An Exploratory Study of Sukuk Utilisation for Transportation Infrastructure Development in Indonesia

Fiona Lamari¹, Ayomi Dita Rarasati²*, and Meilia Evita²

¹. School of Civil Engineering and Built Environment, Science and Engineering Faculty, Queensland University of Technology, Brisbane, 4000, Australia
². Civil Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, 16424, Indonesia

*e-mail: ayomi@eng.ui.ac.id

Abstract

Investment in infrastructure is one of the principal drivers of the growth of the economy. For that reason, the Indonesian government has proposed an investment budget in the railway and sea and air transport sectors over the next 10 years. In order to overcome the burden of direct outflows and for the future, a study was conducted to lay down the framework of Shariah-compliant payments for the development of infrastructure in Indonesia in the transport sector. This paper aims to explore the opportunity and implementation of sukuks utilisation to develop transportation infrastructure. Secondary data study and interviews were selected for the basic research method. This study presents the practice of sukuks implementation in transportation projects. Six transportation projects are also described to gain insight of the utilisation shariah-compliant financing scheme.

Keywords: project financing, shariah-compliant financing, sukuks, transportation infrastructure

1. Introduction

Weakness in the development of infrastructure has become a factor causing the backwardness of Indonesia in spurring the development of the economy on. The provision of good infrastructure is the foundation of the development of an advanced economy, and then existence of adequate infrastructure plays a most vital role in the national economy. This is because the advance and growth of the economy in a country is inseparable from the provision of such infrastructure as transportation, communications and the supply of energy. The government has become increasingly aware of these facts over recent years, and this has been pushing the government to dig out and exploit all the available potential for the development of infrastructure, particularly in the field of transportation. One alternative for paying for the infrastructure which has been developed is by using a system of shariah-compliant payments. It was within the framework of developing sources of paying for the national budget and developing a Shariah-compliant money market that the House of Parliament (DPR) ratified Law No.19 of 2008 concerning National Shariah-compliant Financial Instruments, of which Article 4 states “National Shariah-compliant Financial Instruments (SBSN) are issued for the purpose of funding the national budget including funding the development of projects”, and
results were presented in section 3 and 4. Data were analysed based on content analysis and interviews were selected for the basic research infrastructure projects. The process starts from problem solving making of Shariah-compliant payments is relatively new to Indonesia, and some study is still needed to examine the effectiveness of such payments. It is therefore hoped that this study will increase the sources of funds in infrastructure projects in Indonesia.

2. Methods

This paper aims to explore the opportunity and implementation of sukuk utilisation to develop transportation infrastructure. It is an exploratory study to obtain insight in sukuk as alternative financing for infrastructure projects. The process starts from problem discovery and definition of the need of additional financing for infrastructure development and the opportunity of sukuk implementation as one of elements in shariah-compliant financing. Secondary data study and interviews were selected for the basic research method [2]. Secondary data study was collected from news and government policies about shariah-compliant financing. Interviews were conducted with the government officers from Ministry of Transportation. Data were analysed based on content analysis and results were presented in section 3 and 4.

3. SBSNs in Infrastructure Projects

Understanding SBSNs/Sukuk Negara

On the basis of Law No. 19 of 2008 and Government Regulation No.56 of 2011, SBSNs or Sukuk Negara (National Islamic Bonds) are national instruments issued according to Shariah principles as proof of participation in the division of the assets of the SBSNs, either in Rupiah or in foreign currency. The returns on SBSNs/Sukuk Negara are in the form of compensation, a division of profits, margins and capital gains. An SBSN requires underlying assets as the basis for its issue, and requires a fatwa/Shariah opinion guaranteeing that the sukuk accord with Shariah principles [3]. A Shariah opinion is a declaration of accordance with Shariah, issued by a responsible party with skills in the field of Shariah law which declares that the sukuk being issued are not contrary to the principles of Shariah law. Every issuance of Sukuk Negara has received a Shariah Opinion from the National Shariah Council – Indonesian Islamic Scholars Council (DSN-MUI). A fatwa is a legal determination issued by a party skilled in the field of Shariah law. The relevant fatwas of the DSN-MUI in relation to the Sukuk Negara are:

1. Fatwa No.69/DSN-MUI/VI/2008 re SBSNs
2. Fatwa No.70/DSN-MUI/VI/2008 re Method of Issuing SBSNs
3. Fatwa No.71/DSN-MUI/VI/2008 re Sale and Lease Back
4. Fatwa No.72/DSN-MUI/VI/2008 re SBSN Ijarah Sale and Lease Back
5. Fatwa No.72/DSN-MUI/VI/2008 re SBSN Ijarah Asset to be Leased

