Appraisal of Private Sector Involvement in Infrastructure Development in Lagos State, Nigeria

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Abstract: The need for the provision of infrastructure in any developing country cannot be overemphasized as it constitutes the backbone of the country's national economy. Considering the importance of infrastructure, government at all levels has often borne the full responsibility of providing infrastructure via dependence on loans and credits from financial institutions not recognizing the fact that the investment requirement for the infrastructure deficit is such that cannot possibly be met by relying on the public sector to boost public investment without increasing public borrowing. To this end, this research sought to appraise the involvement of the private sector in infrastructure development in Lagos State through the use of the public-private-partnership (PPP). Questions were asked to investigate the level of awareness about and the use of various models or variants of PPPs. 105 questionnaires were administered on professional firms/agencies (construction consultants, contractors, financing institutions and concessionaires) that have been or are involved in PPP projects in Lagos state. 66 responses were obtained. The data was subjected to both descriptive and inferential statistical analysis. The results of the study indicate that the levels of awareness of private sector involvement in infrastructure development using PPPs as well as the areas of involvement were not significant. It is recommended that government should put more efforts to improve the level of awareness on the involvement of the private sector participation in the provision of infrastructure through public enlightenment both locally and internationally stating the benefits that are obtainable both for citizens and investors.

Key Words: Private Sector, public-private-partnership, Infrastructure, Development, Nigeria.

1. Introduction

A country's level of social and economic infrastructure constitutes the backbone of the national economy; it improves human welfare, contributes to economic activities and has considerable potential for directly reducing poverty (Ogunlana, 2010; DFID, 2007). It also determines to a large extent the type of operating environment that is available to the production sectors of the economy. It is a fact that the level of development of these facilities is a measure of the living index for her people according to Dozie (1999) as cited by Adeniyi (2008). To improve the efficiency and productivity of an economy, it is therefore important to provide adequate and reliable infrastructural facilities.

The level of awareness is an essential factor in ensuring a successful implementation of any new policy like the private sector involvement in infrastructure provision. The level of awareness is seemingly too low going by the scarcity of available relevant literature and limited experience on this type of relationship (Ikechukwu, 2007) and this may hinder the full productive implementation of the concept as awareness of a process is the first step at endearing the concerned construction industry professionals and the citizens (Akintola, 2006) about the possible benefits of its acceptance. People tend to be confusing private sector participation in infrastructure provision with privatization which is not generally accepted as it received a great uproar by the citizens of Nigeria (Alabi, 2000). In the words of Andrew Porter of Price Waterhouse Cooper (PWC) Corporate Finance PPP specialist in Johannesburg (PWC, 2006) as cited in (Adeniyi, 2008) "the initial reaction to public private sector collaboration in service delivery resulted from the belief that it is a new ploy by the capitalist to corner public resources".

According to Ehebha (2011) infrastructure development has in recent times assumed a central importance in Nigeria's fight to attain social and economic stability. The federal government and all state governments

are using infrastructure as the focal point of their administrations and policy enactments. Infrastructure generally has to do with the fixed provision of tangible assets on which other intangibles can be built on. Not limited in scope, it revolves the provision of housing, power (electricity), transport, education, communication, and technology.

2. Statement of problem

Essentially, the need for the provision of infrastructure in any developing country cannot be overemphasized as it constitutes the backbone of the country's national economy. Considering the importance of infrastructure, government at all levels (local, state and federal) has always borne the full responsibility of providing infrastructure via dependence on loans and credits from financial institution not recognizing the fact that the investment requirement for the infrastructure deficit is such that cannot possibly be met by relying on the public sector to boost public investment without increasing public borrowing. So as to achieve the aim of introducing private investors into the development of public infrastructure, the level of the public's awareness of private sector involvement in infrastructure development must be assessed in addition to the areas of private sector involvement infrastructure development. As a result, this work seeks to appraise the private sector involvement in PPP for infrastructure development.

