

The Significance of Sukuk in Facilitating Small and Medium Enterprises (SMEs)

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Abstract

Small and medium-sized enterprises (SMEs) play a crucial role in fostering economic growth and generating job opportunities. However, these enterprises face many obstacles when seeking external funding. This paper aims to analyze the current developments in the funding alternatives accessible to small enterprises. In the process of assessing the barriers to obtaining foreign loans, we also analyze the function of Sukuk, which has seen a notable increase in importance within the Islamic financial system. Sukuk refers to a kind of debt instrument that does not include the accrual of interest, in contrast to traditional bonds. The Sukuk market exhibits distinctive characteristics, including securitization and real return on assets, which distinguish it from other financial markets. Nevertheless, small and medium-sized enterprises (SMEs) have challenges in accessing affordable financing options from the market. The objective of this study is to provide insight into the obstacles encountered by small and medium-sized enterprises in their pursuit of financial resources. Additionally, there are potential strategies to alleviate the aforementioned issues. This report also assesses the novel finance methods that leverage state-of-the-art technical advancements. This paper elucidates the economic ramifications of the sukuk market and its integration into the blockchain network.

Keywords: Entrepreneurial financing, Sukuk, Bonds, Blockchain, SME funding.

Introduction

According to the World Bank, small and medium-sized companies (SMEs) play a substantial role in most economies, especially in developing countries, in stimulating economic development, fostering creativity, and enhancing overall well-being. The great majority of businesses worldwide are SMEs, which play a crucial role in job creation and global economic growth. More than 90% of the world's businesses are SMEs, providing half of all employment. Formal SMEs account for nearly 40% of the gross domestic product (GDP) in developing countries (World Bank, 2018). Seventy-five percent of SMEs in developing nations state that gaining access to capital is a key obstacle to their growth and expansion (Ramalho, et al., 2018). Due to concerns about information asymmetry, a lack of collateral, and the higher cost of servicing loans, research repeatedly shows that SMEs face greater constraints in accessing finance

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than large businesses (Yoshino & Taghizadeh, 2016). Given the importance of SMEs in terms of production and employment in developing countries, it is vital to improve SMEs' access to credit in a way that promotes long-term growth and financial stability. Traditional methods of financing, which rely mostly on loans and guarantees, have limited capacity for dynamic companies. Even SMEs might face financial shortages when they need to make significant modifications to their business model or strengthen their capital structure due to a lack of funds (Cusmano & Thompson, 2018). SMEs' smaller size, lack of diversification, and weaker financial structures make them especially reliant on credit and cash flow. One of the key reasons for lower production levels in SMEs is their limited access to capital (Bouri, et al., 2011).

Delays in receivables, decreased liquidity, and a rise in SME insolvencies and bankruptcies are all signs of financial restrictions faced by SMEs. As a result, excessive leverage or overreliance on bank loans compared to equity increases the risk of financial distress and insolvency for organizations with little capitalization or perhaps no capital at all (OECD, 2018). SMEs' primary sources of external funding continue to be bank loans and lines of credit. Due to the economic crisis, banks' lending capacity has been curtailed, and lending rates on new loans have risen. SMEs, being more vulnerable to external shocks, have experienced fluctuations in the availability of short- and long-term funding (Veiga & McCahery, 2019).

The SME sector still heavily relies on bank financing, and policy measures in many nations are still oriented towards facilitating small businesses' access to financing. To bridge the "growth capital gap," encourage long-term investment, reduce SMEs' sensitivity to financial market shocks, and adapt to the changing regulatory landscape and stricter prudential standards, it is increasingly recognized that better alternatives for SME financing are needed. Unlike conventional lending, SMEs can be financed by investors and other stakeholders, rather than solely relying on banks (OECD, 2015).

