www.kspjournals.org

Volume 4 March 2017 Issue 1

Sukuk: Literature Review

By Mohamed B. AMRANI at & Faris HAMZA b & El Hachloufi MOSTAPHA°

Abstract. At the heart of a global financial crisis triggered since 2008, Islamic finance has been seen as an alternative less affected by the global crisis to cover the financing and investment needs and bringing a new vision that involves sharing of losses and gains and thus prohibit the notion of the interest rate. With the emergence of the concept of Islamic finance a new market has emerged known as sukuk market where its last ones play the role of bonds. These financial instruments have been able, like conventional bonds, to constitute a reliable investment alternative for both companies and governments that want to conduct their business within a framework that respects the precepts of the Sharia. The purpose of this article is to understand the concept and the mechanism of these obligations and to present a review of the literature on sukuks.

Keywords. Sukuk, Islamic Finance, Bonds, Financial Instruments. JEL. A10, H12.

1. Introduction

he development of the sukuk capital market is one of the most significant innovations in Islamic finance. Indeed, this market has grown significantly to the point of becoming a reliable alternative to the mobilization of longterm savings and investments of Islamic investors.

They are also a liquidity management tool for Islamic banks and insurance companies (Takaful), because of their negotiability unless the sukuk structure chosen does not represent pure debt instruments such as Sukuk Murabaha and Sukuk Salam.

For issuers, sukuk constitute a financing alternative in accordance with the Sharia which prohibits the grant and the collection of interest. It is a financial instrument that allows investors to obtain liquidity in return for the payment of a coupon that corresponds to the performance of the underlying asset.

According to (AAOIFI) Sukuk are investment certificates that represent securities of equal value representing undivided shares in the ownership of property, usufruct and services. They are issued in the framework of a contract in accordance with Shariah standards and on the basis of the principle of sharing of profits and losses.

Based on these Islamic principles, (AAOIFI) was able to design 14 Sukuk structures that can be grouped into two types, namely Asset-backed Sukuk and Asset-based Sukuk. Thus, the main difference between these two types of sukuk

2 . +212.638.18.44.96

■. bensaidmot@gmail.com

■. fhamza2004@yahoo.fr

^{4†} Abdelmalek Essaadi University of Tangier, Department of Economics, Morocco.

Abdelmalek Essaadi University of Tangier, Department of Economics, Morocco.

University of Hassan II, FSJES-Ain Sebâa, Morocco.

^{■.} elhachloufi@yahoo.fr

Resides in the fact that the first type is accompanied by the actual transfer of the assets which have been removed from the inventor's balance sheet, whereas for the second type only the right on the income from the assets that is securitized.

Consequently, the growth of the sukuk global market will continue, and especially when we see the evolution of this market from 2001 to July 2014, we find that this market has reached a significant total amount of emission with 668billion USD.

By the end of 2013, Bloomberg had 1813 Sukuk in circulation, totaling approximately \$ 316 billion. Indeed, Malaysian issuers accounted for the highest share of this asset class with 61% pursued by the Gulf countries in second place. Indeed, Saudi Arabia is the first of these countries with 11% of emissions followed by the United Arab Emirates with a share of 9%. Indonesia is in fifth position with 6% followed by Turkey with 3%.

The factors that have made such financial instruments so successful can be explained both from the point of view of supply and demand. From the point of view of demand, the entry of a new asset class On the market is an undeniable asset for diversification for both Muslim and non-Muslim investors as the integration of sukuk into such a portfolio could reduce overall portfolio risk (Çakir & Rai 2007).

This demand is also favored by a strong emotional burden on Muslim investors who spontaneously prefer investments in accordance with the sharia. Finally, Islamic banks in turn played a major role on the demand side of the Sukuk.

