



Is Ppp the New Firepower For Islamic Finance That Will Accelerate Progress Towards (SDGS)?

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Abstract. Having access to essential infrastructure services is pivotal in creating economic opportunities and bringing social services to the poor. Their deficiency leads to a number of negative consequences and lost opportunities (the World Bank indicates that currently 1 billion people live without electricity, 663 million people lack access to safe drinking water, 840 million people are located more than 2 kilometers from all-weather roads, and 4 billion people cannot access the Internet). The systematization of the results of World Bank research proved that lower-and middle-income countries need to spend on average 4.5 percent of GDP to deliver infrastructure services and achieve the infrastructure-related Sustainable Development Goals (SDGs). The urgency of solving this problem lies in the fact that in many countries, the high levels of investment required for infrastructure cannot be financed by the public purse alone. Therefore, the governments of these countries should pay attention to private investments as a tool for additional fundraising. The article presents the results of the analysis, which proved that the Private-Public Partnership has increasingly become a common structure for the delivery of public infrastructure. It offers the opportunity for governments and nongovernmental bodies to achieve more efficient projects by sharing risks and giving the private sector a chance to bring innovation to the design, construction, operation, and maintenance of public infrastructure. The study theoretically proves that public-private partnership offers monetary and non-monetary advantages for the public sector, in particular: allowing the allocation of public funds for other local priorities, distributing project risks to both public and private sectors, improved efficiency and project implementation processes in delivering services to the public, emphasizes Value for Money (VfM) – focusing on reduced costs, better risk allocation, faster implementation, improved services and possible generation of additional revenue. In the paper, based on a comparative analysis of conventional bonds and Sukuk (Islamic bonds), it was concluded that conventional bonds represent the issuer's pure debt, while the latter offers multiple benefits: lower costs of funds due to higher rating via credit enhancement, access to the capital markets, diversification of funding sources, off-balance sheet financing (via securitization), improvement of financial ratios, and potential risk reduction.

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Introduction

Having access to basic infrastructure services is critical to create economic opportunities and bring social services to the poor. Recent research by the World Bank suggests that—with the right policies — lower-and-middle-income countries need to spend on average 4.5 percent of GDP to deliver infrastructure services and achieve the infrastructure-related Sustainable Development Goals (SDGs). Given this, consider the consequences and lost opportunities when 1 billion people go without electricity, 663 million people lack





access to safe drinking water, 840 million people live more than 2 kilometers from all-weather roads, and 4 billion people cannot access the Internet.

The international development community has widely agreed that we must engage all stakeholders and potential sources of finance for infrastructure development. The 2030 Sustainable Development Agenda calls for stepping up cooperation, enhancing domestic revenue mobilization, mobilizing, and catalyzing private finance, and enhancing the role of the private sector across a broad spectrum of development activities. Private-Public Partnership (PPP) has increasingly become a common structure for the delivery of public infrastructure, especially for countries that are encumbered with huge debt. PPP gives the private sector a chance to bring innovation to the design, construction, operation, and maintenance of public infrastructure.

Furthermore, Islamic finance is starting to emerge as a significant source of funding PPP infrastructure projects, where repayment of funds is based on sharing the risk of the underlying economic activity without recourse to tax revenues and without inflicting a direct or indirect burden on the population, and thus constituting a healthier approach in contributing to economic development.

The Imperativeness of Infrastructure Development

The infrastructure shortage in developing countries is a major obstacle to improved living standards, enterprise development, and the goals of the United Nations Millennium Declaration. This is especially the case in the Middle East and North Africa (MENA), where infrastructure demand had long been rising due to population growth, rapid urbanization, and economic expansion, and was further amplified as historic MENA-region transitions pressured governments to increase living standards and improve the business environment. In many countries, the high levels of investment required for infrastructure cannot be financed by the public purse alone, and private investment is therefore an option that governments cannot afford to ignore. Furthermore, private infrastructure investment has become increasingly scarce, due to the global economic crisis, commercial bank deleveraging, and tightened public investment that promotes development.

PPP to Deliver Infrastructure Development

Private-Public Partnership (PPP) has increasingly become a common structure for the delivery of public infrastructure. PPP offers the opportunity for governments and nongovernmental bodies to achieve more efficient projects by sharing risks and responsibilities differently as compared to traditional procurement. These types of structures also can offer better protection against schedule and cost overruns, and give the private sector the chance to bring innovation to the design, construction, operation and maintenance of public infrastructure.

How Does the PPP Work?

