

# MANAGING FINANCIAL MISMANAGEMENT IN CORPORATE GOVERNANCE: RE-BRANDING REAL DEAL FOR PUBLIC PRIVATE PARTNERSHIPS IN NIGERIA

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#### **Abstract**

In certain spheres where government had gone ahead to experiment on Public Private Partnership, so much is expected by numerous stakeholders to ever justify the seemingly last resort. The inherent challenges undoubtedly are systemic as they boarder on the rediscovery, redefinition and redirection of organizational/institutional resources for higher productivity and ultimate sustainability. The Thinker Stinker Scan and ideal financial management tendency web exemplified in this paper are all geared towards harmonizing the apparent discordant financial management predispositions that tend to undermine public private partnership workability in Nigeria.

Scholars have classified infrastructure provision as the foundation of any modern economy. Nigeria like other African countries has been recording deficit in her infrastructural provision despite her quest to become a top 20 economy by the year 2020. It is against this background that the country has been trying to adopt different approaches to infrastructural provision in the country and PPP (Public Private Partnership) is an arrangement that has been accepted between the government and the private sector to meet up with international practices. Infrastructure projects require direct or indirect collaboration between Public and Private sector of the economy, thus political risks are always a factor especially in developing countries where the rule of law is weak and enforcement of contracts unreliable with no respect for property rights. This is the characteristics of PPP in Nigeria, where government never honors agreement. This necessitated this article to chart a new approach for both the government and private investors on how to develop a good relationship between both. The article uses a simple Cobb-Douglas production model to show the relationship between Infrastructure, economic growth and people's welfare. This explains why it is important for Nigeria to develop her critical infrastructure in order to achieve her vision. The article thereafter advocated a slight detour from the old arrangement of infrastructure concessionaire to a more robust approach that takes care of funding for investors, protection of consumers of infrastructure, and the creation of а sovereign wealth fund to assist investors. Keywords: Investors, Public Private Partnership, Infrastructure, Re-branding, Treasury Management

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#### Introduction

Nigeria is a country known for its rich human and material resource endowments with a lot of hope placed on it at independence to be amongst the largest economies in the world a few years after becoming a sovereign state. But much of this potentials and hope has remained a mirage as it has remained untapped, with living standards amongst the lowest in the world coupled with policy inconsistencies by successive governments with high unemployment, corruption, decline in infrastructure development, poor fiscal reforms etc. All the above highlighted problems encouraged the government to embark on a series of economic reforms that will translate into economic development of the country and place it among the 20 largest economies in the world by the year 2020.

Though with a population of over 160 million, Nigeria remained the most populous black nation in the world, 8<sup>th</sup> largest producer of crude oil, with the 7th largest deposit of natural gas and over 100 tertiary institutions producing over 200,000 graduates annually, the basic human capital for development coupled with abundant solid minerals yet untapped. It is against this background that the government embarked on a policy of encouraging foreign investments into the country through trade-liberalization.

However, foreign investors are sensitive to infrastructural availability, being profit-seeking entities that seek to minimize their cost of doing business, they move to developing countries to take advantage of lower labor cost, infrastructural availability, high human capital, large market etc. However, in Nigeria most foreign investments have been going into oil and gas sector of the economy, while the other sectors have remained untapped. The reason for the non-interest is poor infrastructural development of the country. The lack of infrastructure contributes to firms cost structure; most investors will choose not to do business in countries where there is no infrastructure.

Although, there is no agreement among economists on the precise definition of infrastructure, while some associate infrastructure with economic and social overhead capital which includes facilities such as power, transport, and communications, others define it as embracing social overhead capital which includes facilities for water supplies, education, health, information and social welfare. The role of infrastructure as an agent of development was even affirmed by Adam Smith in his treatise.

Successive governments in Nigeria cannot be exonerated for the lack of investments in infrastructure and this is because of the exposure of oil revenue to international oil shocks and volatility, which makes oil revenue unpredictable. Thereby making the government

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to embark on diversification of the economy, by attracting foreign investors to the non-oil sector.