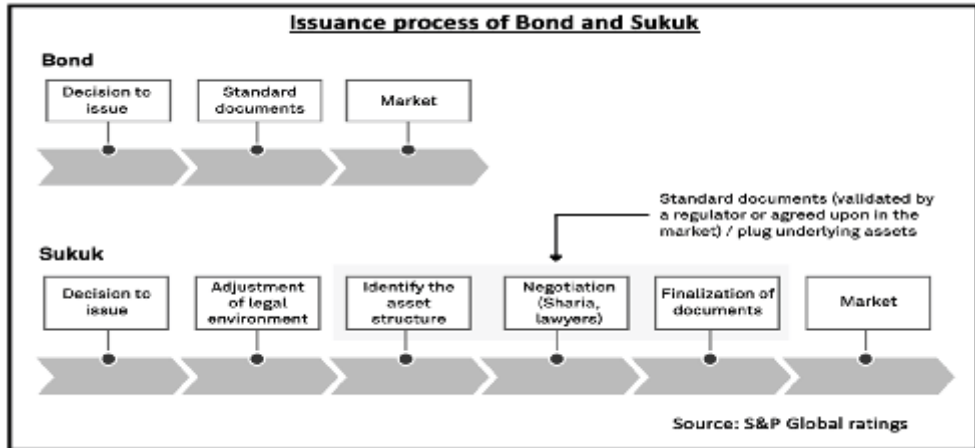


Figure 1: Issuance process of Bond and Sukuk.

However, issuing and managing a sukuk is more complex than handling a regular bond. The Shariah contract's specific terms, circumstances, and operational processes can lead to multiple contracts. Additional steps are involved in the sukuk issuing procedure compared to the regular bond issuance. If mishandled, the operational risk associated with issuing sukuk increases, encompassing both legal and Shariah non-compliance risks at each stage of the sukuk lifecycle.

Fintech professionals herald emerging technologies like blockchain as game-changers because they can simplify contracts, enhance transaction traceability, and partially eliminate conventional intermediaries (Kunhibava et al., 2021). Blockchain offers a new way of managing and exchanging information.

Therefore, priority should be given to enhancing access to financing for emerging, innovative, and rapidly growing SMEs, as well as existing businesses expanding their operations. Islamic Sukuk could be considered a "creative" funding tool for small and medium-sized businesses and entrepreneurs. By placing Islamic Sukuk (asset-backed bonds) on the blockchain, transparency will increase, and efforts to automate complex and costly procedures in asset-backed bond issuances will save time and money. The paper will also discuss the significant benefits of leveraging technology to establish trust and instill confidence in properly constructed and executed financial instruments.

Sukuk and Conventional Bonds

Sukuk, commonly referred to as "sharia-compliant" bonds, are the Arabic equivalent of financial certificates. Sukuk differs from conventional bonds in that the underlying asset or project must be Shari'ah-compliant in origin and usage, whereas conventional bonds represent a pure debt obligation for the issuer. In a Sukuk, the bondholder and

issuer effectively engage in lending and borrowing each other's money because the underlying sukuk assets are proportionally owned by the Sukuk holder, leading to both profits and losses for the holder. The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) defines sukuk as "certificates of equal value representing undivided shares in ownership of tangible assets, usufruct and services, or (in the ownership of) the assets of particular projects or special investment activity" (AAOIFI, 2017). Sukuks are Islamic bonds designed to provide investors with a return on their investment. Various Sharia contracts may be employed to structure sukuks, such as "Sukuk of ownership of leased assets, ownership of usufructs, ownership of services, Murabahah, Salam, Istisna'a, Mudarabah, Musharakah, investment agency and sharecropping (Muzara'ah), irrigation (Musaqat) and agricultural (Mugharasah) partnerships" (AAOIFI, 2017).