A PPP is a long-term contract between the public sector (a Public Sector Client) and a private company or consortium of companies (a Private Entity) covering the design, construction, maintenance, and financing of an infrastructure asset. PPPs can take many different forms, but typically have the following characteristics:

General Forms of PPP

Generally, there are two common forms of PPP structure: availability and concession-based PPPs. The two forms could be distinguished from each other based on what the public or private parties assume within the partnership, e.g. rights, obligations, and risks.

Availability PPP

A form of PPP wherein the public authority contracts with a private sector entity to provide a public good, service or product at a constant capacity to the implementing agency (IA) for a given fee (capacity fee) and a separate charge for usage of the public good, product or service (usage fee). Fees or tariffs are regulated by contract to provide for recovery of debt service, fixed costs of operation and a return on equity. While there are no usage fees in this project, a good example for the availability PPP would be a schools' infrastructure project, wherein the private sector is responsible for making schools available for the government (consisting of design, financing, construction and maintenance) for a contract fee with the Department of Education (DepEd).





Concession PPP

A form of PPP wherein the government grants the private sector the right to build, operate and charge public users of the public good, infrastructure or service, a fee or tariff which is regulated by public regulators and the concession contract. Tariffs are structured to provide for recovery of debt service, fixed costs of operation, and return on equity. Under the contract, the private sector would be given the right to collect a toll (user charge) from the users of the expressway.

Private Finance Initiative (PFI)

A Private Finance Initiative (**PFI**) involves an infrastructure project (e.g. a hospital, health center, school, leisure center, social housing, street lighting, road or prison) being funded by private sector equity and debt funding and then being paid for by the public sector 'customer' through monthly payments over the life of the project. PFI, was first implemented in UK construction industry in 1992. As an important part of Government's strategy for delivering high quality public services, Private Finance Initiative requires the private financers to put its own capital at risk to deliver clear defined public projects for a long term period, ensuring the quality of the work delivered within the time and budget.

PFIs alleviate the government and taxpayers of the immediate burden of coming up with the capital for these projects. Under a private finance initiative, the private company handles the up-front costs instead of the government. The project is then leased to the public, and the government authority makes annual payments to the private company. These contracts are typically given to construction firms and can last as long as 30 years or more. PFIs are used primarily in the United Kingdom and in Australia. In the United States, PFIs are also called public-private partnerships. Governments repay private firms over time with interest.

Advantages of PFIs

Governments have traditionally had to raise money on their own in order to fund public infrastructure projects. If they are not able to find the money, governments may also borrow from the bond market, and then hire and pay contractors to complete the job. This can often be very cumbersome, which is where the PFI comes in. PFIs are intended to improve on-time project completion and also transfer some of the risks associated with constructing and maintaining these projects from the public sector to the private sector. Financial advisers such as investment banks help manage the bidding, negotiating, and financing processes. Firms make their money back through long-term repayments plus interest from the government. Thus, the government does not have to lay out a large sum of money at once to fund a large project.

Disadvantages of PFI

A key drawback is that since the repayment terms include payments plus interest, the burden may end up being transferred to future taxpayers. In addition, the arrangements sometimes include not only construction but ongoing maintenance once the projects are complete, which further increases a project's future cost and tax burden.

Criticism of PFI in the United Kingdom

In the United Kingdom in the 2000s, a scandal surrounding PFI revealed the government was spending significantly more on these projects than they were worth in order to benefit of the private firms running them and to the taxpayers' detriment. In addition, PFIs have been criticized as an accounting gimmick (being off-balance sheet) to reduce the appearance of public-sector borrowing.

PPP Modalities

PPP modalities vary mainly in (i) risk transfer to the private sector, (ii) the investment by each party and (iii) the control and ownership of assets (including whether during the concession period or ultimately at transfer). In the UK, some modalities are similar but have somewhat different names, such as BDFO (Build Design Finance Operate) would be under PFI.

- ➤ **BOOT** Build-Own-Operate-Transfer schemes imply that the private sector obtain the capital needed for construction and operation of the infrastructure for an agreed period of time (usually a long term, i.e. between 15 and 30 years), and then transfers ownership back to the government.
- **BOT** Build-Operate-Transfer contracts often correspond to Greenfield concessions. The private sector will build and retain ownership of an asset for a fixed-term, undoubtedly less than BOOT. BOT may





also involve take or pay provisions, i.e. revenue guarantees, that subject governments to contingent liabilities. On expiration of a BOT, ownership of the asset is returned to the public sector.

