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Islamic Project Financing Implementation for Sustainable Infrastructure Development in Indonesia

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Abstract: Islamic financing in Indonesia infrastructure projects development has not been optimally implemented. Therefore this paper serves as a catalyst to explore alternative financial scheme such as Islamic financing for infrastructure development. The purpose of this paper is to explore the enablers and barriers in implementing Islamic project financing for public infrastructure development. The findings are then culminated into enablers and barriers in the implementation of Islamic project financing. The two main enablers are the readily availability of huge fund that can be used to support infrastructure projects; and the acceptability of the concept of *shariah*-compliant financing. On the other hand, the barriers include: high cost of funding; lack of financial institution capability; lack of government policy and regulation; insufficient government support and commitment; conflict between infrastructure and Islamic finance business practices; profit oriented mindset; lack of understanding of Islamic project financing knowledge in infrastructure; and insufficient project preparation.

Key Words: *Islamic project financing, Indonesia, infrastructure development*

1. INTRODUCTION

Infrastructure plays an important role in supporting a nation's economic growth and competitiveness. Accelerating infrastructure provision became one of the main priorities in Indonesia's national development. Several laws and regulations related to participation of private sector in infrastructure provision had been enacted after a thorough reform. These updated legislations cover the infrastructure provision such as roads, railways, sea and air transportation, electricity, water resources, and telecommunications. The recent changes in legislations have opened the floodgate for the use of project financing in infrastructure provision in almost all public infrastructure projects. The model itself has evolved as a result of private finance initiative (PFI) or public private partnership (PPP).

In Indonesia, the concept of project financing for the provision of public infrastructure is still developing and its implementation is inadequate. For example, in 2010 only 3, out of 100, infrastructure projects offered by the government have adopted project financing. There is a need of innovation in project financing scheme to accelerate infrastructure assets provision. One area of innovation is Islamic financing which have grown in prominent in recent years. In particular, the scheme of *sharia*-compliant (Islamic religious principles law) project financing is expected to be one of the best alternatives in Indonesian infrastructure financing. Although Indonesia is not an Islamic state, the total Muslim population in this country is the largest in the world. It is, therefore, conceivable that Indonesia can also implement Islamic principles for financing its infrastructure provision. Therefore, there is a need for a framework to guide the adoption of Islamic project financing scheme for infrastructure provision in Indonesia.

2. THE NATURE OF INFRASTRUCTURE PROJECT

Public infrastructure project has unique characteristics, naturally monopolistic and have a non-tradable asset. It also precludes competition with high risk level, high increasing returns and high fixed cost (Chen, 2002; Ngowi *et al.*, 2006). The project starts from conceptualization and design, construction, then operation, which is usually managed by public sector. The service delivery process of infrastructure is also complex. Therefore infrastructure project requires massive cost upfront investment with high operating margins, but irreversible and sunk.

Infrastructure financing involves combination of project promoters, lenders, multilaterals, and export credit agencies. The funding includes loans, bond issuances, and equipment leasing. Infrastructure funding can be divided as a shared services, public private partnership (PPP), and outsourcing in accordance with the main responsibility which are taken such as public sector, public and private sector, and private sector respectively (Joha and Janssen, 2010). However, government should not rely only from foreign loans as it will increase the debt. Therefore, a more sustainable alternative is to use project financing for infrastructure development.

The success of project financing implementation in infrastructure provision can be influenced by several factors, which include investment policy clarity, credibility and financial viability of the infrastructure agency, transparency and competitive bidding, restructuring and improvement in fiscal environment. Good credit enhancement mechanism, sustainable capital markets, efficient and effective bureaucratic process, and legally enforceable and fair contracts are also affect infrastructure project financing (Gupta and Sravat, 1998). Competitive bidding is not only a key success factor, but also needed to achieve value for money especially for infrastructure projects in developing country (Cheung *et al.*, 2009).

Infrastructure projects are not risk free investment. The common risks associated with infrastructure projects are categorized by technical risks, construction risks, operating risks, revenue risks, financial risks, force majeure risks, regulatory or political risks, environmental risks, and project default (Grimsey and Lewis, 2002). Zou et al. (2008) also added legal risks, economical risks, social and public acceptance risks, technology risks, health risks, safety risks and management risks. However all the risks should be manage in order to avoid more loss.