In order to bridge the gap of infrastructural deficit, it is estimated that the government will require about \$10 billion or #1.6 trillion annually over the next 10 years. Faced with the herculean task of raising such huge funds, the government in 2005 and in line with acceptable global economic management practices, introduced the Public- Private Partnership (PPP) scheme. The infrastructure concession content is to allow for participation of the Private sector in financing the construction, development, operation and maintenance of her critical infrastructure especially in the area of road construction, airports, seaports, railway, power etc.

The crux of this article therefore is to examine the success of this arrangement (PPP) in Nigeria and its effect on the economic development. In some other developing countries available literatures have alluded to the success of this arrangement between the government and the Private sector in the provision of infrastructure, which has acknowledged its importance in stimulating Foreign Direct Investment (FDI)

This paper will be in five sections as follows: Section 1, will be the introduction, section 2 will examine the various theories and review of some existing literatures on the topic. Section 3 will focus on the methodology adopted for the paper, which will examine the relationships between the issues raised in the literatures, while section 4 will be discussion and policy implication and section 5 will be the conclusion.

#### Literature Review

Literatures' regarding infrastructural development in most African countries and Nigeria has been very few; however infrastructural development in most African countries is very poor with most of them trying to attract FDI, while potential investors always use infrastructural availability as a basis for competitive advantage in determining investment destination.

Since the end of the Second World War, with rapid improvement in communication technology, there has been a significant increase in foreign investment to developing countries and China has become a major destination, other countries like Thailand, Malaysia and Indonesia, have experienced rapid economic growth due to capital inflows. The reason for this success is the availability of modern infrastructure, Lipsey (2003) and Hill (2005).

Grieco (1986) in his study, foreign investment and development theories and evidence, used 4 major approaches to the relationship between FDI and economic growth in developing countries, identified the following approaches, Neo-classical approach which sees FDI as

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being good for economic growth. The next approach is the Depencia School that emphasized the risks and negative effects of FDI on growth and development, next is the bargaining and negotiating approach whose proponents argued that the distribution of gains from FDI emerged from bargaining and negotiation between foreign interests and developing countries. While the last is the structuralist approach, which challenged the bargaining and negotiating approach's relative optimism about the long term negotiating prospects of developing countries. Suggesting that developing countries are more likely to suffer a long-term decrease in their power, especially over high tech manufacturing companies, this study therefore means that there is a linkage between infrastructures.

Similarly, Bengoa and Sanchez-Robles (2003), argued that for long-term capital flows, benefitting countries are required to have adequate human capital, sufficient infrastructure, economic stability and liberalized markets. Buckley et al (2002) argued further, that the extent to which FDI contributes to economic growth depends on the economic and social conditions of the recipient country. Nations with high savings, open trade regime and high technological levels would benefit more from increased FDI to their economies.

Some scholars have attempted to measure productivity of public infrastructure and these studies includes Aschauer (1989), Otto and Voss (1994 and 1998), Holtz-Eakin and Lovely (1996), Morrisson and Shwartz (1996), Lou and Sin (1997), Cohen and Paul(2003), Delorme et al (1999). All these scholars have found a negative relationship between public infrastructure and technical efficiency, but studies by Berndt and Hansson (1992) have attempted the contribution of public infrastructure in Swedish economy, Kim (1998) examined the effect of infrastructure investment on Korean economy and concluded that infrastructural investment has resulted in economic growth and inflation. Feltenstein and Ha (1999) also attempted the impact of infrastructure on Mexican GDP, while Rioja (1999) has shown that public infrastructure investment can lead to a sizeable increase in GDP. While Boisso et al (2000) attempted to measure the impact of changes in public infrastructure provision on slowing down of the US productivity, while Lin (2001) studied the impact of public infrastructure provision on economic development in some regions in China. Morreno et al (2002), attempted to distinguish between long and short run effects of public infrastructure, while Salinas-Jimenez (2004) considered the impact of infrastructure investment on productivity efficiency in Spanish regions, by estimating a translog cost function. Teruel and Kuronda (2005), measured the contribution of public infrastructure in Philippines agricultural sector and concluded that

