



Islamic Project Finance: Shari'a Compliant Financing of Large Scale Infrastructure Projects

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"If there is no need for Islamic cash, then people won't hunt it down because of the added complexity of structuring transactions."¹

Islamic finance has never seen greater appeal. Economically, Islamic finance is experiencing renewed interest due to growing dissatisfaction with the economic status quo and discredit suffered by conventional finance following the financial crisis. Politically, the Arab spring will ensure that Islamic finance plays a more extensive role in the economies of the region due to the fact that long repressed Islamist parties, which will now have a larger influence in the political landscape, have the promotion of Islamic finance as one of their top priorities. Furthermore, the success of post-revolutionary regimes depends on economic recovery.

The Islamic finance industry which offers a wide variety of products, ranging from Islamic micro-lending, to the issuance of *sukuk* (Islamic bonds) for large infrastructure projects will play a key role.

Given this backdrop, it is increasingly pivotal for Middle East observers and financial sector participants to understand the field of Islamic finance, its nuances, and how it can be utilized in new and innovative financing structures, irrespective of the lingering reservations of conventional western financiers.

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This paper discusses how *shari'a* compliant financing can be utilized as a complement to conventional project financing to fund large-scale infrastructure development. Historically, funding for public works came from private sources of capital. It was only toward the end of the 19th century that public financing began to dominate private sources of capital. Since the early 1980's however, private sector financing of large-scale infrastructure projects has experienced a dramatic revival and has increasingly taken the form of project finance.

This analysis provides a comprehensive overview of conventional project finance, the basic tenets of Islamic finance, and how it pertains to project finance and infrastructure development. It concludes with an analysis of the "Equate Project." The project, which highlights the tension in Islamic finance to maintain an "Islamic" character while remaining competitive with conventional financing, is particularly significant due to its status as one of the first successfully completed projects funded using an "Islamic tranche."

AN OVERVIEW OF PROJECT FINANCE

As an effective alternative to conventional direct financing, project financing has become one of the major topics in corporate finance. Project finance is a method of raising long-term financing for major projects based on lending against the cash flow generated by the project alone. This refers to the fact that project sponsors or creditors are repaid or earn a return solely from the revenue that is generated by sale of the project's output. Project finance depends on a detailed evaluation of a project's construction, operating and revenue risks and their allocation between investors.² Project finance may thus be broadly defined as the raising of funds on a limited recourse or nonrecourse basis to finance an economically separable capital investment project in which the funders look primarily to the cash flow from the project as the source of funds to service their loans and provide the returns of and

on their equity invested in the project.³ Nonrecourse financing refers to the fact that the sponsor's liability is restricted to the amount of capital invested. Certain projects are structured with limited recourse, which means that the sponsors are liable for any additional capital infusions the project may require due to cost overruns or shortfalls in cash flow in the initial phase of the project (i.e. the construction phase).

Often referred to as a new financing technique, project finance is actually centuries old and predates corporate finance. The earliest example of project financing dates back to 1299 when the English Crown negotiated a loan from the Frescobaldi, a leading Italian merchant bank of that period, to develop the Devon silver mines.⁴

"Project finance" is not the same thing as "financing projects" because projects may be financed in many different ways. In developed countries for instance, large-scale public sector projects can be financed by the public sector's issuance of debt, whereas private sector projects are funded by large companies raising corporate loans against their balance sheets. In developing countries on the other hand, projects are funded by borrowing from either international banks or multilateral agencies like the World Bank or through export credits. However, increasingly the financing burden in both developed and developing countries is shifting to the private sector via project finance.

While lenders assess the firm's entire asset portfolio before lending in conventional direct financing, in project financing the project is a distinct legal entity with a finite life. Traditionally, assets are valued on the basis of the present value of the future cash flows that they generate. The further out into the future these cash flows are projected, the greater their associated uncertainty. Valuing traditional companies with infinite lives is therefore associated with a great deal of uncertainty. The finite life of projects funded by project finance offers greater certainty and correspondingly lower risk when undertaking a valuation exercise based on discounting future cash flows.