3. ISLAMIC FINANCE IN INFRASTRUCTURE PROJECT

Islamic finance is an evolving form in Islamic economics. For Muslims, Islamic financial concept is related to accomplishment of religious obligation in live (Khan, 1997). It is a form of finance which not only forbids some transactions that relate to the receipt of interest (*riba*), uncertainty (*gharar*), gambling (*maysir*) and some certain goods such as pork and alcohol (Wilson, 1998; Esty, 2000; Ebrahim, 2009; Lewis, 2010; Alexander, 2011), but also the business stream should also be economically efficient and generate fair and genuine profit (Ebrahim, 1999; Ahmed, 2010). Islamic project financing considers an acceptable project funding which is in accordance with *shariah* (Islamic law).

Islamic finance is an asset-based or an asset-backed system, therefore the financing is always based on real assets and inventories (Alexakis and Tsikouras, 2009; Alexander, 2011) and the system must also uphold values of ethics in every transactions (Khan and Bhatti, 2008). The use of Islamic finance nowadays has not only for daily life such as banking but also in investment. In some countries, the Islamic banking system is now offering some products such as insurances, mortgages, investment instruments, and large-scale project financing (Amin, 2008).

Islamic system forbids debt through direct lending and borrowing, but it allows debt through selling or leasing real assets within *sharia* scheme of finance. The fundamental principles in Islamic finance are the concept of sharing profit-loss and risk, no unfair gain, no speculation, no uncertainty, no hoarding money, no deception and the activities should increase social and economic welfare (Khan and Bhatti, 2008; Ahmed, 2010; Merna *et al.*, 2010; Alexander, 2011). Profit, lost and risk sharing principle requires a high level of disclosure and transparency. All transactions must be legitimate with full purpose in taking and giving manner. No debt can be traded, thus no risk can be transferred (Ahmed, 2010).

In order to control the implementation of Islamic investment, supervisory board is established to examine every investment activities (Merna *et al.*, 2010). The board will declare a statement, a fatwa, for every Islamic project financing is made through *ijtihad* process. *Ijtihad*, the independent or original interpretation of problems not precisely covered by the Quran or *Sunnah*, is necessary in any form of decision made in financial affairs (Ebrahim, 1999).

Infrastructure investment is suitable to be financed with Islamic financing scheme, because infrastructure is an asset and it does not contain any activities that are prohibited in *shariah* law. Although there are various types of Islamic finance, only several types of Islamic financial instrument might be suitable in infrastructure investment, such as *murabaha, istisna, ijara, mudarabah, musyaraka, sukuk,* and *kafalah.*

Islamic finance has several positives compared to conventional finance. Islamic finance is observed as financial intermediation competitiveness (Ahmed, 2010), therefore it is now considered as one of the fastest growing financial segments in the world. The business area of Islamic finance has been broadening in many aspects such as private equity, project finance, *sukuk*, or other wealth management movement. The regulatory and legal frameworks recently have been evolved. Islamic finance nowadays has been internationally recognized and will contribute to global financial integration. Since Islamic intermediation is an asset-based and risk-centred sharing, it is more closely related to real economic sector (Hasan and Dridi, 2010). Within the foundation of profit and loss sharing, Islamic finance is more resilient to the global crises that recently happen. It is capable to minimize the severity and frequency of financial crises (Ahmed, 2010; Chazi and Syed, 2010).

Several previous works describing Islamic project financing were started in the late 1990s.

Khan (1997) proposed an alternative Islamic structure for project finance deals in power plant project. Western project finance model were analyzed in the light of Islamic financial principles by suggesting how it may be modified with a view to develop integrated Islamic project finance model. The Islamic law allows financial innovation and contract agreement to create the model. With the integrated model, a structure could be developed whereby Islamic and western financiers could participate in infrastructure projects without compromising any religious principles or financial interest. Wilson (1998) also expressed that private sector were becoming involved in infrastructure projects because government hardly finance major projects. Within *istisna* scheme, it was proved that projects can be financed when interest-based was diminished.

