

SUKUK AS A FINANCIAL ASSET: A REVIEW

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ABSTRACT

Sukuk, an Islamic replication of bond, is a structured financial instrument innovated about two decades ago in line with the historical development of Islamic finance. Despite the phenomenal growth of global sukuk market, the academic research on sukuk is yet at infancy stage, particularly because scholars did not deeply look at this remarkable financial innovation. As of now, there is a growing body of sukuk literature that mostly based on qualitative analysis addressing shari'ah guidelines, ethical matters, distinguishing features, contractual mechanisms and structures of sukuk; a few of them provide some empirical analyses. Given this background, we make fundamental efforts to conduct a systematic review on sukuk studies to identify the unexplored research issues on sukuk. Hence the findings of the meta-analysis identify several thematic areas on sukuk, such as: (i) Sukuk characteristics, (ii) sukuk and convention bonds, (iii) sukuk valuations, (iv) sukuk roles in corporate capital structure and (v) key challenges in sukuk market. All in all, this academic effort significantly contributes to enhance our knowledge in Islamic finance and outlines the specific future research agenda.

Keywords: Islamic Finance, Sukuk, Conventional Financial Instrument, Valuation Method, Capital Structure Effect, Key Challenge.

INTRODUCTION

The Islamic finance having more than 400 Islamic banks and financial organizations operating in 58 countries is flourishing in today's global capital market with a spectacular growth rate and stability over the last several decades (World Bank, 2016). On average, Islamic finance is growing at 10% to 15% a year and hence it is one of the fastest-growing segments of global finance (Afshar and Muhtaseb, 2014; Muhamed & Radzi, 2011; Chermi and Jerbi, 2013; Uppal & Mangla, 2014). With an industry asset value approximately USD 1.9 trillion in 2016; Islamic finance conducts the business competitively with the conventional counterparts around the globe (IFSB, June 2017). Because of a leaps and bonds growth in Islamic finance sector, it attracts a substantial academic attention and consequently academic contributes research papers on versatile issues in Islamic finance (World Bank, February 2017; Uddin et al., 2017; Beck et al., 2013; Johnes et al., 2014; Abedifar et al., 2013). Among the diverse types of Islamic finance instruments, one of the fastest growing instruments available for investors in Islamic Capital Market (ICM) is sukuk, which contributes approximately 14.3% of the global Islamic finance asset (Alam et al., 2013) and also comprises approximately 55% of Islamic banking outstanding debt papers (Zin et al., 2011a). Consequently, sukuk is becoming an important and widely accepted different class of Islamic finance product of international financial system (Bacha and Mirakhor, 2013).

Sukuk, a shari'ah compliant financial instrument is an innovation of Islamic finance used as an alternative fund raising financial instrument. It attempts to circumvent fixed interest that is

prohibited in Islam, yet generates a return closer to conventional bond. According to Ahmed et al. (2015) sukuk has been considered as one of the fastest growing financial instruments in international financial landscape and also considered as the most successful sharia'ah compliant product among the Islamic financial institutions. Although sukuk market is still small compared to bond market, it has been growing quickly, at an average rate of 30% since the global financial crisis (Lackman, 2015). So, we notice that sukuk is still a green (new) and emerging area in Islamic Capital Market (ICM). In addition, given the range and international diversity of sukuk issuers, it is obvious that sukuk has become a globally accepted Islamic finance product that has high potentials to develop further. Since the launch of sukuk as a new class of financial asset, the market for sukuk has witnessed a remarkable growth in the past with a forecasted global demand of US \$900b by 2017 (Ernst & Yong, 2017). We also find that, Malaysia is the global pioneer in the Islamic finance industry and continuously stays at the forefront of sukuk issuance with more than 57 percent of the global sukuk market as on 2015 (IIFM, 2016). Therefore, it is important to undertake a meta-analysis on the thematic areas of sukuk that require an intensive investigation and further research.

Given the above discussion, this paper provides a systematic review of the existing literature on the pertinent qualitative and quantitative studies on sukuk mainly to identify the unknown research issues on sukuk and evaluate them in the context of corporate finance. We find that sukuk is ideally introduced as a new class of financial asset in the global financial market since 2002. Despite the remarkable growth of global sukuk market, the prior research on sukuk is limited and mainly based on qualitative analysis. Hence we argue that sukuk scholarly review is, *prima facie*, not as in-depth and developed as that of the conventional financial instruments. In a nutshell, based on existing meta-analysis of sukuk, the synthesis summarizes a bundle of key thematic areas such as- 2.1: Sukuk characteristics mainly argued that sukuk are equity-like Islamic financing instruments or fund raising product like bond or even investment certificates having bond and stock like features representing undivided beneficial ownership of the underlying asset for a limited period; 2.2: Sukuk & conventional financial instrument debated that the finding on comparability between sukuk and bond is still inconclusive and therefore, sukuk can neither be considered as bond nor Islamic bond though many scholars may be by mistake termed sukuk as 'Islamic bond'; 2.3: Sukuk pricing recommended that there is much scope for further intensive research to overcome several major challenges, such as: Islamic benchmark rate, held to maturity and nature of cash flow among others to determine fair pricing and valuation model of sukuk taking various financial contracts into accounts; 2.4: Sukuk and cost of capital remarked that still there is a strong debate regarding the corporate capital structure effect of sukuk, because whether the cost of capital will decrease or increase by sukuk issuance is yet to be examined with empirical evidences, 2.5: Finally, sukuk challenges attempted to summarize the major constraints and crisis of global sukuk market development- such as: Lack of credit rating, global currency, valuation mechanisms, risk mitigation, recognized secondary market, government and regulatory support, guarantee by the sponsor or government, harmonization among shari'ah boards and many more. The details of each thematic areas of sukuk have been discussed and critically evaluated in a consistent way in the main discussions of the review paper.

