (i.e. before, during, and after the financial crisis) to ascertain any unusual impact on the market return during the 2007–2008 financial crisis. The stock market returns are measured by the FTSE Bursa Malaysia KLCI. To generate a more robust finding, this study re-measures the market returns using Bursa Malaysia's FTSE EMAS Index as it is a better representation of the sample population. Unlike the KLCI which is based only on 30 large-cap stocks, the EMAS is composed of 100 large, mid, and small-cap stocks listed on the Malaysian stock market. Hence, it is more applicable to represent the Malaysian stock market portfolio and behaviour. The data collected from Bursa Malaysia, Bloomberg, and DataStream database are analysed using Brown and Warner's standard event study methodology (1985).

The remaining parts of this paper is organised in the following format. The first section provides an overview of the issue, the research problem, the objectives as well as the significance of the study and its limitations. The second part of the paper presented the review of other previous related literature. Each issue is critically analysed and the latest literature is considered. The data collection, the information concerning the instrument, and theoretical foundation are presented in section three. The results and

data analysis are presented in section four. The discussion of the results, including the implication to the existing literature is also included in this chapter. The fifth section governs the final chapter of the research and provides the overall conclusion, recommendations for future research and limitations.

## LITERATURE REVIEW

There is limited empirical evidence on stock market reactions toward the *sukuk* issuance since the existing studies provided ambiguous results. A study conducted by Ashhari, Chun and Nassir (2009) showed that by employing the Malaysian-listed companies from 2001 to 2006, the investigation made on the impact of *sukuk* and the conventional bond announcements on shareholders wealth can be conducted. Theoretically, the market transaction of common stock or bond which is in compliance with the shariah should result in the stable aftermarket behaviour (Abdul-Rahim, Yusof, Sopian & Janor 2008).

*Sukuk* is the Arabic word for a portfolio of fixed-income securities that demonstrate a financial certificate which in economic terms, are akin to conventional bonds. The Securities Commission Malaysia (SC) defines *sukuk* as 'a certificate of equal value that evidence an undivided ownership or investment in the assets using Shariah principles and concepts approved by the Shariah Advisory Board (SAC) (Securities Commission Malaysia Guidelines 2011). Unlike conventional bonds, *sukuk* needs to have an underlying tangible asset transaction either in ownership or in a master lease agreement. It represents the ownership of underlying assets, usufructs (benefits), services, or investment. The most common principles used in *sukuk* structuring to date are *ijarah*, *mudharabah*, *musharakah*, *murabahah*, and *istisna'a*.

Behavioural finance, in a broad context, distinguishes the investor's reaction into two main reactions, namely under-reaction and over-reaction. Kaestner (2006) argued that both reactions have cognitive bases to the investors' irrationality. Kaestner's argument is that an investor shows over-reaction to long-term investments that used to show 'unexpected earnings in the past,' and the under-reaction occurred as a promise of gaining short-term earnings that received much attention from economists. This scenario specifically applies to the western markets and this study reveals and discusses how the reactions could be applied into the Islamic debt. Past researches that are related to the concept of Islamic debt studies, particularly in the *sukuk* perspective, is however scarce.

Within a 61-day event window (i.e. 30 days before the announcement day and 30 days after the announcement), this study finds that there is a wealth effect that happened on the announcement of the issuance of Islamic bond during the event period. The study concludes that on average, investors in the Malaysian stock market reacted significantly to the *sukuk* announcements. A similar result is reported by Ibrahim and Minai (2009), who examined

a sample period from 2000 to 2006. The study revealed that the Malaysian stock market reacted significantly and positively during an event window of  $[-3, 0]$  and  $[-3, 3]$  around the time of the *sukuk* issuance announcements. The study further examines the determinants of the wealth effect in *sukuk* offerings and reveals that the market reaction is positively affected by the issuers' investment opportunity. Meanwhile, the variables of the Security Commission approval or the issuance size or firm size have documented a negative association to the market reaction.

A study conducted by Ameer and Othman (2010) generates a contradicting result with another – study (Ashhari et al. 2009; Ibrahim & Minai 2009), in which the former reported significant negative abnormal returns that surrounds the *sukuk* announcement. The study also finds that the negative response is asymmetrical to different types of bonds issuance announcement in Malaysia from 2000 to 2007. A negative market reaction towards *sukuk* and conventional bond announcements among Malaysian firms is later found by Godlewski, Turk-ariss and Weill (2010). The study, which examined 170 issuances (77 of which are *sukuk* and 93 of them are conventional bonds) from 2002 to 2009 that consists several event windows that comprise (1) the announcement day, (2) the day of the announcement, 1 day before the announcement and 2 days after the announcement is made, and (3) the day of the announcement, 2 days before the announcement and 2 days after the announcement. The study highlighted that there is a negative reaction to the announcement of *sukuk* during the 5-day event window, probably due to an adverse selection mechanism whereby a *sukuk* is issued by financially less competent firms.