Specifically the study is set out to pursue the following objectives:

- 1. To determine the level of awareness about private sector involvement in PPP for infrastructure development.
- 2. To assess the areas of involvement of the private sector in PPP for infrastructure development in the economy.

3. Overview

3.1 The concept of PPP

Public-private partnership (PPP) is emerging as an alternative method for the delivery of infrastructure and services in different parts of the world (Cheung & Chan, 2011; Forrer, Kee & Newcomer, 2010; Sarmento, 2010; Dada & Oladokun, 2008). PPP depicts a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. These schemes are sometimes referred to as PPP or P3 (Harris, 2008). Typically, a private sector consortium forms a special company called a special purpose vehicle (SPV) to build and maintain the asset. The consortium is usually made up of a building contractor, a maintenance company and a bank lender. It is the SPV that signs the contract with the government and with subcontractors to build the facility and then maintain it. A typical PPP example would be a hospital building financed and constructed by a private developer and then leased to the hospital authority. The private developer then acts as landlord, providing housekeeping and other non medical services while the hospital itself provides medical services (Adeniyi, 2008). Initially, most publicprivate partnerships were negotiated individually, as one-off deals. In 1992, however, the Conservative government of John Major in the United Kingdom introduced the Private Finance Initiative (PFI) (UNISON, 2007) the first systematic program aimed at encouraging public-private partnerships. In the 1992 program, the main focus was on reducing the Public Sector Borrowing Requirement, although, as already noted, the effect on the public accounts was largely illusory.

3.2 The difference between PPP and privatisation

PPPs must not be confused with privatization. PPPs constitute an approach to introducing private management into public service by means of a long-term contractual bond between an operator and a public authority. Fundamentally, it secures all or part of the public service, so delegated by private funding and calls upon private sector know-how. On the other hand, privatization means transferring a public service or facility to the private sector, sometimes together with its ancillary activities, for it to be managed in accordance with market forces and within the framework of an exclusive right granted by a ministerial or parliamentary act (or sometimes a license). (UN/ECE, 2000)

According to Delloitte (2006) critics of PPP argued that it is just privatization (a process with pejorative connotations in some places) "by the back door" and some definitions place privatization at one end of a range with conventional procurement at the other end and PFI type PPP in the middle. It is important to realize that there are, however, fundamental differences between the two approaches. Privatization is about taking an existing state owned business, ideally reorganizing it to make it attractive for sale and then dropping it, some would say dumping it, into the private sector. Done properly, with an accurate assessment of the size of the assets concerned, a clear objective as to the purpose of the privatization (hopefully efficiency gains rather than just revenue raising for the government) and sensible pricing to develop competition this process can produce very positive results for the government and the consumer. However, many governments, particularly in the developing world, understandably are concerned about the loss of national assets to a (probably) foreign owned private sector. Essentially, the public sector loses control of the asset to the private sector except for a certain amount of regulatory control over items such as customer tariffs. PPP is an entirely different approach to delivering services to or on behalf of the public sector. The effect of a typical PPP structure is usually to create a single stand-alone business, financed and operated by the private sector. The purpose is to create the asset and then deliver a service to the public sector client, in return for payment commensurate with the service levels provided. Rather than taking the existing delivery mechanism and transplanting it into a wholly different operating environment as in privatization, the PPP process takes the service delivery back to basics and begins by defining the services to be delivered specified only in terms of the outputs to be achieved. The key is to specify the output of the service required and to allow the private sector to determine which inputs are required, including infrastructure and skills, to achieve that specified output. Because it is the public sector specifying the required output of the private sector it retains a great deal of control over the standards and type of service to be delivered in a way that a privatization arrangement does not. In addition, a privatization is, to all intents and purposes, a permanent arrangement whereas a PPP contract is for an agreed and finite time period. Full operational control and "ownership" reverts to the public sector at the end of the contract term. It is this temporary nature of the agreement and the degree of control enjoyed by the public sector, which fundamentally differentiates PPP from privatization. It is also important to note that there is no need to transfer title of the asset to the private sector. The state owns the asset throughout the process; there is no "loss" of national assets. It is generally true; therefore, that PPP is more likely to be suitable for stand-alone projects whilst privatization is more likely to be suitable for large utilities. However, it is important to remember that roles formerly carried out by state employees are now likely to be carried out by private sector employees (although they may be state staff seconded to the private sector operator) and there well may be job losses(Harris 2008).

