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IMPACT OF SUKUK ISSUANCE ON BAHRAIN ECONOMIC GROWTH

Abdelkhleg M. M. Elkormagi[1]; Hazianti Binti Abdul Halim[2], Rusliza Binti Yahaya[3]

[1]*Universiti Pendidikan Sultan Idris, Faculty of Management and Economics, Tanjung Malim, Malaysia,*
[2]*Universiti Pendidikan Sultan Idris, Faculty of Management and Economics, Tanjung Malim, Malaysia,*
[3]*Universiti Pendidikan Sultan Idris, Faculty of Management and Economics, Tanjung Malim, Malaysia,*

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ABSTRACT

This study aims to investigate the impact of Sukuk issuances on the economic growth in Bahrain. The time series of the data over the period 1996-2016 is used. The retrieved data is tested using a linear regression model.
The finding showed a significant and negative impact of Sukuk issuances on the economic growth over the tested period. This is attributed to the leaking of the money supply to be invested into long-term financial instruments represented by Sukuk, which lower the investment opportunity, specifically most of these issuances in property sectors with lower money cycle within the economy.

1. Introduction

Nowadays, the banking sector involves in every financial transaction that any country would like to do, resulting in that the banking industry is changing based on the global forces. The worldwide requires many changes to follow up with the technologies and innovations that the globe faces regarding financial services. This article highlights the modern orientation of the world toward the Islamic finance and banking concept, and how Bahrain has realized the earlier advantages of adopting the Islamic banking concept besides the conventional idea, which was one of the motivations behind developing the Islamic financial market. Bahrain is escaping from the relevant risks of dealing with traditional (conventional) financial instruments, which conflict with Islamic law, in addition to its leading role in the global financial crisis. Recently, Islamic financing was designed as a significant pillar of the current economic system in the banking sectors. The resulted consequences from the conventional financial procedure and its role in the last successive financial crisis have attracted economists to re-evaluate the role of the Islamic concept in consolidating the financial system. Also, the Islamic financing market has added new diversification to the available financial instruments, which contributed to reducing the financial risks and supporting the market liquidity. In this regard, this article has focused on the Islamic bonds (Sukuk) as one of the Islamic financial market components and its significant role in mobilizing savings and fulfilling the financial market functions; it would have a notable effect on the economic growth. Bahrain trends toward boosting the role of the Islamic financial market came as a response to the Islamic culture of this group. Besides the potential role of adopting the Islamic trend in attracting the local investors, the skeptics' investors form the primary target, those doubts about the conventional financial instruments' stability, safety, and its conflict with the Islamic law.

Sukuk alludes to what might as well be called securities, which is composed so that yields come back to financial specialists without bias to Islamic law (which denies riba or intrigue). Shariah-agreeable money related structures and items are quickly developing and turning into an essential piece of the worldwide economy and changing the budgetary scene. This development is because of the proceeded with the enthusiasm of Islamic money related organizations in customary monetary establishments (Smaoui & Khawaja, 2017). The expansion in item costs and the massive levels of outside direct speculation have constrained a substantial number of nations and multinational companies to wander past their outskirts in a quest for venture openings, prompting the rise of creative items and structures that agree to Islamic law (Naifar, 2016). Islamic budgetary arrangements are frequently determined by request to a great extent by financial specialists who have a definite inclination for items that are steady with their confidence. Given the expanding offer to the world of Muslim nations' total national output and the immense statistic arrangement of youngsters, these nations are resolved to add interest for Shariah-agreeable items and deals in the coming years. Among the key zones that have seen quick advancement in Islamic funds in the Global Sukuk Market is now esteemed at $ 270 billion.

The division keeps developing as an exciting stage to advance more prominent incorporation of global monetary and budgetary frameworks. Sukuk offers an extensive variety of advantages to the economy regarding liquidity administration, raising money, accounting report administration, and securitization (Mohamed, Yahya, & Ishak, 2017).