This review paper has a notable contribution to a small but growing literature on Islamic finance. So far to the best of our knowledge, no prior study presents the meta-analysis on sukuk, hence, as the initial attempt, the findings of the meta-analysis will be a breakthrough in detecting the thematic areas and key research issues on sukuk. Hence the findings of the analysis

eventually offer a noble contribution in Islamic finance for all specially for the Muslim ummah of the world. In the next section, we review the existing literature of sukuk identifying the findings, implications and future research areas. Eventually, the final section wraps up with the summary of sukuk literature review.

Sukuk Characteristics

Recently, we find that different school of thoughts attempt to define the fundamental concept, distinguishing characters and contractual mechanism of sukuk from different perspectives. We notice that ‘Sukuk’ is literally the plural of Arabic term ‘SAKK’ which per se implies investment certificate, legal instrument, deed or cheque. The Arabic expression ‘SAKK’ also refers to strike one’s seal on a document or tablet which represents a contract of rights, obligations or belongingness. Although the word ‘SAKK’ may be a bit unfamiliar to many, it is a forerunner of the word ‘CHEQUE’, which is pervasive in the modern financial world (ISRA, 2015; Abdullah, 2011). The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI, 2010) defined sukuk as ‘certificates of equal value representing undivided shares in ownership of tangible assets, usufruct and services or the ownership of the assets of particular projects or special investment activity’. In the same vein, Securities Commission Malaysia (SCM, 2014) addressed sukuk as ‘certificates of equal value which evidence undivided ownership or investment in the assets using shari’ah principles and concepts endorsed by the SAC’.

Regarding the basic nature and shari’ah compliant issue of sukuk, Ahmed et al. (2014) opined that sukuk cannot be invested in conventional securities having payment of *riba* (interest). The probable logic here is that sukuk are attractive financing instruments for Islamic shari’ah compliant projects like Islamic financial institutions, shari’ah managed funds and *takaful* Islamic insurance companies. In addition to these, sukuk can be based on various Islamic contracts, namely *Mudarabah*, *Murabahah*, *Musharakah* and *Ijarah*, among others. Similar is the case with the study finding of Maurer (2010) who stated that there cannot be a sukuk issuance for any enterprise that engages in non-shari’ah compliant (forbidden) activities, such as the production of pork products, alcohol or interest-bearing debt. The author also specified that sukuk have been mainly issued for shari’ah compliant (legal) projects such as airlines, real estate, petroleum extraction enterprises and infrastructure projects, among others.

To wrap-up the distinguishing characteristics of sukuk, we conclude that sukuk are mainly asset backed, stable income, tradable and shari’ah-compatible investment certificates having partial beneficial ownership of underlying asset. We also argue that heterogeneity is evident in the fundamental characteristics of diverse types of sukuk that are currently available in the financial market- such as: *Ijarah Sukuk*, *Embedded Sukuk*, *Mudarabah*, *Musharakah*, *Murabaha*, *Salam*, *Wakalah*, *Istisna* and *Perpetual Sukuk*, among others. The important issue here is that each and every sukuk is identical in terms of the distinguishing characters, terms & conditions, operational and legal aspects of respective Islamic financial contract.

Sukuk and Conventional Financial Instrument

This section reviews the return and risk performance of sukuk in comparison with the conventional financial instrument, particularly the bond. First, we review the studies concluding that the sukuk and bond are similar in terms of their market performance. Second, we present the evidence showing that the performance of sukuk and bond are different. Eventually we look into

a basic matter if a sukuk has a debt characteristic like bond in the financial market trading based on the findings of our earlier analyses and comparisons between sukuk and bond.