Table 1: Main differences between Conventional public procurement and PPP/concessions

	Conventional public procurement	PPP/Concession contracts
Definitions	Supply, works, or service as defined by public authority.	Private concessionaire creates facility and service on the basis of a negotiated agreement between public private sectors
Main characteristics	Single objective Short term No link to operation No public project delegation • Public authority direct operation • No prior financing, co-financing or project financing •No entrepreneurial investment • No project design freedom • Contract does not deal with service (secondary contract) • Entrepreneur is not project manager • No management freedom • No long-term occupancy of public Property	Multiple objectives Long term Linked to service management Public mission assignment Operation directed by concessionaire Financing, co-financing, mission financing by concessionaire Investment by concessionaire Project/service design freedom Contract deals with service needed by public authority ("main contract") Concessionaire is project manager Concessionaire is free to manage contract Generally long-term occupancy

Source: United Nations Economic Commission for Europe (2000).

3.3 The construction industry and infrastructure

The construction industry can be defined as that section of the economy responsible for planning, designing, procurement, construction and delivery of building, civil engineering and public works for government and private institutions as well as individuals (Osaba, 1993 as cited in Adewuyi, 2004). Seeley (1984) stated that the construction industry embraces a wide range of loosely integrated organization that collectively constructs, alters and repairs a wide range of different building and civil engineering structures. Also Willis (1987) supported that the construction industry is a company organization, which centers on the project under construction or adaptation.

3.4 Suitable sectors

A PPP approach is suitable for any sector where it is possible to develop a service based on an output specification. In the United Kingdom (UK), the following sectors are being patronized: Health (hospitals and clinics), Education (Schools and University accommodation), Justice (prisons and courthouses), Transport (light rail, roads, bridges), Utilities (water, waste disposal and street-lighting), social housing, defence (training simulators, sea and land tank transporters) and government buildings. The only sector where it has not really worked and where the UK government has recommended that no more projects take place is in Information Technology (UN/ECE2000). This for a number of reasons that include: (1) the speed of change in the sector making it difficult to define effective long-term outputs;(2) the high level of integration of IT into other business systems makes it difficult to delineate areas of responsibility and effectively allocate risk; and (3) the nature of the capital investment with IT project costs dominated by operating costs not up-front investment. Areas where PPPs have been used include:

3.4.1 Transportation

Public-private partnerships have played an increasingly central role in answering the pressing need for new and well maintained roads, tunnels, bridges, airports, ships, railways, and other forms of transportation. Internationally, transportation has been far and away the largest area of PPP investment (Doyin, 2006).

3.4.2 Water and Waste Water

The largest European water PPP is in the Netherlands, where the Water Board of Delft land awarded a 30-year concession, with a total contract value of €1.58 billion. The project includes the design, construction, and operation of a new wastewater treatment plan and, to comply with more stringent discharge requirements, the refurbishment and operation of an existing wastewater treatment plant. Water and Wastewater PPPs (Doyin, 2006)

3.4.3 Education

PPPs can deliver substantial innovation to education infrastructure and service delivery. While arrangements differ, the private sector typically finances, designs, constructs, and operates a public school facility under a contract with the government for a given time period, for example, 20 to 30 years. At the end of that concession period, ownership of the school facility transfers to the government. Under typical education PPPs, the private sector invests in the school infrastructure and provides related non-core services (school transport, food services, cleaning, and so on), under contract while the government continues to provide core services, namely, teaching.