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A blend of instruments effectively exchanged the auxiliary market oversees liquidity for Islamic money related establishments. For instance, managing an account with surplus liquidity may put resources into mechanisms that give it arrival and likewise be exchanged. Sukuk can also be utilized as a gathering pledges instrument to accomplish corporate objectives when the requirement for stores emerges. On the off chance that an ideal harmony amongst obligation and value is required in the corporate asset report, Sukuk gives the arrangement. Instruments can likewise be utilized by an establishment or organization to open finances in resources by exchanging with the end goal of reinvestment. In conventional monetary markets, borrowers swing to banks for advances or capital markets. The conventionally managing an account advertising is viewed as a backhanded financing market as borrowers manage banks using middle person, by directing surplus subsidizes that are assembled to penniless gatherings. Capital markets are considered immediate financing since organizations bargain precisely with speculators without experiencing the saving money advertises (Hassan, Andrea, Dreassi, Miani, & Sclip, 2017).

2. Literature review

Determining the relationship between financial development and economic growth took many levels of investigation. The first level relies on investigating the connection from a general perspective, which focused on studying the financial development entirely, i.e., using all the components. The second level tries to explore deeply through using one of the financial system components such as studying the relationship between the stock market development and economic growth (Arestis, Demetriades, & Luintel, 2001; Caporale, Howells, & Soliman, 2004; Enisan & Olufisayo, 2009; Levine & Zervos, 1996; Vazakidis & Adamopoulos, 2009). Furthermore, other studies concentrated on the relationship between the intermediaries and the economic growth (Apergis, Filippidis, & Economidou, 2007; Hasan, Wachtel, & Zhou, 2009; Klein & Olivei, 2008). The third level of investigation concerns the relationship between the contracts and economic growth (Acemoglu, Aghion, & Zilibotti, 2006; Allen, Qian, & Qian, 2005; Klein & Olivei, 2008).

Since the initial emergence of the Islamic banking concept, it has tried to overcome the misperception about the Islamic banking concept objectives. It is often, people linking the Islamic banking concept to the level of commitment of the Islamic law, thinking that the Islamic banking concept came to meet Muslims need only. In contrast, on the other side, the Islamic banking concept, in general, comes to fill the conventional concept defects through the Islamic approach. The previous successive financial global crisis has highlighted the deficit from the conventional side; it has clearly emerged in poring over credit (Rizvi, Arshad, & Alam, 2015). Since the revolution in 2011, Tunisia has tried to invest heavily in infrastructure as a means of providing economic stimulus in the short-run and to lay the foundations for economic growth. Although banks cannot finance such projects due to the required important funds which are beyond their ability, the Sukuk constitute a viable solution to infrastructure and project financing (Rifaat Ahmed, 2012). For example, the Islamic Development Bank used the Sukuk to finance infrastructure projects in the medium and long-run in Morocco, Egypt, Senegal, and Malaysia.

The worldwide Islamic banking practice originated in the UAE when the first biggest Islamic bank [Dubai Islamic Bank (DIB)] came into being in 1975. There are four other fully dedicated Islamic banks in the UAE: Sharjah Islamic Bank, Emirates Islamic Bank, Abu Dhabi Islamic Bank, and Dubai Bank. Conventional banks also offer Islamic products either through an Islamic window or subsidiary. Islamic banking and finance institutions in the UAE are experiencing increasing growth patterns in their profits and assets. More frequently in the UAE than elsewhere in the Middle East, conventional financial institutions have been converted on an Islamic basis, partially or entirely. For example, Dubai Bank, National Bank of Sharjah (Sharjah Islamic Bank), Middle East Bank (Emirates Islamic Bank), and Amlak Finance transformed themselves on Islamic lines over recent years. The complete conversion of the Dubai Financial Market into an Islamic entity is also included in the government plans of UAE. Sukuk are becoming the backbone of corporate financing in the UAE. The funding needs for the real estate sector of the UAE are primarily met by Islamic mortgage and Sukuk issues. DIB is the biggest dealer of the global Sukuks market. It has issued Sukuk worth more than AED33 billion (US$9 billion), which comprised 20.80 percent of global market share in 2006, which also includes the raising of AED12.932 billion (US$3.52 billion) Sukuk for the Nakheel Group at the end of 2006.