The extensive web of contractual relationships between different parties in project financing is also an important characteristic that lowers the project's risk profile. For example, an offtake contract might be used for a project that produces electricity. An offtake agreement provides the offtaker (purchaser) with a secure supply of the required product and the project company with the ability to sell its products on a pre-agreed basis.⁵ This greatly enhances the certainty with which investors can project future cash flows as future revenues earned by the project. Similarly, input supplies like fuel or raw materials are likely to be the main operating cost

for a project selling output products under an offtake contract. Securing these input supplies at an appropriate price is critical and accomplished through an input supply contract which usually matches the length of the offtake contract described above. Such input supply contracts, by reducing the risk that supply or input costs will be unexpectedly higher and therefore result in diminished cash flows generated by the project, also play their role in lowering uncertainty for investors in such projects. Similarly, the project company may enter into other contracts with the aim of reducing uncertainty and lowering the project's risk profile.

Project assets, project related contracts, and project cash flow are segregated, to a substantial degree, from the sponsoring entity. This is vital. As these projects tend to be highly capital intensive, few corporations have the risk appetite or the balance sheet size to raise the requisite amount of debt to fund these large scale projects without hurting their general creditworthiness. Thus if these projects weren't structured as separate legal entities and held off balance sheet, financing would be greatly curtailed.

Project financing inevitably involves tailoring the financing package to the circumstances of a particular project. That said, every project financing has essentially the same underlying components (See Exhibit 1).

The halo of the angel is the government, the project sponsor is the head, the contractor and operator serve as wings, the project company is the body, the supplier and customer represent the arms, and the banks are the angel's feet. The outspread arms and the body together also symbolize the project's throughput—the tollable commodity that creates the cash flow.⁶ Of course, as transactions become more complex, it is necessary to modify the basic structure. The following section describes the role of each major participant in a project financing.⁷

MAJOR PARTICIPANTS IN A PROJECT FINANCING

- **Government:** The project company usually needs to obtain a concession from the host government to undertake the project. The government may also establish a new regulatory framework, guarantee currency convertibility, and provide environmental permits.
- **Project sponsors or owners:** A separate company is established to undertake the project. Sponsors are generally the project owners with equity stake and will generally be involved in project construction and management. Other equity holders may be companies with commercial ties to the project.

- **Project company:** The project company is a single purpose entity created to execute the project. Controlled by the sponsors, it is the project's hub through its contractual arrangements with operators, contractors, suppliers and customers.
- **Contractor:** The contractor is responsible for constructing the project according to the specifications outlined in its contract with the project company. Primary contractors will then subcontract with local firms for different components of the construction.
- **Operator:** Operators are responsible for maintaining the quality of the project's assets and ensuring maximal operational efficiency.
- **Suppliers and customers:** The supplier provides the critical input, like fuel for a power plant project. The customer is the party willing to purchase the project's output. The project company seeks customers who are willing to sign long-term off-take agreements whereby the customer agrees to purchase a predetermined volume of the output for a definite period of time.
- **Lenders:** Infrastructure projects involve substantial investments. A large fraction of the funding is generally raised as debt from a syndicate of lenders such as banks and specialized lending institutions like developmental banks, and less frequently from bond markets. A bond issue to fund a green-field project is likely only in the case of a low risk project. Bond financing is more commonly used to replace bank financing once construction is complete and the project facilities become operational. This is because the need for monitoring falls once the construction phase is completed.
- **Multilateral agencies:** The World Bank, IFC and regional development banks are often lenders or co-financiers of infrastructure projects in developing countries.
- **Export credit agency (ECA):** Because infrastructure projects in developing countries often require imported equipment from developed countries, ECAs are routinely approached by contractors to support these projects. Generally, ECA's provide a loan guarantee or funding to projects for an amount that does not exceed the value of exports that the project will generate for the ECA's home country.
- **Other important parties include:** insurers (provide political risk and other cover), legal and financial advisors (assemble the transaction given the number of important contracts and help structure the financing for the project) and the trustee (responsible for monitoring the project's progress).