Sukuks are issued and traded in accordance with Shariah principles, which prohibit the payment of Riba or interest. As a result, Sukuk bondholders do not receive interest payments as with conventional bonds; instead, they receive a share of the income generated by the asset purchased with the Sukuk bond proceeds. In terms of the parties involved and the purpose of the bond issuance, Sukuk bonds bear many similarities to traditional corporate bonds. Both Sukuk and bonds have fixed terms and a final payment at maturity. However, Sukuk must be tied to a specific service or activity for a defined period, while equity shares, in contrast, confer ownership rights in the entire entity and lack a maturity date (Hussain et al., 2015). Some scholars argue that Sukuk are essentially similar to regular bonds and not a financial innovation since they are structured like traditional securitization. Unlike traditional bonds, Sukuk yields are derived from an underlying asset rather than a commitment to pay interest. Despite their fundamental differences, Sukuk and conventional bonds are influenced by similar economic factors and exhibit similar pricing patterns, suggesting that investors may not gain significant diversification benefits by investing in Sukuk (Krasicka & Nowak, 2012).

There is a counterargument that Sukuk are distinct from ordinary bonds because they involve risk-sharing (Iqbal et al., 2014). Combining Sukuk with traditional securities issued by the same sovereign issuer offers diversification advantages. From an investor's perspective, Sukuk differ from traditional bonds in that the stock market's response to the issuance varies for each type of corporate security (Godlewski et al., 2013).

The following table provides an overview of the differences and similarities between Sukuk and ordinary bonds.

Table 1: Difference between Sukuk and Bond

	SUKUK	BOND
Ownership	Ownership of a portion of an asset.	Obligation to pay back the debt.
Compliance	Sukuk must be backed by Shariah-compliant assets.	Compliance of national/local legislation in which they are issued.
Pricing	A sukuk's face value is determined by the assets underlying it.	Bond price is depending on the issuer's creditworthiness.
Return	The Sukuk holder shares in the asset's earnings.	Bond returns are fixed interest (riba).
Risks	A Sukuk holder takes a share of any loss.	Their principal is guaranteed at maturity of a bond.
Costs effects	Costs associated to the underlying asset impact Sukuk holders. Higher expenses may equate to reduced investment earnings.	Costs associated with the asset, project, business, or joint venture are generally not borne by bond holders. The underlying asset's performance has no bearing on investor returns.
Sales	Sale of underlying asset ownership.	Debt is being sold.

Islamic Securitization Aiding SME Finance

SME securitization is another option for bridging the funding gap for small businesses. Following the global financial crisis, securitization was stigmatized, and investors were hesitant to engage in this area of the market. In comparison to established countries, developing market securitization markets are often undeveloped. A share of asset ownership is provided to each Sukuk investor, symbolizing their fractional stake in the asset or structure. The fundraising institution pays Sukuk holders on a periodic basis. However, it is important to evaluate the potential advantages of securitization, as well as the necessity for well-developed, straightforward, and transparent frameworks to make securitization for SME finance more accessible (IOSCO, 2015). Considering that securitization relies on assets, Islamic financial principles are in favor of it. Islamic securitization is a legal framework that applies Islamic finance principles to accomplish the economic goal of transforming illiquid assets into tradable securities. Securities may be created for public or private markets using a single portfolio of assets or a collection of portfolios (assets that will be developed later). An asset securitization approach is a structured

finance strategy in which credit is delivered to market investment firms rather than financial institutions. Securitization has a very basic reason behind it. A security is more liquid than the underlying loan or receivables because it can be traded. Reduced risk, increased liquidity, and increased economic efficiency are all benefits of securitization (Giddy, 2001).

Shariah-compliant securitization uses special purpose vehicles to issue securities after assets have been transferred from their original owners. Financial institutions and their consumers usually engage in income-generating financing agreements. Among Islamic finance's asset-backed securitization structures, Sukuk is the most prevalent. Sukuks are secured by Shariah-compliant assets, such as Murabaha, Ijarah, Istisna, Salam, etc., which may be financed via Islamic financing techniques. An originator transmits entitlements to receivables from several Shariah-compliant assets to a SPV (acting as the Issuer). In exchange for the issuance of Sukuk Certificates by the Issuer SPV, the investors contribute the funds for the purchase or investment in Shariah-compliant assets. The associated Shariah-compliant assets are represented by the pro rata portion of investors in the Sukuk Certificates. Because of this, Shariah-compliant assets may be used to pay investors on a regular basis for their investments. They may be constructed in several ways, including Sukuks based on Mudarabah, Wakalah structures, etc.

