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Smart Sukuk in the Digital Era and National Economic Development

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Abstract

Development in Indonesia cannot be separated from the increasingly massive development of national finance. One of the things that is trending now is commonly known as sukuk. Sukuk collaborates with financial technology in the form of a blockchain which produces smart sukuk. Referring to the Financial Services Authority regulation Number 18/POJK.04/2015 concerning the issuance and requirements of sukuk, tokenization of sukuk through the issuance of smart sukuk opens up various opportunities or alternative financing access schemes, especially for micro businesses with light and cheap schemes as well as opportunities to strengthen Islamic financing at the micro level such as MSME funding through Baitul Mall wat Tamwil (BMT) or integrated independent business centers. This research uses a qualitative method, the data collection technique carried out is literature study or literature review, this research collects data from previous studies by collecting literature documentation from articles, journals or books as well as publication data from other parties which are sources for examining problems in this study. Base data sources mostly come from Scopus indexed journals and Google Scholar as the main database. The data analysis techniques used in this research are data reduction, data presentation, and conclusion drawing. The results obtained from the data taken based on the Indonesian BMT Association, the total assets reached 12 trillion and total deposits of 10 trillion rupiah with total BMT financing has reached 7.82 trillion rupiah. This data is as a reference for the issuance of smart sukuk in the future, considering that BMT is the first to use smart sukuk. In fact, the issuance of smart sukuk in Indonesia and the issuance of bonds in various countries using blockchain is new starting points in the development of financial innovation and a new niche for explore Islamic microfinance. Currently, smart sukuk is the answer to developing the economy in Indonesia, because its work has realized several MSMEs is managing their businesses. The use of smart

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sukuk also opens up the possibility of financing for the Regional Revenue and Expenditure Budget (APBD) by local governments. Thus the opportunity to improve the national economy is increasingly wide open.

Keywords: smart sukuk, blockchain, economic development

INTRODUCTION

Digital development framed in the term industrial revolution 5.0 is a challenge and opportunity for Indonesia to develop national economic development going forward. The industrial revolution plays an important role in changing the face of Indonesia, especially global finance by utilizing digital technology. The impact of these technological developments extends to the regulation and control of any activity or transaction where technology is used. Not only are financial products changing rapidly due to technological innovation, other things that intersect are also changing over time.

One of the fastest growing Islamic financial instruments is sukuk. Growing the investment sector using Islamic capital market instruments is one of the efforts that Indonesia can make in encouraging the pace of Indonesia's economic growth. At present, the Islamic capital market sector is one of the investment sectors that is of great concern in Indonesia. Even the Islamic capital market is one of the most important investment instruments in the economy in Indonesia and in the world. The Islamic capital market is the same as banking as a medium that is able to become an intermediary for parties with excess funds and parties who lack funds (capital). In the Islamic capital market, all countries in the world can become economic actors. At this time in Indonesia, the development of the Islamic capital market is very good and is experiencing very rapid growth from year to year. This rapid growth can be seen from the development of Islamic capital market instruments, namely Islamic stocks, sukuk and Islamic mutual funds which are experiencing very rapid growth. This rapid growth certainly affects the development of the capital market in general and of course will also affect the economy in Indonesia.

It is known in the data on the development of global sukuk released by the Indonesian Ministry of Finance, the government has issued global sukuk amounting to US $ 2.35 billion consisting of US$ 759 million with a 5-year tenor, US $ 1 billion with a 10-year tenor and US $ 600 million with a 30-year tenor which is issued by the government through the SBSN Indonesia III issuing company, a legal entity established by the government specifically to carry out SBSN issuance in foreign currency in the international market. This is a new record for the largest global sukuk issuance in

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Southeast Asia. Issuance of Green Sukuk which is the government's commitment to fight climate change: The Indonesian government has issued Green Sukuk since 2018. Green Sukuk combines climate and social components, thus supporting the achievement of the Sustainable Development Goals (SDGs).