The principle features of project financings can be summarized as follows:⁸

- A project is established as a separate company, which operates under a concession obtained from the host government.
- The project manager provides a major portion of the project's equity, thereby tying the provision of finance to the management of the project.
- The project company enters into comprehensive contractual arrangements with suppliers and customers.
- The project company operates with a high ratio of debt to equity, with lenders having only limited recourse to the government or to the equity holders in the event of default. This limited recourse is vital as it lowers the risk of sponsors or equity providers becoming liable for injecting additional equity to meet debt obligations.

RISK MANAGEMENT AND RISK SHARING: CONTRACTUAL AND FINANCIAL ARRANGEMENTS.

It is also useful to discuss the importance of the extensive contractual relationships between various parties in project financing. Oftentimes the risks associated with a project are so great that no single party can bear them alone. Project financing permits the sharing of operating and financial risks through contractual and financing arrangements.

The contractual arrangements are designed to allocate each major risk in a project to the party that is best able to appraise and control that risk. For example, the main contractor is obviously best suited to ensure that construction is completed within the budget and on schedule. He therefore enters into a turnkey contract that specifies a fixed price and penalties for delays, and is usually required to post a performance bond. A turnkey contract refers to a business arrangement where the project or asset being constructed is delivered in a complete state. Transferring the risk of poor performance to the party best able to manage it incentivizes all parties to act efficiently.

Due to limitations on how much can be written into a contract and how efficiently that contract can be monitored, financing arrangements complement contractual arrangements. Provision of equity stakes to the operator and main contractor creates an incentive to be efficient by making them residual claimants whose profits depend on how well the project facility is built and operated.

A detailed discussion of the reasons behind the high debt levels in a project company is beyond the scope of this paper. However some common reasons attributed to the high leverage in

project companies include lower bankruptcy costs, political risk reduction, and lower information costs for lenders which enable them to focus their credit risk analysis on the project and its future cash flows.

AN INTRODUCTION TO ISLAMIC FINANCE

It is increasingly pivotal for Middle East observers and financial sector participants to understand the field of Islamic finance, its nuances, and how it can be utilized in new and innovative financing structures, irrespective of the lingering reservations of conventional western financiers.

Islamic financial institutions base their objectives and operations on Islamic law, the *Shari'a*. These operations are characterized by the avoidance of *riba* (in the broad sense of an unjustified increase), *gharar* (uncertainty, speculation), the focus on *halal* (religiously permissible) activities and more generally, the quest for justice and other ethical and religious goals.⁹

Two prime aspects of Islamic finance deserve attention. First, Islamic finance is based on a risk sharing philosophy: the lender must share in the borrower's risk. As a result, fixed returns in the form of predetermined interest rates (which place the burden on the borrower) are eschewed in favor of profit and loss sharing (PLS). Second, Islamic finance promotes social and economic development through specific business practices and *zakat* (almsgiving). Thus while "conventional" finance usually seeks profit maximization within a given regulatory framework, Islamic finance is also guided by other religiously-inspired goals.

*"The way to understand Islamic finance is to replace the word 'Islamic' with the word 'Structured.' Like any structured finance deal, you have constraints that must be overcome with creativity and innovation. Here, the principles are based on the principles of Shari'a. The question is how to structure the deal given these constraints."*¹⁰

The quote encompasses a major critique of Islamic finance and brings to mind the story of the cobbler who asked Luther how he could serve God within his trade of shoemaking. Luther's answer was not that the cobbler should sell a "Christian shoe," but rather that he should make a good shoe and sell it at a fair price. The primary criticism of Islamic finance is that its focus is analogous to the concept of a "Christian shoe." It emphasizes contract mechanics and the approval of "Shari'a Supervisory Boards," rather than

efficiency and fair pricing.¹¹ Critics highlight the industry's form above substance approach by pointing to the tension that they claim arises when Islamic finance institutions strive to maintain their "Islamic" character while attempting to bridge the gap between conventional finance and what *Shari'a* proscribes.

Like most Western commentators on Islam, these critics view Islamic finance monolithically rather than as a highly diverse and dynamic industry. While the above criticisms may apply to segments of practitioners within the industry, Islamic finance is practiced in varying ways in a range of countries like Malaysia, Egypt, Saudi Arabia, England and Singapore. The criticism also ignores the evolution of Islamic finance practices over the last few decades and its increasing significance following the 2008-09 financial crisis.