Thus, in order to manage the requirements of profitability and liquidity, the Islamic bank must build a Sukuk portfolio that is more liquid than loans and more profitable than interbank liquidity. However, in the absence of a sufficient market Extensive and deep Sukuk, Islamic banks are struggling to comply with such a requirement. This explains why, Islamic banks have a very high demand for this Sukuk asset class.

In terms of supply, rising oil prices in the Persian Gulf countries following the events of September 11, 2001, the resulting repatriation of liquidity has led to an increase in the monetary liquidity of these countries.

Through this paper, we will attempt to present a state of the art on sukuks as a financial instrument widely used by investors wishing to comply with Shariah requirements. For this purpose, and in order to ensure the logical sequence of the ideas contained in this paper, a first part will be devoted to a presentation of the conceptual framework related to sukuks with the aim of better defining the concept of sukuks, the second part will be dedicated to a state of the art to discuss the work and research previously carried out by researchers who have seized the subject of Islamic finance and sukuks in particular.

2. Conceptual framework for sukuk financial instruments

2.1. Definition of sukuk

Sukuk (plural of the word sak) are sharia-compliant bonds issued by an originator of assets which may be either an enterprise or a State through a common fund (SPV) in order to raise the funds it needs on the market. Thus, the sukuk issued by the originator may be either secured or unsecured. In the first case, we speak of sukukassetbased whereas in the second case we speak of sukuk asset backed. Currently, according to AAOFI, there are 14 sukuk structures. However, the most widespread are:

Sukuk Al mourabaha:

This type of sukuk is equivalent to zero coupon bonds insofar as the sukuk contributors do not receive periodic coupon payments on the investment certificates they hold only the repayment of the nominal value plus a premium which they can get at maturity. The peculiarity of this Islamic financial arrangement is the requirement of a tangible asset purchased by the SPV and resold to the issuer of the sukuk on the one hand on the due date. On the other hand, this type of Sukuk is not tradable on the secondary market only if and only if it is resold

at face value and not with a discount or mark-up. This is explained by the principle of Islamic finance which forbids the gain that emanates from the debt.

Sukuk al ijara:

This type of sukuk is similar to conventional leasing contracts. The SPV receivable is then purchased by the SPV for the property. The latter leases from the SPV the property in return for the periodic payment of the rents, which will then be distributed by the SPV to the sukuk Of coupon. At maturity the SPV sells the asset to a third party who is in most cases the originator itself.

Sukuk al musharaka:

This type of sukuk, for its part, allows the financing of a project by a contract of co-ownership between the originator, that is to say the project's contributor and the Sukuk holders. Each of the two parties contributes to the project, which may be either in cash or in kind (eg land). The resulting gain and loss will be distributed by the SPV according to each party's share. This financing transaction is accompanied by a reserve account in order to accumulate the profits when they exceed the value of the coupon on each date of its detachment. These reserves will be used to cover the deficit corresponding to the difference between the value of the initially defined coupon and the coupon for the period. This account also makes it possible to offset any shortfall in the repayment of the nominal amount of the sukuk at maturity. However, when the reserves in this account have been able to cover deficits arising both from the coupon or from the nominal value while generating a surplus. Granted to the project manager (who is in most cases an Islamic bank) as a bonus. However, some lawyers do not agree with this practice in that the financing operation is based on a Gain and loss and consequently this gain must also be distributed among the project co-owners.

Sukuk al Mudharaba:

This is a financing contract whose legal consequences are translated into a real transfer of ownership of the underlying asset of the originator to the originator. However, this type of sukuk allows sukuk holders, in the case of default, to use the shares they hold in the asset. In this contract, the organizer brings its know-how and the investor contributes its capital in order to realize the project through the SPV which facilitates this transaction. The latter, in case of profit, redistributes it according to the share of each one, whereas in the case of loss the SPV passes it exclusively on the" The sukuk.