Since 2002, Indonesia has shown its consistency in sukuk issuance. As of July 2020, the value of sukuk issuance was IDR 1,041 trillion with state sukuk amounting to IDR 892 trillion. In October 2019, Indonesia was noted as the first country to issue (financial technology) fintech sukuk that can be paired with blockchain micro banks in practice called smart sukuk. (Source: IDX, OJK Sharia Finance Market Update, June 2020)

State sukuk is currently an Islamic financial instrument that is being discussed nationally and globally. The development of this instrument is one of the strategies of the Indonesian government in creating sources of financing for the state budget. As is known in the development of Indonesian sukuk which has been released by the Ministry of Finance, the Government is increasing the rate of economic growth and infrastructure. In line with research conducted by Siti Latifah (2020) which examines the role of state sukuk in the growth of Indonesia's economic development, the results of which are the issuance of state sukuk from year to year has increased in accordance with the developments and strategies implemented in the state budget. The role of state sukuk has a very positive impact, namely financing project development, encouraging the development of Islamic financial markets, creating branch marks in Islamic financial markets, developing alternative investment instruments and utilizing public funds. The addition of financing instruments is expected to be a source of funding for national development. The issuance of state sukuk, in addition to the above objectives, is also in the context of developing Islamic finance which is growing in Indonesia. The provision of Islamic financial instruments will certainly help the Islamic financial industry both banking, insurance and so on in the development of financing their assets. State sukuk can be an alternative investment for the Islamic financial industry amid the very limited choice of Islamic investment instruments.

The smart sukuk revolution in Indonesia is playing its part in this digital age, changing the face of global finance by utilizing blockchain technology. Smart sukuk uses blockchain technology on smart contracts to increase transparency, minimize fraud and speculation in sukuk transactions and reduce the involvement of intermediaries. Research conducted by Pekerti, 2024 shows the use of blockchain technology can reduce credit risk and improve risk management in smart sukuk. Smart sukuk can strengthen the

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role of sukuk as an Islamic financial instrument in the face of complex economic and social changes in the Society 5.0 era, because in the digital world conventional financial practices will be left behind. Previous studies have reviewed a number of issues related to the implementation of smart sukuk with blockchain technology in the future. One of the main issues is regulatory law, where several studies have highlighted that a lack of clarity in regulatory law can slow down the adoption of blockchain technology in smart sukuk. Unclear legal regulations can lead to a lack of investor confidence in smart sukuk transactions.

The smart sukuk revolution as the latest transaction platform has become quite an interesting issue in the financial industry, especially in the era of Society 5.0. However, previous research has not found an analytical gap in this issue, especially regarding the potential and challenges of using blockchain technology in smart sukuk. A new research needs to be conducted to better understand how blockchain technology can be optimized in the financial industry. The issuance of Smart Sukuk in Indonesia and the issuance of bonds in various countries using blockchain is a new starting point in the development of innovation and new niches of financial (capital) markets, especially Islamic capital markets. In relation to Smart Sukuk specifically, the issuance opens up opportunities for the development of the Islamic finance industry, including: (i) the development of the ecosystem and the deepening of the Islamic financial sector marked by the issuance of relatively new financial instruments; (ii) the issuance of Smart Sukuk has the opportunity to encourage the development of the Islamic capital market or industry and/or Islamic non-bank finance through its integration with fintech; (iii) broadening the reach or opportunity to get a large source of funding or investment from Indonesian Muslims who are the majority population or around 87 percent of the total population (OJK at the Ministry of Finance, 2020b); and (iv) increasing the inclusiveness of Islamic financial services (other than investment) that are more accessible and inexpensive, with the opening of access to funding for Islamic business people and activists, both individuals or institutions (especially BMT) and also for MSMEs, especially halal MSMEs. In this case, it can advance the development of the national economy for the better in the future.

This research is different from research conducted by previous researchers. This research focuses on the role of smart sukuk in economic growth in Indonesia while previous studies have focused on state sukuk and sukuk in general by following current developments. Therefore, this study aims to 1) find out the development of smart sukuk in Indonesia and 2) the role of smart sukuk in economic development in Indonesia carried out through MSMEs.