- ▶ **BOTT** Build-Operate-Train-Transfer schemes are another variation of BOT whereby the private operator commits to train the public sector to allow a smoother transfer of the asset back to the public sector at the end of the contractual term.
- **BOO** Build-Own-Operate contracts are similar to BOTs except that they do not involve transfer of the assets to the public sector after a pre-determined period of time.
- **BDFO** The private sector party is awarded a contract to design, construct, finance and operate a capital project. In consideration for performing its obligations under the agreement, the private sector party may be paid by the government agency (availability payment) or from fees collected from the project's end users. The government or government-owned entity retains ownership of the project.
- ➤ **DCMF** in Design, Construct, Maintain and Finance, the private entity creates the facility based on specifications from the government body and leases it back to them. This is generally the convention for PPP prison projects.

Contract Type	Build- Design- Finance- Operate (BDFO)	Build Transfer Operate (BTO)	Build Operate Transfer (BOT)	Build- Own- Operate- Transfer (BOOT)	Build- Own- Operate (BOO)
Construction	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
Ownership	Public Sector	Private sector during the construction then the public sector	Private Sector during the contract then the public sector	Private sector during the contract then the public sector	Private sector
Who is paid?	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector

Table 1. PPP Models

Source: Compiled by the author.

Advantages of PPP

PPP is increasingly being deemed a distinctive tool that stimulates economic activity in underdeveloped regions and beyond. Moreover, many governments and jurisdictions with firm fiscal profiles and high credit ratings, are increasingly engaging in PPPs. Not because they cannot afford to fund infrastructure on a public basis, but rather because they deem procurement by PPP to create a greater value for money for their taxpayers and citizens.

Furthermore, PPP offers monetary and non-monetary advantages for the public sector. It addresses the limited funding resources for local infrastructure or development projects of the public sector thereby allowing the allocation of public funds for other local priorities. It is a mechanism to distribute project risks to both public and private sector. PPP is geared for both sectors to gain improved efficiency and project implementation processes in delivering services to the public. Most importantly, PPP emphasizes Value for Money (VfM) – focusing on reduced costs, better risk allocation, faster implementation, improved services, and possible generation of additional revenue.

- ➤ PPPs make projects affordable. Government spending will be less if the project is undertaken as a PPP, since the private sector funds their share of the project (including operation and maintenance) during the duration of the concession.
- A key element for a successful PPP is to deliver **Value for Money (VFM)**. (VfM) is achieved when the government obtains the maximum benefit from the goods and services it both acquires and provides. What government judges to be an optimal combination of quantity, quality, features and price (i.e. cost), calculated over the project's life cycle. (VfM) must be the primary objective in designing a PPP.
- ➤ PPPs enable the government to take on fewer risks due to shared risk allocation. Generally, the private sector takes on the project's life cycle cost risk, while the government assumes site risks, legislative and government policy risks, among others. Many PPPs will also contain liquidated damages clauses whereby the private party will pay pre-determined damages to the public authority if the infrastructure is not available for use as of the contracted date.
- ➤ PPPs force the public sector to focus on outputs and benefits from the start. The government focuses on providing quality infrastructure and services by setting each project's **Minimum Performance Standards and Specifications** (MPSS).



- > PPPs maximize the use of private sector skills. It utilizes higher levels of private sector efficiency, specialization, and technology.
- ➤ In many cases assets designed under PPP agreements could be classified off the public sector balance sheet.

PPPs Through Islamic Finance

In practice, the most frequently used structures in Islamic project finance are a combination of two separate structures in one transaction: <code>istiṣnā'-ijārah</code> (construction/procurement and leasing); <code>wakālah-ijārah</code> (agency and leasing); or <code>mushārakah-ijārah</code> (contractual partnership and leasing).

Istisnā'-Ijārah-based structure (as an example)

An istiṣnā'-ijārah structure is the combination of two separate structures (an istiṣnā' and an ijārah) in one transaction. An istiṣnā' (manufacture/build) contract is generally used for the construction phase, when the underlying assets are procured. An ijārah (leasing) contract is put in place for the operation phase, when the assets are ready for their intended purposes.

Istișnā' (Build/Manufacture)

Pursuant to the istiṣnā' agreement, the project company undertakes to procure the manufacture, construction, and delivery of the relevant assets from the manufacturer/construction contractor and deliver such assets to the Islamic financiers. In turn, the project company enters into an (Engineering, Procurement, and Construction) **EPC** contract or any other form of construction contract with the construction contractor, incorporating a pass-through of the terms and conditions of the istiṣnā'agreement. Title to the relevant assets typically passes to the Islamic financiers automatically upon transfer of title under the EPC contract or construction contract. The Islamic financiers in their capacity as buyer under an istiṣnā'agreement avoid being exposed to construction, performance, and delivery risk associated with the project assets.