The literatures suggesting sukuk and bond are similar financial instruments are based on the analyses that a sukuk has many features that resemble those of a bond (Ariff and Safari, 2012; Alam et al., 2013; Ahmed et al., 2014; Zakaria et al., 2013; Ulus, 2013; Trad and Bhuyan, 2015). These studies argued that, like a conventional bond, a sukuk also has a fixed term maturity and a contractual profit rate. They also contend that a sukuk trades in the financial market maintaining a yield-price relationship like a bond. Therefore, several empirical studies find no significant difference in the return and yield between the bonds and sukus (Fathurahman and Fitriati, 2013; Arif and Safari, 2012; Krasicka and Nowak, 2012; Abdullah et al., 2007; Ahmad and Radzi, 2011). Researches also find that sukuk and bond are significantly correlated based on their yields (Mosaid and Bouti, 2014; Naifar, 2016; Maurer, 2010; Alam, 2009; Miller et al., 2007) and they have a significant causal relationship (Naifar, 2017; Safari et al., 2013; Nursilah et al., 2012). Hence, sukus and bonds are closely pegged in terms of their expected returns suggesting that an investor cannot benefit from diversifying a portfolio (Bashir, 1983; Faccio, 2011; Hamzah, 2016) through combining both the securities as they are alternative to each other.

The researchers saying sukus are different from bonds find a number of contractual elements such as a sukuk provide an ownership stake in the assets purchased with investors' funds while a bond is a documentation of a pure debt. Thus, a sukuk is not an exchange of money with a certificate alone, but it is a trustee certificate identifying the exchange of assets that enable investors receiving profits from the transaction (Zin et al., 2011b). In this regard, some empirical studies find that sukuk return performance is significantly better than that of the bond (Afsar, 2013; Kamso, 2013; Hanifa et al., 2014; Ahmed et al., 2014; Bacha et al., 2015; Ramasamy et al., 2011a), while others find an opposite result (Mansur & Bhatti, 2011; Ariff et al., 2013; Azmat et al., 2014; Cakir and Raei, 2007). Apart from these studies, a number of other researchers find that the both return and risk of sukus are greater than those of the bonds, but they did not identify the underlying reasons why a sukuk is riskier and thereby offer a higher return in comparison with the bond (Fathurahman & Fitriati, 2013; Abedifar et al., 2013; Krasicka & Nowak, 2012; Abdullah et al., 2007; & Ahmad & Radzi, 2011).

Given these conflicting evidences, the suggestion that a sukuk could be an alternative to bond needs a further analysis. As the cash flow of sukuk is expected to be derived from the earnings of the underlying assets, investors may benefit from its value appreciation (Alam et al., 2013; Afshar, 2013; Trad & Bhuyan, 2015). Therefore, all else equal, a sukuk could have a higher demand than a conventional bond as sukuk could offer a better return in the circumstance when the underlying asset earns a high profit (Meager, 2017; Sagbansua & Yalciner, 2016; Hamzah, 2016; Patrick & Kpodar, 2015; Mansor & Bhatti, 2011; Zulkhibri, 2015; Hanefah, 2013; Safari et al., 2013). Nevertheless, it is likely that the sukuk return could be more volatile due to the possible uncertainty in the underlying asset earnings. As a whole, an empirical difference between the sukuk and bond has been documented by a group of prior researchers. Hence, some studies find no correlation and causality (Ariff et al., 2013; Mohamed et al., 2015; Zakaria et al., 2012; Harun & Ibrahim, 2012; Ramasamy, 2011a) between the market performances of both securities. In summary, the prior empirical studies provide mixed evidence about the comparative behaviour of sukuk and bond performance.

Sukuk Pricing and Valuation

The literatures suggesting theoretical discussion on sukuk valuation mainly argue that pricing model of sukuk is not simple and straightforward in real world, mainly because there is the issue of underlying Islamic financial contract addressing the diverse types of relationship between sukuk holder and issuer. Hence we identify that the key challenges of sukuk pricing may include absence of an Islamic benchmark rate, relatively small number of participants leading to low market depth and liquidity, absence of a standard price validation mechanism, lack of risk mitigation to manage and only certain listed assets are to be accepted as guarantee (Ahmed et al., 2014; Safari et al., 2013; Ramasay, 2011a). Similar is the case with the discussions of Najeeb & Vejzagic (2013) and Ramasay et al. (2011b) who claimed that quite a few phenomenal factors lead the trend of held-to-maturity strategy in the international sukuk trading, such as shari'ah considerations that restrict the ability of the sukuk notes to be traded at values other than par, lack of sufficient supply of quality sukuk papers to satisfy the ever growing demand, lack of infrastructural facilities to allow sukuk instruments to be traded and lack of benchmark yields to explore the correct pricing models for sukuk. Considering the above discussions, we recommend that the concept of held-to-maturity is a very important issue for sukuk pricing. In this respect, we also detect that there are several differences between conventional and Islamic way of calculating cash flows such as the profit rate changed by the Islamic finance is not based on length of time period and in case of default cases due to some unforeseen reasons the amount due will not be added to the principal as in conventional finance to compute compound interest.

