

Risk and Risk Management in Islamic Multilateral Infrastructure Projects

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1. INTRODUCTION

Infrastructure construction projects are sensitive to an extremely large matrix of hazards and risks. Among these risks; risk from extensive interaction between many of the parties involved in construction project such as employer(s), contractor(s), money supplier(s) and etc with a variety of goals and interests, will be much more essential to be well handled and allocated specially in financing of multilateral international infrastructure projects. When the type of financing of a project differs from one party to another party, this risk will be more important. In this paper we will have a look at what makes an Islamic financed project different from a conventional one from the risk allocation point of view.

2. BACKGROUND

2.1 Islamic Economics and Shari'ah Compliant Contracts

Islamic economic system is defined by a network of constitutive and regulative rules called shari'ah; the shari'ah is the guide for human action which encompasses every aspect of life - social, political, cultural, and economic (Rahmanian,2012). A shari'ah compliant construction contract is defined as a construction contract with its subject matter, agreement, terms and the conditions that embrace the Islamic belief, practice and value system. The main objective of a shari'ah compliant contract is not only to fulfill the demand of the industry but most importantly it is to fulfill obligations of Muslims towards Allah which requires us to identify the lawful and prohibited in Muslim's everyday dealings (Khairuddin, 2009) but at the same time self-interest is not rejected. Islam, in fact, considers it as a primary factor in its incentive/motivation system; a necessity in any organized society if the individual is to find it utility maximizing to follow behavioral rules prescribed by the system (Khan, 1992). The proponents of Islamic economic and finance claim that Islamic alternatives offer superior social and economic benefits to Muslim society (Hegazy, 2007). As Otto et al(2010) believe, in the contemporary Muslim world, we don't have only one shari'ah to be understood, legalized and implementd. There are shari'ahs which as well are combined with customs and developed in the historical and cultural background of any Muslim country in a different way. Even some efforts have been done to establish an infrastructure legal system in the field of Islamic finance for integration; it is still at the infancy level.

2.2 Islamic Project Finance

Islamic Finance is a relatively new term which denotes engaging in financial and business transactions according to the principles of shari'ah (Iqbal, 2004; Mirakhor, 2007). The most critical and distinguishing feature of such a system is the prohibition of riba which removes pure "debt based" contracts from financial transactions. However the Islamic financial system has a centuries-old history (Chapra et al,2000). The concept of Islamic banking was put into practice in the 1970s when the first commercial Islamic bank, Dubai Islamic Bank, was launched, followed by the establishment of the Jeddah-based the Islamic Development Bank, in 1975. Since then, the Islamic financial industry has enjoyed consistently high growth (10-15 percent annually) and continues to grow rapidly. By the end of 2008 more than 300 institutions in more than 65 countries engaged in some form of Islamic finance(Askari et al, 2009) and total assets classified as Islamic is estimated to exceed US\$1200 billion by the end of 2011 making a rise of about 150% from \$509bn in five years since 2006. Islamic assets represent about 1% of the global financial market. Islamic finance has shown resilience during the past years at a time when global recovery has slowed and conventional banking in Western countries has remained under pressure (Gatehouse Bank, 2012).

What distinguishes the Islamic project finance market from both the general Islamic banking and sukuk markets is that the Islamic tranches are usually integrated within a much wider 'multi-sourced' financing arrangement. This typically involves the Islamic banks coming in alongside the conventional lenders, multinational development banks and export credit agencies. However, conventional funding is not always involved. The origins of Islamic funding in project financing transactions can be traced back to the early 1990's, to the US\$1.8 billion Hub River power project in Pakistan which involved a US\$92 million Islamic tranche. and 2006 saw the first wholly Islamically financed project financing, the US\$526 million Al-Waha petrochemical project, which was followed in 2008 by the US\$195.4 million wholly Islamic financing of an ethyleneamines facility for Arabian Amines Company. Since then, there have been numerous project financings, mostly in the GCC, involving Islamic tranches, with size and frequency both continuing on an upward trend. The total amount of project financing raised in 2010 for Middle Eastern infrastructure and industrial projects was US\$ 33.7 billion for 13 projects, with nearly that entire amount provided by Middle Eastern banks. That compares with US\$ 40 billion raised in 2008 for 29 projects and US\$ 24 billion raised in 2009. For 2010, 70% of the total project financing was raised for projects in Saudi Arabia, followed by Egyptian projects at 12% of the total and Emirati projects at 9% of the total. Most of the projects financed in 2010 were oil and gas projects (54.3%), followed by industrial projects (34%) and power and water projects (11.7%) (Martin, 2011). In Japan, JBIC (Japanese Bank for International Corporation) has been involved with Islamic finance partners in project such as Saudi Arabian

Petrochemical Project with Sumitomo Chemical co. and Aramco(JBIC today,2007). Islamic Modes of Financing Infrastructure Projects are as follow:

Murabahah (cost-plus or mark up sale), Istisna' (commissioned construction/manufacturing), Ijara (leasing),Tawaruq (cash financing) , Mudharabah (profit sharing), Musharakah (joint venture).

