



## What Determines Sukuk Market Development? New Theoretical Insights

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**Abstract:** In recent past, the Asian economies faced various financial crises, 1997 & 2008, because of underdeveloped or small capital markets. Most of the countries continued to heavily depend on the mere banking system for sovereign and corporate financing needs which made the region repeatedly vulnerable to the crises state. Therefore, the last decade has witnessed the remarkable growth in the alternative arrangement in the form sukuk and bond markets. The academic literature on the topic mainly focuses on bond market ignoring largely the determinants of sukuk market. Using content analysis approach, this conceptual study proposes the theoretical relationships of sukuk with some new possible determining factors along with some other factors which have not received enough attention in the literature. The study focuses on the dynamics of foreign capital inflows, macroeconomic and financial variables with respect to sukuk market development.

**Keywords:** Sukuk Market Development, Theoretical Relationship, Financial Crisis, Foreign Capital Inflows, Macroeconomic Factors.

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### Introduction

Economies of Asia had to face series of financial crises in recent past. Notably, the Asian financial crisis of 1997 and then world financial crisis in year 2008. The primary reason behind seeing these crises by Asia was considered as the over dependence of the region on the banking system, ignoring alternative financial avenues (Asian Development Bank, 2002; Kawai, 2007). This over dependence was due to the unavailability of well-established capital markets in the region. Most of the sovereign and corporate financial needs were and are still used to be met with commercial banks borrowing. Commercial banks normally lend for short term period which creates mismatch between the long term financing needs and the short term funding availability. As a result of which, the cases of default arise with unavailability of more funding for debt servicing and for the purpose of further investments. This situation leads to the state of currency depreciation which altogether creates debt burden on both banking as well as corporate sector (Aman, Sharif, & Arif, 2016; Bhattacharyay, 2013).

Asian economies continued to depend on commercial banks because of unavailability of well-established and sizeable capital markets (bond markets) in most of the economies of the region. That is why, these economies remained seriously exposed to the financial crises. Moreover, the negative effect on investment related activities because of this whole situation ultimately reduces the size of the aggregate demand in the economy (Herring & Chatusripitak, 2000). Therefore, the region realized the importance of the development of efficient capital market segments by taking stern steps to develop conventional and subsequently Islamic bond markets. The established bond markets provide the alternative funding sources with the facility of short term as well as long term arrangements to deal with the problem of maturity mismatch. The wider investor base in the capital market makes the region less reliant on the banking sector. Also, the facility of local and foreign currency investors remains available in the bond financing which resolves the problem of currency depreciation risk for the borrowers (Eichengreen & Luengnaruemitchai, 2004).

Furthermore, the economies of Asia had to face the outflows of foreign capital because of inadequate investment environment based on uncertainties and low level of investors' confidence. Therefore, the Asian corporate sector did not find enough financial resources in foreign and domestic currencies (Bhattacharyay, 2013). However, Asia needs long term financial capital on a very large scale in order to meet their existing and future investment plans. Asia has been connecting infrastructures within and across the economies. Such huge financial requirements of Asia can be met with the mobility of regional financial resources through the establishment of the sukuk and conventional bond markets. Sukuk and bond market financing will diversify the debt portfolio of Asia and make the region more resilient towards financial crisis incidents. Also, the savings of the region will be able to be utilized for productive investment purposes (Bhattacharyay, 2010).

Therefore, it is timely and relevant to see the various factors that determine the development of the sukuk and bond markets. In this regard, various studies have been conducted in the last decade to study the determinants of conventional bond market (Adelegan & Radzewicz-Bak, 2009; Aman, Naim, & Isa, 2019; Ameer, 2007; BIS, 2002; Braun & Briones, 2006; Burger & Warnock, 2004; Fanta, 2017; Fink, Haiss, & Hristoforova, 2003; Godlewski, Turk-Ariss, & Weill, 2013; Gopinath, 2007; Herring & Chatusripitak, 2000; Hristoforova, 2003; Kapingura & Makhetha-Kosi, 2014; Matei, 2013; Mu, Phelps, & Stotsky, 2013; R.P. Pradhan et al., 2015; Rudra P. Pradhan, Arvin, Bennett, Nair, & Hall, 2016; Sharma, 2001; Thumrongvit, Kim, & Pyun, 2013).