3.4.4 Health/Hospitals

In recent years, a number of countries have aggressively moved to diversify the sources of health care funding by using PPP arrangements to meet the growing demand for health care infrastructure. Typically, a private consortium designs, builds, owns, and operates a hospital and leases it back to the relevant government entity—such as a hospital board—for a period of 20 to 60 years. In Portugal, 31 hospitals will be built using PPPs. The entire program, at an estimated cost of \$37 billion, should be complete by 2014, with 10 new hospitals launched in 2006 (Delloitte, 2006). The contract covers the design, construction, financing, maintenance, and operation of the facilities as well as hospital management and some clinical services.

3.4.5 Public Housing, Land and Area Development

In Australia and Ireland, the central governments have encouraged the use of concession models in their pilot PPP public housing projects. But the country with the deepest experience in this sector remains the Netherlands, which has been applying PPPs to social housing and regeneration projects for nearly two decades. This model proved quite successful for more than 100 locally initiated projects in the Netherlands (Nijkamp, VanDer Burch & Gabriella, 2002) Joint venture, the most commonly used PPP arrangement for these projects, suits the local governments' need to retain control over planning and development while utilizing the private partners' available resources and expertise. Housing and Development PPPs:

3.4.6 Defence

PPP projects in the defence sector include equipment maintenance and installation, supply chain integration and operational support, depot maintenance, specialized military training and real estate management (land

development, privatized housing and base closures and development). The projects typically are designed to overcome fiscal constraints, manage life-cycle costs, and reduce pressure on military personnel. The UK Ministry of Defence has employed various PPP models for more than 56 defence projects—everything from building military accommodations to training personnel to putting up satellites. Total value: £4.65 billion.

3.4.7 Justice/Prisons

Herizonte (2006) as obtained from (news.bbc.co.uk) reported that Britain currently has 10 prisons run by private companies, 8 of them built under the PFI. These buildings are leased back to the prison service for a period of 25 years after being designed and constructed by commercial groups .The results have been generally positive, as construction times have dropped by more than 40 percent; costs by 20 percent (http://www.chi.org.uk/pdf/prisonsupport.pdf).

4. Research methods

The research was conducted by an examination of relevant literature and recourse to field investigation. From the 172 firms and agencies involved in the execution of the various PPP projects executed by the Lagos State Government as obtained in the course of the research, a sample size of 105 respondents which represents 61% of the firms and agencies were employed based on non probabilistic sampling. Survey research design which was cross-sectional in nature was employed with the aid of questionnaires and interviews as the research instruments for the study. Well structured questionnaire after the objectives of the study coupled with personal interviews with professionals representing the professional firms or agencies (i.e. Builders, Quantity Surveyors, Architects, Engineers and Estate Surveyors), financial institutions and concessionaires were used. The questionnaires requested biographical information about the respondent organisations. It also sought to know the level of awareness of respondent organisations about the involvement of the private sector in PPP for infrastructural development. The levels of measure were from 1= 'not aware' to 5 = 'strongly aware'. Areas where the private sector has also been involved in infrastructural provision were also requested. The level of involvement of the private sector in infrastructure provision was also used. The levels of measure were from 1 = 'not involved' to 5 = 'highly involved'.

78 questionnaires were distributed to professional establishments (Quantity Surveying {26}, Architectural {12}, Building {8}, Estate Surveying {2} and Engineering {30}). Financial institutions received 18 and concessionaires received 9 so as to obtain information from a good size of the sample frame. At certain times during the course of this report, the researchers were obligated to seek information on the subject matter through interviews with some respondents when given the opportunity. This way, the researchers were able to understand answers given both to the open and closed-ended questions posed to the respondents. Due to the fact that some of the questions in the questionnaire were left unanswered by some respondents coupled with the fact that some of the questionnaires got missing probably as a result of carelessness on the part of respondents, the breakdown of the properly filled questionnaire which represents 62.85% of the total questionnaire properly completed is provided below: The analysis of the collected data was carried out using descriptive and inferential statistical methods. Tables 2 to 10 indicate some aspects of the results of the descriptive statistical analysis.