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Literature Study

Sukuk

In Islamic economics, sukuk is not a new financial instrument. Sukuk has long been used as a financial instrument in domestic and international trade by Muslim traders since the early development of Islam (6th century AD). The term sukuk then became popular in the early 21st century after it was widely used by governments and corporations in mobilizing funds to finance certain projects on an international scale.

Etymologically, sukuk comes from the Arabic language. The word sukuk is the plural form of the word *Sakk* which means a document/contract sheet similar to a certificate or note. In practical terms, sukuk is a proof (claim) of ownership of the asset on which the sukuk is issued (underlying asset). (Ayub, 2005)

The concept of sukuk in medieval times was different from the use of sukuk in the 20th century. Currently, the sukuk structure is close to the concept of conventional securities, where the process of ownership of the underlying asset is transferred to a number of investors through certificates showing a proportion of the value of the asset (Nathif & Abdulkader, 2004). Internationally, the issuance of sukuk has standard rules that refer to The Accounting and Auditing Organization for Islamic Finance and Institutions (AAOIFI). In the standard rules, sukuk is defined as a certificate that reflects the same value and is proof of undivided ownership of an asset, benefit rights and services or on the ownership of a particular project or investment activity. (AAOIFI, 2002).

Smart Sukuk

In the era of Revolution 4.0 towards Society 5.0, sukuk is evolving into smart sukuk by using blockchain technology in smart contracts. Blossom Finance as the first pioneer blockchain technology provider company in Indonesia, explained in its press release that with smart contracts, sukuk issuance can be more efficient. “Most sukuk issuance are in the hundreds of millions or billions of USD, and service fees can generally exceed $1 million USD per year. Blockchain technology in this smart contract can eliminate many intermediaries that can streamline costs and simplify the sukuk issuance and investment process.” (source: MJ/ Blossom Finance)

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Gambar 1. Skema pembiayaan smart sukuk
sumber: Blossom Finance

Table.1 Previous Research

Description	Purpose	Methods	Results
Indonesian Smart Sukuk Model: Opportunities and Challenges Nurul Hudaya, Ulfa Amani Hidayati (2024) FiTUA, Journal of Islamic Studies, 5(2)	describe the opportunities of smart sukuk and challenges faced in its implementation in Indonesia	The approach used in this research is qualitative research method with literature studies.	There are several factors that support the potential of smart sukuk instruments in Indonesia, namely the increase in internet penetration, the Muslim population, the increase in young investors and the large number of MSMEs and their contribution to Indonesia's Gross Domestic Product. Meanwhile, the challenges in the development of this evolutionary technology in Indonesia are basic regulations that have not yet been established, unclear tax treatment, sukuk tenor, liquidity risk, and uneven cyber risk
The role of sukuk state sharia securities (SBSN) in the growth of	Knowing the development of sukuk in	This research uses qualitative methods	The Indonesian government has issued Retail Sukuk (SR) namely

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Indonesia's economic development Siti Latifah (2020) JIEI, Scientific Journal of Islamic Economics, 6(3)	Indonesia, and the role of sukuk in economic growth in Indonesia.	and a library research approach	SR 001SR 013. The issuance of state sukuk from year to year continues to increase, in accordance with the developments and strategies implemented in the state budget. The role of state sukuk has a very positive impact, such as financing project development, encouraging the development of Islamic financial markets, creating business branches in Islamic financial markets, developing alternative investment instruments and utilizing public funds.
Revolutionizing smart sukuk in the era of society 5.0: the role of blockchain technology Retno Dyah Pekerti, Amalia Siti Khodijah, Rina Madyasari (2024) Informatics and Digital Expert (INDEX), 6(1)	investigate the potential, benefits of blockchain in smart sukuk, understand its impact on Islamic finance and sustainable economic development	Case study qualitative method the stages carried out: 1) preparing instruments and determining the research site; 2) data collection stage using structured interview techniques to informants; 3) processing and analyzing secondary and primary data.	BMT Bina Ummah uses the Ethereum ERC20 blockchain which can streamline issuance cost, increase security, simplify the transaction process; Issuers must understand the shariah aspects of sukuk; Blockchain has great potential but has not yet been implemented in Indonesia. Smart sukuk helps MSMEs in obtaining financing more easily, increasing financial inclusion, especially in Islamic capital markets. Regulators continue to innovate following developments in the