The information content of *sukuk* offerings is another significant determinant of the *sukuk* wealth that is noted in the literature. For instance, Modirzadehbami and Mansourfar (2011) focused on the determination of *sukuk* announcements that bring an impact on the stock returns

of private firms by examining the information content of the Islamic private debt offerings. By using 45 listed firms on Bursa Malaysia that involved in the Islamic debt issuance from 2005 to 2008, the study calculated the abnormal and cumulative average of abnormal returns (CAARS) as samples. The study revealed that there are significant (negative) abnormal returns that occurred one day before announcement day, indicating market investors' adverse behaviour towards the Islamic private debt announcement. As for the CAARS, their results presented insignificant negative CAARS, thus, rejecting their hypothesis regarding the positive market reactions to an Islamic bond announcement.

The economic events such as the economic crises are also considered as an important influence in the study of stock reaction. A previous study like Michayluk and Neshauer (2006) and Otchere and Chan (2003) have found that the stock market tends to over-react in times of crisis. There is one study conducted by Modirzadehbami and Mansourfar (2011), in which their major findings indicated that the average abnormal return is significantly negative and lowest on day  $-1$  during the 22-day event window. Their main rationale towards this finding is that the 2007 financial crisis has led to an increase in the investors' awareness.

Capital structure has been extensively investigated in recent years. The mixture of debt and equity in the companies' financial structure and whether it will have an impact on the financial performance risk and valuation is the subject of theoretical and empirical studies. The method used to investigate the impact of capital structure is the main focus of the discussion. This study investigates the market reactions toward the Islamic debt announcement. Furthermore, this study also examines whether there is a difference in market reactions during a different period of crisis. The market capitalisation for each issuer is used to control the effect of size differences in the issuance. Figure 2 illustrates the framework of this research.

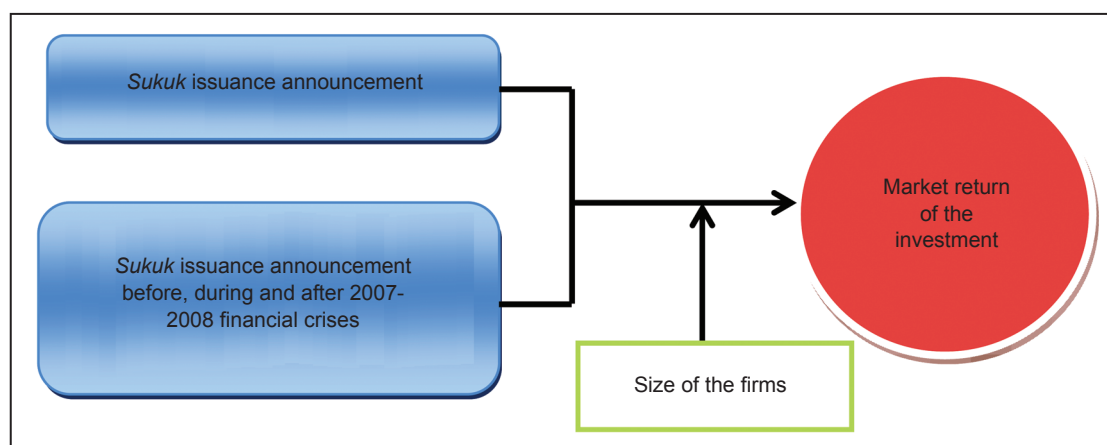


FIGURE 2. Research framework

## RESEARCH METHODOLOGY

## SAMPLE DESCRIPTION

The data on the *sukuk* issued obtained from Bursa Malaysia is between January 1, 2001, and December 31, 2013. Following the past studies (e.g. Brown & Warner 1985), this study uses a standard event study methodology to estimate abnormal returns around the event date for the selected *sukuk* issued. The 2007–2008 crisis periods is selected as the observation period because this period is relevant to the bond and leverage issues. The data on the daily closing stock prices for thirteen years before the announcement date of *sukuk* for all of the selected issuers according to the Kuala Lumpur KLCI and the Bursa Malaysia EMAS Index are collected from Thomson DataStream.

A final sample of issues is filtered based on the following selection criteria:

1. The issuers (i.e., issuing companies) are listed in Bursa Malaysia.
2. The announcement date of the issuance is identifiable clearly and accurately.
3. The maturity of the issuance must be 1 year or longer. This condition is imposed to avoid contamination of the results that may arise from the signalling implications of a short-term debt.
4. The issuing company's daily common stock prices during the period of at least two years before announcement should be available and accessible in the DataStream.