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by reducing cost of production, public infrastructure has enhanced productivity in Philippines agriculture. Dementriades and Memuneas (2000) examined the impact of public infrastructure on production in 12 OECD countries and discovered that increased spending on infrastructure is associated with higher levels of production and a positive relationship between demand for inputs and supply of infrastructure, similarly Reinikka and Svensson (2002) have shown that poor public goods can significantly reduce the complementary private investment. Fumajalli (2003), considered the welfare effect of competition for foreign investment, while Hoffman (2003) empirically examines the link between the supply of public infrastructure and capital inflow, by making use of fairly dis-aggregated cross-sectional data and concluded that there is a positive relationship between supply of public infrastructure and capital inflow. Moreover, some scholars have attributed classical factors such as good infrastructure in stimulating FDI and amongst these scholars are Wheeler and Mody (1992), Loree and Guissinger (1995), Richard et al (1999), Asiedu (2002), Sekkat et al (2004). They all agreed that a good infrastructure is a necessary condition for foreign investors to operate successfully, as unavailability of public inputs or poor infrastructure increase firms cost. While Wei (2000) posits that a location with a good infrastructure is more attractive than others. Dunning and Narula (2000,2004), have emphasized the relationship between economic growth and infrastructure and they concluded that good infrastructure is a hall mark of economic development, with most other literatures on development economics establishing robustly that access to basic infrastructure is fundamental to poverty reduction. Krol (2001) gave an excellent summary of the literatures, which suggests that reduction in congestion and adequate maintenance contribute greater benefits from public infrastructure. Therefore, availability of a functional and productive infrastructure is the foundation for a modern economy.

However, private investors who benefited most from infrastructural availability are averse in its investment, because they are traditionally profit oriented. The most common characteristics of most infrastructure investments (railways, seaports, highways, airports, power stations etc,) have long gestation periods, large capital outlay, irreducible/minimum social overhead, industry mix and the indirect routes of pay-off. These peculiar characteristics have made investments in infrastructure generally unattractive to the private sector. Hence the reason why the development and maintenance of infrastructure facilities is left to the state or the public.



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Page et al (2008), stated that the common reason for private participation in the development of infrastructure is the lack of public funding, while Quiggin (1996) observed that the past 25 years has witnessed a decline in public spending on physical infrastructure as a proportion of GDP. Therefore, responsive governments began a self-imposed constraint on public borrowing capacity and the capacity of the public sector to undertake new infrastructural investments. Governments now decided to diversify the sources of infrastructure finance and they sought private sources of capital to fund these projects, they thought that the macroeconomic effects of infrastructure investments would be same irrespective of the sector undertaking it.

Garvin (2003) suggested that the private sector can best contribute by adopting the efficiency and competency techniques that are managed and honed in competitive markets to infrastructure projects. They can develop and introduce innovations in technology design, construction and operation processes, provide independent competitive checks of the technical and economic viability of the projects. Similarly, private sector can provide alternative sources of financing for infrastructure projects when projects are potentially and technically self-sufficient. Moreover, the private sector can provide additional financial resources and perhaps far more agility in accessing capital for infrastructure. Page et al (2008), identified the risks and rewards associated in private equity investments in infrastructure and they alleged that since P.E (Private Equity) holders were at the bottom bucket of the cash flow waterfall, they are likely to absorb project risks, especially demand risk. Furthermore, they analyzed Private Equity Investment Funds (PEIFS) and discovered its low volatilities, diversification of portfolios and mitigation of inflation as some benefits of private equity in infrastructure investment. Orr (2009) observed that P.E investments seem to play a role in faster, cheaper and better project delivery and concluded that P.E investments strategies add value by applying strategic management expertise i.e. giving older assets a facelift, expanding service capacity, bundling smaller assets, generating organic growth, initiating a rate-case review or moving assets to more efficient tax structures. Chowdhury et al (2009), posited that P.E fund structures represent an important new point of access for multicultural development finance institutions into infrastructure projects (MDFIs). As investors in P.E funds, they encourage new investment formats, new fund management practices to tackle risks and opportunities. This phenomenon could have an important impact on emerging markets in Africa, Asia, Latin America, as well as other developing economies, which are in dire need of arable infrastructure system, and raising capital for it is a challenge.