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			financial industry. Smart sukuk increase transparency, efficiency, security. Blockchain is very likely to be applied in the financial industry in Indonesia. Blockchain service providers and regulators will innovate to keep up with the times.
Optimizing the role of sukuk as an Islamic investment instrument in encouraging national economic development Dessy Dwi Romadhoni, Nur Ramidah, Ramdhani Kartika Damayanti (2022) Diponegoro Journal of Islamic Economics and Business, 2(2)	Analyze the role of sukuk in encouraging national economic growth and development as well as the development of sukuk as a sharia investment instrument in Indonesia and strategies implemented to intensify the role of sukuk to improve national economic development	Qualitative method through a library research approach	Sukuk is one of the risk-free investment instruments and in the future can be used to help the government in this case including Bank Indonesia to reduce inflation. Sukuk can be used to develop the national economy and improve people's welfare. Therefore, it is necessary to take steps to optimize the role of sukuk in national economic development. These steps include efforts to expand the variety of sukuk, advance the structure with innovative approaches, clarify definite legal handling, maintain sukuk sharia coherence, spread education and socialization to the public and improve the application of rules and coordination between government agencies.

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Smart sukuk on blockchain technology: a systematic literature review Retno Dyah Pekerti, Missi Hikmatyar, Dede Rizal, Isnaen Nurzaman (2024) Proceedings of the 8th Global Conference on Business, Management, and Entrepreneurship (GCBME 2023), Advances in Economics, Business and Management Research 288	Explore the trend and potential of smart sukuk from 2018 to 2023	A systematic literature review was conducted to uncover recent research trends in smart sukuk. Using the Semantic scholar database, 23 articles were selected and analyzed using VOSviewer	Research on smart sukuk still needs to be improved, especially in the issuance of technology-based sukuk and the opportunities and challenges it presents. One of the reasons is the need for clear regulations related to the utilization of blockchain technology in smart sukuk.

RESEARCH METHODS

This research uses a qualitative method. The data collection technique carried out is a literature study or literature review, this research collects data from previous studies by collecting literature documentation from articles, journals or books as well as publication data from other parties which are sources for examining problems in this study. Base data sources mostly come from Scopus indexed journals and Google Scholar as the main data base. The data analysis techniques used in this research are data reduction, data presentation, and conclusion drawing.

RESULTS AND DISCUSSION

Smart Sukuk Issuance in Indonesia: BMT Bina Ummah and Blossom Finance Experience

Baitul Maal wat Tamwil (BMT) Bina Ummah as the first issuer of Smart Sukuk in the world, is a sharia cooperative that was established in 1995 with the legal entity of Sharia Savings and Loan Financing Cooperative (KSPPS). Previously, BMT Bina Ummah had the legal entity of Koperasi Serba Usaha (KSU) and Koperasi Jasa Keuangan

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Syariah (KJKS). BMT Bina Ummah has various BMT business operational models consisting of Baitul Maal and Baitul Tamwil. As Baitul Maal, BMT Bina Ummah became a partner of Dompet Dhuafa in collecting ZIS (zakat, infaq, sedekah) and became a cash waqf nazir that has been registered with the Ministry of Religion. ZIS collected by BMT Bina Ummah is then channeled back to the community in humanitarian, empowerment, and financing activities. As Baitul Tamwil, BMT Bina Ummah collects funds from the community in the form of deposits (principal, mandatory, and voluntary). BMT Bina Ummah also cooperates with Islamic banking or similar financial institutions and investors.

BMT Bina Ummah seeks to improve the economic position of its members with various financial services. The financial services provided include grant assistance and savings education for members with the position of the lower middle class, soft financing and savings education for members with poor positions, as well as commercial financial services and capacity building for members with micro business positions. In carrying out its operational activities, BMT Bina Ummah and other microfinance institutions have major challenges that need to be faced, including: (i) liquidity management (withdrawal of funds by cooperative members during the holidays and the new school year or before maturity); and (ii) the ups and downs of cash flow and partial member perceptions of profit sharing schemes (members expect fixed profit sharing, while profits do not always increase). With these challenges, BMT Bina Ummah collaborates with Blossom Finance in providing suitable funding for BMT Bina Ummah's MSME customers through the issuance of Smart Sukuk using Smart Sukuk.