After the screening process, this study has obtained the final sample of 115 events of *sukuk* announcement by 32 publicly listed firms from 2001 to 2013. This study has applied the Brown and Warner (1985) standard event study methodology to examine the market reactions toward the Islamic debt announcement. This study also replicates a similar event window used in the study conducted by Ashhari et al. (2009), in which this study considered 61 days before the announcement date (-30 to +30 days around the announcement date and the announcement date itself). The reason for replicating this event window is because the Securities Commission will grant its approval for the Islamic debt (*sukuk*) proposal issuance within 21 working days as mentioned in the Securities Commission Malaysia Guidelines (2011), hence the 30 days around the announcement date are considered as the perfect event window.

## THE MEASUREMENT OF MARKET RETURNS

The average abnormal return (AAR) and cumulative average abnormal return (CAAR) are the two variables on return that are used for this event study analysis. The AAR is the average abnormal returns across firms while CAAR is the cumulative average abnormal returns across firms. The abnormal return is defined as the difference between

expected return and actual return on investments. The abnormal return may be either positive or negative. It is calculated using the abnormal return benchmarks, which is a market portfolio basis.

The performance of stock prices of firms on certain days is quantified as follows;

$$AR_{it} = R_{it} - R_{mt} \quad (1)$$

where;

$$\begin{aligned} AR_{it} &: \text{Abnormal returns for firm } i \text{ at time period } t \\ R_{it} &: \text{Actual returns for firm } i \text{ at time period } t \\ R_{mt} &: \text{Returns on market portfolio in period } t \end{aligned}$$

After estimating the abnormal returns for each firm, the abnormal return for all of the firms on each day of the event window are aggregated and averaged as (2); where, N is equal to the number of firms in the sample:

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it} \quad (2)$$

The  $AAR_t$  is cumulated to identify the aggregated AR behaviour. The  $AAR_t$  is the average estimated deviation of the returns of the inspected stock from the normal relationship to the market.

The standard deviation of the AAR of the estimated window is computed to test and analyse whether the ARR is measurably different from zero, using (3):

$$t\text{-test} = CAAR / \delta (CAAR) \quad (3)$$

where;

$$\begin{aligned} AAR_t &= \text{Average abnormal return of period } t \\ \delta &= \text{Standard deviation of average abnormal return over the estimation window} \end{aligned}$$

To observe the cumulative effects, the cumulative abnormal returns ( $CAAR_{t,+t2}$ ) are computed by summing up the  $AAR_t$  over the various time periods of interest in respect to the event period (-t1 to +t2) using (4):

$$CAAR_{(-t1,+t2)} = \sum_{-t1}^{+t2} AAR \quad (4)$$

The stock price of each issuer will be used to estimate the actual return of each firm during the time period t ( $R_{it}$ ). Returns are calculated on a daily basis; 31 days before and after the announcement date. The formula for  $R_{it}$  is:

$$L_n \text{Price}_{it} - L_n \text{Price}_{it-1} \quad (5)$$

The *sukuk* price functions as proxy in order to get the returns from the market portfolio in period t ( $R_{mt}$ ). For the purpose of this study, the *sukuk* price is calculated on a monthly basis starting from the month of the announcement was made.  $R_{mt}$  is the outcome of the following formula:

$$L_n CI_t - L_n CI_{t-1} \quad (6)$$

The FTSE Kuala Lumpur Composite Index (KLCI) is based on a capitalisation-weighted index of 30 large-cap stocks while the FTSE EMAS Index is composed of 100 large-cap, mid-cap, and small-cap stocks in the Malaysian stock market (officially named as Bursa Malaysia). Both of these indexes are employed to measure the performance and behaviour of the Malaysian Stock market. The objectives and the usage of both composite indexes are not only to measure the performance of the Malaysian stock market but also to reflect the performance of listed companies that represents the major population as well as relevant sectors in the growth and development of the Malaysian market economy. The returns on KLCI and EMAS are used as a proxy to market returns ( $R_{mt}$ ) for period  $t$ .

## FINDINGS AND ANALYSIS

### DESCRIPTIVE STATISTICS

Table 1 provides details of the statistical methods used in this study. The mean value for AAR is 0.0012%, which ranges from -0.0070% to 0.0094%, while the CAAR's

mean value is 0.0818, that ranges between -0.0027% and 0.1625%, which suggesting that most of the issuers are experiencing an average return. A low CAAR may indicate that the stock is at a low price and vice versa. Theoretically, the stock that is being held at an average is likely to happen in a firm which has a stable earning history, consistent returns on the equity and a higher earning growth rate compared to the market average. In other words, the stocks between the average value are stocks belonging to a middle-sized to a large-scale firm. This theory is applicable to this study since the majority of our samples consist of middle-sized firms with an average market capitalisation.

Market capitalisation, which acts as the control variable shows the mean value of RM7, 599.7816 million, ranging from RM0.9300 million to RM57,571.0100 million. This could be due to the fact that bigger firms are already well-stabilised in terms of cash flows and profits. Due to their well-stabilised capital structure, the change in the capital structure with a new unproven instrument may endanger the firms' credibility and ability to maintain their stable cash flow and profits especially during a financial crisis.