Having the above shari'ah compliant issues considered, we suspect that like any Islamic financial instruments, developing sukuk valuation is yet a core challenge in the domain of Islamic finance. A number of scholars argued that sukuk can be priced at historical cost rather than fair market value and also must be followed by necessary requirements for sukuk transparency to ensure that adequate disclosure is made by the issuer of sukuk for the purpose of assessing whether or not it complies with shari'ah law (Sukor et al., 2008; Muhamed & Radzi, 2011). In this respect, by considering event study methodology to measure abnormal returns for a sample of 131 sukuk from eight countries over the period 2006-2013, Godlewski et al. (2016) recommend that the type of sukuk contractual mechanism and the choice of scholars engaged to certify these sharia'ah compliant securities may matter a lot for the market valuation of the issuing company.

In line with the thought that sukuk is an Islamic bond, several of the prior studies argued that the pricing model of sukuk should be derived from the valuation of conventional financial instrument, particularly the bond (Ramasamy, 2011a). We find that arbitrage opportunities may emerge if pricing mechanism of sukuk is deviated much from conventional bonds. In addition, overpricing will prevent investors in parking funds in sukuks while under-pricing will attract all. Therefore, considering efficient market hypothesis, we argue that proficient fair pricing is needed to avoid arbitrage between sukuk and bond. For sukuk fair pricing, we should also deeply look at identifying the factors influencing sukuk market demand where the leakage of information may have a more direct effect, mainly because the fundamental value of sukuk becomes more stable and predictable if the provisions and risk factors inherent in the sukuk structure are considered properly (Ahmad & Radzi, 2011; Yatim, 2009; Mokhtar, 2008). However, now-a-days we find that the present trend is to conduct sukuk valuation with variable profit rates linking the profit rate to Islamic interbank offered rate. In this respect several scholars debated that the financial institutions and banks might face a challenge in managing the funds as the durations of

borrowing and lending does not match and this may result in erosion of equity drastically in financial market trading (Ramasamy et al., 2011b; Securities Commission Malaysia, 2009).

Based on the background of the discussion, we find that the preceding literature has a critical gap in terms of valuation model of sukuk under different contract types. However, most recently many practitioners as well as Islamic scholars assume that the theories and pricing models that have been developed over 60 years for bonds may also be applicable to value sukuk with necessary modifications as dictated by Islamic shari'ah. If so, it is necessary to investigate and develop the pricing model of sukuk taking various Islamic contracts into account.

Cost of Capital & Capital Structure Effect

We find that a wide range of research studies have been conducted on capital structure theory over the years. The capital structure theory which is one of the core issues in corporate finance is mainly concerned with the response regarding the optimal proportion of debt to total assets or in another way the proportion of debt to equity and it is directly associated with the cost of capital as well as value of the firm for shareholders' wealth maximization. We identify that in terms of capital structure formulation, corporations may build their own structure by issuing pure equity, debt and convertible securities (Elian & Taft, 2014). In this context, Shahida & Saharah (2013) opined that the company's stability or internal-external threats and opportunities may be exposed by 'debt equity ratio' under the basic concept and application of capital structure. Consequently, based on the background of above discussion, a basic question may arise whether there is a fact of optimal capital structure including sukuk, equity and debt that may maximize the value of the firm for shareholders' wealth maximization.

From the existing literature study, diversified school of thoughts influencing firms' financing decision of capital structure are identified such as: Static trade off theory, pecking order theory and agency cost theory, tax shield of capital structure theory, among others (Harun & Ibrahim, 2012). These are the several theories and propositions that have been repeatedly examined and referred in the domain of capital structure literature throughout the years and finally conclude that optimal capital structure may be achieved if the net tax advantage of debt financing balances the leverage related costs (Myers, 1984), the pecking order theory which highlights the hierarchical choices of financing (Myers & Majluf, 1984) and the agency theory derived from information asymmetries (Jensen & Meckling, 1976).

Pecking Order Theory

In the theory of firm's capital structure and financing decisions, the pecking order theory is initially suggested by Donaldson in 1961 and later on it is modified by Myers & Majluf in 1984. In a nutshell, this theory proposes that companies prioritize their sources of financing which is from internal financing to equity-preferring to issue equity as a financing means of the last resort. We also find that firms whose investment opportunities exceed internally generated funds may tend to issue more debt securities and hence have higher debt ratio (Myers, 2001; Mohamed, Masih & Bacha, 2015; Lumby & Jones, 2003, p. 488). In this regard, we find the literature support that there is the possibility of having a positive market reaction and better corporate performance due to the sukuk issuance instead of debt security (Ahmad & Rahim, 2013; Safairi, Ariff & Shamsher, 2013; Saad, Haniff & Ali, 2016). Notwithstanding the financing options (through sukuk or bond) are not restricted and legally bounded for the firms; nonetheless Muslim clientele are more interested to engage in sukuk investment, provided the

pecking order conditions of the market accessibility are well satisfied (Nagano, 2016). Having identified the current global practice considered, a question may arise whether the firms' corporate performance is related to the selection of bond (henceforth conventional debt) or sukuk (henceforth synthetic debt) for managing corporate financing.