Meanwhile, Blossom Finance with its mission to improve the welfare of the community (especially through MSMEs), is a Smart Sukuk issuance platform provider in the form of blockchain, which is accompanied by a smart contract with the name Smart SukukTM. In order to realize this mission, Blossom Finance collaborates with microfinance institutions (in this case BMT Bina Ummah) to work together through the issuance of Smart Sukuk. This sukuk is expected to have characteristics such as high quality (risk-mitigated, diversified, liquid/tradable) and inclusive (Ministry of Finance, 2020b). In this sukuk issuance, Blossom Finance with its platform, at least plays (replaces) several roles (functions) in sukuk issuance in general, such as underwriter, trustee, insurer, clearing house, public accountant, stock exchange (platform). According to Blossom Finance, the main stakeholders in the capital market related to the issuance of Smart Sukuk, consist of four institutions, namely: (i) KSPPS; (ii) investors; (iii) OJK; and (iv) the Ministry of Finance. According to Blossom Finance, the most difficult aspect

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in the Smart Sukuk issuance process is the absence of a regulatory framework (regime) related to Smart Sukuk in Indonesia. In addition, Blossom Finance also experienced difficulties in finding a BMT that was trustworthy and willing to try new things.

Table 2 Stakeholder smart sukuk

type	Stakeholder	Main objective
Capital raising	KSPPS	- Minimize cost of funds and seek cash flow compatible payments - Maintaining good reputation and ratings
Capital provider	Investor	- Maximizing returns and minimizing risk - Delegate supervision and protection of rights - Create positive social impact
organizer	FSA	- Facilitate efficient capital circulation - Protecting investors from the unwise - Ensure soundness and reduce systemic risk
Policy maker	Ministry of finance	Growing a productive, competitive, inclusive and equitable Indonesian economy in the 21st century

Source : Blossom Finance, 2020 at the Ministry of Finance

According to Blossom Finance, sukuk issuance through conventional means involves too many stakeholders, is complex, and inefficient, making it ineffective as a source or access to funding for MSMEs. The process of issuing sukuk through a digital platform carried out by Blossom Finance has succeeded in eliminating several requirements and involvement of stakeholders, such as public accountants, legal consultants, underwriters, trustees, and other stakeholders so that the existing process becomes simpler and more efficient.

Smart Sukuk Working System

Smart Sukuk issuance involves leveraging Blockchain technology and smart contracts to digitize and automate the Sukuk issuance process. Here is an overview of how it works:

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a. Digitalization of Sukuk: The Sukuk issuance process is digitized on a Blockchain platform, where Sukuk certificates are represented as tokens or digital assets (Kunhibava et al., 2021b) This enables efficient transfer and tracking of ownership.
b. Smart Contracts: Smart contracts are self-executing contracts with the terms of the agreement directly written into the code. In the case of Smart Sukuk, Smart Contracts are used to automate and enforce the rules and conditions of Sukuk issuance and transactions (Kunhibava et al., 2021b) These contracts are executed automatically when predefined conditions are met.
c. Issuance and Subscription: The issuer creates a Smart Sukuk on the Blockchain platform, specifying the terms and conditions of the Sukuk, such as maturity date, profit-sharing ratio, and payment schedule (Hamza, 2020). Investors can then subscribe to the Sukuk by transferring funds or digital assets to a designated smart contract address.
d. Verification and Compliance: Blockchain platforms verify investor eligibility and ensure compliance with regulatory requirements. This can be done through identity verification and authorized access to smart contracts
e. Profit Payment and Distribution: Smart contracts automatically calculate and distribute profits to Sukuk holders based on a predetermined profit-sharing ratio (Kunhibava et al., 2021b). Payments can be made in digital assets or traditional currency, depending on the terms of the Sukuk.
f. Secondary Market Trading: Smart Sukuk on a Blockchain platform can facilitate secondary market trading, allowing investors to buy and sell Sukuk certificates transparently and efficiently (Blossomfinance, 2019) Blockchain provides a secure and auditable record of all transactions.