TABLE 1. Descriptive statistics

Variables	Mean	Min	Max	Skewness	Kurtosis
Average abnormal return for 61 days (AAR %)	0.0012	-0.0070	0.0094	-0.072	-0.441
Cummulative average abnormal return for 61 days (CAAR %)	0.0818	-0.0027	0.1625	-0.064	-1.556
Amount issued (RM '000)	66,534.62	982.64	812,900	4.199	22.039
Market cap (RM 'mil)	7599.7816	0.9300	57571.01	2.972	9.494

Note: Observation = 115

### RETURNS USING THE FTSE BURSA MALAYSIA KLCI

The abnormal returns are calculated for 61 days of the event window. A cumulative average abnormal return (CAAR) is computed to test the cumulative effect of the announcement news on the market reactions. Table 2 provides the result taken during a 5-day time span (-2 to +2). The results showed that both AAR and CAAR are negative as well as becoming a significant result to the AAR mean values of 0.00343 on day -1. Regardless of the type of reaction (i.e. positive or negative), the rationale behind the early response is probably due to the leaked information on the new *sukuk* issuance before the official announcement is published to the public. Nevertheless, the significant negative abnormal returns on the day before the announcement is made which showed that the announcement of the *sukuk* offerings in the Malaysian debt market reflects unfavourable news over the study period. This reality is also being observed by Shamsheer and Taufiq (2009). In the event study, it accurately explains

TABLE 2. Daily abnormal return (AAR) on day -2 to day+2 (KLCI)

Day	AAR		CAAR	
	mean AAR	t-value	mean CAAR	t-value
-2	-0.00082	-0.379	0.0826	0.931
-1	-0.00343*	-1.681	-0.07916	-0.885
0	-0.00269	-1.541	-0.02691	-1.541
1	0.00067	0.280	-0.00202	-0.535
2	0.00093	0.407	-0.00109	-0.216

Notes: \* denote significant 10%.

about 80–90 per cent of information content reflected in stock prices before the announcement date.

The negative AAR and CAAR on the day before the announcement showed a reversal behaviour that existed among market participants. That is, in the short-term

the overconfidence increases following the arrival of confirming news and that leads to further overreaction and return momentum; in the long run, as investors realize their errors, a return reversal is observed. Furthermore, since on average investors hold long positions an increase in market prices will result in higher overconfidence and greater return momentum (Spyrou, Kassimatis & Galariotis 2007). Hong and Stein (1999) assume two type of investors that either rely exclusively on their own private information (news watchers) or rely exclusively on past price information (momentum traders) and develop a model that predicts initial under-reaction to information and a subsequent over-reaction. Although the return is negative and insignificant, the losses diminished (from -0.07916 to -0.02691) a day after the announcement, thus, investors can earn a positive abnormal returns.

#### CAARS SURROUNDING THE CRISIS PERIOD

Table 3 depicts the results of CAAR for each event window using FTSEKLCI for *sukuk* issuances that were isolated by the crisis period. There were no positive reactions from the market participants toward the announcement of *sukuk* before and after the financial crisis period. Apart from insignificant results, the returns of issuers also negative for all event windows. Before the 2007–2008 financial downturn, market participants showed a positive and significant reaction during the event of [-30, +30], for 61 days. The same pattern of significant results also can be seen after the financial crisis, over the larger event window of [-30, +30], for 61 days. That event showed the maximum value of cumulative average abnormal return (CAAR), which is 0.22952 and 0.09732 respectively with 1% significant result. The positive results of market reaction to the Islamic debt in this study is found consistent with the findings by Nursilah and Syazwani (2013) as well as with Ashhari et al. (2009) as they did found a significant

but negative reaction from market investors during the financial crisis period. However, the result of positive market reaction to the *sukuk* of this study is in contrast with the findings of a study by Modirzadehbami and Mansourfar (2011) that discovered a negative interpretation of Islamic bond announcement by market participants. The reason might explain this conflict of results would be investor's misconception about the real nature of the Islamic bonds. They attributed their features to bond and failed to recognize their similarities to equities' features in primary years. However, after a while, investors became more informed about the true characteristics of Islamic bonds and learned about its more common features with equity than bond. As a result, they started to treat Islamic bonds as equities rather than bonds.