Moreover, it holds AED36.74 billion (US$10 billion) Sukuk in the pipeline, which will be issued to the European and US companies from the oil and gas, infrastructure, and telecom sectors (Razak, 2006). The demand for Islamic retail finance and private equity funds has gradually increased in the UAE over time. In 2015, Emirates, the Dubai-based airline, has announced it has priced a $913 million Sukuk issue that will be guaranteed by Britain's export credit agency. The proceeds from the issuance will be used to fund the acquisition of four Airbus A380-800 aircraft, which are expected to be delivered in April, May, June, and July 2015. The aircraft will be leased to and operated by Emirates, the airline said on Monday. Moreover, taking into consideration the previous issuance of Sukuk to finance new construction projects in the country that exceeded $100 billion, Sharjah Islamic Bank announced the listing of $500 million in Nasdaq Dubai in May 2015. Mohammed Abdulla, Chief Executive Officer of Sharjah Islamic Bank, remarked, "We are delighted to list our Sukuk on Nasdaq Dubai as an international listing venue. Nasdaq Dubai gives our listing global visibility from within our own country and the region. We appreciate the exchange's high regulatory standards and straightforward listing processes. This Sukuk listing by SIB, as one of the UAE and the region's most respected Islamic institutions, underlines the rapid growth of the listed Islamic securities sector." A constant concern of companies is how to create value through financing, taking into account that this is an essential factor of growth in a globalized world in which competition is increasingly

intense. Staying in the market depends a lot on the decisions that are made to make incursions into new ones. Therefore, when companies are in the introduction stage, finding financing becomes more complicated since they do not have the experience and solidity that gives the confidence to find external financing. That is why they can be forced to finance themselves through their own resources. At this stage, investors must assume higher risk and expect to obtain a higher return. Companies can find various sources of financing such as banks, financial institutions, leasing companies, factoring companies, suppliers, share issuance, bond issuance, among others, but which of these sources best suits the needs of the company?

3. Methodology

The required data of this study retrieved from Central Bank of Bahrain Reports for Sukuk issuances and The World Bank for gross domestic product. Data series for this study for Sukuk issuances (1996-2016) and economic indicators (1996-2016), using an annual basis. The classic normal linear regression model assumes that each ui is normally distributed with some assumptions. These assumptions are expressed more compactly as:

Mean: E (ui) = 0
Variance: E [ui - E (ui)] 2 = E u2i = σ2 ui ∼ N (0, σ2)
cov (ui, uj): E {[(ui - E (ui)] [uj - E (uj)]} = E (ui uj) = 0 i = / J.
The classic standard linear regression model can solve something other models do. What it refers to: The MCRLN makes assumptions about the probabilistic nature of ui, which works with more variables, is more precise than the other models, and encompasses many variables. The central limit theorem is a statistical theory that states that, given a sufficiently large sample of the population, the distribution of the sample means will follow a normal distribution. What does this theorem show us? It shows that if there are many dependent random variables with the same distribution. It shows the variation of the estimated variables. It shows the difference between the estimated variables and the correlation of the variables. It shows that if there is many an independent random variable with the same distribution, then, with few exceptions, the distribution of their sum tends to be expected as the number of such variables increases to infinity.

We say that they are estimators and that their values will change from sample to sample. What are they called? Estimated variables, projected variables, random variables. Statistical variables. In the context of regression, it is generally assumed that u have the normal probability distribution. If the assumption of normality for ui is added to the premises of the classical linear regression model (MCRL). What do you get from this? We obtain the MCO. We obtain the classic standard linear regression model. We get the classic linear regression model. We obtain the least-squares model. The econometric model is based on observation of the facts, not based on d predictable at any given time if it were possible to know all the data. What is the estimator that is expressed in terms of the quantities? Maximum likelihood. Ordinary least squares. Interval estimators. Minimum likelihood.

If we subtract the equation

$$Y = \beta 1 + \beta 2$$

From the equation

$$Yi = \beta 1 + \beta 2Xi + ui$$

Where yi and xi, as agreed, represent deviations from the respective values of their means (show them). How is this formula known? yi = β2xi + ui Deviation from Correlation form Estimation form Auto deviation form. The Gaussian model, classical or standard linear regression model (MCRL), is the foundation of most econometric theory. Which of these assumptions belongs to Gauss Markov's theorem? Linear model in the parameters. Zero mean and strict exogeneity Homocedasticity All of the above.