Co-financed structures, combination of Islamic and Western sponsors financing, in the Equate Petrochemical project was implemented successfully (Esty, 2000). This project used *ijara*, *istisna* and *murabaha* structures. Since then, there had been several more co-financed deal in infrastructure projects, such as the Kuala Lumpur Light Rail Transit 2 project, Thuraya Space Telecommunications project, Shuaiba power plant project, the TAG and Mersin Motorways project, and the Kuala Lumpur International Airport. However, the number of projects which used co-financed structures is not plenteous. There is still factors need to be considered such as improving understanding in Islamic finance and Islamic project finance.

Shariah compliant collateral security and project financing structures have been described as a critical factor that relates to availability of enforcement entities and paradigms in project financing (McMillen, 2001). McMillen also emphasizes that *shariah* board will examine the investment structure and documentation to approve an Islamic investment, to ensure that every transaction acknowledge the cultural, moral, ethical and religious principles.

Government guarantees are less needed when the profit sharing is high and sponsor's own capital is big. However, government financial guarantees are still needed to increase the creditworthiness and to raise the debt capacity of the project (Hassan and Soumaré, 2006).

Alexander (2011) explicates potential sources of problem when projects with Islamic scheme attempt to suit Western financing. First, the lack of cohesive regulatory body, in this context is the *shariah* boards. There is uncertainty regarding *shariah* boards' decision which somehow unpredictable and subjective. Although the board will consider similar transactions, but there is no guarantee the decision will be the same. This happens because a *fatwa* is only valid for one specific case. Therefore *shariah* boards also hold the most significant decision in project endorsement. Second, the requirement in *shariah* compliant that lender should bear the project risk which may cause risk enhancement from Western lenders perspective. *Shariah* board will make decision whether the project can be implemented based on the *fiqh*, *shariah* principle and the duration of financing. The *shariah* principle is also determined based on *fiqh*. Usually, Islamic financing is utilised in short term or medium term of finance. Therefore *shariah* board should also understand and analyse infrastructure project condition in term of financial duration.

Fundamentally, Islamic financing can be implemented for infrastructure projects. However the implementation can encounter some obstacles. In Indonesian context, there is a need to identify the enablers and barriers for Islamic project financing in infrastructure. Therefore Islamic financing can be successfully implemented in infrastructure development.

4. THE ENABLERS AND BARRIERS OF ISLAMIC PROJECT FINANCING

4.1 The research method

The semi-structured interviews and content analysis were used to identify the enablers and the barriers of Islamic project financing implementation in Indonesia infrastructure development. The semi-structure interviews were conducted with several stakeholders in Indonesian infrastructure project and the national *shariah* board members. The infrastructure stakeholders are categorised as follows: the government as the policy maker, infrastructure contracting agency, the infrastructure company as the special purpose vehicle, infrastructure guarantor, consultants, banker and academic. The government is subdivided into fiscal policy office, *shariah* financing debt management office and coordinating ministry for infrastructure development.

The respondents were invited through emails to get their ability to participate in the face-to-face interview. A letter of invitation email was also supported with materials such as interview topic questions, research background and a consent form. In total, 18 people agreed to participate in the face-to-face interviews. Table 1 shows the number of respondents and their affiliations.

Table 1 List of respondents in face-to-face interviews

Type of organisation	Number
Academics	1
Banker	1
Government ministry	7
Infrastructure consultant	2
Infrastructure contracting agency	2
Infrastructure guarantee company	1
National *shariah* board	2
Special purpose vehicle	2
Total	**18**

In the semi-structured face-to-face interviews, the respondents were asked open-ended question which is "What are the enablers and barriers for Islamic finance concept implementation in Indonesian infrastructure project financing?"

4.2 Results and analysis

Content analysis was conducted after the semi-structured face-to-face interviews in order to identify the main points of the enablers and barriers of Islamic project financing framework in Indonesia infrastructure. The process was started with finding major ideas of each interview, then similar main concept were united from the interview analysis.

After analysis, there are two main points for the Islamic project financing in infrastructure enablers, including:

(1) Huge fund and investment interest in Indonesia infrastructure projects; and
(2) Acceptability concept of *shariah*-compliant financing in Indonesian culture.

There are eight major categories for the barriers regarding:

(1) Cost of fund;
(2) Finance institution capability;
(3) Government policy and regulation;
(4) Government support and commitment;
(5) Infrastructure and Islamic finance business conflicts;
(6) Profit oriented mindset;
(7) Understanding of Islamic project financing knowledge in infrastructure; and
(8) Project readiness.

