



INFRASTRUCTURE FINANCE MECHANISM AND CHALLENGES IN NIGERIA

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ABSTRACT

Infrastructure financing plays an important role in addressing chronic deficiency of infrastructural facilities in developing economies. Inadequate infrastructural facilities discourage investments and retards economic development. Traditional methods of financing infrastructure through budgetary provisions and execution by direct contract award has proven to be inadequate and most often unimplemented creating a financing gap for execution of infrastructure projects in developing countries. This paper assesses the nature of infrastructure financing in Nigeria and highlights the major models of PPP as well as some of the challenges encountered in the mobilizing this type of financing. The paper concludes with some suggestions on the policy measures to be adopted in addressing the identified challenges.

Keywords: Infrastructure finance, challenges of financing, development policy, Nigeria



1. INTRODUCTION

In recent decades, the importance of infrastructure finance on economic, industrial, technological and social development of a country has dominated the policy discussions of developing countries, international donor agencies and developed countries. Financing infrastructure projects remains a major constraint in the delivery of efficient and improved infrastructural facilities across developing countries in general and Nigeria in particular.

Infrastructure finance may be defined as all means or methods available for mobilizing the resources required to finance physical assets and services which are fundamental to the growth and development of an economy. Provision of good infrastructure can accelerate economic development and prosperity in developing countries just as maintenance of existing infrastructure can ensure that developed countries remain developed. The level of accumulated infrastructure facilities is, no doubt, one of the major indices for measuring development of an economy.

With the rising demand for infrastructure co-moving with the accelerating pace of globalization and urbanization, the total global infrastructure investment requirement by 2030 for transport, electricity generation, transmission and distribution, water and telecommunications, according to the OECD, amounts to \$71tn. The European Commission estimates that, by 2020, Europe will need between euro 1.5tn and euro 2tn of infrastructure investments.

Kawalya-Kwaga (2014) emphasizes that the infrastructure gap in Africa per annum is \$93 billion. Every month in the developing world more than five million people migrate to urban areas (Schwartz et al, 2014). Fast growing populations and rising urbanization rates in developing countries have also led to a global shortage of infrastructure services such as roads, rail, mobile and fixed line telecommunications, water and electricity, among others (Water UK, 2013).

In such a rapidly growing and evolving global infrastructure market, there is need for proper understanding of infrastructure financing and its challenges in not only Nigeria but globally, since infrastructure finance has become a global business. While most infrastructure investments are local, the sources of finance are increasingly global.



More so, the continuing need for infrastructure investment places huge demands on financial markets. The aggregate capital sourced by unlisted infrastructure equity funds (operating internationally) since 2004 is close to US\$200bn for water infrastructure only (Water UK, 2013). In Nigeria road infrastructure, on an average, the annual funding requirement is estimated at ₦500b against an average budgetary allocation of ₦120bn with a deficit of ₦380bn. In 2012, out of the ₦143bn budgetary allocation for road infrastructure development only ₦110bn was released with deficit of ₦33bn unimplemented (Federal Ministry of works, 2013).

This clearly depicts the dilemma of infrastructure financing using the traditional method of government budget. Pearson (2013) observes that if Africa is to effectively participate in the global trading environment and reach its true economic potential, it will require a level of investment in infrastructure that goes well beyond the capacity of the government. The private sector will need to be involved and if this is to happen then instruments to reduce risk level and increase returns will need to be developed – that is the public-private partnership (PPP).

PPP, according to Brusewitz (2005), is a medium to long-term venture in which there are key contractual or legal relationship between the public and the participating private sector. PPP therefore refers to a project in which there is cooperation between the public and private sector(s) in one or more of the development, construction, operation, ownership or financing of infrastructure assets, or in the provision of services. Under a PPP arrangement the private sector is typically contracted to design, build, operate, manage and finance new infrastructure and meet government obligations for a set period of time.

The major objective of this paper, therefore, is to present an overview of infrastructure finance through PPP and to examine some its challenges to the infrastructure development in Nigeria. Immediately preceding this introduction is section 2, which provides an overview and methods of financing infrastructure. Section 3 presents some of the challenges of infrastructure finance, and Section 4 provides the way forward.

2. INFRASTRUCTURE FINANCE MECHANISM

2.1. Traditional Infrastructure Financing Mechanism



The traditional mechanism for infrastructure financing is the use of government budget as the primary source of financing infrastructural facilities including provision of portable drinking water, roads, transportation energy, etc. This traditionally method of financing of infrastructure are executed by traditional method of direct contract award.

This method has proven to be inadequate and most often unimplemented creating a financing gap for execution of infrastructure projects. Severe budget constraints and inefficient management of infrastructure by public entities have led to an increased involvement of private investors in the business.