Based on this background and the developing trend in Muslim countries, it is very crucial for any international financier or contractor even from non-Muslim countries to be well engaged in a multilateral project to handle all type of risks and situation that could emerge in such projects.

3. RISK MANAGEMENT

3.1 Islamic Risk Management

Islam prohibits any transaction including gharar. Gharar is literally interpreted as uncertainty and risk. But since no project could be done without conveying risk and uncertainty, it should be more analyzed by an economic approach based on narrations from the Prophet. Gharar has been modeled as a zero-sum game by Al-Suwailem(1999) . Rahmanian et al(2012) with a different methodology conclude that firstly, risk associated with an activity must be allocated to equally to all individuals that enjoy the benefit of the activity. This reflects the consideration of fairness, the core discipline of Islam. Secondly, Islam constrains the attitude of individual toward risk. The first principle concerning the attitude toward risk is 'the principle of uncertainty minimization'. The degree of uncertainty must be minimized by due process of transaction as much as possible. The principle of uniformity of risk attitude' makes necessary to make essential modification in some arrangements of risk treatment commonly used in the conventional infrastructure projects such as the conventional insurance and the leveraged finance including debt finance and non-recourse finance. Therefore, development of unique system of insurance and financing scheme for building infrastructure in Islamic region is essential to strictly follow the discipline of Islamic risk management.

3.2 Main Qualifications of Islamic Financial Contracts

In this section based on the findings about Islamic risk management definition and two principles of fairness and uncertainty minimization, some of the main topics in a multilateral infrastructure contract including risk management and risk allocation rules using a lease (ijara) tool are discussed.

Indemnities: Under the general principle of fairness, it is unfair to request indemnity from the counter-party for loss or damage specially, if it is not caused by him. The question is what if the risk is higher than expected return so how the financier for example would have interest to invest? The suggestion which is still controversial is the financier can obtain warranties from the supplier of the underlying subject matter, make a takaful(Islamic insurance) contract or request an indemnity or seek indemnity based on public need which would contribute to the well-being of society.

Warranties: The general principal of risk allocation and uncertainty minimization requires that the grant or restriction of warranties by an Islamic banking for example in a lease (ijara) contract which is a very common Islamic project finance tool, must be fair and reasonable. The lessor can assign benefit of third party warranties to the lessee in substitution and get a takaful policy to mitigate the risk as well.

Rental period and term: Rental under ijara could be adjusted periodically. However it could be against the rule of minimizing uncertainty. It is required that before each rent adjustment, notice shall be duly served, which would give the lessee an option to accept or reject the adjusted rent offered.

Breach, termination and liquidated damages: The general principle of fairness recommends that the option to breach a contract should be well defined and an unconditional termination is not fair to be allocated and reflected in the general conditions of contract. The right to breach could be considered in case that it is toward the public benefit and well-being of society. Also the financier should not penalize a debtor who is struggling to pay the debt. This ruling may cause moral hazards and an incentive to late payment which is one of the Islamic finance's challenges.

4. CONCLUSION

The Islamic finance of projects is an emerging trend that should be well understood by non-Muslims and well-defined by scholars to mitigate the risk of engagement in such kind of projects. This paper was a much summarized attempt to brighten this dark side of gharar and uncertainty treatment in shari'ah compliant infrastructure contracts.

REFERENCES

- Rahmanian, M.: An Islamic Approach to Contract Management and Financing of Infrastructure Projects, A thesis submitted to receive Phd degree, Kyoto University, September 2012.
 Khan, M. S. and Mirakhor, A.: Islam and The Economic System. *Review of Islamic Economics* , 2 (1), 1-29. 1992. Chapra, M. and Tariqullah Khan: Regulation and Supervision of Islamic Banks, Occasional Paper No. 3, Jeddah, Saudi Arabia: Islamic Research and Training Institute, Islamic Development Bank,2000.

Otto, J.M., Shari'ah Incorporated, Laiden University Press 2010

Askari, H., et al.; A.. New Issues in Islamic Finance and Economics Progress and Challenges, John Wiley & Sons. 2009.Gatehouse Bank (2012). Islamic Finance, The UK Islamic Finance Secretariat, TheCityUK, March 2012.

Rahmanian et al(2012), Ghara r Concept and Treatment of Risk in Construction Projects, International JV Conf, . 2012
 Martin, M.: Project Finance Market Remains Muted in the Middle East, 6 MEED 11-17 February 2011.