The following figure briefly describes the benefits of securitization:

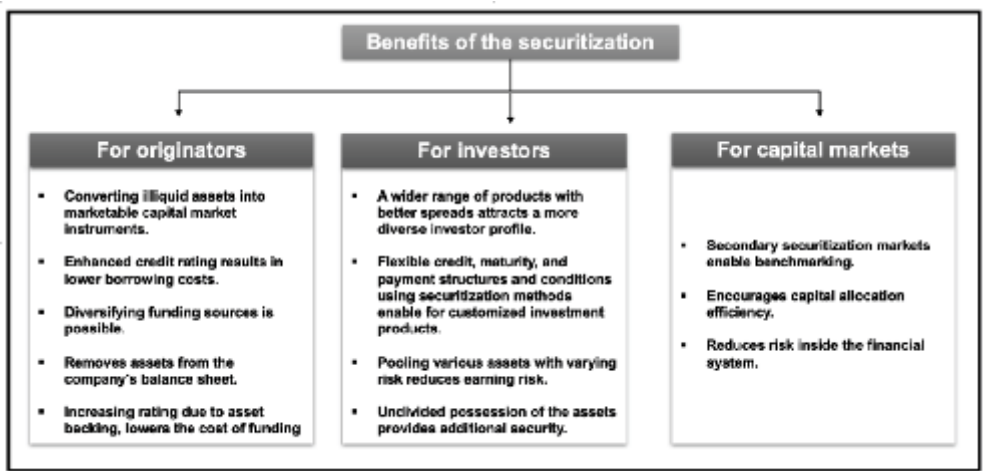


Figure 2: Benefits of the Securitization.

Sukuk and its Importance in SME's Financing

Small and medium-sized enterprises (SMEs) are one of the most critical sectors for economic growth in developing nations. Small and medium-sized enterprises (SMEs)

account for roughly 90% of all businesses. About 70% of all jobs are supported by them, and between 50% and 60% of the value added is generated by them, making them an important part of the economy (OECD, 2016b). The size and significance of the SME sector differ from country to country; the last few decades have seen a rising acknowledgment of its function in industrialized nations, which is already clearer for developing economies since the late 1960s or so. Nearly every country's economy, but particularly those in emerging nations, depends on SMEs (Keskgan et al., 2010).

Despite their importance to the global economy, SMEs have had a difficult time obtaining reliable access to finance in previous decades. Between 55% and 68% of SMEs in developing nations are either underserved or completely unserved by financial institutions. As a result of these large numbers, many promising business ventures have lost the opportunity to create a feasible business. Businesses in the G20 nations only face a funding shortage of \$1.3 trillion, according to estimates (Joint, W. B. I. D. B., 2015). A growing number of small and medium-sized businesses (SMEs) are making a bigger impact on innovation than they ever have before, result of rising incomes, more specialized market demands, and new technologies that have allowed SMEs to improve their comparative advantages and limit structural disadvantages like lack of resources and inability to realize economies of scale (OECD, 2017).

Corporate Sukuk markets are evolving in a way that may complement the corporate debt SME market. Because Sukuk have a larger investor base, now is an excellent time for SMEs to use them. Governments, corporations, and financial organizations have all issued sukuk in the past. Sukuk for SMEs is more likely to succeed when there is a funding shortage from the banking industry. In this instance, an SME Sukuk might be a good place to start when it comes to obtaining finance. Changes to the present market structure in other more established jurisdictions might pave the way for SME involvement in the Sukuk market (IOSCO, 2015).

It is believed that Sukuk financing may be a significant source of financing for development. An important function of the global Shariah-compliant capital market is to direct the increasing supply of money to projects that support long-term economic growth that is equally distributed among the world's population. Because Islamic banking places a high value on social justice and welfare in all of its financial operations, it would seem that the Sukuk market and efforts to alleviate poverty are a natural fit (Jaffer, 2011). There is more work to be done in order to make the Sukuk market a reliable and liquid source of funding for addressing global development issues. As a result, the sukuk market is currently quite small. On the other hand, the amount of money required to alleviate poverty and the expanding pool of Shariah-compliant funds that may be made accessible are enormously significant. The Sukuk market's existing restrictions must be overcome in order to unlock its full potential as a source of development financing.