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Kingombe (2011) estimated that infrastructure financing gap between what is invested in Asia and the Pacific region and what is needed is about \$180 billion every year, while Griffth-Jones and Ocampo (2008) disclosed that over the next ten years Africa's total infrastructure investments needs are estimated at over \$250billion.

Bye and large all the literatures have shown a significant relationship between infrastructure, FDI, economic growth and development, poverty and improved welfare of the people, similarly is the funding of infrastructure financing by local investors and private individuals, for a functional infrastructural development is a catalyst for modern economic development.

#### **Public Private Partnership in Nigeria**

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The Nigerian government does not have the resources to undertake the immense cost of infrastructural development, especially in the critical areas of road, rail, water etc. Therefore, funding of these sectors and institutions has been a problem and in order to overcome this challenge the various concepts of Public Private –Partnership (PPP) was developed. In 2005, Infrastructure Concession Regulatory Commission (ICRC) was established to formalize and regulate private sector participation in infrastructure development. The act stipulated that any federal government ministry, agency, corporation or body involved in financing, construction, operation or maintenance of infrastructure by whatsoever name called. May enter into a contract with urgent concession to any duly pre-qualified project proponent in the private sector for the financing, construction, operation or maintenance of any infrastructure, that is viable or any development facility of the government. From this concession refers to a contractual arrangement whereby the project proponent or contractor undertakes the construction, including financing of any infrastructure facility, the operation and maintenance thereof, including the supply of any equipment and machinery for any infrastructure and provision of any services. Infrastructure in practice relies heavily on the private sector and to prevent abuse, government policy objectives have been clearly spelt out to include acceleration of investment in new infrastructure and ensure existing infrastructure is brought up to a satisfactory standard capable of providing services that meets the need and aspiration of the public. To improve the availability, quality and efficiency of power, water, transport and other public services. To increase economic growth, productivity, competitiveness and access to markets. To increase capacity and diversification of the private sector by providing opportunities for international and local investors, with contractors in public infrastructure by encouraging efficiency, innovation and flexibility at the minimum cost.

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To ensure that infrastructural projects are planned, prioritized and managed to maximize economic returns, delivered in a timely, efficient and cost effective manner. The earliest Public Private Partnership (PPP) agreement between the governments resulted in the establishment of specialized zones such as Lekki and Olokola free trade zones, the various power projects to boost electricity supply and the Lekki-Epe expressway in Lagos State.

However, governments in Nigeria has not been living up to its responsibilities of meeting up and respect some of the agreements with local and foreign investors in the areas of infrastructural development. Some of the reneged agreements includes the Ajaokuta steel company limited (ASCL). The steel company is a splendid edifice to the wonders of science and technology, but this is where this dream terminates in the realm of aesthetics adulation.