We find that pecking order theory de facto starts with asymmetric information as managers know more about their company's prospects, risks and value than outside investors. Asymmetric information may affect the preference between internal and external financing and between the issue of debt or equity. In this regard, Mohamed et al. (2015) opined that pecking order theory considers the problem of information asymmetries in which shareholders and managers of a firm know more about the value of its assets in place and future growth prospects than do the outside investors. Hence asymmetric information favours the issue of debt over equity. The probable reason may be as the issue of debt signals the board's confidence that an investment is profitable and that the current stock price is undervalued. However, the issue of equity would signal a lack of confidence in the board and that they feel the share price is overvalued. An issue of equity may, therefore, lead to a drop-in market share price with the passage of time.

The purpose and significance of the discussion is to address how to fit the preference of sukuk issuance within the pecking order theory. Considering pecking order theory, whether the issue of sukuk over debt or issue of debt over sukuk should be more feasible, reliable and financially profitable could be investigated and justified with empirical evidence in future research.

Static Trade-Off Theory

Another widely acceptable theories under capital structure theory is the so called 'static trade-off theory' (De-Angelo & Masulis, 1980), claiming that there is a limit to the advantage of increasing usage of debt. The probable explanation here may be increasing debt not only results in the increasing tax shield benefits but also is accompanied by increasing financial distress costs. The need to balance these two opposite forces on value may lead to an optimal and desired level of capital structure. Here trade-off theory predicts that firms should balance the benefits against the cost of debt and thus, have an optimal target debt ratio (Shyam-Sunder & Myers, 1999; Frank & Goyal, 2003; Hanifa et al., 2014). Here an important purpose of the theory is to explain the fact that corporations usually are financed partly with debt and partly with equity. It states that there is an advantage to financing with debt, the tax benefits of debt and there is a cost of financing with debt, the costs of financial distress including bankruptcy costs of debt and also non-bankruptcy costs. For designing the capital structure, as debt increases, the marginal benefit may increase while the marginal cost may also increase (Harris & Raviv, 1990). The probable implication is that a firm which is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing.

Nowadays, sukuk is also widely used as an alternative source of fund raising Islamic financial instrument. Therefore, a firm that is optimizing its overall value may focus on optimum level of trade-off when choosing how much sukuk, debt and equity to be used for financing. Considering the capital structure theory, several of the existing literature proposes that sukuk may help firms lowering cost of capital (Shahida & Sarahah, 2013). Even cost of capital may increase (Godelewski, 2010; Ashhari et al., 2009) which needs to be investigated. Several of the existing literature proposes that some detrimental effects of sukuk expansion may adversely affect firm value at least in the short run and also the system may be detrimental to sustained

economic growth (Bacha et al., 2015) which also should be investigated. Therefore, whether sukuk behaves similarly like bond or not should be empirically examined as a future research agenda.

Agency Costs

In general, agency cost is a type of internal cost that may arise from or even particularly be compensated to an agent acting on behalf of a principal. Agency costs arise because of core problems such as conflicts of interest between shareholders and management. This delinquent may become more complex issue in the presence of asymmetric information (Azmat, Skully & Brown, 2014). In general, shareholders wish for management to run the company in a way that increases shareholder value. But management may wish to grow the company in ways that maximize their personal power and wealth that may not be in the best interests of shareholders (Ross et al., 2013; Petty et al., 2012).

The purpose of the discussion here is to integrate the role and effect of sukuk on agency cost. Several studies argued that issuing sukuk may increase firm agency cost (Mirakhor & Zaidi, 2007; Godlewski, Turk-Ariss & Weill, 2013). If it is so, is it directly proportionate to that of bond? If the agency cost between sukuk and debt is different, the capital structure effect may also be different considering all other factors constant. This research issue may also be empirically examined as a prospective research agenda.

Key Challenges

We notice that though Islamic finance has observed unprecedented growth for the last decade, however, it has also many challenges and opportunities. It is, *prima facie*, evident that unlike conventional finance, the success of Islamic finance depends on both satisfying faith and economics. Consequently, we perceive that the fundamental matter of faith, financial issue and many other concerns restrict Islamic finance from being fully implemented in non-Muslim countries (Malik et al., 2011; Alam, 2009). Then again, the consistent investment from oil-rich Gulf countries makes Islamic finance attractive even to non-Muslim countries. According to Uppal & Mangla (2014) the significance and expansion of the economic and financial reality pose greater challenges to the product development, positioning and branding strategies addressed by the niche market of Islamic finance. Therefore, our conjecture is that in the future, there is likely to be a serious set of strategic and operational challenges for the Islamic finance industry in competition with a mature conventional finance industry.