During the crisis period, the results of CAAR for event windows over the period of up to [-7,+7], 15 days period displayed positive and negative reactions. Almost all results show positive and significant results during crisis. They showed good results on the event window of [0, 0], [-1, +1] and [-2, +2] which were -0.0783, 0.07788 and 0.07645 with 1% and 5% significant. The existence of a significantly positive reaction of stock markets during the financial crisis periods is contradicting with former literature which stated that stock markets did not react to debt announcements including bond issuances (Eckbo 1986; Mikkelson & Partch 1986; Modirzadehbami & Mansourfar 2011). This diverse market reaction could be attributed to the conditions where the Islamic debt issuance might have sent an incredible signal about the financial position of the company, which have helped in solving the financial problem, especially during the economic downturn. Hence, markets will react favourably to the issuance of *sukuk* due to high risk but in turn, bring negative returns to the investors. Moreover, the 2007 financial crisis can be considered as a major contributing factor in the investor's investment preference.

TABLE 3. Summary of CAARS for each event window comparing between periods

Event window	Before crisis 2004-2006		During crisis 2007-2008		After crisis 2009-2013	
	CAAR	t-value	CAAR	t-value	CAAR	t-value
[0,0] 1-day	0.05668	1.145	-0.0783***	-1.989	0.0106	0.598
[-1,+1] 3-day	-0.0579	-1.169	0.07788***	1.975	-0.0109	-0.613
[-2,+2] 5-day	-0.0593	-1.196	0.07645**	1.936	-0.0108	-0.608
[-3,+3] 7-day	-0.0605	-1.221	0.07461*	1.883	-0.0104	-0.587
[-4,+4] 9-day	-0.0616	-1.244	0.07322*	1.835	-0.0099	-0.559
[-5,+5] 11-day	-0.0619	-1.24	0.07173*	1.816	-0.0091	-0.517
[-7,+7] 15-day	-0.0584	-1.149	0.06765*	1.746	-0.0065	-0.372
[-15,+15] 31-day	-0.0152	-0.339	0.04928	1.42	0.01448	0.879
[-30,+30] 61-day	0.22952***	3.078	0.06896	1.121	0.09732***	3.127

Note: \*\*\*, \*\*, and \* indicate significant at 1 percent, 5 percent and 10 percent, respectively.

Despite the insignificant reaction on the announcement date pre and post crisis, *sukuk* in Malaysia has recovered after the crisis and showed improved results over a larger time frame with significantly positive reactions. The results indicated that Malaysian markets respond with delayed reaction. These reflected a positive signal in the Malaysian *sukuk* market, thus became the reason for investors' awareness to change and protect their securities. One plausible explanation for this scenario is the huge demand for asset-backed *sukuk* in the global market post-crisis period (Young 2012). The announcements of

Islamic debt offerings enhanced the *shariah* compliance status of the issuing companies and attract more investors consequently lead to an increase of stock prices. It is an early, sound indication that the recent *sukuk* announcement is perceived to be non-negative by concerned investors after the 2007–2008 financial crisis. It also signals potential investors to hold the investment until day 61, for a promise of favourable returns from their existing investment in the respective stocks. Figure 3 further demonstrates the difference of CAAR before, during, and after the financial crisis.

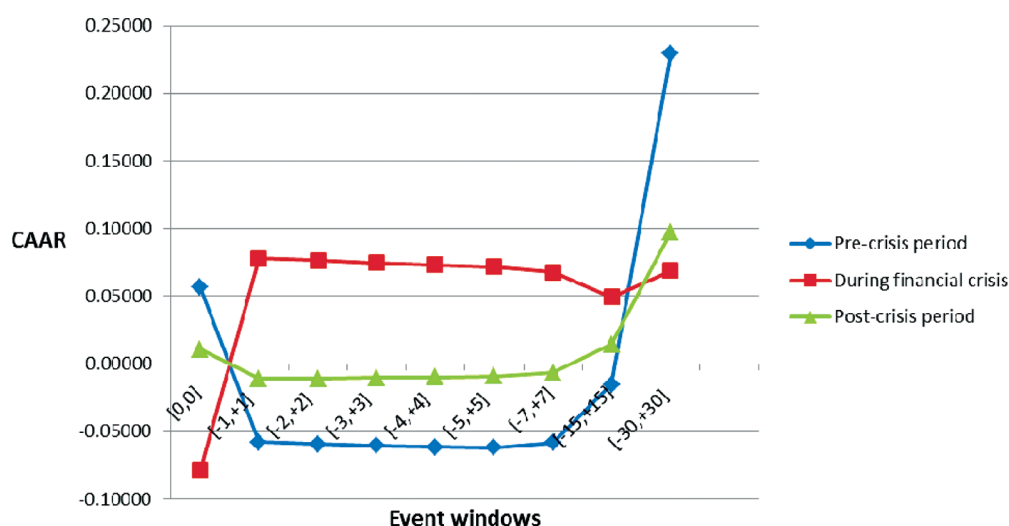


FIGURE 3. CAARs for pre-crisis, during crisis and post-crisis period

RETURNS VIA FTSE BURSA MALAYSIA EMAS INDEX

The analysis now proceeds to focus on the second alternative index, which is the FTSE Bursa Malaysia EMAS Index which is seen to better represent the sample population. Unlike the FTSE Bursa Malaysia KLCI, which is based on 30 component stocks, the EMAS comprise of 100 stocks in the main market of Bursa Malaysia, thus, it is more likely to proxy the overall market portfolio and behaviour. For this additional analysis, the same method of measuring returns are used but with a different composite index ( $R_{mt}$ ).