In 2004, government tried to salvage this complex but when it dawned on them, that it would be impossible for them to run it after they have sunk about \$10billion. Entered into agreement with an Indian firm Global Infrastructure Nigeria Limited (GINL) for a 10-year concession agreement to manage the Ajaokuta steel company limited, who will be investing substantial resources into the project. However, the government revoked this agreement when the Indian firm demanded the completion of a rail line in Delta state and the dredging of the Escravos River. For this has hampered the transportation of needed raw materials input to ASCL (Tell no 44, 2012). Due to the complaints from the Indian firm, a crack was opened in the cozy relationship with the government, as the firm as accused government of reneging on its promise and the government on its part accused the firm of stripping off the component parts of the steel complex. By mid-2008, government had to terminate the agreement, but the parent firm of the Indian company, Global steel holdings responded by taking the country to the International court of arbitration. It must be stated that it was not only Ajaokuta steel that was revoked from the Indian firm, the National Iron Ore Mining Company (NIOMCO), Itakpe in Kogi State earlier concessioner to the firm was also affected by the revocation order. The multibillion-dollar equipment installed is rusting away for lack of use and the hope of about 3500 former workers whose hope of job resumption was thwarted.

Another reference point is the Virgin Nigeria project in the aviation industry, In September 2004; Virgin group brokered an agreement with the government to float Virgin Nigeria Airways (VNA). The new airline would use the international terminal of the Murtala Mohammed International Airport (MMIA) Lagos as its operational base, but 4 years into the agreement (31<sup>st</sup> January, 2008), the airline was forced out of the

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international terminal by the government, eventually Virgin group was forced to pull out, leading to the final collapse of Virgin Nigeria Airways.

In a similar development, the government in 2006 signed a concession agreement with an Abuja consortium to take over the Nnamdi Azikwe International Airport Abuja for 25years, to re-build the runway, airport terminal, provide multi-level car park and a hotel. This was expected to run for a period until it recovers her investment, but the government after a few months revoked the concession agreement. Maevis Limited is another victim of agreement revocation of the government, in 2007, the company entered into agreement with the government to collect revenue for Federal Airport Aviation of Nigeria (FAAN), for the provision of Airport Operations Management Systems (AOMS), which would make the easy facilitation of the airports run by FAAN for 15 years. However, in May 2012, this agreement was revoked and the reason given by government was that some government officials saw it as being exploitative to FAAN.

The refineries were not spared of this cancellation of agreements by the government, during the twilight of the Obasanjo administration, the former president approached some oil majors to invest in the refineries but he was re-buffed on the premise that oil prices were not deregulated in the country. However, the president offered these oil majors the refineries, but the offer was rejected because according to them not all the refineries were in proper shape as they were poorly maintained. It was because of this that the president contacted both Aliko Dangote and Femi Otedola (Zenon oil) to buy the Port-Harcourt and Kaduna refineries. Both men were said to have paid \$561 million and \$160 million respectively (Tell no44,2012), both deals was later revoked by the Yaradua/Jonathan administration in order to placate some people, thereby dashing the hope of many Nigerians who felt that the refineries privatized, the end is here for fuel shortage problem. The situation now is such that in terms of refinery capacity utilization Nigeria is rated 15% while both Egypt and South Africa are 80% and 85% respectively.

In another development, the Lagos-Ibadan expressway is another victim of government's contract breach, with the recent revocation of its concessionaire agreement with Bi-Courtney Highway Services Limited (BHSL). The agreement signed in 2009 for 25 years between the government and BHSL to design, build, operate and transfer the expressway, the design will be eight lanes from Lagos-Sagamu interchange, from where it would become a six-lane carriage to Ibadan end. By this arrangement, the concessionaire was to source the fund and recoup its investment through toll collection after its completion. Like other previous agreements, it has been revoked and the concession terminated.

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This litany of breach of agreement by the government made both the World Bank and IFC (International Financial Corporation) to rank Nigeria 131<sup>st</sup> on the list of 185 countries with ease of doing business; this has been the situation of some of the PPP agreement in Nigeria, displaying the seriousness of government at infrastructural development.

#### **Research Methodology**

This paper will however, adopt a simple model of an economy with foreign investment and public infrastructure with a diversified equilibrium where the model is used to examine the impact of increased labor on production of private goods, public infrastructure, foreign investment, welfare and complete specialization.

Consider a small open economy that produces two final goods (an exportable) and B (an importable). Both goods are produced by means of capital and labor; this is akin to a pure public input that enters private sector production functions.