Ijārah, advance rental payments, and liquidated damages

The Islamic financiers make stage payments to the project company (the obligor)—akin to drawdowns/utilizations under any conventional finance facility—during the construction phase of a project. *Shari'ah* scholars generally permit the use of a forward lease arrangement (known as an *ijārah mawsufah fi al thimma*), whereby advance rental payments are paid by the project company during the term of the *istiṣṇā* '(or the construction phase). These advance rental payments are typically structured to cover the Islamic financier's funding costs, together with a profit margin during construction. The project company is required to pay liquidated damages to the Islamic financiers if (i) assets are delivered behind schedule, or (ii) assets are nonconforming.

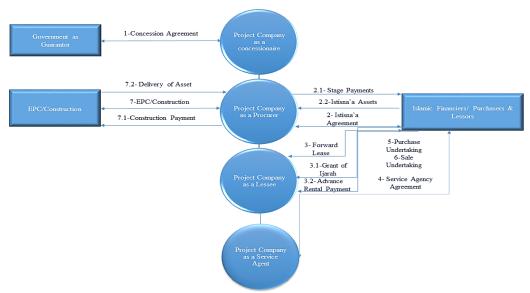


Figure 1. Istisnā'-Ijārah-Sukuk based structure

Source: Compiled by the author.





Utilizing Sukuk to Finance Public Infrastructure

Incorporating private partnership is becoming a vital instrument for financing infrastructure development. In this regard, the government of Indonesia, for instance, has played a significant role by combining (PPP) for provision of infrastructure assets and public services and then applying sovereign project-based Sukuk for a (viability gap fund) and (availability payment) mechanism.

The Main Differences Between Bonds and Sukuk

The fundamental difference between a conventional bond and Sukuk, Islamic bond, is that the conventional bond represents the issuer's pure debt with an obligation for repayment at maturity date. While Sukuk represents an ownership stake in an underlying asset for a defined period where the risk and the return associated with cash flows generated by underlying assets in a pool are passed to Sukuk holders (investors). Accordingly, bondholders receive regular interest payments, while Sukuk holders receive a share of the profit generated by the underlying asset.

Sukuk issuance and their advantages

In a generic Sukuk issuance, there are three players: the originator, the issuer, and investors. Thus, the Government is called the "originator." Sukuk are issued by a special purpose vehicle (SPV) ("issuer") that is established by the government and represents the entity where the assets or the infrastructure investment project will be placed. "Investors" are Sukuk holders who buy Sukuk certificates from either primary or secondary markets.

Advantages

From the originators' perspective

1. Lower cost of funds due to higher rating via credit enhancement

It is a clear proposition that the stronger the security rights of the creditor, the lesser is the risk he faces, and the lower, therefore, is the risk premium he translates into cost of financing. If securitization means lower credit risks for the originator, obviously this should lead to lower funding costs.

2. Access to the capital markets

Access to capital markets via transformation of illiquid assets into liquid and tradeable capital market instruments. Securitization permits companies to obtain funding directly through the capital markets.

3. Diversification of funding sources

Securitization provides an alternative source of capital from bank debts or debts provided by other financial institutions. Using securitization will make originators less dependent on one source of capital.

4. Off-balance sheet finance

Traditional forms of financing involve injection of debt or equity, which gets reflected on the balance sheet. Securitization does neither since it provides funding through the sale of the financial assets to the capital markets. Hence, it facilitates removal of assets from the balance sheet, i.e. off-balance sheet treatment of debt resulting in improved gearing.

5. Improvement of financial ratios

Securitization can help improve financial ratios because it removes both assets and liabilities from the balance sheet. Following securitization, an originator's return on equity, debt to equity and return on assets ratios will improve.

6. Potential Risk Reduction

Securitization transfers credit risks associated with the securitized assets. If desired, through credit enhancement, an originator may transfer substantially all of the risks associated with the assets and receive full or almost full payment of the purchase price up front.





From the investors' perspective

The benefits that are derived from securitization are often seen from the perspective of the originator. However, real benefits exist for the investors as well, including:

1. High quality investment

Sukuk is typically rated higher - the same as government and higher than commercial paper.

2. Better risk-reward relationship

The contracts are based on the belief that the provider of capital and the user of capital should equally share the risk of business ventures. Translated into Sukuk terms, the originator, issuer and investors should all share the risks and the rewards of financing business ventures.