2.2. Sukuk asset backed VS Asset based Sukuk

The different sukuk structures can be grouped into two main categories, namely asset backed and assetbasedsukuk. In fact, for the first category, the realization of the financing operation inevitably involves the actual transfer of ownership of the balance sheet, Issuer to the subscriber without there being a guarantee of either the principal or any losses that will result from a poor performance of the underlying asset. In this, it appears that this financial arrangement presents two financial risks in this case the market risk and the credit risk.

In contrast, the second category allows the issuer of sukuk to drain the funds it needs without the constraint of actual transfer of ownership but with a guarantee of the principal by the redemption of the property at maturity and a periodic payment of the coupons. Sukuk cases do not differ from conventional bonds in the sense that the credit risk that accompanies this transaction is the same as in the case of conventional bonds.

This is why lawyers and specialists in Islamic finance consider sukukAsset-Backed to be closer to the spirit of Islamic finance than the sukukassetbased that do not give full ownership over the underlying assets. Thus, the table below further illustrates the advantages and disadvantages of each sukuk category.

Table 1. Types of Sukuk

_ 40.	Advantages	Disadvantages
SukukAsset-Backed	Sukuk holders own the assets The holders benefit from a real transfer of the property Benefit also from excess income of the underlying assets. Benefit also from an advantageous recovery through the use of assets in the event of defects The Sukuk "Asset-Backed" rating is generally based on the quality of the underlying assets and not on the credit quality of the issuer. The Sukuk Asset-Backed are more in keeping with the spirit of the Shariah The issuer undertakes to repurchase the assets to a par value or via a guarantee offered by the latter. The holder only bears the credit risk. Non-existence of the transfer constraint of the property. No legal or financial constraints on the transfer of assets. The rating of the sukuk is linked to the creditworthiness of the issuer and not to the quality of the underlying asset. Sukuk holders benefit from a capital guarantee and a periodic coupon, which depends solely on the creditworthiness of the issuer. Sukuk holders are indifferent to the market value of the assets. The assets may remain in the issuer's balance sheet if national law permits.	The value of the underlying assets is the only means by which the Sukuk owner can reimburse the principal at maturity in the event of default. No recourse to the issuer if the performance of the assets is insufficient for the payment of the coupons or if the value of the assets at maturity does not allow the repayment of the capital. Sukuk holders are exposed to market risks as well as credit risk. Issuers renounce ownership of their assets. Requirement of the actual transfer of ownership entails additional costs. SukukAsset-Based holders are less secure, as they do not benefit from direct recourse to assets. Exclusion of any possibility of sharing the gain as a result of the appreciation of the assets in the market. Non-compliance with Sharia principles on asset ownership. In practice there is no difference between conventional bond and sukuk, since the latter's contract contains a promise to buy back at the maturity of the asset at its nominal value. the guarantee granted by the issuer is not necessarily linked to the performance of the assets.
Som	rce: (Al-Khawarizmi, 2012).	

Source: (Al-Khawarizmi, 2012).

2.3. The Sukuk notation

The agency's rating of Islamic bonds is a key variable in the investment decision in this asset class. Thus, this note provides information on the credit quality of the issuer, ie the ability of the issuer to honor its liabilities at maturity. As a result, a high rating requirement is synonymous with a high solvency of the issuer or a high quality project in the case of sukukassetbacket and vice versa a low rating obligation is a sign of low issuer solvency or a poor quality project.

Moreover, before addressing the question of the methodology of notation of sukuk, one must distinguish between sukuk asset based and sukuk asset backet. Thus, in the case of sukuk asset based the underlying asset is only a formality for the completion of the issue. This is why the rating is related to the creditworthiness of the issuer and not to the quality of the underlying asset. In this case, the rating methodology of sukuk is similar to that of conventional bonds.

On the other hand, for asset backed sukuk, the rating is related to the quality of the underlying asset. This is why the sukuk rating methodology is equivalent to that of securitization. Moreover, the original advantage of the sukuk is that it allows the unsubstantiated originator to issue sukuk low credit quality and vice versa to issue high quality sukuk by an investor with low creditworthiness. The table below summarizes the analytical characteristics of the sukuk as well as the rating methodology adopted for each sukuk category.