This is as follows:

A=G^ $\alpha$  K\_a^(1- $\lambda$ )-L\_a^ $\lambda$ 

B=G^ $\alpha\beta$  K\_b^(1- $\theta$ )-L\_b^ $\lambda$ 

where  $\alpha$ ,  $\lambda$  and  $\theta$  are parameters in the range (0,1);  $\beta$  is strictly non-negative; Ka and Kb respectively are capital used in the production of A and B; La and Lb respectively are labor used in the production of A and B.

Producers of the final goods take the supply of public infrastructure as given. This implies that there are constant returns to scale at the firm level, but for the industry as a whole, there are external economies.  $\beta$  greater (less) than unity implies that B-industry (A-industry) derives greater benefits from the infrastructure as compared to A-industry

(B-industry). Because of the external nature of the economies of scale, both final goods are produced under conditions of perfect competition. Labor is immobile across international boundaries and its supply is fixed. The wage rate (w) is determined by the interaction of domestic supply and demand. The supply of domestic capital is fixed, however, due to unrestricted international capital mobility; unlimited amount of capital can be acquired from the international market. In other words, foreign investment can occur in both the private and public sectors.

The domestic producers take the rate of return on capital  $(r^{-})$  in the international market as given, which also equals the rate of return on capital in the domestic market. The optimal output of A-industry is determined by the following first order condition.

 $I=\theta[\bar{r}/G^{\alpha}] [w/\bar{r}]^{\lambda}....(1)$ Where  $\theta=[1/[\lambda^{\lambda}(1-\lambda)]^{((1-\lambda))}]>0$ 

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The right hand side of eq. (1) is the unit cost of production of A, which decreases as the supply of public infrastructure increases and the left-hand side is the price, which has been set equal to unity, in other words, an increase in the provision of public infrastructure leads to positive spillovers to the final goods sector.

The profit maximizing output of B-industry is determined by the following first order condition where p is the unit price.

 $P=\Omega[\overline{r}/G^{\alpha}\alpha\beta] [w/\overline{r}]^{\alpha}\theta....(2)$ 

#### Where $\Omega = [1/[[\theta^{\theta}(1-\theta)]]^{((1-\theta)})] > 0$

The right hand side of eq. (2) is the unit cost of production, which decreases as the supply of public infrastructure increases. Since the economy under consideration is small, it cannot influence p, which is determined in the international market. Unlike most existing studies, this model assumes that provision of public infrastructure involves fixed as well as variable cost as follows:

#### C=w,(r,) $G,\gamma,\mu,\varphi=[\gamma+\mu G] [w/r]^{\phi} r$

Where  $\gamma$  and  $\mu$  are positive and  $\phi$  lies in the range (0, 1).

 $\gamma$ =0 implies that there is no fixed cost and hence the average cost equals the marginal cost. The above cost function is consistent with real life situations where provision of infrastructure involves a significant fixed cost. Because of the presence of the fixed cost, the public infrastructure industry is characterized by internal economies of scale, this model views public infrastructure as being produced by a public firm that is not focusing on profit maximization. The optimal supply of public infrastructure is determined by comparing the average cost of production with the marginal benefits to the producers as follows:

 $\alpha A/G+P[\alpha\beta B/G]=[(\gamma+\mu G)/G] \qquad [w/r - ]^{\varphi} r$ 

The right hand side of eq. (3) is average cost of public infrastructure production, whereas the first and the second terms on the left-hand side respectively are the marginal benefits to the producers of A and B. The cost of public infrastructure is financed by means of non-distortionary income taxation (see Feeben 1998, Feeben and Matsumoto 2000). The market clearing condition for labor, which is assumed to be in fixed supply, is as follows:

a.  $\lambda \theta [w/r^{-}]^{(-1-\lambda)} [A/G^{\alpha}] + \theta \Omega [w/r^{-}]^{(-(1-\theta))} [B/G^{\alpha}\beta] + \phi [\gamma + \mu G] [w/r^{-}]^{(-(1-\phi))} = L^{-}.....(4)$ 

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# The first, the second and the third terms on the left-hand side of eq. (4), respectively, are the demand for labor in industry A. B. and G: whereas the right hand side is the supply of

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the demand for labor in industry A, B and G; whereas the right hand side is the supply of domestic labor.