While the preceding paragraphs provide a basic introduction to Islamic finance, comprehensive coverage of its complexity and diversity is beyond the scope of this paper. The primary focus here will be on certain Islamic financial products and instruments and the role they play in financing large-scale infrastructure projects. Within the context of project finance and infrastructure development, the paper will also discuss the necessary structural changes for a particular project to maintain its *shari'a* compliance.

ISLAMIC FINANCIAL PRODUCTS AND INSTRUMENTS

In classical Islamic theory, the only straightforward loan is an interest free loan, the *qard hasan*, and the only common form of deposit is *al-wadiah* (safe-keeping). These traditional practices had to evolve for Islamic finance to operate in the modern global economy and compete with conventional banks. In response, Islamic bankers devised new products and instruments that do not pose religious objections.

Here is an overview of some of these products and instruments followed by a description of their usage in project financing.

Murabaha (sale based product):

The Koranic verse "Allah has allowed trading and forbidden *riba*" (2:275) is a cornerstone of Islamic finance. Therefore it is not surprising that a large majority of the transactions undertaken by Islamic financial institutions are sale-based.

Murabaha is the best known sale-based instrument. It is a cost plus contract in which a client wishing to purchase any type of good asks the bank to purchase the item and sell it to him at the cost plus a declared profit. Traditional *murabaha* was a spot transaction. The innovation of modern Islamic finance is evident in the

addition of an element of financing, since the bank will purchase the required goods directly from a supplier and sell them to the “borrower” for future payment. This enables the replication—in economic though not religious, legal or regulatory terms—of conventional loans.¹² *Murabaha* and comparable sale-based contracts have grown significantly and today constitute the bulk of Islamic bank activity.

Istisnaa (sale-based product):

Istisnaa (commissioned manufacturing) is an exception in Islamic finance; it states that a sales contract is invalid if the item being sold does not exist at the time of the sale. *Istisnaa* is a contractual agreement used to finance manufacturing items or construction projects. Under such a contract, the bank enters into an agreement with the manufacturer to manufacture and deliver goods at an agreed future date. The subject matter, price and delivery date must be specified beforehand to eliminate the element of *gharar*.

Ijara (leasing based product):

The principle of *ijara* is virtually identical to conventional leasing. The bank leases an asset to a third party in exchange for rent. Payment amounts are known in advance and the asset remains the property of the lessor. Although initially directed at businesses, *ijara* is increasingly used in retail finance. In recent years it has been used for big ticket items like aircrafts and has become an essential building block in Islamic project finance.

The *ijara* is a well-established instrument that is acceptable in the eyes of most Islamic scholars. By financing assets, it is a useful tool in economic development and lends itself to collaboration with conventional institutions.

ISLAMIC PROJECT FINANCE

Increasingly, executives in charge of infrastructure projects in Islamic countries want to finance them in accordance with the *Shari'a*. Furthermore, because of the increasing influence of Islamic finance, Islamic investors are looking for long-term investments that are religiously acceptable. The challenge is to develop project finance structures that are not only consistent with *Shari'a* principles but are also attractive to international capital providers.

Co-financing is one popular solution. In a co-financed deal, the sponsors combine conventional “Western” finance with “Islamic” finance. Because *Shari'a* prohibits interest-based financing, investors must use profit based structures that involve asset ownership. Although there are advantages to using Islamic finance, the asset ownership requirement generates several potential complications in deal structuring and

project management. For example, the requirement that Islamic financiers retain title to part of the project’s assets could increase the project’s riskiness from the perspective of the Western lenders because it hinders the lender’s recourse in the event of a project default due to a reduction in the collateral backing their loans.

Before analyzing the particulars of The Equate Project, it is worthwhile to describe briefly how an Islamic finance tranche is typically structured in a project finance transaction. The most frequently used structures in the project finance sector in the Islamic world are the *Istisnaa-Ijara* structure and the *Wakala-Ijara* structure.¹³

Istisnaa – Ijara:

An *istisnaa-ijara* structure incorporates an *istisnaa* contract that applies to the construction phase of a project, and an *ijara* contract for the operations phase. The borrower undertakes (to avoid the Islamic lenders being exposed to significant construction, credit and performance risk of contractors) an *istisnaa* contract to procure the manufacture, delivery and construction of the relevant plant and equipment from the manufacturer. The borrower simultaneously enters into a construction contract with the construction contractor incorporating a pass through of the terms and conditions of the *istisnaa* contract.