Table 2. Analytical characteristics of the sukukand methodology adopted

Table 2.7 mary from characteristics of the sakakana methodology adopted			
Sukuk category	Characteristics	Scoring methodology	
Sukuk totally guaranteed (asset- based)	The principal and coupons are guaranteed by the owner. Thus, the principal is guaranteed by the issuer via a buy-in commitment. While the coupons, that is to say the periodic distributions, are protected by a liquidity clause made available by the guarantor.	Equalization of the notation of the broadcast with the notation of the originator. The sukuk have an equal rank with the obligations of the originator.	
Sukuk not warranted (asset-backed)	Neither the principal nor the coupons are subject to any internal or external support clause.	Methodology equivalent to that applied to securitization transactions. The rating given to sukuk is largely related to the quality of the underlying asset and the nature of the structure.	

Source: (Hassoune 2009).

3. State of the Art related to Sukuk

Despite the significant development of the Sukuk capital market, research in Islamic finance is still at an early stage. Indeed, most research has attempted to study the sukuk from the standpoint of their structures and mechanisms in comparison with conventional obligations. Indeed, Vishwanath & Sabahuddin (2009), through their analysis of the sukuk structures and their comparison with classical bonds, the authors support the idea that sukuk is an ideal instrument for mobilizing funds and managing liquidity and their Asset backing, makes investment in sukuk more secure.

Afsher (2013) also attempted to study the structure of these Islamic financial instruments as well as their profitability and risk characteristics in relation to conventional bonds. The author supports the idea that sukuk financial instruments and conventional bonds are two instruments that have succeeded in draining funds for both companies and governments.

However, there are fundamental differences between these two instruments. Conventional bonds are only a recognition of debt whereas sukuk are instruments of sharing of gain and loss generated by the performance of an underlying asset. Moreover, these instruments meet the needs of investors who are keen to respect the principles of Sharia.

On the other hand, empirical research on sukuk is not numerous. These studies revolve around the question of the profitability and volatility characteristics of sukuk versus conventional bonds, as well as the question of diversification of sukuk using different empirical models and methods.

For example, Çakır & Raei (2007) carried out a risk study of the sukuk portfolio using risk-value VaR. To calculate this risk, the authors constructed two portfolios: the first contains traditional bonds, while the second contains of bonds plus sukuk. The findings confirm that the VaR of the second portfolio is lower than that of the first. This allows them to conclude that the integration of the sukuk in the portfolio generates a diversification gain.

Hassan (2012) assessed the risk of a portfolio of sukuk and conventional bonds with another that only contains conventional bonds for the same issuer. The results show that the addition of sukuk allows a diversification gain. He also found that the sukuk portfolio is more risky than that of the classic bonds. These findings are in line with those of Çakır & Raei (2007). However, Hassan (2012) has incorporated into these portfolios the bonds undertaken, in addition to the risk comparison of the sukuk portfolio with that of the conventional bonds.

Najeeb, Bacha, & Masih (2014), analyzed the diversification of sukuk. The findings confirm that the opportunity for diversification manifests between local currency sukuk as well from Malaysia as Emarate United Arabia where there is a weak correlation between the two markets. This constitutes an opportunity for diversification for investors. Gold, for sukuk issued in dollars are strongly correlated long-term with the sukuk of the domestic market of Malaysia as the

market of the countries of the golf. That hinders, in this case, any possibility of diversification.

Paltrinieri, et al., (2015) studied the correlation of sukuk with several asset classes of conventional bonds by constructing a sukuk index. The results confirm that sukuk show a diversification gain especially during the sukuk period financial crisis.

Fathurahman & Fitriati (2013) studied sukuk performance through an analysis of mature yields between sukuk and conventional bonds in the Indonesian context. The results show that the means of yields of sukuk and classical bonds are significantly different. And the maturity of the sukuk is higher than that of the conventional obligation in three groups studied among ten.