Legal basis: Issue of SBSNs/Sukuk Negara

The legal basis for the issue of SBSNs is Law Number 19 of 2008 concerning SBSNs, which establishes that the central government has the authority to issue SBSNs, which is executed by the Minister of Finance. Other regulations supporting the issue of SBSNs are specified in the Government Regulation (PP) relating to company issuers of SBSNs, and Regulation of the Minister of Finance (PMK) concerning the Issue of SBSNs on local and overseas markets and the handling of SBSN assets.

Objectives of the Issue of SBSNs/Sukuk Negara

The objectives of the issue of SBSNs are to fund the National Budget (APBN), including funding construction projects (such as infrastructure projects in the sectors of energy, telecommunications, communications, agriculture, manufacturing industry and private housing). The reasons for the need for the issue of SBSNs are

1. To extend the base of sources of funding for the national budget
2. To encourage the growth and development of a Shariah-compliant money market in Indonesia
3. To strengthen and elevate the role of the financial system based on Shariah law in the country
4. To create benchmarks for Shariah-compliant financial instruments in the market
5. Shariah-compliant domestic and international finance
6. To extend and diversify the investor base
7. To develop alternative investment instruments
8. To fund the development of infrastructure projects
9. To optimise the use of state property (BMN)

Characteristics of SBSNs/Sukuk Negara

The characteristics of SBSNs/Sukuk Negara are:
1. SBSNs are issued by the government or special purpose vehicles (SPVs)
2. They accord with the principles of Shariah
3. They are tradable or non-tradable, according to the type of contract and terms and conditions
4. Fixed coupon or variable coupon
5. Payment of compensation/reward and the date guaranteed by Law No.19 of 2008 and budget laws
6. Payment of compensation/reward is made per month or per semester
7. Instruments will be sold at par, premium or discount, to investors in SBSNs, Shariah-compliant or conventional investors, either individuals or institutions
8. Instruments will be issued denominated in Rupiah or foreign currency and will be discharged in full at maturity.

On the basis of Government Regulation No.56 of 2011, the following types of project may be funded through the issue of SBSNs [4]:
1. Projects which, in whole or part, are proposed to be funded through the issue of SBSNs, either projects now under way, or projects which will be undertaken.
2. Projects that have received allocations in a national budget whose source of funding originates purely in Rupiah, either projects now under way, or projects which will be undertaken.

The criteria for projects that accord with Shariah principles according to the National Shariah Council are:
1. Said projects possessing transparency embracing planning, execution and completion, and at least taking in aspects of:
   a. Utility of plans
   b. Project construction plans from a cost-benefit perspective (analysis of the benefits of the project)
2. The utility of the Project is not intended to be associated with:
   a. Provision and or existence of contributions towards conventional (usurious/ribawi) financial services
   b. Provision and or existence of contributions towards activities which include any element of gambling (speculation/maysir)
   c. Provision and or existence of contributions towards the production, distribution, trade in and/or supply of forbidden (haram) goods and services

Provision and or existence of contributions towards activities whose nature is to dangerously (detrimentally/ mudharat) damage the moral or environmental character.

Series of SBSN

The following series of SBSNs have been issued in Indonesia:
1. Retail Sukuk Negara (SR) are Sukuk Negara sold specifically to individual Indonesian citizen investors. This series was first issued in 2009. They are tradable with fixed compensation.
2. Sukuk valas (SNI) are Sukuk Negara issued on the international civil market, denominated in foreign currencies.
3. Sukuk Dana Haji Indonesia (SDHI) are Sukuk Negara issued specifically for the placement of Muslim Pilgrimage funds in Sukuk Negara.
4. IFR Series Sukuk are Sukuk Negara issued on the domestic civil market, denominated in Rupiah. This series was first issued in 2009. They are tradable with fixed compensation.
5. Shariah-compliant Treasury Notes (SPN-S) are Sukuk Negara issued for a tenor of less than one year.
6. Project Based Sukuk (PBS) are Sukuk Negara issued using a project as the underlying asset.