The equilibrium foreign investment (Kf) in the domestic economy is determined by the following condition where  $K^-$  is the supply of domestic capital, which is assumed to be fixed.

θ(1-λ) [w/r<sup>-</sup>]<sup>λ</sup> [A/G<sup>λ</sup>α]+Ω(1-0) [w/r<sup>-</sup>]<sup>λ</sup>θ [B/Gαβ]+(1-φ)[γ+μG] [w/r<sup>-</sup>]<sup>λ</sup>φ=K<sup>-</sup>+K\_f...(5)

The first, the second and the third terms on the left-hand side of eq. (5) respectively, are the demand for capital in industry A, B and G; whereas the right hand side is the aggregate supply of capital. Eq. (5) also shows that foreign investment can take place in all sectors of the economy under consideration, Bougheas et al. (2003).

This completes the description of the production side of the economy. Eqs. (1)–(5) are five equilibrium conditions in five endogenous variables (A, B, G, Kf and w) and four exogenous variables ( $P,r,K^-$  and  $L^-$ ).

It is well known that the presence of external economies can result in multiple-equilibria involving complete specialization in one final good.

The next model presented will correspond to the case of diversified equilibrium involving incomplete specialization.

Labor supply, foreign investment, provision of public infrastructure and welfare: the case of incomplete specialization.

Eq. (1) can be used to establish the following relationship between the wage rate and provision of public infrastructure, where a circumflex is used to denote proportional changes (i.e.,  $w^{\circ}$  and  $G^{\circ}$  respectively are proportionate changes in the wage rate and provision of public infrastructure).

 $w^{=}[\alpha/\lambda] G^{-}....(6)$ 

Eq. (6) shows that an increase in the provision of public infrastructure increases the wage rate only if the infrastructure is productive (i.e.,  $\alpha > 0$ ). This follows from the fact that infrastructure provision increases the productivity of primary factors used by the private sector.

It is clear from eqs. (1) and (2) that in the case of a diversified equilibrium (i.e., an equilibrium that involves incomplete specialization), changes in labor supply do not affect the provision of public infrastructure and hence by making use of eq. (6), it can be argued that labor inflow does not affect the equilibrium wage rate (see eq.2). This follows from the fact that, owing to free international capital mobility, the rate of return on capital

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is determined in the international market. Variations in the provision of public infrastructure will affect the wage rate if capital was not fully mobile across international boundaries. Some existing literature does not explicitly include public infrastructure that suggests that a small inflow of labor does not affect welfare of a small open economy.

#### DISCUSSION AND POLICY IMPLICATION

The model presents a unified framework where both foreign investment and public infrastructure are endogenous which allow the impact of labor inflows on foreign investment, provision of public infrastructure and welfare. However, a number of empirical studies have demonstrated the importance of the provision of public infrastructure in real economies and in real life with foreign investment endogenous.

This stylized model of a small open economy that produces two final goods by means of capital, labor and public infrastructure. Infrastructure is produced by means of capital and labor while its cost is financed by non-distortionary taxation. With existing studies explicitly include public infrastructure, this model assumes that provision of public infrastructure involves fixed as well as variable cost and the presence of public infrastructure gives rise to external economies of scale, which gives rise to multiple-equilibria where both complete and incomplete specialization was considered. International capital mobility has made foreign investment in both private and public sectors possible. Within the context of this model, an increase in labor supply is attributed to exogenous labor inflows.

For a case of a diversified equilibrium, an increase in labor supply does not have any effect on the provision of public infrastructure and hence the wage rate.