Smart Sukuk Issuance Scheme

The issuance of BMT Bina Ummah Smart Sukuk was first carried out in October 2019 with a value of Rp715 million through a mudharabah contract with a period of 12 months. Smart Sukuk issued by BMT Bina Ummah successfully recorded oversubscribed in its issuance. The issuance of Smart Sukuk is able to finance 234 MSMEs with a margin (average) profit sharing rate from investments of around 15 percent. The initial process of issuing Smart Sukuk took quite a long time as a pilot project. Prior to the issuance of the contract, Blossom Finance prepared several technical matters, such as adjusting the form of the contract, reports, and other administration. Furthermore, in the Smart Sukuk issuance process, Blossom Finance acts as an arranger and calculating agent. As a

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calculating agent, in determining the price and rate of return, Blossom Finance first compares the valuation and rate of return of several types of assets and financial products in several regions (domestic and international).

As mentioned earlier, Blossom Finance played a central role in the issuance of Smart Sukuk. Like many other fintech services, Smart Sukuk (by Blossom Finance) is able to provide inclusive financial services, especially for MSMEs, by bringing together the demand and supply of funds more efficiently relative to banking financial services. Specifically, the scheme in the Smart Sukuk issuance can be seen in three parts, namely: (i) general scheme and sharia aspects; (ii) business scheme; (iii) and governance.

Opportunities and Utilization of Smart Sukuk for MSMEs in the Economy

In Indonesia, MSMEs represent 99.99% or around 62.9 million business actors spread throughout Indonesia. And menyerao 89.2% or around 107.2 million workers who contributed approximately 61 percent to GDP (Haryanti and Hidayah, 2019; OJK at the Ministry of Finance 2020). MSMEs as a strategic sector are able to create inclusive development. It is expected that its impact on the Indonesian economy will provide a better future. The number of MSMEs that have access to finance is only around 26% of the total MSMEs throughout Indonesia and only 12% of the total MSMEs have access to banking services (Annur, 2019; Rachmawati, 2020). With this, MSMEs are a sector that can realize equal distribution of community income. Even though it is still a micro, small and medium scale business, if many MSMEs advance in Indonesia, it will unwittingly increase state revenue and national development will be more advanced in addition to many other sectors that can reduce income.

In the issue of MSME financing, the challenge faced is that the intensity of the problem is relatively the most severe. Own capital is usually 80.90% spent by an entrepreneur for his/her initial step to establish MSMEs. Informal sources of funds are usually 13.86% and formal sources at 5.24%. Smart sukuk as financing can open up great opportunities in supporting the development of MSMEs through efforts to diversify MSME financing and as an alternative to increase effectiveness and efficiency for MSME financing.

Opportunities for utilizing smart sukuk financial technology for MSMEs:

1. Increased Access to Financing: Smart Sukuk issuance platforms based on Blockchain technology can provide SMEs with access to financing that may not be available through traditional channels (Zoair & Mohamed, 2022) This can help SMEs to grow and expand their businesses.

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2. Increased Transparency: Blockchain technology provides a transparent and immutable ledger, enabling greater transparency in the issuance and management of Smart Sukuk (Iftikhar & Saba, 2020). This can increase investor trust and confidence in the market, making it easier for SMEs to attract funding.
3. Increased Efficiency: Smart contracts can automate the various processes involved in the issuance and management of Smart Sukuk, reducing transaction time and costs (Iftikhar & Saba, 2020) This can make it easier and cost-effective for SMEs to issue and manage Smart Sukuk.
4. Reduced Costs: Smart Sukuk issuance and transaction costs are much lower than current Sukuk issuance, making it more affordable for SMEs to issue and manage Smart Sukuk (Iftikhar & Saba, 2020).
5. Increased Security: The use of Blockchain technology in Smart Sukuk structures increases transparency and eliminates fraud and speculation in Sukuk transactions (Hafssa & Oumaima, 2020). This can provide SMEs with more secure and reliable financing options.
6. Standardization: The use of Blockchain technology can facilitate the standardization of Smart Sukuk processes and documentation across different jurisdictions, promoting harmonization and interoperability within the Islamic finance industry (Hamza, 2020) This can make it easier for SMEs to issue and manage Smart Sukuk across different markets.