4.3 Discussion

Huge amounts of investment in infrastructure projects open the opportunity for investors to invest in infrastructure projects. The *shariah* investment can be from private sectors, non-bank institution even from community participation. Therefore Islamic financing can be applied either in water or energy infrastructure development. However, regarding the capital expenditure, water supply infrastructure does not require a very massive amount of fund, contrasting with energy sector or toll road. Hence, it is at ease for *shariah* financing mode to step in water infrastructure investment.

Other aspect that can support Islamic finance scheme in infrastructure is the regulations in Islamic finance instrument and Islamic banking have been settled. It is started by enacting Law No. 19 Year 2008 in Islamic state securities (*Sukuk*) and Law No. 21 Year 2008 in Islamic banking, continuing with other supportive regulations such as government regulation, ministry decree and regulation, and general director decree. The establishment of regulations in Islamic finance shows government support and seriousness in Islamic investment opportunity. Government also open investment in infrastructure projects through project-based *sukuk*, even though the current project is yet only based on government budget funding (APBN). Therefore it provides another opportunity for Islamic scheme in financing infrastructure within private investment.

Within the biggest Muslim population in all countries, *shariah* concept is more acceptable amongst communities. The prohibition of *riba* is already known by the communities from the Quran and *Hadits* as people faith in. For this reason, *shariah* scheme in infrastructure investment is more easily accepted, because none of activities in public infrastructure development is contradicted with the *shariah* principles.

Although there are already some regulations relate to the *shariah* finance, none of the regulations relate to infrastructure project financing. The regulations in infrastructure itself also not correlated to Islamic financing. Law No. 19 Year 2008 only covers financing within obligation, while other Islamic financial instruments such as *murabaha*, *mudarabah*, *musyaraka* or *ijara* are not conceal with the law. Meanwhile Law No. 21 Year 2008 only regulate banking sector activities, while in Islamic project financing, banking is not the only institution of financing. The same circumstance also happens in infrastructure regulation. It never converges with project financing nor Islamic financing. Most of infrastructure regulations focus in sectors development or institutional role. Therefore it is needed to accomplish others law and regulation regarding infrastructure project financing. These law and regulation should bridge the gap and overarching infrastructure business and Islamic finance investment.

Islamic finance transaction has unique characteristics. The consideration of choosing the *aqd* is based on the aim and the subject of each transaction. In conventional project financing, there are two terms in the investment methods which are equity and debt. Meanwhile in Islamic financing, *mudarabah* and *musyaraka* are considered as equity, and *murabaha*, *ijara*, and *istisna* are considered as debt. Those different expressions of transaction are complex and complicated in the perception of some infrastructure stakeholders that never deal with Islamic scheme. Although for the Islamic finance players, those unique transactions are seems attractive and even called "the art of Islamic finance" or "the beauty of Islamic finance". Therefore there should be proper transfer of knowledge to infrastructure stakeholder in Islamic finance type of transactions in order to eliminate the difficult perception of Islamic transactions.

Improper infrastructure project preparation will become another consideration for investor to make an investment decision and this condition can create another barrier for Islamic infrastructure project financing implementation. It is already well known that project financing can be successful if the project is financially feasible and bankable. In order to be able to provide a good project, there should be solid willingness and responsibility from public infrastructure sector to establish the project. Within public private partnership scheme, the government, as the initiator of the project, must be certain that the projects offered are financially feasible. The department sector, should concern that PPP's projects are different with the budget, thus there should be different approach to prepare the project due diligent. Professional team members within top budget should be formed with the intention of precise project arrangement.

5. CONCLUSION

This paper shows the possibilities of Islamic project financing implementation for infrastructure. Several public infrastructure sectors, such as water, energy and toll road, concern to assort those financing scheme. However, in the implementation level there are still several barriers that need to be addressed. For example in high cost of funding factor in Islamic finance scheme might affect investors' interest to return choosing conventional scheme. Every stakeholders has own responsibility to omit barriers in order to optimally implement *shariah*-compliant financing in infrastructure projects. Therefore, further research should be conducted to convert the barriers.

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