However, despite the steady development of sukuk market in more than last one decade (IIFM report, 2017), there are very a few studies on the factors that may contribute in the development of the sukuk market (Ahmad, Daud, & Kefeli, 2012; Al-raeai, Zainol, & Khilmy, 2018; Said & Grassa, 2013; Smaoui & Khawaja, 2016; Smaoui, Mimouni, & Temimi, 2017). Moreover, these determinant studies on sukuk use more or less same variables ignoring other possible factors from the perspective of investment in sukuk to the factors that may cause sukuk issuance. Therefore, to fill this literature gap and provide further support to the available limited studies, since sukuk is relatively a new phenomenon with no substantial empirical literature, we tend to produce a theoretical discussion on the topic with some more possible factors that may contribute in the development of the market. To the best knowledge of authors, this is the first study which discusses the determinants of sukuk market development from the wider angle than available limited literature. Capital market development is determined by both foreign participation and local investment environment. Therefore, the study discusses the theoretical relationship of sukuk with the factors of foreign capital inflows as well as domestic macroeconomic and financial environment.

Because of limited particular literature on sukuk and since sukuk is the counterpart of conventional bond and these securities grow with the participation of investments, it is relevant to add the theoretical foundations of bonds and investments to describe the theoretical relationships of sukuk. Therefore, we propose existing literature the following possible theoretical relationships of sukuk to invite further discussion and empirical attestations.

### **Relevant Literature Review and Theoretical Relationships**

In Muslim and non-Muslim world alike, the growth of sukuk market has remained phenomenal. In the relevant literature, some studies have produced empirical findings on the topic. Like Azmat et al. (2014), Daruwalla and Siddiqui (2010), Godlewski et al. (2013, 2014), Jaffer (2011), Van Wijnbergen and Zaheer (2013) and Wilson (2008). The main focus of these existing studies is discussing sukuk from firm specific characteristics. Azmat et al. (2014) studied the choice of firm while issuing sukuk or bond. The study was in Malaysia and found that firm's higher existing debt liabilities favor to issue sukuk. The studies of Godlewski et al. (2013, 2014) investigated the relationship between announcements of sukuk and bond with stock market reaction. Earlier study finds no relationship but the later study gives evidence of positive relationship with Ijara sukuk, in particular. Van Wijnbergen and Zaheer (2013) investigated the cases of sukuk defaults. They find that defaults were because of having contract conditions in sukuk same as bonds. Similarly, Daruwalla and Siddiqui (2010) discussed the sukuk with respect

to their intrinsic value. Sukuk in Saudi Arabia was discussed by Wilson (2008). Study finds that stability in the country is connected with structuring of sukuk based on GDP growth, unlike interest rates (Naim, Isa, & Hamid, 2013).

More specifically, Said and Grassa (2013) linked macroeconomic, financial, institutional, legal and societal environment with sukuk market development. Also, the link between financial crises and sukuk was discussed in the same study. Findings revealed that sukuk react positively to some macroeconomic and institutional variables, like economic size and income. However, sukuk are negatively associated with financial crises. Similar studies (Smaoui & Khawaja, 2016; Smaoui et al., 2017) find that economic size, size of Muslim population and appropriate investment and institutional environment contribute for sukuk market development. However, interest rates volatility is negatively associated with sukuk. Moreover, sukuk substitute banking industry and complement stock market (Smaoui et al., 2017). In what follows, we posit the theoretical underpinning of sukuk with these and some other new factors not studied before in this context.

### **(1) Sukuk and Foreign Direct Investment**

Foreign investment in the country is positively related with financial development. Precisely, the inflows of foreign investment is particularly associated with the development of bond market in the recipient country (Bhattacharyay, 2013). This effect becomes more obvious in the economies which have large domestic demand. At this conjecture, we argue for the theoretical association between foreign direct investment and sukuk. However, it is important to consider that bond market openness do attract foreign investment with no guarantee that the said investment will necessarily be invested in the bond market. Therefore, the theoretical relationship between bond market development and foreign investment is ambiguous and requires empirical investigation.

### **(2) Sukuk and Workers' Remittance**

The association of remittances and financial development has got enough attention in the literature (Aggarwal et al., 2006; Gupta et al., 2009). Similarly, Mundaca (2005) finds that inflows of remittances lead to the credit expansion in the economy and ultimately have direct effect of financial development. Moreover, the study of Chowdhury and Chowdhury (1992) shows the acceleration in investments because of remittances. Similar evidence was found by Durand et al. (1996) that remittances boost the levels of investments. Therefore, remittances should foster investment in sukuk market. However, in a counter opinion, most of the remittances may be utilized for domestic consumption and not for investment purpose (Massey and Parrado, 1994). The counter opinions leave ambiguity in the theoretical foundation of sukuk with remittances. None of the prevalent literature on remittances, financial development and investments includes sukuk or bond in the empirical investigation, leaving theoretical relationship untested.