From the above, it seems that an increase in labor supply increases welfare as long as the public infrastructure is productive and its provision involves some fixed cost. This linkage, between foreign investment and public infrastructure with labor mobility and welfare, has shown that theoretically and empirically there is a close relationship between FDI, infrastructural development and the welfare of the people.

It is against this background that scholars have discovered that since infrastructural development is a public-good with externalities and lots of political decision-making, this could have explained and influenced decisions in Nigeria's PPP arrangement. Moreover, the financing of infrastructure does not appear to be a viable avenue for attracting foreign capital to developing country like Nigeria.

Therefore, to make a success of PPP (Public-Private Partnership) in Nigeria, it is advised that government needs to give their support to private investors through tax incentives;

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direct financing, government equity and guarantees improve project cash flows and reduce risks.

More so, it is imperative for government to make available sufficiently long-term debt capital for matching maturities (long-term assets to be funded through long-term debts and vice-versa) through the establishment of a sovereign wealth fund in order to avoid the risk that a project's cash flows may fall short or the required debt service obligations when such payments come due. Due to Nigeria's low capital market development, there is a need for infrastructural projects financing to tap international financial markets for long-term finance as the size and depth of local equity markets are very small, less liquid, with a narrower investor base.

Similarly, there is a need for a review of the law establishing Infrastructure Concession Regulatory Commission (ICRC) agreement to reflect international best practices. As a regulatory institute, they are expected to balance the distribution of risks and responsibilities between the investor and the government. As both of them had a separate objective that requires a special arrangement, for a private investor comes to invest so that he can make money but infrastructure provision is the responsibility of government to the public. ICRC should ensure that national expertise in PPP development and implementation is necessary to effectively design and monitor the agreement. In this respect, learning curve effects will be a positive point, for a successful PPP requires strong public sector commitment and support, in order to ensure the continuation of a project and reduce its long-term costs.

Moreover, government should ensure that contracts are as complete as possible to include clauses on unforeseen events, specifying what each party has to do in any contingent event.

It should be noted that PPPs are a multi-player game, in addition to the public sector and the private investor, the interest of the citizens must be kept in mind very often. The most profitable tariff for the private investor is not efficient for society. Again, the interests of the private investor must be balanced with the interest of the consumers/citizens, as the potential for public outcry should not be underestimated.

The inclusion of the paying public in design and monitoring considerations is critical in ensuring use of infrastructure, ease of implementation and the sustainability of the PPP concept.

International financial institutions may be key, in facilitating financing of infrastructure at a time of limited liquidity and ensuring appropriate loan maturities. International

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financial institutions involvement can add substantial value to PPP, provided they are involved at an early stage in the project assessment phase during which key projects are being conceived and their independence maintained vis-à-vis the interests of parties involved in PPP, as their support cannot be substituted as a long-term viable financing concept.

#### Conclusion

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Successive governments in Nigeria have realized the effect of infrastructure deficit in the country; as a result, several attempts have been made to encourage PPP arrangement as an alternative means of achieving this shortfall. However, most of the concessionaire agreement entered into between the government and private investors have not yielded the expected results, as most have not been kept in the past. This article therefore, attempt to detour a little from other previous works by advocating a new approach that will facilitate a common understanding between the government, the private investor and ICRC (regulatory agency).

Similarly, due to the low development of the capital market in Nigeria, the creation of a sovereign wealth fund by the government is advocated, in this paper to assist investors in meeting with their financial obligations to their creditors and for government to keep its own part of agreements, with consumers' interests always taken care of through socially desirable price.

However, PPP arrangement might not be the sole way out of the quagmire of infrastructural deficit in Nigeria but they have the potential to offer high cost efficiency under certain conditions, if the government and its agencies are institutionally vision to know exactly what it wants in terms of infrastructure provision. More so, it must be willing and able to monitor the fulfillment of such arrangement, and then a partnership with the private investors may provide an alternative superior to government investment in infrastructural provision.



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