Underlying assets in issues of SBSNs

An underlying asset is an asset which has become the subject or basis for the transaction in connection with the issue of a sukuk. The assets which form underlying assets may be physical or non-physical, such as land, buildings, various kinds of construction project, together with other non-physical assets such as services. The issue of an SBSN requires the existence of an underlying asset because an SBSN is basically an instrument reflecting partial ownership of the asset/benefit/service which is the basis for the issue of the SBSN. The existence of the underlying asset functions as a real transaction which is the basis for the issue of the SBSN and is one of the principal aspects which differentiate a bond from a sukuk. Without an underlying asset, the certificates issued would be in the nature of debt instruments, because there would be no real transaction providing the basis for the issue of sukuk. The assets which are able to be underlying assets for SBSNs are SBSN funding objects and State-owned Assets (BMN) which possess an economic value, such as land and/or buildings, and other than land and/or buildings. Every time it issues an SBSN, the government establishes the underlying asset of the SBSN through a Decree of the Minister for Finance concerning the specification of a State-owned Asset (BMN) as the asset of the SBSN.

According to Government Regulation No.25 of 2009 concerning Income Tax on Shariah-based Activities, the taxation provisions for SBSNs are the same (mutatis
as those for National Bonds (SUN). Thus the tax levied on the compensation for long-term SBSNs is a final Income Tax (PPh) of 15% as regulated by Government Regulation No.16 of 2009 concerning Income Tax on Interest on Bonds. On the other hand, the tax levied on the compensation for short-term SBSNs is a final Income Tax (PPh) of 20% [5, 6].

**Scheme for issue of SBSNs**

According to Law No.19 of 2008, the SBSNs that may be issued are [1]:

1. **Ijarah SBSNs**
   These SBSNs are issued on the basis of an *Ijarah* contract, that is, a contract in which one party acting for itself or through a representative leases the right over an asset to another party on the basis of a lease fee and for a lease period which have been agreed. One *Ijarah* scheme is a Sale & Lease Back *Ijarah*, which represents the sale of an asset, which is then leased back by the buyer to the seller. The contracts used are a buy/sell contract and a lease contract which are executed separately. The sale of the asset is basically only the sale of the beneficial title, but is not accompanied by a physical surrender and transfer of legal title. An outline of the issue of a sale and lease back contract is described in Figure 1.

2. **Mudarabah SBSNs**
   These SBSNs are issued on the basis of a *mudarabah* contract, that is, a cooperative contract among two or more parties, in which one party acts as the provider of capital and the other party as the provider of labour and skills; the profits from the cooperation are divided according to a ratio decided on beforehand while any losses are borne entirely by the provider of the capital except for losses caused by the provider of labour and skills.

3. **Musyarakah SBSNs**
   These SBSNs are issued on the basis of a *musyarakah* contract, that is, a cooperative contract among two or more parties to group together capital, either in the form of money or in other forms, for the purpose of obtaining profits, which are divided according to a ratio decided on beforehand, while any losses that arise are borne jointly according to the amount of capital participation of each party.

4. **Istisna SBSNs**
   These SBSNs are issued on the basis of an *istisna’* contract, that is, a contract to buy and sell the assets that are the subject of purchase between parties, where the specifications, method and date of surrender, and the price of the asset, are determined by agreement among the parties.

5. SBSNs issued on the basis of other contracts, provided that they are not in conflict with Shariah principles, and

6. SBSNs issued on the basis of combinations of two or more of these contracts.

![Figure 1. Outline of Sale and Lease Back Contract [3]](image-url)
4. Development of Infrastructure Projects in the Field of Transportation Based on Shariah Law in Indonesia

The development of infrastructure projects in the field of transportation based on Shariah law began in Indonesia in 2012. The infrastructure project paid for by Shariah-compliant funding in 2012 was the construction of Stage II of the Medan-Kualanamu-Tebing Tinggi toll road, using sukuk. In 2013, two projects were paid for by Shariah-compliant funding: the supply of two Boeing 777-300E aircraft by ijarah and the dual carriageway Cirebon-Kroya railway by sukuk. In 2014, there were again two projects paid for by Shariah-compliant funding: the construction of the double track Manggarai-Cikarang road and the supply of trains by sukuk. In addition, a further project paid for by Shariah-compliant funding is the construction and development of the Belawan container terminal by istisna; at present, this is still in the final stage of providing a contractor for the civil works. The following depicts the transportation infrastructure projects based on Shariah in Indonesia.