Table 4 reports that when a study is tested with more EMAS for a 5-day time span (-2 +2), none of the AAR and CAAR show a significant result. This prompted a question; which index can assist investors to form better investment strategies for the EMAS Index covered more stocks in the index? The insignificant result may be due to the majority of companies in the Malaysian stock market that are unaware or simply being ignorant toward new information flow in the market. This indirectly shows that the investors are less than concern with the offerings' announcement to reform their investment strategies.

TABLE 4. Daily abnormal return (AAR) on day -2 to day +2 (EMAS)

Day	AAR		CAAR	
	mean AAR	t-value	mean CAAR	t-value
-2	.0008450	.541	.0164211	.112
-1	.0007665	.494	.0171881	.116
0	.0007052	.459	.0178931	.120
1	.0006976	.457	.0185908	.123
2	.0006952	.458	.0192863	.127

Note: \*\*\*, \*\*, and \* indicate significant at 1 percent, 5 percent and 10 percent, respectively



Instead, they focused and concerned on other aspects for their long-term strategies' planning.

#### CONCLUSION AND RECOMMENDATION FOR FUTURE STUDIES

Apart from financial information and economic news, political, and social events were also reflected in the security prices. If the market reacts toward the announcement of *sukuk* offerings, the market players (e.g. investors) might use this information to form strategies that may allow them to earn abnormal returns on their investment. This will help them to realise the goal in the Malaysia Key Economic Aspiration (NKEA) transformation programme to produce high-income citizens. This significance is brought in the objective of this study to examine whether the announcements on the *sukuk* issuance did carry any new information that affected the market reactions from 2001 until 2013 in Malaysia.

The findings of this study concluded that the AAR is significantly negative 1 day before the announcement of *sukuk* but the findings is opposite for CAAR (Table 2). According to Ashhari et al. (2009), the significant reaction before the announcement may be due to the leakage of information prior to the new issuance of *sukuk* in emerging economies like Malaysia, which is not expected to be as efficient as those in advanced economies. The CAARs during the crisis period indicated that there were positive reactions from market participants toward the announcement of *sukuk*. The positive market reactions during financial downturn can be interpreted in two ways. First, markets have readily distinguished the news. Second, markets were confident that shareholders' wealth would be increased through the issuance of these *sukuk*. This is because, *sukuk* being neither debts nor shares, stayed true to the calling of Islamic economics and the issue reflects the economic strength of the company, therefore the real economic activities underlie the issuance. Despite no positive reaction occurring, the returns of issuers slowly progressed from negative to positive returns during most of the pre and post crisis event windows. This subsequently explained how Islamic debt issuance might have taken some time to send a convincing signal about the financial position of the company, and assisted in solving the financial problem, especially after the economic downturn. Hence, the markets will not react favourably to the issuance of *sukuk* due to high risk that could sometimes resulted in negative returns for the investors. This study also showed that there is a positive and significant reaction to stock returns during a larger time window of over 61 days, before and [-31, +31] after the financial crisis. This result is possible if the investors were able to perceive and digest the information content of the announcement that leads to the delayed reaction towards the announcement of the *sukuk* offerings. This indirectly portrayed a positive signal to the Malaysian *sukuk* market due to the investors'

awareness to switched to a more *Shariah*-compliant security after the financial crisis period is over. It is also seen as a sign for investors to hold their stocks for 61 days to earn a favourable return.

In short, the result of this study provides an early yet worthy indication of the recent *sukuk* announcement, which is perceived favourably to be non-negative by investors over longer periods of time. Markets have also shown positive and significant reaction during the financial downturn. The result is due to the announcement of the Islamic debt offerings that enhanced the *shariah* compliance status of issuing companies. This eventually attracted more investors to look for a more secured investment, leading to an increase in the stock price. Despite the different indexes used for a more robust finding, in Malaysian context, market participants prefer to refer the FTSE Bursa Malaysia KLCI as the main indicator of the stock market performance. Fewer market participants view the FTSE Bursa Malaysia and EMAS Index as benchmarks for market returns, hence for that reason, it is implausible to observe market reactions based on the EMAS Index.

In retrospect, future researchers could examine the impact of capital structure beyond this market and make a comparison between two or more markets; e.g. between advanced and emerging economic countries. The variables used in this study are limited based on the availability of data sample. It is possible to explore more explanatory variables and *sukuk* characteristics in the future. This study considered only the corporate finance aspect of *sukuk*; hence for future studies, one can consider the aspect of the *shariah* corporate governance to see whether or how *shariah*-compliant firms practice different sets of corporate governance. And if there is a difference, one can examine the contribution of *shariah* compliance corporate governance to the firm's value or performance?