Sukuk Development Challenges for Small and Medium-Sized Enterprises

- a. The legal rules which make Sukuk costly: Often, in order to issue a sukuk, a Special Purpose Vehicle (SPV) must be created, and the underlying assets transferred to the SPV. This is called the "originator" party. This might lead to increased taxes and stamp duties, which would make sukuk less competitive than regular bonds. However, some countries have made legal rules to reduce the cost of Sukuk issuances, such as in Malaysia, continuing to account for more than 60 percent of the worldwide market since the country's tax, land transfer, and registration rules do not penalize sukuk issuances, in contrast to conventional bonds (Latham and Watkins, 2015). However, the process of issuing and administering a sukuk remains more difficult than that of issuing a conventional bond.
- b. Standardization of Sukuk transaction validation: For sukuk transactions, legal pronouncements (fatwas) issued by Shariah scholars are often obtained to ensure that the transaction is Shariah-compliant for issuers and investors alike. Even though there is a wide range of interpretations, the market's reaction to these endorsements might be volatile. Shariah experts should agree on a set of guiding principles to ensure that uncertainties about Shariah-compliance don't impair the marketability of a product. The Government in Malaysia has taken steps to address the problem nationwide, including creating an independent Shariah oversight board to confirm that all sukuk issued in the country adhere to nationally recognized Shariah norms.
- c. Mechanism for Default: In order to build a mature sukuk market, investors must understand their rights and procedures in the event of default. Early investors considered sukuk as safe securities, benefitting from the security provided by the underlying sukuk assets. Investors, on the other hand, learned from experience that most sukuk instruments are not secured in the traditional sense after a few high-profile defaults. Although from a Shariah viewpoint, a sukuk represents an undivided part in the entitlement of a pool of physical assets, usufructs, and/or services, whether investors may claim these assets following a default depends solely on how the provisions of the sukuk were formed. Government-sponsored guarantee systems will also encourage more investors to engage. This segment's development has been shown to be aided by guarantees. Credit improvements, such as credit guarantee programs or insurance schemes, might be used to offer credit protection for SME Sukuk, making them more appealing to investors. The insurance coverage may be able to assist issuers in meeting significant investor demand for investment Sukuk. The Government may consider establishing an agency to assist in this area. Multilateral organizations such as the Islamic

Corporation for the Insurance of Investment and Export Credit (ICIEC) have established an insurance product aimed at improving Sukuk credit ratings, although it only covers sovereign issuers at the moment. This is a novel finance concept that might be investigated further with the goal of applying it to SME funding.

Sukuk and its Possible Role in SME Financing through Blockchain

Sukuk for small and medium-sized enterprises (SMEs) is still in its infancy, despite legislative and regulatory structures that facilitate Shariah-compliant financing, especially for SMEs, in some countries. The Sukuk market, like the corporate debt market, has the difficulty of a non-supportive market structure that does nothing to encourage SME sukuk (IOSCO, 2015). Financial technology (fintech) has grown significantly since the financial crisis of 2008. The public and commercial sectors have shown interest in building this ecosystem, which supports 1.9 billion people and incorporates US \$2.4 trillion in assets and has 142 fintech companies globally, despite Islamic fintech's late entrance. Fintech organizations have been formed in a number of Islamic nations as a means of accelerating the growth of their own ecosystems. This start-up may now be linked to the financial system of their nation because of the regulatory software developed by their central banks (INF, 2021).