Construction of Stage II of the Medan-Kualanamu-Tebing Tinggi toll road

The construction of Stage II of the Medan-Kualanamu-Tebing Tinggi toll road made use of Shariah-compliant bonds/sukuk. Stage II of the Medan-Kualanamu-Tebing Tinggi toll road extends for 60 km. The estimated cost of the project is Rp5.789 trillion. The project is a public-private partnership (PPP). The government is responsible for Rp1.37 trillion of the funding. The funds were provided through the 2012 Budget. The balance, to be provided by private investors, was Rp4.419 trillion [7]. According to information from Bappenas, the physical start of the project was in September-October 2011.

Sukuk based on government infrastructure projects was a new form of funding for the government. The government had of course issued sukuk previously, but the underlying assets of the transactions were national assets. For example, the government used the Ministry of Finance building as the asset in a sale and lease back. In the funding of this project, the sukuk investors will invest in a profit-sharing scheme for this project [7].

Supply of two Boeing 777-300E aircraft

In 2013, Shariah funds were used to import two Boeing 777-300Es, to strengthen Indonesia’s fleet. The Shariah concept for payment resulted from cooperation between PT Garuda Indonesia (GIAA) and Alafco Aviation Lease and Finance Company from Kuwait. Alafco has been in Shariah-compliant aircraft leasing since 2000, applying ethical investing and equity tied only to profits using genuine assets or the cash flow resulting from them.

The method of Shariah funding employed is an ijarah scheme, using payments of around $US315 million or around Rp3 trillion per aircraft, so that the total was Rp6 trillion [8]. The ijarah scheme used for the Boeing 777-300ERs was marketed and sold by Boeing to Garuda; Garuda then sold the aircraft to Alafco with the promise that Garuda would lease the aircraft back from Alafco for a certain time (12 years) [9]. Schemes such as this are also known as sale and leaseback.

This was a pilot project for Shariah-compliant funding in the area of air transport. According to the President Director of Garuda Indonesia, the signing of the cooperation agreement and the import of the two Boeing 777-300ERs was the first time Garuda had employed Shariah-compliant methods and formed a guide to the exploration of funding from diverse sources [9]. Apart from that, this was a first step for Garuda in obtaining funds from the Middle East by Shariah methods. The Boeing 777-300ERs will service the Jakarta-Jeddah route specifically for the umrah (lesser Pilgrimage). The aircraft have a capacity of 314 passengers, configured for eight in first class, 38 in business class and 268 in economy class [9].

Project for the construction of dual track Cirebon-Kroya railway

In 2013, the government issued Rp800 billion in project backed sukuk SBSNs to pay for the project to dual track Segment 1 of the Cirebon-Kroya railway [10]. Nevertheless, the actual raising of funds for the project via sukuk in 2013 only reached Rp777.8 billion. Under the national budget for 2014, Segment II of the project to construct the dual track for the Cirebon-Kroya railway will be Rp745 billion, which will be funded by sukuk [11].

This project for the construction of a dual track on the Cirebon-Kroya line is the first railway project to be paid for with Shariah funds, and is a pilot project for the issue of sukuk to fund infrastructure. Debt is not permitted in Shariah buying and selling. For that reason, the assets are the subject of the transaction. In this project, the underlying asset forming the asset is the dual track. The government as owner of the project will receive rent from PT Kereta Api, and this rent will be given to the investors as their profits.

According to the Deputy for Infrastructure in the Ministry of Planning and National Development (Bappenas), funding through sukuk has several advantages, namely the absence of currency risk, since the loans are domestic, and that they are non-binding. In addition, the superiority of funding a project through SBSN-PBS is amongst other things is that the source of funding is the money market, so that the total cost can be higher and the timing of the issue/provision of funds is more flexible, which supports the continuity of...
execution of the project. The conditions for infrastructure projects to be paid through SBSNs are that the project is a priority activity under the National Medium-term Development Plan (RPJMN), that it be approved by Bappenas for the technical readiness and appropriateness of the execution of the project, and that the execution of the project by its initiator follow the requirements in this field in the national budget [12].

The construction of the dual track Cirebon-Kroya line will provide safe, fast and secure public transport more quickly, while the number of users of the railway should increase, reducing congestion and the load on the roads. The summary of the works in Stage I is the provision of railway bridges, railway signalling and telecommunications and construction management. In Stage II, the tracks will be laid, railway bridges will be built, and railway signalling and telecommunications and construction management will be undertaken [11].