Statistical inference is the set of methods and techniques that allow inducing, from the practical information provided by a sample, the behavior of a specific population with a risk of measurable error in terms of probability and consists of two branches. What are these branches into which it is divided? Estimation and hypothesis testing. Variance and estimation. Hypothesis and Variance. Linear Regression and Estimation. As family income increases, family consumption, on average, also increases. What happens to a family's consumption in relation to their fixed income level? The consumption of a particular family does not necessarily decrease as the level of income does. The consumption of a particular family does not necessarily increase as the level of income does. The consumption of a specific family necessarily increases as the level of income does. The consumption of a family is not necessarily average as the level of income does. It is a non-observable random variable that adopts positive or negative values. Technically, ui Acceptance margin is known Error margin Standard deviation stochastic disturbance or stochastic error term.

Why not create a multiple regression model with as many variables as possible? The reasons are the vagueness of the theory, lack of data availability. Central variables and peripheral variables, intrinsic randomness in human behavior, inadequate representative (proxy) variables. Principle of parsimony, incorrect functional form. All the above. Also known as a statistic (Veksler et al.), it is nothing more than a rule, formula, or method to estimate the population parameter from the information provided by the available sample. Also known as a statistic (Veksler et al.), it is nothing more than a rule, formula, or method to estimate the population parameter from the information provided by the available sample. To achieve these study objectives, Eviwes software version 8 will be used to examine the study hypotheses. The Pearson

correlation test and multiple linear regressions test will be employed to explore the relationship between the study variables. Two models of the regression tests are developed as follow:

$$Y = a + S + e$$

Where

Y = gross domestic production
A = constant
S = Sukuk issuances
E = standard error

4. Findings

For the current research, descriptive statistics are used to identify the minimum and maximum values for all the research variables (independent and dependent). In this process, descriptive statistics analysis will reveal the mean and standard deviation for these variables. The minimum value for the GDP variable was 3052393617.02, while the maximum value was 35307127659.57. The mean score for GDP was 13091069349.9097. These results show that the GDP was in an excellent position of growth over the years. The GDP is rapidly growing. For discovering the variance for the GDP variable, the standard deviation value was used, which was 11142295279.13720. The result shows that scores deviate from the mean.

The minimum value for the Sukuk variable was 1000.00, while the maximum value was 35490000000000.00. The mean score for Sukuk was 615885395884.7130. These results show that the Sukuk issuance was rarely introduced in the market by 1996, but it has seen a significant increase over the years. The Sukuk is rapid growth. For discovering the variance for the Sukuk variable, the standard deviation value was used, which was 2877242851111.76000. The result shows that scores deviate from the mean.

Table 1: Descriptive Statistics

	Mean	Std. Deviation	Minimum	Maximum
gdp	13091069349.9097	11142295279.13720	3052393617.02	35307127659.57
sukuk	615885395884.7130	2877242851111.76000	1000.00	35490000000000.00

Table 2 results show the correlations between whether and how strongly pairs of variables are related. If the correlation coefficient (r) is close to 0, there is no relationship between the variables. If r is positive, it means that as one variable gets larger, the other gets larger. If r is negative, it means that as one gets larger, the other gets smaller (often called an "inverse" correlation). Sukuk and GDP have a negative correlation. Based on table 2, the correlation matrix does not indicate multicollinearity, where the coefficients are below 0.80.

Table 2: Correlation Matrix

SUKUK		GDP
SUKUK	1	
GDP	-.331*	1

*. Correlation is significant at the 0.05 level (2-tailed).

The collinearity diagnostics given in table 3 shows that VIF for the independent variable is 1, which is less than 3. The tolerance level is above 0.4, which further suggests that multicollinearity does not exist among the independent variables. The higher the value, the more significant the correlation of the variable with other variables. Table 3 shows the F-values are statistically significant at the 5% level, implying that the regression models are reliable for prediction. The Durbin-Watson statistic will always have a value between 0 and 4. A value near 2 indicates the detection of non-autocorrelation, a value toward 0 indicates positive autocorrelation, and a value toward 4 indicates negative autocorrelation in the sample. A positive autocorrelation was identified where the DW is 0.315 in this case. The R^2 value shows 0.11, which means Sukuk explains the 11% variance in the GDP.