Ramasamy *et al.*, (2011), have studied the risk of sukuk in the Malaysian capital market. The authors used the convexity and duration measure to compare the sensitivity between sukuk and classical bonds. The results found show that sukuk have a better sensitivity than that of conventional bonds. They also confirm that sukuk are less risky than bonds and that the investor can obtain a high return compared to sovereign bonds and less so than bonds.

Ariff & Safari (2012) studied sukuk performance by analyzing the causal link between the performance of sukuk and conventional bonds with the same performance and rating. The findings confirm that there is no causal link between sukuk performance and conventional bonds.

El-Mosaid & Boutti (2014), studied the performance of the sukuk portfolio. This is a comparison between the series of sukuk and conventional stock indices in the Malaysian capital market. The results confirm that there is a positive correlation between the performance of sukuk portfolios and conventional bonds. They also confirm that the performance of the sukuk stock indexes is significantly higher than that of their traditional counterparts.

Godlewski *et al.*, (2013) examined the reaction of Malaysian market investors to the announcement of the issue of conventional sukuk and bonds. The results show that the market is neutral as to the announcement of conventional bonds, whereas it reacts negatively to The author attributes this result to the high demand for Islamic investment certificates and adverse selection in the measure where lower-quality companies prefer to issue sukuk in order to share the projected losses that will result from The underlying asset.

Rusgianto & Nursilah (2013), examined the volatility Dow Jones Citigroup Sukuk Index. The findings show that the structural shocks associated with the financial crisis significantly affect the behavior of the sukuk stock indexes. They also argue that the volatility of sukuk indices is influenced by good news rather than bad news.

Most of our research has attempted to investigate the performance of sukuk financial instruments with conventional bonds through a separate analysis of their profitability and risk profile (Ramasamy *et al.*, 2011; Ariff & Safari, 2012; Fathurahman & Fitriati 2013; El-Mosaid & Boutti, 2014).

In addition, the majority of these studies have attempted to study this issue in a domestic context including Malaysia. Our study proposes to address this issue of performance in an international context using the Dow jonssukuk indices index series by notation Based on seven models of performance measurement on the one hand. On the other hand, in order to enrich the debate on the question of diversification of the Sukuk, the majority of which have attempted to answer it by working on portfolios, our study will deal with this question by taking the Sukuk case.

4. Conclusion

Islamic finance represents an attractive alternative to conventional financing and introduces several instruments, namely sukuks, which represent Islamic bonds to offer investors a means of diversifying their portfolios and thus investing in

accordance with religious principles. Indeed, Sukuk plural of the word sak represents the Islamic equivalent of a bond.

These financial instruments, like the traditional bonds, have been a reliable alternative investment for companies as well as governments that want to conduct their business In a framework respecting the precepts of the sharia. Indeed, conventional bond financing results in a periodic payment of interest and a repayment of the principal at maturity.

While sukuk financing is accompanied by a sharing of gains and losses resulting from the performance of the underlying asset and the repayment of the principal through the sale of that asset at maturity. Conventional bonds are only debt recognition, while sukuk represent a share of ownership in a tangible asset.

Through this paper we have tried to study the concept of sukuks and to better understand their mechanisms as an Islamic obligation widely used to cope with the failures recorded during the global crisis.

References

Abdel-Khaleq, A., Richardson, C.F. (2007). New horizons for Islamic securities: emerging trends in sukuk offerings, *Chicago Journal of International Law*, 7(2), 409-425.

Adam, N.J. (2006). The evolution of sukuk, Establishing Singapore as an Islamic Financial Hub, Sukuk Masterclass, February 22–23. [Retrieved from].

Afsher, T.A. (2013). Compare and contrast *Sukuk* (Islamic bonds) with conventional bonds, are they compatible?, *The Journal of Global Business Management*, 9(1), 44-52.