5. Analysis and results

5.1 Descriptive analysis

Table 2: Type of firms/Agencies

Firms/agencies	Frequency	Percentage
Building	3	4.50
Quantity Surveying	18	27.30
Architecture	10	15.20
Engineering	24	36.40
Estate Surveying	1	1.50
Concessionaire	6	9.10
Bank	4	6.00
Total	66	100.00

Table 2 shows that 4.50% of responses were obtained from Building firms, 27.30% of them are Quantity Surveying firms, 15.20% of the sample are Architectural firms, 36.40% of the respondents are engineering firms, and 9.10% of them are Concessionaire while the remaining 6.00% of the respondents are Bank representatives.

Table 3 indicates the number of years of experience of respondents

Table 3: Number of years of experience of respondents

Years of work experience	Frequency	Percentage (%)
1 -5 yrs	36	54.50
6 -10 yrs	20	30.30
11 - 20 yrs	10	15.20
21 - 30 yrs	-	-
above 30 yrs	-	-
Total	66	100.00

In terms of years of working experience, it was discovered that 54.5% of the respondents have worked for between 1 - 5 years, 30.3% of them have worked for between 6 - 10 years while the remaining 15.2% of the respondents have between 11 - 20 years of working experience.

Table 4 reports on the level of awareness of respondents about PPP as a method of project delivery

Table 4: Awareness about Public-Private Partnership as a method of project delivery

	Frequency	Percentage (%)
Slightly aware	54	81.80
Aware	7	10.60
Strongly aware	5	7.60
Total	66	100

Table 4 shows that 81.8% of the sample is slightly aware of the public –private partnership which was defined as a method of project procurement that entails a cooperative venture between a government service and a private sector company, 10.6% are aware while the remaining 7.6% of the sample are strongly aware. Table 5 indictes the awareness of respondents about parties involved in PPP projects.

Table 5: Awareness about parties involved in PPP arrangement.

Frequency	Percentage (%)
47	71.20
17	25.80
2	3.00
66	100
	47 17 2

From Table 5, it is observed that 3% of the respondents are strongly aware that government and a private company are always the parties involved in any public-private partnership arrangement, 25.8% of them are aware while the remaining 71.2% are slightly aware.

Table 6 indicates the level of awareness about various models of PPP

Table 6: Awareness about various models of Public-Private Partnership.

Level of awareness	Frequency	Percentage (%)
Strongly unaware	63	95.50
Unaware	1	1.50
Aware	1	1.50
Strongly aware	1	1.50
Total	66	100

In terms of the various models of public private partnership, 95.50% said they are strongly unaware of the various models, 1.5% are unaware, 1.5% are aware while the remaining 95.5% of the sample said they are strongly aware of the various model of public – private partnership.

Table 7 indicates level of awareness about concession as a way of government granting an entity exclusive right

Table 7: Awareness about concession as a way of government granting an entity exclusive right

Level of awareness	Frequency	Percentage (%)
Slightly aware	1	1.50
Aware	4	6.10
Strongly aware	61	92.40
Total	66	100

On collating the respondents' definition of concession as a process whereby the government grants a private entity exclusive right to provide, operate and maintain an asset over a long period of time in accordance with performance requirements set forth by the government, it was discovered that 1.5% are slightly aware of the definition, 6.1% of them are aware while the remaining 92.4% of the respondents are strongly aware of the definition.