### **(3) Sukuk and Exports of Goods and Services**

Bond markets grow more in those economies which are open to other economies. It is because of less capability of local organizations to resist local competition (Bhattacharyay, 2013). In developing economies which rely more on banking system, banks tend to play the role of resistance for the development of bond market to avoid alternative financial sources from the economy. However, banks cannot effectively resist on this role in the state of an open economy because of foreign competition (Rajan & Zingales, 2003). In fact, economies with less trade openness remain more dependent on developed bond markets to meet their financial funding needs (Adelegan & Radzewicz-Bak, 2009). Thus, we posit that sukuk market will grow more in the open economy.

**(4) Sukuk and Economic Size**

Countries with smaller economic size lack scale efficiencies which is important for the depth and liquidity of the bond market. Accordingly, the attention of global investors may not be achieved because of smaller bond issues (Mu et al., 2013). Similarly, the interest of investment banks may not be found which will discourage investors to hold local bonds for long as stated by Eichengreen and Luengnaruemitchai (2004). This altogether shows the strong connection of economic size with sukuk market development.

**(5) Sukuk and Stage of Economic Development**

Income per capita and the need for financial instruments are positively related which shall lead to the demand for sukuk securities (Smaoui & Khawaja, 2016). Higher income per capita comes with reliability of the contract, better institutional environment, less volatile environment and more investors' rights. These aspects altogether lead to the development of sukuk market.

**(6) Sukuk and Interest Rates**

Interest rate volatility creates uncertainty in the economy which declines the confidence of investors. Therefore, investors will not be willing to keep holding sukuk securities for future. In addition, long term sukuk issues will particularly be discouraged because of interest rate variability as is case the in bonds (Mu et al., 2013). Interest rate volatility influences the risk of declining purchasing power of investors for long term bonds (Bhattacharyay, 2013). Thus, we argue for the negative relationship of interest rates variability with sukuk market.

**(7) Sukuk and Government Consumption Spending**

Government policies play a variety of roles in determining domestic investments. Government consumption spending may crowd out available funds in the market by increasing interest rates which will negatively affect investments in the sukuk securities. Thus, the demand for sukuk will go down. On the contrary, however, domestic investment may increase by means of accelerator channel because of government consumption (Ndikumana, 2000). The unclear theoretical foundation for government consumptions with domestic investments in sukuk market needs empirical explanation.

**(8) Sukuk and Country's Current Account Balance**

Economies issue more sukuk and bonds if they have deficits in national current balance (Min, 1998; Sachs & Williamson, 1985). Similarly, sukuk and bond securities are commonly issued by the economies to finance their fiscal deficits. This phenomenon is very common particularly in developing economies. Thus, we hypothesize strong relationship between current account balance and sukuk market development.

**(9) Sukuk and Banking System**

Being common in nature of funding, sukuk markets and banking systems are primarily competitors. However, since banks market and facilitate sukuk market dealings, banking system is supposed to be contributing in the development of liquid and efficient sukuk market. On the contrary, since banking system is already well-established, it may tend to crowd away more market share from the competitor (Mu et al., 2013). The ambiguous theoretical link needs empirical explanation.

## (10) Sukuk and Stock Market System

Stock markets are supposed to be contributing in the development of sukuk market in many ways. Stock market handles the issue of information asymmetry, enhances corporate governance and facilitates to reduce the cost of debt issuance (Demirguc-Kunt & Maksimovic, 1996). All these functions of stock market also foster sukuk market growth. Moreover, dealing in sukuk securities becomes easy for investors if they already know about equity issues (Smaoui et al., 2017). Thus, we hypothesize the positive association between sukuk and stock market.

## Findings of the Study

Theoretical relationships discussed in the previous section argue for inconclusive link between foreign capital inflows, domestic macroeconomic factors and financial factors with the development of sukuk market.

To be more resilient towards economic and financial crises events, economies need to have enough diversification in their financing mix. Therefore, economies need to reduce the dependence on the mere banking system and develop large scale sukuk and bond markets. Academic literature on the variety of determinants of sukuk market is very limited. This paper contributes in the prevalent literature with theoretical foundations of various types of possible determinants of sukuk market development. The paper opens the scholarly discussion on the topic and invites empirical explanations of the relationships hypothesized here.

## Policy Implications

The policy implications can be concluded after having the empirical evidence of the theoretical relationships discussed in this paper between foreign capital inflows, macroeconomic factors, financial factors and sukuk market development. If the empirical evidence supports the theoretical relationship between foreign capital inflows and sukuk, then the concerned policy makers will need to harmonize the suitable environment for the attraction of enough foreign capital in order to support the development of domestic sukuk market. Similarly, if more empirical justifications are found for the association of macroeconomic and financial factors with sukuk market, then government and concerned authorities will need to manage economic variables (gdp, income, interest etc) and financial variables (banking, stock market) accordingly to provide the conducive environment for the growth of sukuk market.

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