Dailami and Leipziger (1986) show that out of the \$1.3 billion infrastructural financing raised by developing countries, only \$100 million is sourced from private sector sources. But by 1995, the private sector provided \$15,607 billion of the \$22,297 raised, whereas public sources accounted for only \$6690 billion. These show that private sector, in recent years, has attained the role of domineering financiers of infrastructure investments through the public-private partnership (PPP) model.

2.2. Public-Private Partnership (PPP) Infrastructure Financing Mechanism

One of the modern methods of infrastructure financing is private sector initiative. The history of private sector participation in infrastructure development is quite old. Private sector participation in the transport sector, for example, dates back to seventeenth century canal and road concessions in Europe and the United States of America. Private companies built the American railways in the nineteenth century. Many early public transport systems in European and American cities were also developed in this century by the private sector under various municipal charter or franchise arrangements with revenues coming from fares and land development.

Another method of infrastructure financing that has been adopted in recent times in Nigeria is public-private partnership (PPP). It involves construction of a project or provision of services in cooperation between the public and private sector(s). In the view of Trabant and Allard (2008), PPP first emerged in the United Kingdom in the wake of the conservative revolution of Margaret Thatcher.

Beginning in the early 1990s, the government began to explore avenues of co-production of public services with the private sector. PFI, as it was called in the



UK (Private Financing Initiative) spread quickly across sectors and took various forms, depending on the exact role that each project assigned to the private and public sectors.

PPP project generally fill a gap between traditionally procured government projects and full privatization. PPP or P3 model describes a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. Typically, one or more private sector companies form a consortium and are generally described as “Special Purpose Vehicle”. The consortium may mainly consist of a project sponsor, Bank lender etc. More so, the consortium will be developed in a manner as to account for the technical, financial, legal, environmental and social aspects of the PPP transaction.

The proponents of PPP posit that it bring forward the delivery of infrastructure projects, draw on private sector expertise and offer an alternative financing vehicle to traditional government procurement. They also submit that bundling of PPP services for major infrastructure projects provide whole-of-life cost savings, and increased efficiency by delivering services of a higher-quality or at a lower cost.

Two major surveys of PPP projects conducted by the British government, according to Trabant & Allard (2008), estimated average savings of 17% on the completed projects, due mainly to the avoidance of cost overruns in the construction phase. They also discovered that 80% of PPP projects had met their initial delivery time targets, compared to 20% for comparable public-sector projects.

The reports concluded that the main source of the savings was that risks of delays or overruns had effectively been transferred from the public to the private sector. This effective reallocation of risks is the main benefit of PPPs and is the issue that must be addressed most effectively when PPP contracts are negotiated. The opponents of PPP, on the other hand, argue that PPP contracts involve high transaction costs and efficiency is undermined by limited competition in the bidding process.

They also claim that PPPs do not offer value for money because the premium required by the private partner is in excess of the risk they assume, and that



inadequate risk transfer has occurred in some projects and government, and ultimately the taxpayer, has had to bear the financial consequences.

The following are the models available for PPP transactions in Nigeria:

Table 1: PPP Models

s/n	PPP Model	Description
1	Design-Build (DB) or Turnkey Contract	The private sector designs and builds infrastructure to meet public sector performance specifications, often for a fixed price. The cost of overruns is transferred to the private sector.
2	Service Provision Contract	A private operator, under contract, operates a publicly owned asset for a specified period. Ownership of the asset remains with the public entity.
3	Management Contract	A private entity contracts to manage a Government owned entity and manages the marketing and provision of a service.
4	Lease and Operate Contract	A private operator contracts to lease and assume all management and operation of Government owned facility and associated services, and may invest further in developing the service and provide the service for a fixed term.
5	Design-Build-Finance Operate (DBFO)	The private sector designs finance and constructs a new facility under a long term lease and operates the facility during the term of the lease. The private partner transfers the new facility to the public sector at the end of the lease term.
6	Build-Operate-Transfer (BOT)	A private entity receives a franchise to finance, design, build and operate a facility (and to charge user fees) for a specified period, after which ownership is transferred back to the public sector.
7	Buy-Build-Operate (BBO)	The transfer of a public asset to private or quasi-public entity usually under contract that the assets are to be upgraded and operated for a specified period of time. Public control is exercised through the contract at the time of transfer.
8	Build-Own-Operate (BOO)	The private sector finances, builds, owns and operates a facility or service in perpetuity. The public constraints are stated in the original agreement and through on-going regulatory obligations.
9	Build-Own-Operate Transfer (BOOT)	This is an extended version of the BOT model where the private sector builds, owns and operates a facility for a specified period as agreed in the contract and then transfers to the public.
10	Operating License	A private sector receives a license or rights to build and operate a public service, usually for a specified period. Similar to BBO arrangement.
11	Finance Only	A private entity, usually a financial services company, funds a project directly or uses a mechanism such as long-term lease or bond issue.