The Islamic financiers make phased payments to the borrower, akin to draws under any conventional finance facility during the construction phase of a project whereby capital is raised from financiers in blocks or separate disbursements based on construction milestones reached and on a predetermined schedule.

The *ijara* contract typically comes into effect upon project completion. In order to be *shari'a* compliant, an *ijara* contract must be transparent, detailed and have set terms prior to execution. The lessor under an *ijara* must maintain legal and beneficial ownership of the asset and bear responsibility for risks associated with asset ownership, meaning there must be a link between an Islamic lender’s ability to earn profits and the assumption of risk.

The *ijara* contract also typically includes a promise from the Islamic lenders as lessors to transfer the ownership of the leased asset to the borrower, as lessee, either at the end of the lease period or in stages during the term of the *ijara*. This form of *ijara* is the Islamic equivalent of a conventional equipment lease contract. Ownership of the assets is delivered to the Islamic financiers upon project completion pursuant to the *istisnaa* contract. Thereafter the Islamic lenders lease the assets to the borrower in consideration

for rental payments that are sized to cover the capital cost of the equipment plus a profit margin.

Obligations that would typically fall on the Islamic lenders—such as care and maintenance of the assets and responsibility for insurance—are normally performed by the borrower on the Islamic lender's behalf.

Wakala – Ijara:

The *Wakala – Ijara* structure is an alternative but similar method commonly used in Islamic project finance. Under this structure, the borrower is employed as the Islamic lender's agent or "*Wakil*" in accordance with the terms of an agency agreement known as a *wakala* agreement.

The *wakala* agreement more or less fulfills the same function as the *istisnaa* agreement. The only difference is that in this instance the contractual relationship between the Islamic financial institutions and the borrower differs. The borrower procures the design, engineering, construction, testing, commissioning and delivery of the assets identified in the *wakala* agreement as the agent for the Islamic lenders.

THE EQUATE PROJECT

The Equate Petrochemical Company, a joint venture between Union Carbide Corporation and Petrochemical Industries Company (PIC) (a subsidiary of Kuwait's national oil company), was a \$2 billion petrochemical plant in Kuwait that closed in September 1996.¹⁴ Islamic funds in the form of an *Ijara* facility financed \$200 million of the \$2 billion petrochemical plant (\$100 million was allocated to each

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tranche of debt).¹⁵

Construction began in August 1994 and was financed through a combination of equity and debt from a \$450 million bridge (temporary) loan. By late 1995, the bridge loan needed to be replaced with more permanent financing to better match the long-term nature and cash flow profile of the project. Both sponsors decided to use project finance with the project having a total debt to total capital ratio of 85%, including subordinated debt (40% of the funding would come in the form of equity and subordinated debt). With regards to the debt financing, in addition to term loans, PIC wanted to use \$100 to \$500 million of Islamic funds. Apart from

diversifying the project's funding, structuring part of the deal Islamically made it more socially acceptable to Kuwaiti citizens and investors. The mandate to arrange the funds was awarded to Kuwait Finance House (KFH), Kuwait's only Islamic bank. In structuring the transaction, KFH could have used one of three main Islamic finance structures: *istisnaa*, *murabaha* or *ijara*.

The *istisnaa* structure, similar to the structure described above, was a "back to back" *istisnaa*. Under the first *istisnaa*, the customer/buyer would agree to purchase an asset from the Islamic bank upon completion. Under the second *istisnaa* contract, the bank would agree to pay the manufacturer to build the asset under question. Thus the Islamic bank would be placed at the center of the transaction as an intermediary. It would accept the manufacturer's performance risk and the buyer's payment risk. The major advantage of such a contract is that the *istisnaa* is a fixed rate contract with the profit margin set at signing. The major disadvantage, conversely, is that it is used for construction financing, not permanent financing. This would expose the project to refinancing risk. This structure was therefore inappropriate for this case as the sponsors needed access to permanent financing.