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APPENDICES

Number of issuance and total amount issued by each issuer Company		No. of Issuance	Types of Sukuk	Announcement date	Issuance date	Maturity date	Total amount issued (RM)
		8	SIJ	3/7/2007	6/7/2007	7/7/2014	
Alam Maritim Resources Bhd				3/7/2007	6/7/2007	6/7/2015	
				3/7/2007	6/7/2007	6/7/2017	
				3/7/2007	6/7/2007	6/7/2016	
				18/1/2008	25/1/2008	25/1/2018	94,913,470
				18/1/2008	25/1/2008	23/1/2015	
				8/3/2010	12/3/2010	12/3/2015	
				22/5/2013	30/5/2013	30/5/2014	
Axis REIT Sukuk Bhd		1	SMB	13/7/2012	13/7/2012	12/7/2024	1,569,610
Batu Kawan Bhd		1	SMK	30/5/2013	6/6/2013	6/6/2023	162,446,000
BIMB Holdings Bhd		1	SMB	10/12/2013	12/12/2013	12/12/2023	513,773,000
Boustead Holdings Bhd		2	SMK	19/12/2013	23/12/2013	24/12/2018	207,523,000
				19/12/2013	23/12/2013	24/12/2018	
Chemical Co of Malaysia Bhd		1	SMK	24/8/2011	25/8/2011	25/8/2016	40,133,800
DRB-Hicom Bhd		9	SMB	29/11/2011	30/11/2011	30/11/2018	
				29/11/2011	30/11/2011	30/11/2016	
				20/2/2012	22/2/2012	21/2/2020	
				20/2/2012	22/2/2012	22/2/2021	584,354,800
				9/3/2012	14/3/2012	14/3/2019	
				9/3/2012	14/3/2012	14/3/2022	
				9/3/2012	14/3/2012	14/3/2017	
				5/4/2012	12/4/2012	12/4/2018	
				5/4/2012	12/4/2012	12/4/2018	
Eversendai Corp Bhd		1	NON	21/2/2013	11/3/2013	9/3/2018	80,339,300
Gamuda Bhd		3	SMB	29/3/2010	1/4/2010	1/4/2015	
				13/3/2013	21/3/2013	21/3/2018	354,011,900
				22/10/2013	28/10/2013	26/10/2018	
Kinsteel Bhd		3	SMB	5/9/2006	7/9/2006	7/9/2015	
				5/9/2006	7/9/2006	5/9/2014	13,708,020
				5/9/2006	7/9/2006	7/9/2016	
Kuala Lumpur Kepong Bhd		2	SIJ	6/10/2011	10/10/2011	10/10/2016	417,568,000
				9/8/2012	3/9/2012	2/9/2022	

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Number of issuance and total amount issued by each issuer Company		No. of Issuance	Types of Sukuk	Announcement date	Issuance date	Maturity date	Total amount issued (RM)
LBS Bina Group Bhd		2	SMB	21/7/2010 1/12/2011	23/7/2010 1/12/2011	23/7/2015 1/12/2016	18,910,630
Malaysia Airports Holdings Bhd		2	SMK	26/8/2013 26/8/2013	6/9/2013 6/9/2013	6/9/2018 6/9/2016	151,240,200
Malaysia Building Society Bhd		8	SM	17/12/2013 17/12/2013 17/12/2013 17/12/2013 17/12/2013 17/12/2013 17/12/2013 17/12/2013 17/12/2013	24/12/2013 24/12/2013 24/12/2013 24/12/2013 24/12/2013 24/12/2013 24/12/2013 24/12/2013 24/12/2013	23/12/2016 24/12/2021 24/12/2014 22/12/2017 24/12/2018 23/12/2015 24/12/2020 24/12/2019	149,959,100 149,959,100
Maxis Bhd		1	SMK	20/2/2012	24/2/2012	24/2/2022	812,900,000
MISC Bhd		4	SMB	19/9/2011 19/9/2011 18/9/2012 18/9/2012	21/9/2011 21/9/2011 25/9/2012 25/9/2012	21/9/2016 19/9/2014 25/9/2017 25/9/2015	417,469,200
MNRB Holdings Bhd		1	SMD	6/10/2012	10/12/2012	11/12/2017	39,222,100
Muhibbah Engineering M Bhd		1	SMD	22/4/2010	27/4/2010	27/4/2015	21,926,400
Naim Holdings Bhd		2	SMK	6/9/2011 6/9/2011	8/9/2011 8/9/2011	8/9/2016 8/9/2021	50,091,840
Padiberas Nasional Bhd		1	SMK	1/9/2010	7/9/2010	7/9/2015	127,898,000
Poh Kong Holdings Bhd		5	SMB	21/11/2011 13/1/2012 2/2/2012 26/7/2012 12/12/2012	22/11/2011 16/1/2012 14/2/2012 26/7/2012 13/12/2012	22/11/2018 16/1/2017 12/2/2016 26/7/2016 11/12/2015	41,473,230
Puncak Niaga Holdings Bhd		1	SIJ	28/8/2013	17/9/2013	17/9/2018	51,056,700
Sime Darby Bhd		3	SMK	2/11/2009 2/11/2009 28/11/2012	16/11/2009 16/11/2009 11/12/2012	14/11/2014 16/11/2016 10/12/2027	635,672,000