3. Diversification

Having a representative component of asset-backed securities in a fixed-income portfolio provides diversification by type of fixed income product within the fixed-income portfolio.

4. Reduction of event risks

Securitization is predicated upon eliminating the connection between the Trust's right to asset cash flows and the fund provider condition of the originator. Following a "true sale" of assets, the fund provider of the originator should not be able to make a claim against the cash flow generated by the assets. Accordingly, in evaluating the quality of the Sukuk, an investor need not be concerned about events risk associated with the originator, such as industry competition, litigation, etc. Instead, quality is determined by analyzing likely asset performance on the basis of historical delinquencies, defaults and losses, pooled diversification and the credit enhancement available.

5. Liquidity

Sukuk offers investors a high degree of liquidity without being locked into long term commitments, such as those found in term notes or traditional government bonds. Moreover, Sukuk may be liquidated easily due to having various terms from as long as equal to the rental period to as short as per agreed upon the signing period.

Difficulties Confronted While Utilizing Sukuk

In case of a Sukuk, the entire financing is raised on the first day of subscription which sometimes doesn't correspond to the nature of a greenfield PPP. Greenfield projects normally have an uneven pattern of capital expenditure and need injections of different amount of funds at different times throughout their construction periods. Accordingly, the originator must be ready to issue, in such case, different types of Sukuk for this additional funding and in addition to being bankable they must be properly justifiable.

Incorporating PPPs and Green Sukuk to sustain SDGs

Sustainable Development Goals (SDGs) open up the opportunities for the issuance of Green Sukuk as an alternative financing instrument for green projects to support governments commitment to combat climate change. Leveraging untapped Islamic financial capital and innovative green finance will thus become an alternative to close the financing gap for climate actions and accelerate progress towards (SDGs). Moreover, in line with increasing public awareness of the concept of sustainable development, a new investor market is developing, where investors will only invest in instruments that are categorized as "green".

There are several green sectors that can be funded or refinanced via Green Sukuk while incorporating PPP, to name a few: renewable energy, waste management, sustainable transportation, and the use of clean technology for power generation.

Conclusion and Future Implications

The link between infrastructure development and growth is exceptionally robust, as highlighted in this study. Better infrastructure facilitates manufacturing, services, and trade within a country. It enables sound economic development, creates jobs, and helps the transportation of goods and services. Any economy needs reliable infrastructure to connect supply chains and efficiently move goods and services across borders. Sound infrastructure also improves the quality of life for citizens, raises benefits, supports the





protection of vital natural resources and the environment, and facilitates more efficient use of financial resources. Furthermore, essential infrastructure services can reduce inequality and foster inclusion.

This strain is especially substantial for underdeveloped countries, whose economies are undergoing rapid development and urbanization and have a great need for expanded infrastructure. However, most countries are not spending enough to provide the infrastructure needed to reach universal access and meet Sustainable Development Goals (SDGs). Additionally, infrastructure projects typically involve large sums of money and are therefore susceptible to corruption and bribery. Moreover, the quality of infrastructure delivery by governments is often disappointing – construction of new assets costs more and takes longer than expected, and maintenance and service delivery is poor.

Public—Private Partnerships (PPPs) are increasingly being used by these governments and public sector authorities throughout the world as a way of increasing access to infrastructure services for their citizenry and economies. The study concludes that PPP is a significant tool to stimulate economic activity in underdeveloped regions and governments and with strong credit ratings, as it is deemed to create greater value for money for their taxpayers and citizens and allows them to allocate public funds for other local priorities.

Yet it should be noted, that although PPPs are deemed as value drivers for money and assets under their custody are maintained in a good, serviceable condition, PPPs are not a panacea or a remedy for all infrastructure performance problems. Sound public decision-making based on comprehensive analysis and a governance framework fostering transparency and accountability are prerequisites for successful public investment projects.

Moreover, the study presumes Islamic finance with its risk-sharing and asset-backed principles is a natural fit to accommodate various PPP infrastructure investment projects. The paper also advocates Sukuk as a better alternative to bonds with multiple benefits for this task: lower costs of funds due to higher rating via credit enhancement, access to the capital markets, diversification of funding sources, off-balance sheet financing (via securitization), improvement of financial ratios, and potential risk reduction. However, further studies should be conducted on versatile Sukuk structures for practical implementation, especially resilient Green Sukuk structures that comply with SDGs demands for both brown and greenfield projects.

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