In fact, the potential increase in the value or volume of financing is an opportunity for escalation as a source of financing for the Regional Budget (APBD) by local governments in Indonesia. Blockchain as a platform allows the operation of secondary markets and smart sukuk as an asset class that is inclusive in terms of investment can encourage national economic growth in Indonesia.

Smart Sukuk in National Economic Development

Indonesia is a developing country that has great potential in growing the pace of the national economy through Islamic finance. Because Indonesia has many advantages in the present such as demographic bonuses, the majority Muslim population, and has a high economic level among other Muslim countries so that Indonesia has great potential in growing its Islamic financial base. In its development, sukuk is currently becoming a trend among economic activists and entrepreneurs. The exclusivity of sukuk is still a challenge for MSME financing in Indonesia. So far, the issuance of sukuk has been

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dominated by corporations and the government with the main target of obtaining a large flow of investment funds. Unfortunately, the funding needs of MSMEs and start-ups that are currently trending are still largely unmet through sukuk due to the high *cost of funds* for sukuk. Meanwhile, sources of financing from banks are also considered still relatively expensive and difficult to access. Ironically, with such a large role in the national economy, the number of MSMEs that have access to finance is relatively limited. Bank Indonesia survey results show that only around 30.5% of total MSMEs are connected to bank financing and 6.1% of MSMEs are connected to fintech financing or non-bank financial institutions. (www.money.kompas.com)

In increasing national economic growth, MSMEs and start-ups certainly play a role in this economic growth. Weak funding is a major problem that overshadows the development and growth of MSMEs. Therefore, the issuance of smart sukuk has great potential to fund start-ups and MSMEs. Smart sukuk in particular can offer relatively better access to financing for MSME players because existing sources of funds are considered too expensive and some of them are difficult to access. Informal sources of financing, which mostly come from business partners such as middlemen, collectors or informal financial institutions, have relatively high risks. This shows that MSME capital sources still do not have a solid structure, especially the weak access to formal financing sources such as banks. Therefore, the issuance of sukuk through blockchain can help reduce the cost of issuance so that it is more affordable for MSMEs and microfinance institutions.

Referring to the Financial Services Authority regulation Number 18/POJK.04/2015 concerning the issuance and requirements of sukuk, the tokenization of sukuk through the issuance of smart sukuk opens up various opportunities or alternative financing access schemes, especially for micro businesses with cheap and cheap schemes as well as opportunities to strengthen Islamic financing at the micro level such as funding MSMEs through Baitul Mall wat Tamwil (BMT). Data taken based on the Indonesian BMT Association, its total assets reached 12 trillion and total deposits amounted to 10 trillion rupiah with total BMT financing reaching 7.82 trillion rupiah. This data is a reference for the issuance of smart sukuk in the future, seeing that this BMT is the first to use smart sukuk. In fact, the issuance of smart sukuk in Indonesia and the issuance of bonds in various countries using blockchain is a new starting point in the development of financial innovation and a new niche to explore Islamic microfinance.

Baitul Maal wat Tamwil (BMT) Bina Ummah even managed to issue smart sukuk facilitated by Blossom Finance through blockchain financial technology with total funds raised of IDR 715 million and successfully channeled them to 234 MSME players in

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Indonesia. This is a major breakthrough in utilizing sukuk instruments to strengthen financial inclusion for MSMEs through smart sukuk-based Islamic financing. Special governance differentiation is needed that is able to become a frame of reference for the implementation of smart sukuk to be developed and utilized, not only within the framework of utilization on a micro scale. Currently, smart sukuk is the answer in developing the economy in Indonesia, because its work has realized several MSMEs in managing their businesses. Furthermore, the use of smart sukuk also opens up possibilities in the source of financing for the Regional Budget (APBD) by local governments. Thus it can contribute to the wider spread of sukuk, thus encouraging the expansion of digital-based Islamic financing (smart sukuk).

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