As one of the fastest growing Islamic financial instrument, sukuk is also subject to a number of arguments, crisis, challenges and encounters regarding various underlying concepts and practices. According to ISRA (2015, pp. 459) the market perception and commercial considerations that expose sukuk more as debt instruments to replicate the economic effects of conventional financial instrument have posed several potential issues and challenges to sukuk market such as sukuk valuation, sukuk rating and sukuk default. One of the main challenges of sukuk that its return relies on usually benchmarked to the LIBOR on US dollar funds that may lead to an interest rate which may be used only for pricing. However, such a case may be dealing with *riba*, which is a controversial issue among shari'ah scholars (Ahmed et al., 2014).

In addition to the above encounters, another critical issue of sukuk trading is that the typical "buy-and-hold" investment strategies and limited diversity of sukuk investors may produce illiquid secondary markets and inhibit efficient price discovery for proper financial and

investment decision (Jobst et al., 2008; Najeeb et al., 2014; Rusgianto & Ahmad, 2013). In this context, Safari et al. (2014) argued that liquidity is serious problem and challenge in all sukuk market trading. The majority of sukuk markets suffer from illiquidity to the extent that on average more than 70% of the sukuk have never been publicly traded, from their issuance date until their maturity. In this regard, Oseni (2014) opined that one complicating and remarkable factor to growth and maturity in sukuk global trading is the lack of legal clarity around default mechanisms and such legal uncertainties have been the cause for the bane of a number of sukuk transactions in recent times. In fact, issues that are now often considered for discussions regarding the key concerning issues of sukuk may include restructuring approaches, governing law and dispute resolution issues, valuation mechanisms, selected asset securitization and priority between sukuk holders and creditors, among others.

Having the above discussion considered, we state that the key challenges of sukuk are very important for determining risk scale, because the challenges may drive the leading role as a source of risk structure of sukuk. Therefore, we suspect that notwithstanding exemplary advancements and achievements of sukuk around the world, there remain a number of controversies, crisis and challenges over various underlying concepts and practices. Eventually, these challenges immediately need to be addressed and overcome if sukuk continues thriving and consistently booming around the globe.

Findings, Implications and Future Research Directions

Despite the sensational development of sukuk market around the globe, the research on sukuk as a new financial security is yet at early stage in comparison to that of conventional financial instrument. This could be due to the niche market of Islamic finance; lack of historical, reliable and consistent data; limited academic institutions adhered to Islamic finance; the discrepancies among shari'ah scholars, the absence of global standard setting and accreditation for Islamic finance research, among others. However, as of now there is a growing body of sukuk literature that mostly discuss about the issues related to the compliance of shari'ah rules, ethical matters, distinguishing features and structures of sukuk; quite a few of them conduct some empirical analyses. Given this foundation, we make efforts to thoroughly review the related sukuk researches done in the past and identify the unexplored issues regarding sukuk as a financial security that needs a priority study to catch up with the market growth. Based on the synthesis analysis, let us now discuss the key findings, implications and future research directions sequentially:

Key Findings

This meta-analysis on systematic review of sukuk literature mainly identifies the unexplored research issues on sukuk and evaluates them in the context of corporate finance. We find that sukuk scholarly review is, prima facie, not as in-depth and developed as that of the conventional financial instruments. In a nutshell, the findings of the synthesis summarize several thematic areas, such as: (a) Sukuk characteristics, (b) sukuk and convention bonds, (c) sukuk valuations, (d) sukuk roles in corporate capital structure and (e) key challenges in sukuk market. Let us now discuss the findings of the meta-analysis elaborately:

Sukuk Characteristics

Based on the scholarly review on sukuk characteristics, we argue that sukuk is a hybrid financial instrument carrying the features of both bond and equity, although sukuk is perceived to be an Islamic counterpart of conventional bond. Nevertheless, heterogeneity is evident in the fundamental characteristics of different types of sukuk that are currently available in the market, such as: Ijarah, Bay Al-Bithaman Ajil, Istisna, Wakalah, Mudarabah, Musharakah, Salam, Perpetual and Embedded sukuks, among others. We also detect that heterogeneity in sukuk characteristics is present due to the differences in their contractual mechanism. Thus, we identify that earlier studies on sukuk have a notable literature gap, because sukuk scholarly reviews do not consider the distinguishing characteristics of different types of sukuks.

Comparative Study

The review finds that researchers make efforts to compare sukuk with conventional financial instrument mainly bond based on their composite indices; and majority tend to equate a sukuk with bond on the ground of equivalent yields from both financial assets. The scholarly reviews generally identify the sukuk as an Islamic bond providing a buyer-seller, lessor-lessee, fund provider-user or partnership-based relationship. However, we notice that sukuk contract does not constitute a lending-borrowing relationship between the holder and issuer of sukuk. In addition, some scholarly studies debated on the comparability between sukuk and bond, because a sukuk also carries the features of equity.