Table 8 indicates the awareness about employing private sector in infrastructure provision in only few sectors

Table 8: Awareness about employing private sector in infrastructure provision in only few sectors

Level of awareness	Frequency	Percentage (%)
Strongly unaware	46	69.70
Unaware	11	16.70
Slightly aware	8	12.10
Aware	1	1.50
Total	66	100

Table 8 reveals that 69.7% of the respondents are strongly unaware of the fact that private sector can only be employed in infrastructure provision in only a few sector, 16.7% were unaware, 12.1% are slightly aware while the remaining 1.5% said they are aware.

Table 9 indicates level of awareness about the concept of privatization as a process of transferring a public service to the private sector

Table 9: Privatization as a process of transferring a public service to the private sector

Level of		
awareness	Frequency	Percentage (%)
Strongly unaware	45	68.20
Unaware	13	19.70
Slightly aware	4	6.10
Aware	3	4.50
No response	1	1.50
Total	66	100

The responses on the definition of privatization were collated from which it was observed that 68.2% of the sample was strongly unaware of the definition, 19.7% are unaware, 6.1% of them are slightly aware, and 4.5% said they are aware of the definition while the remaining 1.5% did not answer the question. One of the questions was structured to establish the extent of involvement of respondents identified in the study population in the use of PPP. Table 10 shows the results.

Table 10: Number of PPP projects respondents have been involved in

Project	Frequency	Percentage (%)
1-5 Projects	57	86.40
6-10Projects	9	13.60
Total	66	100.0

Table 10 shows that 86.4% of the respondents have been involved in PPP projects ranging from a minimum of 1 to a maximum of 5 while the remaining 13.6% of them have been involved in such projects ranging from a minimum of 6 to a maximum of 10 projects. It is worthy of note that the involvement of this respondents is at any stage of the construction/building process and it is also possible for 2 or more professionals to be involved in the same project.

Table 11 shows areas of private sector involvement in infrastructure development

Table 11: Areas of private sector involvement in infrastructure development

Sectors of Involvement	N	Mean	Ranking
Education	23	4.26	1
Transportation	64	4.08	2
Tourism	47	3.38	3
Housing	45	2.89	4
Security	59	2.76	5
Agriculture	49	2.10	6
Sport	41	2.10	6
Commerce / industry	56	2.09	8
Health	46	1.59	9
Power/Electricity	64	1.59	9
Communication	51	1.47	11
Water	56	1.36	12
Judiciary	52	1.00	13

In terms of the frequency of private sector participation in infrastructural development in Lagos state, it was discovered that the private sector have been most involved in the educational sector which ranked 1st, in the 2nd position is the transportation sector, rated 3rd is the tourism sector of the economy. For the three sectors that respondents has experienced least participation, it was observed that Judiciary was rated least with a ranking of 13, next was the water sector ranked 12th, in the position of third least sector of PPP involvement in infrastructural development is the communication sector with 11th position.

5.2. Inferential statistical analysis

5.2.1 Test of hypotheses

Two hypotheses were set up for this study. The first one tests for awareness about the use of PPP in infrastructure development while the second one investigates the level of use of PPP for infrastructural development.

Hypothesis One

Null (Ho): There is no significant awareness about PPP for infrastructural development

Alternative (H₁): There is significant awareness about PPP for infrastructural development

In order to carry out this analysis, the average of the items that measures the level of awareness of the respondent organisations about the use of PPP for infrastructural development were collated and used to carry out the analysis.

Table 12 shows the results of the statistical test

Table 12: One sample t-test of level of awareness

Test Value = 2.5							
t df Sig. (2-tailed) Mean Difference Lower Upper							
Awareness	40.473	65	.213	1.63333	1.5527	1.7139	

In accordance with the decision rule in statistics, the null hypothesis is rejected when the p-value of the analysis is greater than the level of significance at which the test was carried out and the alternative should be accepted when the p-value is less than the level of significance of the test. In this case the p-value is 0.213 which is greater than 0.05 (level of significance), hence the decision to accept the null hypothesis which invariably means there is no significant awareness of private sector involvement in infrastructural development.