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Symphony Life Bhd	3	SMK	29/11/2012 29/11/2012 29/11/2012	30/11/2012 30/11/2012 30/11/2012	30/11/2018 29/11/2019 30/11/2017	49,345,380
Talam Transform Bhd	1	NON	29/6/2009	29/6/2009	28/6/2019	37,918,600
		SIJ	23/6/2011	27/6/2011	25/6/2021	
		SIJ	9/9/2011	13/9/2011	13/9/2021	
		SIJ	7/12/2011	12/12/2011	10/12/2021	
Telekom Malaysia Bhd	8	SIJ	10/5/2012	15/5/2012	13/5/2022	709,249,100
		SIJ	12/12/2012	19/12/2012	19/12/2022	
		SIJ	26/4/2013	30/4/2013	28/4/2023	
		SIJ	13/6/2013	24/6/2013	23/6/2023	
		NON	6/12/2013	18/12/2013	18/12/2020	
Tenaga Nasional Bhd	1	NON	13/12/2001	13/12/2001	13/12/2021	526,385,000
TH Heavy Engineering Bhd	1	SMB	30/9/2013	30/9/2013	30/9/2016	52,184,100
			27/4/2009	4/5/2009	4/5/2016	
			21/12/2009	24/12/2009	23/12/2016	
			12/8/2010	16/8/2010	16/8/2017	
			1/12/2010	1/12/2010	1/12/2017	
			1/12/2010	1/12/2010	1/12/2017	
			15/3/2012	19/3/2012	19/3/2018	
			15/3/2012	19/3/2012	19/3/2018	
			15/3/2012	19/3/2012	19/3/2018	
			22/10/2012	30/10/2012	29/10/2027	
TH Plantations Bhd	17	SMB	15/2/2013 15/2/2013 15/2/2013 15/2/2013 15/2/2013 8/4/2013 6/12/2013 6/12/2013	25/2/2013 25/2/2013 25/2/2013 25/2/2013 25/2/2013 15/4/2013 10/12/2013 10/12/2013	25/2/2019 25/2/2020 25/2/2021 20/2/2022 24/2/2023 15/4/2025 10/12/2025 10/12/2026	281,691,720
UEM Sunrise Bhd	2	SMB	13/12/2012 3/12/2013	21/12/2012 13/12/2013	21/12/2017 13/12/2018	411,698,000

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Number of issuance and total amount issued by each issuer Company		No. of Issuance	Types of Sukuk	Announcement date	Issuance date	Maturity date	Total amount issued (RM)
UMW Holdings Bhd		3	SMK	5/10/2010	8/10/2010	8/10/2015	
				20/6/2012	28/6/2012	28/6/2017	236,671,600
				22/1/2013	8/2/2013	5/2/2016	
WCT Holdings Bhd		1	SMK	7/6/2012	14/6/2012	13/6/2014	62,976,300
				28/4/2011	3/5/2011	3/5/2021	
				28/4/2011	3/5/2011	3/5/2022	
				28/4/2011	3/5/2011	2/5/2025	
				28/4/2011	3/5/2011	30/4/2026	
				28/4/2011	3/5/2011	3/5/2023	
				28/4/2011	3/5/2011	3/5/2024	
Westports Holdings Bhd		15	SMK	28/3/2013	1/4/2013	31/3/2028	295,201,480
				28/3/2013	1/4/2013	1/4/2027	
				28/3/2013	1/4/2013	1/4/2026	
				28/3/2013	1/4/2013	1/4/2025	
				23/10/2013	23/10/2013	23/10/2025	
				23/10/2013	23/10/2013	23/10/2024	
				23/10/2013	23/10/2013	23/10/2028	
				23/10/2013	23/10/2013	23/10/2026	
				23/10/2013	23/10/2013	23/10/2026	
				23/10/2013	23/10/2013	22/10/2027	
<b>Total</b>		<b>115</b>					<b>7,651,481,580</b>

Note: SMB: Sukuk Al-Murabahah  
 SIJ: Sukuk Al-Ijarah  
 SIN: Sukuk Al-Istana'a  
 SMD: Sukuk Al-Mudarabah  
 SMK: Sukuk Al-Musharakah