Valuation/Pricing Models

A major finding of this review is that the scholarly literature is yet to be developed on how to value sukuk in the financial market. Researchers are found to be exploring the ways of sukuk pricing mechanism, but majority of these works are with regards to suggesting a suitable benchmark for sukuk pricing. Instead prior researches do not agree on a particular benchmark mainly because of the difficulty in finding a financial index complying with shari'ah tenets. Other than searching for a suitable sukuk benchmark, hardly any research is found to look at the other aspects of valuing sukuk as a financial asset, e.g. time to maturity and cash flows of sukuk. Consequently, being a hybrid financial asset carrying somewhat the features of bond and stock, how a sukuk is likely to be valued in financial market remains as an academic puzzle.

Capital Structure

Since sukuk is a new class of financial asset using as an alternative source of corporate capitals, it is necessary to examine if the firm is affected due to any changes in the overall cost of funds. There is a missing of notable empirical work on studying the effect of sukuk particularly on the firm capital structure and thereby value of the firm. Therefore, the use of sukuk as an alternative source of funds could be a gamble by firms on their own cost of capital, unless they can ex-ante predict the cost effect of sukuk inclusion in the firm capital structure. Hence literature does not guide us clearly regarding the key motivation of issuing sukuk instead of bond as part of corporate capital structure. This is an exploring research arena that remains unaddressed.

Key Challenges of Sukuk

Given the above review, we find that sukuk being a financial asset faces a number of key challenges in the financial market that could potentially restrict the unprecedented growth of sukuk market, which has been witnessed in the recent past. First, difficulty in finding a fair value of sukuk often deprives it to obtain a fair credit rating from the established agencies. In particular, the non-standard nature of sukuk contracts and the absence of a valuation method restrict the risk analysis for sukuk. In the absence of a fair rating, investors and portfolio managers find difficulties in sukuk selection. Second, the lack of fair sukuk rating may lead to more price uncertainty in the market trading; thereby, sukuk are hardly recognized as an investable grade financial asset. Third, apart from these market challenges, scholarly disagreements among the shar'ah experts with regard to the underlying guiding principles inhibit standardization of sukuk contracts that may limit the expansion of sukuk market in the future.

Implications

This research has both theoretical and practical implications in real world. The expected implications of the study can be summarized from three various aspects, such as: (A) Model Application, (B) Target Beneficiaries and (C) Practical Implementation. Let us now discuss the study implications sequentially:

Model Application

1. At first, this research outlines and guides us for undertaking a new study on the risk-return behaviour of sukuk and bonds across their characteristics matched portfolios. In addition, for determining appropriate sukuk rate of return, the synthesis recommends for empirically examining if the sukuk performance is subject to the performance of the industry in which the sukuk underlying asset is invested. Hence the study renders theoretical and empirical implications particularly while taking the investment decision and providing purchase-selling decision.

2. To the best of our knowledge, no prior empirical study addresses the issue of identifying the common risk factors in the market performance of sukuk investment. Hence the finding of this study has a significant use to the enhancement of the body of knowledge on Islamic finance in general and sukuk security valuation in particular. Therefore, this study sheds the light on understanding sukuk valuation in financial market.

3. In addition, the strategic important implication of the anticipated sukuk pricing model is that it provides a sukuk valuation approach that does not rely on the benchmark of LIBOR, an interest-based reference rate of return. We know that using interest-based rate is the key concern in assessing the market performance of Islamic investments. We consider that industry practitioners can use an Islamic alternative IIBR instead of LIBOR; however, both LIBOR and IIBR cannot determine the fair value of a sukuk unless the undiversifiable common sukuk risk factors are identified.

4. Finally, the synthesis has noteworthy implementations to the body of literature in cross-disciplinary areas of corporate finance and Islamic finance. The study contributes a new dimension to the studies on capital structure decisions involving debt and equity, because there is a new question of conventional debt or Islamic debt. The key implication of this study is that sukuk holders need an additional risk premium because they practically invest in weak performing companies on the top of sharia'h risk in Islamic investment (Mollah & Zaman, 2015; Azmat et al., 2014). The findings also imply that sukuk has potentials to take a position in wider international financial markets despite Islamic origin. Therefore, the synthesis has a global implication.

Target Beneficiaries

The findings of this research could be beneficial for diversified beneficiaries, such as issuers and rating agencies, regulators and policy makers, researchers and academicians in capital market, investors and fund managers to realize the true potential of sukuk investment and raise fund as a reliable financial instrument. In addition, we hope that proper sukuk valuation helps to reduce estimating the inappropriate pricing of this innovative financial instrument.