Source: Obuzuwa (2011).

3. CHALLENGES OF INFRASTRUCTURE FINANCE IN NIGERIA

The major challenges of infrastructure finance are as discussed below.

First, exposure to currency risk is a critical feature of infrastructure financing. Infrastructure project revenues are often generated in local currencies, while servicing of foreign capital, whether debt or equity, involves payment in foreign currency. Fluctuations in the exchange rate of the domestic currency, as well as capital controls limiting currency convertibility and transferability, pose a particularly difficult problem for foreign investors and financiers.

Second, infrastructure investments are typically up-front, with a high degree of asset specificity and risky revenue streams stretching many years into the future. Investors are hesitant to make investments in such circumstances without adequate contractual protection.

Third, the scope for divesting equity holdings in infrastructure investment through IPOs is limited in many developing countries. As a result, project promoters would be locked in their investments for several years.

Fourth, there are very few bankable projects. The project preparation process is not yet sophisticated enough to address bankability issues from the onset. Challenges in the project preparation stage include securing funding for costly feasibility tests and limited project precedents due to the short history of PPP projects in Nigeria.

Fifth, inadequate legal and regulatory framework hinders infrastructure financing. The Federal government and a number of state governments have made significant strides to create a suitable legal and regulatory framework that will encourage private sector participation in infrastructure development projects. However, this framework is yet to be fully established and tested, which may create apprehension and reluctance in the private sector.

Sixth, there is high preference for 'Quick Win' Sectors. Most private sector investments in African infrastructure have been in quick return sectors such as telecoms. Telecoms projects have a quicker gestation period whilst investment in concessions will be recouped over a much longer period ranging from 25 – 30 years.

Seventh, relatively high cost of projects discourages infrastructure financiers. Due to economic and political factors, the cost of undertaking PPP projects in Nigeria is relatively higher compared to costs of similar projects in other countries. Thus the opportunity cost of financing infrastructure development projects in Nigeria is relatively high.

4. CONCLUSIONS

The paper appraises infrastructure finance through Public-Private Partnership (PPP) initiative as well as examines its challenges to the infrastructure development in Nigeria. The need for this appraisal arises from dwindling government resources

which has resulted in ineffectiveness of the traditional methods of infrastructure financing through budgetary provisions and execution by direct contract award.

Thus, has created gap in financing infrastructural projects in Nigeria. The paper highlights importance of PPP projects in covering the infrastructure lacuna as well as some challenges investors encounter in the mobilising PPP financing. Finally, the paper proffers policy measures to address the highlighted challenges. In general, the conclusion is that inadequate infrastructural facilities discourage investments and retards economic development.

5. RECOMMENDATIONS

Granted that financing the much needed investment in Nigeria's infrastructure is one of the critical challenges facing the country, the government as well as the private sector proponent can take certain steps to enable a greater number of infrastructure development projects attract adequate financing. These steps, which are the way forward, include:

- Proper Project Appraisal. In deciding which infrastructure development projects to undertake, emphasis should be laid on indentified public needs which can only be met by direct public private partnership intervention. These are the types of projects that will provide the requisite cash-flows from which private sector investment will be recouped.
- Government Intervention. Government can provide support in a number of ways including giving guarantees on the continuity of the project, which acts as an assurance to investors. Some State Governments in Nigeria such as Lagos State, Imo State and Delta State have also adopted this approach, raising state bonds for infrastructure development.
- The Viability Gap Fund. Government can provide active financial support through schemes such as the Viability Gap Fund. The Viability Gap Fund is a sovereign grant to close the commercial gap on a PPP infrastructure development project. This is necessary where the cost of infrastructure financing is so high that the revenue stream therefrom may be insufficient to yield sufficient returns

- Excellent Legal Framework. The Government must establish and implement a coherent and comprehensive framework for such projects at both the State and Federal level covering recurring issues including risk allocation and mitigation strategies and government support and guarantees.
- Policy makers has to ensure that infrastructure assets are structured to an investment grade level, hedged against macroeconomic risks and are regulated or licensed in some form.
- Enhance the capacity of Nigerian capital markets to supply long-term debt capital in form infrastructure bond, which is critical for the financing of infrastructure projects with long-term assets whose costs may take 10 to 30 years to recoup. The Infrastructure bond could be issued in the local or international capital markets secured by and serviced from the cash-flows of a specific project or a portfolio of projects without recourse to the sponsors.

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