Because of the knowledge gap, lack of mortgages, and higher loan servicing costs, SMEs have a more difficult time obtaining financing than big ones. SMEs play a significant role in the production and employment of developing economies, making it vital to improve SMEs' access to financing in a manner that promotes sustainable development and financial resilience. However, Sukuk has remained out of reach for the majority of small and medium-sized businesses, enterprises, and cooperatives due to the difficulty and high cost of issuing them. In order to minimize costs and enhance efficiency, asset-backed bond issuances (Sukuk) may be made more transparent and automated using blockchain (Mohamed, 2021). Owing to the complexity and expense of issuing, nearly all Sukuks have been only accessible to governments and other major entities.

An innovative approach to simplify and decrease the entry barriers for smaller businesses is sukuk (Smart Sukuk) issuance using blockchain technology through Smart Contracts. By using blockchain technology, smart contracts underwrite trust certificates, which include the ownership of the asset and payments to investors. The smart contract is an innovative use of blockchain technology. A smart contract is a digital record of a contract between two parties that is kept on the blockchain. peer to peer agreement (P2P), person-to-organization (P2O) agreements, and person-to-machine (P2M) agreements may all be made between two individuals. As a result, it is possible to specify that the contract is automatically performed, and assets (such as fiat money, digital currency, title to property, and data) are transferred between the

of contractual conditions such as profit payment, redemption, etc. Regulators may obtain comprehensive transaction data and a live audit trail straight from observation nodes.

Taking the example of the blockchain on the Ethereum network, which supports "smart contracts," drives Blossom's Smart Sukuk, the first SME Sukuk issued by an Indonesian microfinance institution - BMT Bina Ummah in 2019. The blockchain on its own enforces the contract rules involving payments and transfer of ownership via the use of smart contracts, which embed business rules directly into the underlying payment currency. The Smart Sukuk in the illustration below may be issued by a financial institution in order to collect cash from investors in return for Smart Sukuk Tokens, which represent a proportion of the sukuk's ownership.

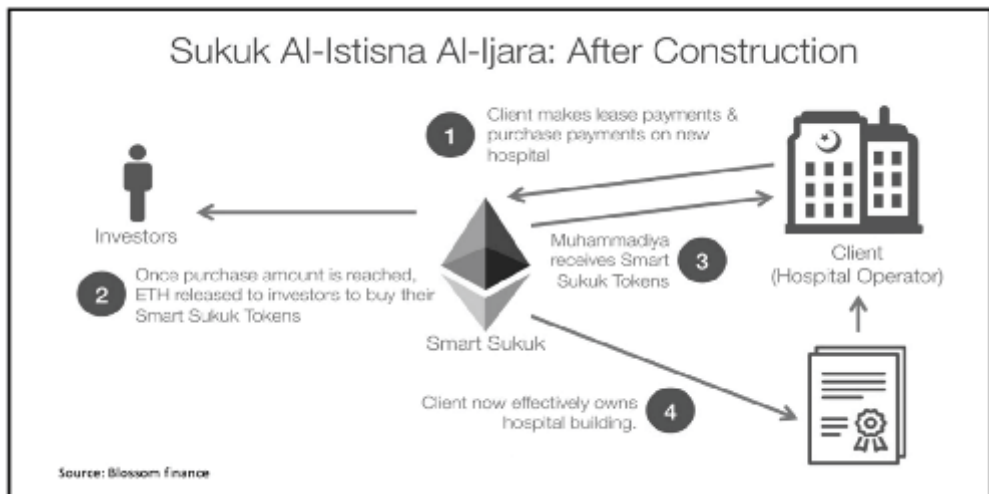


Figure 4: Sukuk Al-Istisna Al-Ijarah: After Construction.

The Smart Sukuk in the illustration below may be issued by a financial institution to collect cash from investors in exchange for Smart Sukuk Tokens, representing a portion of the sukuk's ownership. Payments made by the institution are promptly returned to Smart Sukuk Token holders through the blockchain, in accordance with the smart contract's terms and conditions, without the involvement of traditional banks or middlemen. Smart Sukuk Tokens are supported by the ERC20 protocol, enabling a wide range of public cryptocurrency exchanges worldwide to trade tokens.