For post-construction financing, the sponsors could have used a *murabaha* or an *ijara* contract, both of which required ownership of dedicated assets. As construction was well underway at this stage, there were assets available to "ring fence" for the Islamic tranche.

Murabahas are usually fixed rate instruments, which is an advantage from the borrower's perspective. However, from an investor's perspective, a *murabaha* contract is like investing in a risky, fixed rate, zero coupon bond (in the case where payment is made in a bullet form at maturity). A zero coupon bond is an instrument from which an investor does not receive periodic interest payments as he would in the case of a traditional fixed coupon paying bond. Investors in zero coupon bonds earn all their return in the form of capital appreciation when the bond, which is issued at a discount to its par value, reaches its par value at maturity. This theoretically can increase the riskiness of the instrument in the eyes of an investor as no cash flow is received in the interim period prior to maturity of the bond. As such the investor is exposed to ownership risks between the time he buys and sells the asset. The contract tends to be shorter-term; furthermore, Islamic banks have few long-term liabilities with which to offset the assets. However KFH, which had been restructuring its balance sheet such that its fraction of short term assets was growing while the fraction of short term liabilities was shrinking, should have been interested in booking long term

assets such as the *murabaha* or the *ijara*. The choice thus depended on whether it had fixed or variable/floating rate liabilities. KFH's reluctance to book long term assets stemmed from a combination of it not wanting to book fixed rate assets (*murabaha*) and not extending long term credit given the country's political and economic fragility following the Gulf War.

The final option was to use an *ijara* contract, or financial lease. In this contract the bank purchased the specific assets and then leased them to the project company. Assets have to be separable and have autonomous economic value to qualify for this contract. Several furnaces, boilers, and other related types of equipment were selected as the basis of the lease. The *ijara* is a variable rate instrument that requires periodic (typically semiannual) payments. While all three structures (*istisnaa*, *murabaha* and *ijara*) could have been used in this project, the sponsors chose the *ijara* structure as the best compromise between what they wanted and what investors were willing to provide.

OBSTACLES IN STRUCTURING THE CO-FINANCED DEAL

A number of complications arose as a result of the decision to use Islamic funds to partly finance the project.¹⁶ Because the Islamic investors would own the assets, they bore ownership risk, which could result in substantial liabilities. To address this concern one option was to place the particular assets in a special purpose vehicle (SPV) with limited liability. However, this structure had never been tested in a major litigation and it was unclear whether a court might pierce the corporate veil and assert liability on the deal's Islamic investors.

A second issue concerned the selection of the assets for the Islamic tranche. The sponsors had to be willing to relinquish asset ownership. Some countries believe that natural resources are strategic assets and are unwilling to permit foreign ownership of those assets. If Kuwait imposed such a restriction, the pool of available investors would shrink considerably.

A third issue involved the payment of insurance and maintenance expenses associated with Islamically financed assets. Even though Islamic investors knew nothing about running a petrochemical plant, they technically would be responsible for maintaining the assets in working order and insuring them against loss. A possible solution entailed signing a service management contract that obligates the sponsors to pay insurance and maintenance expenses in a timely fashion.

By trying to integrate Islamic financing with conventional financing in a single deal,

complications regarding inter-creditor agreements arose. These pertained to cash flow entitlement as well as creditor rights in the event of a default. In the case of a default, about it was unclear whether Islamic religious law or English law would govern the contracts. Delay in payments was another concern. While conventional lenders could charge an interest penalty, Islamic investors could not. To solve this problem, liquidated damages are generally included in the Islamic tranches to ensure equal and fair treatment to all investors.

Furthermore in the case of an actual default, a judge usually orders an automatic stay and supervises a liquidation or reorganization with the goal of ensuring maximum liquidation or going concern value. Piecemeal liquidation of integrated projects like the Equate project would destroy its value. Islamic investors who are owners of specific assets in the project could claim those assets and come out whole while conventional lenders would suffer. This would violate the *pari passu* treatment of most intercreditor agreements. *Pari Passu* treatment refers to the fact that all creditors holding the same securities should have equal claim to the assets in the project. However, the alternative of lumping all investors together would violate the Islamic tranche. The standard solution is for Islamic investors to forgo their rights in the case of a liquidation or default.