For the past few decades, Islamic finance has imposed itself as a viable alternative / complementary system to the long-existing conventional financial system. Nevertheless, recent research has claimed that Islamic finance, as it is current practice, does not promote economic growth. Hence, the objective of this study is to empirically test this claim by examining the potential effect of Islamic finance in the specific form of Sukuk issuance on the economic growth represented by proxy, namely, Gross Domestic Product (GDP). Accordingly, the findings indicated that the Sukuk issuance influenced the GDP only when all the countries were pulled together.

Table 3: Regression Results

	Coefficients	t-stat
(Constant)	1.56E+10	7.425
		(0.000)
Sukuk	-0.047	-2.107**
		(0.042)
Durbin-Watson	0.315	
F - stat		
	4.440**	
	(0.042)	
r^2	0.110	
Adjusted r^2	0.085	

5. Discussion

The current study has found that the minimum value for the GDP variable was 3052393617.02, while the maximum value was 35307127659.57. The mean score for GDP was 13091069349.9097. These results show that the GDP was in an excellent position of growth over the years. The GDP is rapidly growing. For discovering the variance for the GDP variable, the standard deviation value was used, which was 11142295279.13720. The result shows that scores deviate from the mean. By applying the correlation test, the GDP also has a negative correlation with Sukuk issuance. Also, using the regression test, the Durbin-Watson statistic will always have a value between 0 and 4. A value near 2 indicates the detection of non-autocorrelation in the sample. A value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. A positive autocorrelation was identified where the DW is 0.315 in this case. The R^2 value shows 0.11, which means Sukuk explains the 11% variance in the GDP.

These results are not different from the effects of previous studies where Yean (2009) further describes Sukuk and the way Sukuk holders should have ownership in the asset to give them some extent of assurance that even if there is insolvency (default). The Sukuk holder will recover his or her investment partially. Otherwise, lack of any confidence altogether would make Sukuk very discouraging and unattractive to investors who are already exposed to asset risks. Economic development has formed one of the vital global issues. It would drive many generations to think about the primary key of ensuring a high level of economic growth, which helps countries to create integration welfare on the domestic level, as well as extending to the global scale (Hicks, 1965). Despite the different definitions of economic development, but it met in achieving a high level of life, many previous approaches, and theories that relevant to economic growth have varied the essential means of boosting economic development. Precisely, these theories have a different level of perception toward the critical factors of stimulating the economy wheel. Several stages of theorizing the main engine of economy drives have tried to draw the significant landmarks of economic development.

However, the different perspectives about economic development were reminded captive to the related concepts to the economic environment. Adam Smith's (1776) has highlighted intrinsic stimulation in driving the economic growth away from the government intervention linked to the market competition, as the limited development in the financial institutions then, and he didn't touch the role of the economic growth. If the financial system has expanded rapidly through the industrial revolution era, several economists have been pouring their concerns on the significance of organizing the financial system. The concern was to commensurate the significant swelling of the economy, in addition to evaluating the related concepts that have been addressed, such as the political regulations, populations, production, and social issues (Chandavarkar, 1992).

The marked changes in the related issues to the economic development have arrangement the affected factors in boosting the economy wheel, raising the role of the financial growth that has endorsed by many scholars. Example (Cho, 1986; Deidda & Fattouh, 2002; Demirgüç-Kunt & Maksimovic, 1996; King & Levine, 1993; Levine, 1997; Masoud & Hardaker, 2012; Pagan, 1993; Schumpeter, 1911; Singh, 2013), credit as a substitute for cash has increased the financial leverage of institutions. The expansion of the available resources formed a burst change in economic life; the existence of credit finance contributed to the public funding (Van Horne & Wachowicz, 2008). The financial development was accompanied the high demand of financing according to the new expansion of the industrial sector in the late sixties, the

urgent need for a steady development of the financial system was a necessity to ensure a smooth growth in the economy (Edwik, 2007).

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