As long as the design adheres to the Shariah standards of the Shariah contract relevant to the specific sukuk, blockchain can be utilized. This is recognized in the AAOIFI guidelines (2017), which specify that "The certificates may be traded through any known means that do not contravene the rules of Shariah, such as registration, electronic means, or actual transmission by the bearer to the purchaser." Therefore,

the architecture of blockchain platforms must be approved by Shariah experts, similar to commodities trading platforms. Once approved, the platform is ready to operate, providing a simple, easy, reliable, and cost-effective way for SMEs to raise funds through Sukuk.

Table 2: Advantages and challenges of blockchain Sukuk

ADVANTAGES	CHALLENGES
Sukuk issuing using a blockchain is simple and fast.	Parts of the issuing process for blockchain sukuk are decentralized, generating regulatory concerns, notably about possible consumer protection violations.
Negotiations are reduced and papers are issued practically instantly.	Adherence of network operators to national professional confidentiality and privacy laws.
Reverse inquiry and private placement marketplace may be accessed.	Enforcement of smart contracts under the law.
The automation makes issuance cost cutting, due diligence procedures using blockchain KYC/ID, asset appraisal, and AI compliance systems saves both time and money.	To develop legislation that governs smart instruments and smart contracts functioning and adapts to their usage in everyday life.
Faster addition of new issuers to the platform, successive drawdowns are less expensive, particularly when numerous tranches each year are issued, rather than a single issuance.	Necessitates of more thorough investigation of security threats as Blockchain solutions may be vulnerable to cyberattacks, such as hacking, due to their online nature.
With the decentralization of these qualifying underlying securities and the reliable blockchain ledger framework, the issuer's profile among foreign investors is raised, making cross-border investment and worldwide reach easier.	Possibility of further challenges if the design uses cryptocurrencies, since Shariah experts are currently disputing its permissibility.
The capacity to raise funds on the international capital markets may be proved with ease of access and a history of structural financial flexibility.	

Even though there are some challenges in the issuance of Sukuk for SMEs on blockchain, recently a few sukuk have been successfully issued. These successfully issued sukuk are mentioned below:

- In November 2017, Wethaq, a Dubai-based blockchain fintech company, released its first prototype Sukuk on R3's Corda blockchain as part of its securities market platform for Islamic capital markets (Ledger Insights, 2019).
- In November 2018, Al Hilal Bank became the world's first Islamic bank to use blockchain technology for Sukuk resale and settlement. Blockchain was used to trade a USD 500 million Senior Sukuk maturity in September 2023 (Al Hilal Bank, 2018).
- In October 2019, BMT Bina Ummah, an Indonesian microfinance organization, raised 710 million Indonesian Rupiah (\$50,000 USD) through a primary sukuk issue on the blockchain using Blossom Finance's Smart Sukuk platform (Blossom Finance, 2019).

In order to have a significant impact on the market, technology adoption must be backed by a large percentage of the population. Some market players have advocated for technology to concentrate on enhancing the present infrastructure rather than replacing it, so that the debt capital market may remain secure. There is still a need for human engagement in advisory roles, such as negotiating pre-issuance contracts, and thus the use of blockchain technology should not result in a total disintermediation of these tasks. Furthermore, blockchain should not be regarded as a one-size-fits-all solution for improving issuance efficiency but rather be integrated with other cutting-edge technologies, such as artificial intelligence and cloud computing, to achieve the best possible outcomes.

Conclusion

Sukuk is a key financial instrument in the global economy, becoming more important as transaction volume rises. Interest-free Sukuk investments may serve as a remedy in the event of a financial crisis, with a favorable impact on inflation and job creation due to its support for the real economy. Countries that use sukuk finance have a better chance of avoiding financial catastrophes. If an SME lacks sufficient collateral, it may leverage its other assets to obtain sukuk funding effectively. A new blockchain network, such as Smart Sukuk, has the potential to become the future of Sukuk issuances, contributing to widespread distribution and supporting real economic growth by making Sukuk easily accessible to SMEs. This could lead to the expansion of Islamic funding, wealth distribution, social justice, and support for the real economy.

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