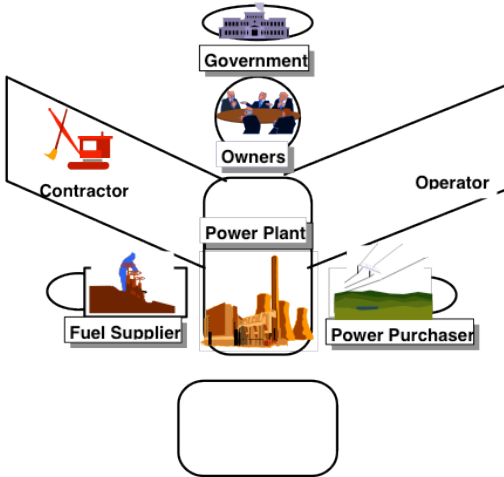
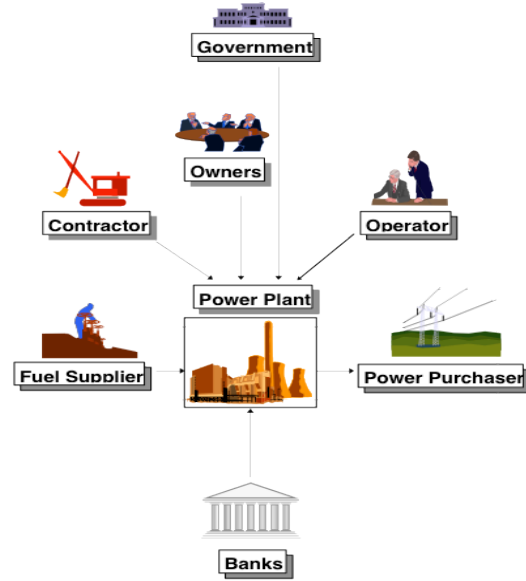
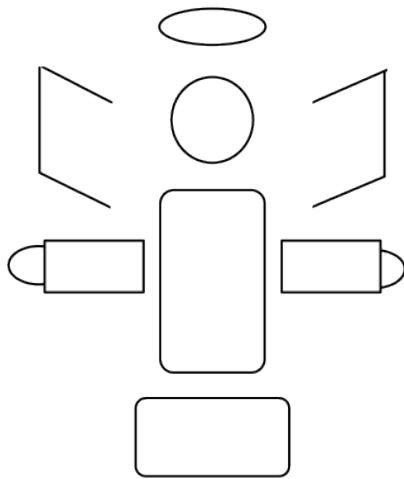
CONCLUSION

The case discussed above demonstrates that co-financed structures can work. It provides a template for similar deals in the future to be successful. Projects partially or fully funded by Islamic investors are undoubtedly more complex to structure than conventionally funded ones. However, this should not limit the study of Islamic finance in project finance and infrastructure development. As the market develops and structures such as those used in the Equate project become more widespread and familiar to investors, infrastructure projects can avail the vast amount of wealth that nations in the Islamic world have at their disposal.

The views and opinions expressed in articles are strictly the author's own, and do not necessarily represent those of Al Nakhlah, its Advisory and Editorial Boards, or the Program for Southwest Asia and Islamic Civilization (SWAIC) at The Fletcher School.

Exhibit I.

The “project finance angel” is one popular structure:¹⁷



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⁴ Ibid, 4.

⁵ E.R. Yescombe, *Principles of Project Finance*

⁶ This refers to the sale of the commodity extracted or produced by the project that generates revenue to meet the debt obligations of the project.

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¹⁴ Apart from the \$200 million Islamic funds, the Equate project was financed with \$800 million of equity and subordinated debt, \$600 million of term debt from international banks with an 8.5 year maturity, \$400 million of term debt from regional banks with a 10.5 year maturity.

¹⁵ Esty, "The Equate Project: An Introduction to Islamic Project Finance."

¹⁶ Ibid.

¹⁷ The Wharton School, Project Finance Teaching Note - 1