Al-Khawarizmi, G. (2012). Les Sukuk: Une Nouvelle Alternative de Financement Pour le Maroc,. Al-Khawarizmi-Group, [Retrieved from].

Ariff, M., & Safari, M. (2012). Are sukuk securities the same as conventional bonds?, *Afro Eurasian Studies*, 1(1), 101-125.

Bourkhis, K., & Nabi, M.S. (2013). Islamic and conventional banks' soundness during the 2007–2008 financial crisis, *Review of Financial Economics*, 22(2), 68-77. doi. 10.1016/j.rfe.2013.01.001

Çakır, S., & Raei F. (2007). Sukuk vs. Eurobonds: Is There a Difference in Value-at-Risk? International Monetary Fund, *Working Paper*, No.WP/07/237. [Retrieved from].

El-Mosaid, F., Boutti, R. (2014). Sukuk and bond performance in Malaysia, *International Journal of Economics and Finance*, 6(2), 226-234. doi. 10.5539/ijef.v6n2p226

Fathurahman, H., & Fitriati, R. (2013). Comparative analysis of return on sukuk and conventional bonds, *American Journal of Economics*, 3(3), 159-163. doi. 10.5923/j.economics.20130303.05

Godlewski, C.J., Turk-Ariss, R., Weill, L. (2013). Sukuk vs. conventional bonds: A stock market perspective, 745-761. doi. 10.1016/j.jce.2013.02.006

Godlewski, C.J. Turk-Arsis, R., & Weill, L. (2011). Do markets perceive Sukuk and conventional bonds as different financing instruments?, BOFIT Discussion Papers, No.2/2011. [Retrieved from].

Hardy, N. (2008). Finance islamique, Techniques et Enjeux, Paris: Banque.

Hassan, K.A. (2013). Comparison between Sukuk and conventional bonds: Value at risk approach, Unsversity Westminster Working Paper, [Retrieved from].

Hassoune, A. (2009). *Cartographie de la finance islamique*, Conférence sur la Finance Islamique, Paris, Bercy, Novembre, 3.

Najeeb, S.F., Bacha, O., & Masih, M. (2014). Does a held-to-maturity strategy impede effective portfolio diversification for Islamic bond (sukuk) portfolios? A multi-scale continuous wavelet correlation analysis, MPRA Working Paper, No.56956. [Retrieved from].

Naughton, S.A.J., & Tahir, M.A. (1988). Islamic banking and financial development, *Journal of Islamic Banking and Finance*, 5(2), 521-538.

Observateur De l'OCDE. (2009). Finance Islamique: Un placement d'avenir, No.272, Raynal.

Paltrinieri, A., Dreassi, A., Miani, S., Sclip, A. (2015). In search of zero beta assets: Evidence from the sukuk market, ICIBF, 2015, Conference Paper, Zurih.

Peillex, J., & Ureche-Rangau, L. (2012). Création d'un indice boursier Islamique sur la place financière de Paris: Méthodologie et performance, Revue d'économie Financière, (107), 289.

Rafique, M. (2008). Islamic finance can solve global crisis, Says Scholar. Arab News. [Retrieved from].

Ramasmy, R. (2011). Relative risk of Islamic sukuk over government and conventional bonds, *Global Journal of Management and Business Research*, 11(6), 5-12.

Rusgianto, S., & Ahmad, N. (2013). Volatility behavior of sukuk market: An emprical analysis of the Dow Jones Ctigroup sukuk index, *Middle East Journal of Scientific Research*, 13(1), 93-97. doi. 10.5829/idosi.mejsr.2013.13.1887

Vishwanath, S.R., & Azmi, S. (2009). An overview of Islamic sukuk bonds, *The Journal of Strutured Finance*, 14(4), 58-67. doi. 10.3905/JSF.2009.14.4.058



Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by-nc/4.0).