Practical Implementation

The findings of the study could be useful for the development of massive projects, such as: Real estate, factory expansion, construction project of buildings and equipment, infrastructure projects like railway, ports, airports, ships, power station, electrical networks, land, vehicles, business spaces, engine, power plants, wind and solar-energy projects, among others. Consequently, Ministries of Finance, Central Banks of Muslim countries and even World Bank may review their debt financing policies and explore the potential of sukuk on the basis of the recommendations and perspective implementations of the study. In particular, with the risk factors of sukuk are known now, the market analysts and practitioners can better assess the performance of this Islamic financial asset. Otherwise, the practice of mispricing not only cause serious financial loss but also erodes the confidence in sukuk investing in financial trading. Hence, we conclude that Islamic finance has a wider practical application for all beyond the realm of religion.

Future Research Direction

Given the theoretical and empirical research gaps identified, the study directs several research agenda for the future researchers, such as: (1) To conduct comparative analysis between bond and sukuk based on heterogeneity of contract types; (2) to introduce sukuk valuation model; and (3) to investigate why firms issue sukuk in place of bond as part of the capital structure. Let us now analyse the future research guidelines following the thematic areas of the study:

Sukuk and Bond: A Comparative Analysis

As suggested all sukuk are disaggregated based on their contract types. Hence, the future researchers can carefully review the underlying contracts of sukuk and classify them into two groups: (i) Debt-type sukuk and (ii) non-debt type sukuk. For instance, fixed rate Ijarah Sukuk and Murabaha Sukuk can be considered as debt-type sukuk, while profit-loss sharing Mudarabaha & Musharakah can be considered as non-debt type sukuk because of their cash flow patterns and time to maturities. Finally, future researchers can compare debt type and non-debt type sukuk with the relevant bond indices. For example, the parameters of debt-type sukuk can be compared with those of the fixed coupon bond while that of the non-debt type sukuk with the non-fixed coupon bond indices

Sukuk Valuation

The future researchers can develop sukuk pricing model particularly addressing two groups of contract types: (i) Debt-type sukuk for example Ijarah, Murabaha and (ii) non-debt

type sukuk, for instance Mudarabah, Musharaka. Consequently, if required, the necessary assumptions can be considered on the basis of distinguishing characteristics of respective sukuk contract type. Therefore, future studies can attempt to identify the common risk factors in the return of sukuk investment for introducing the mechanism of sukuk valuation taking various Islamic financial contracts into account. If researchers can identify the common risk drives of sukuk investment, the market analysts and practitioners can easily fit them for developing a separate sukuk rating scale reflecting the sukuk inherent characteristics.

Issue Sukuk or Bond

A material question of sukuk investors is how the sukuk holders' ownership - as opposed to the issuer's ownership - on the underlying asset affects the liability and cost structure of firm and the legal recourse to sukuk holders. Hence the future study can examine the effect of sukuk role on corporate market performance and capital structure of the issuing companies. Therefore, future study can empirically investigate how issuing sukuk instead of bond affects the cost of capital and value of the firm; because perhaps the effect of sukuk on corporate capital structure is not clear yet.

CONCLUSION

This review paper attempts to provide a thoughtful discussion and critical analysis on sukuk across different thematic areas, identifying the distinguishing characteristics of sukuk as a different class of financial asset. At first, having considered the discussion on contractual mechanism, we identify that bond and sukuk are not similar financial asset; because unlike bond, a sukuk does not constitute a lender-borrower relationship. This workout, de facto, sets a ground to undertake a comprehensive empirical analysis on different types of sukuk and related conventional financial asset. It also helps us to identify the parameters needed to construct a valuation model for sukuk. The issue is important-because in the absence of a shariah compliant index, literature does not guide us clearly what could be the best possible reference rate for determining the hurdle rate of sukuk security. Further, in the absence of a pricing model that is based on asset pricing theory, the market analysts have been relying on LIBOR, IIBR or any other similar benchmark to assess the corporate performance of sukuks. In addition, the paper provides a conceptual discussion on how sukuk fits within the capital structure of a firm based on the widely-known capital structure theories in extant literature. Hence firms can, ex-ante, understand the sukuk effect on corporate market performance and thereby value of the firm. Eventually the paper identifies the market challenges of sukuk for not having a valuation model and maintaining disagreements among shar'ah scholars around the globe.

Therefore, this paper on sukuk meta-analysis contributes to a small but growing literature on Islamic finance. We expect that if properly structured and executed, the study has important theoretical and practical implications to enhance our knowledge in Islamic finance. In particular, without a clear knowledge on the market behaviour of a sukuk with respect to bond, the valuation of sukuk is enormously difficult, particularly when we do not know how to estimate the sukuk expected return. In this respect, we expect that if we can identify the common risk factors for sukuk investment, we can easily develop a pricing model for sukuk valuation. So, market analysts can use them for sukuk ratings and buy-sell recommendations for investment opportunities. Furthermore, if we can empirically examine why firms issue sukuk instead of bond as part of corporate capital structure, this will help us to identify the key motivation for

issuing sukuk in place of bond. All in all, this fundamental academic effort and original research idea (not replicating prior study) on sukuk meta-analysis significantly contributes to enhance our knowledge in Islamic finance and frameworks the future research agenda.

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