Dual track Manggarai-Cikarang construction project

One project to be built with sukuk funding in 2014 is the Manggarai-Cikarang dual track construction. The objective of this project is to separate the long distance and commuter tracks. A further objective is to increase traffic capacity between Jatinegara and Cikarang stations. The construction project has been divided into four packages, two of which, Packages A and B22, are to be funded with sukuk. Package A is the construction of the dual track between Manggarai and Jatinegara, and package B22 is the construction of the dual track between Jatinegara and Bekasi. The Secretary-General of the Ministry of Communications declared that the Manggarai-Jatinegara dual track would need Rp2.4 trillion and the Jatinegara-Bekasi dual track would need Rp1.46 trillion [11].

This project has been delayed for 6 years, owing to problems with compensation for land. According to the head of the land section in the Bekasi municipal administration, only around 76% of compensation has been paid out so far because there are still a number of residents who have not agreed to the size of the compensation for their land on the path of the railway. This project also requires the freeing of 207 plots of land located in three Kelurahan in the municipality of Bekasi. The Kelurahans are Arent Jaya, Bekasi Jaya and Duren Jaya. The railway will be built with the aim of each track being used for a different direction. This is to avoid head on collisions and to increase traffic capacity [13].

Rolling stock provision project

Another project to be funded by sukuk in 2014, in addition to the Manggarai-Cikarang dual track, is the provision of 55 economy class trains, consisting of 50 K-3 AC (5 trainsets and 5 KMP-3 AC), valued at Rp217 billion. This project will be paid for by sukuk, and will have the advantage of being a domestic borrowing, so that is non-binding as is the case with overseas borrowings, and the sukuk does not include interest, but only administrative costs.

Construction and development of Belawan Container Terminal project

This project which will use Shariah funding in the field of sea transportation is a project to build and develop the Belawan Contain Terminal Phase 1, located on the northeast coast of Sumatra and 27 km from Medan, the capital of North Sumatra. This project is intended to increase the capacity of the Belawan Container Terminal. The project will be carried out by the Directorate General of Sea Transportation (DGST) under the Ministry of Transportation (MOT). The scope of the project includes civil engineering, equipment, information systems and developing the schematic conceptual framework for operating the container terminal, consultancy, personnel support and financial auditing. Civil engineering includes dredging, land reclamation and recovery, revetments, extending the container wharves, site expansion, rain drainage system and service roads and utilities. Equipment includes gantry cranes and transtainers, trailers, chassis and stackers. Consultancy includes evaluating the environmental effects, detailed engineering design and management and supervision of the project. Personnel support includes skilled labour, training, startup workshops and socialisation visits. The new container terminal port will have a container wharf 350 m long and 30 m wide. The seabed will be sufficient to allow 36,000 DWT container ships to manoeuvre. The container yard will add 157,700 m² of storage – sufficient for 8,921 TEUs [14].

The construction and development of Phase 1 of the Belawan Container Terminal will be funded by the Islamic Development Bank (IDB) and PT Pelabuhan Indonesia I. The istisna’a scheme of Shariah funding will be applied to paying for the project. A concession agreement will run with a state-owned enterprise during the operation and maintenance phase of the operation. Income during operation and in the maintenance phase will be used to return the funds invested.

According to the Ministry of Transportation informant, the project is in the final stage of provision of the civil engineering contractor and the results of the assessment were forwarded to the IDB in the 18 September 2014. The project suffered delays resulting from the processing of proposals for re-scoping the package of civil engineering. The re-scoping was agreed to by the IDB, with Package I being funded by IDB loan; Packages II and III will be settled through Rupiah funding (PT PELINDO). In order to accelerate the start on the physical work, the IDB proposed that the
executing agency immediately send in the draft contract for review first by the IDB while awaiting the results of the evaluation of the civil engineering. In preparing the employment plan, the executing agency indicated that the load would be extended to 2017 due to delay in signing the contract. Nevertheless, this proposal must await progress on the physical works during 2015. Progress on the project for 2014 is around 32% of the block finance has been paid, or around US$36 million. The target for the total value of disbursement by the end of 2014 was 58% or around US$66.81 million. Other components that had been completed were capacity building for communities, facilities and local government as well as facilitation of activities.

5. Conclusion

This article has outlined how sukuk can be implemented in infrastructure financing, especially in Indonesia along with the regulations and policies that support this implementation. The caution in utilising sukuk for infrastructure financing needs to be heeded by linking it to the principle of project financing. Cash flow obtained from infrastructure projects supposed to be the basis for paying sukuk at the maturity date and profit sharing on the issuance of sukuk.

Acknowledgment

This study was supported by AIIRA Grant Program Activity P255.01.

References