Hypothesis Two

- H₀: There is no significant involvement of stakeholder/respondent organisations in the use of PPP for infrastructural development
- H₁: There is significant involvement of stakeholder/ respondent organisations in the use of PPP for infrastructural development

In order to carry out this analysis, the average of the items that measured the level of infrastructural development was computed and used to carry out the analysis; the descriptive statistics is presented below.

Table 13: One sample t-test of infrastructure development

				Test Value = 2.5		
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Infrastructure	-4.100	65	.103	21554	3205	1105

In this case the p-value (significance at two-tailed) is 0.103 which is greater than the level of significance of 0.05, hence the null hypothesis is accepted which means that the private sector does not involve significantly in infrastructure development.

5.3. Discussion of findings

It was revealed that only few professionals have handled projects under the delivery system which is as a result of the government poor attitude of enlightening the citizenry on the benefits of engaging the private sector in infrastructural development as well as providing the needed legislation guiding private sector involvement so as to encourage the private sector, this concurred with Akintola (2006) who in a research conducted found out that that lack of legislation and adequate enlightenment hinders the full productive implementation of any concept as awareness of a process is the first step at endearing the concerned construction industry professionals and the citizens about the possible benefits of its acceptance. Furthermore, the level of awareness is an essential factor in ensuring a successful implementation of any new policy like the private sector participation in infrastructure provision. This is in agreement with Ikechukwu (2007) who in a research carried-out establish that the level of awareness is seemingly too low going by the scarcity of available relevant literatures and limited experience. It was further observed that there is no significant awareness of private sector involvement in infrastructural development.

The study revealed that education and transportation received the highest patronage i.e. projects like road, airport, seaport, bus terminus, hostels, and similar ones are more attractive to the private sector presently due to the return mechanism put in place as both the public and private sector have established ways of recouping their capital via toll and rent within a specified period. This finding corroborated Olaloku, Adejugbe, Fajana and Tomori (1979) who in their work submitted that the private investor is traditionally profit oriented and are interested in Directly Productive Activities (DPA). It was observed that investors were

not involved in almost all sectors due to the substantial procurement cost with relatively small returns compared to the investment in-addition to the possibility of future changes in policy and demographic shift. This also supports one of the findings of Forrer et al (2011) where costs and benefits were part of the factors in a model on PPP performance. Furthermore, in a bid to encourage investors into more of the sectors there must be flexibility as well as paying careful attention to lifecycle costing. In addition, this research indicates that the private sector was not significantly involved in infrastructural development in Lagos state.

6. Summary, conclusions and recommendations

6.1 Summary of findings

The study was centered on private sectors involvement in infrastructure development in Lagos state. The study revealed the following:

- Most professionals had idea about the concept as they have been involved in at least one project where any of the PPP model was employed as a means to delivering infrastructure.
- 2. The private sectors participation is mainly in two sector of the economy they are education, transportation and partially in tourism sector.
- 3. The level of awareness of PPP is still insignificant despite government effort to get the private sector involved in the provision of infrastructure.
- 4. The involvement of the private sector in infrastructural development is very insignificant as there is a great concentration on a particular sector while other sectors are left unattended to.

6.2 Conclusions

The study investigated the level of awareness about, and the areas and the extent of use of the private sector in PPP for provision of infrastructure in Lagos State, Nigeria. The study revealed that despite government's effort to get the private sector involved in the provision of infrastructure in Lagos state, the level of awareness about and use of private sector involvement in infrastructural development was not significant. Furthermore, it was revealed that the involvement of the private sector in infrastructural development was not significant considering the fact that there is a great concentration on a particular sector due to adequate ways employed in generating income while other sectors were left unattended to as a result of little or no establishment of ways required to yield income. The study results from the analysis of responses further indicate that, in Lagos State, the sectors that ranked highest (first, second and third respectively) with private sector participation through PPP in the delivery of public infrastructure are education, transportation and tourism. Additionally, there was no private sector involvement in the judicial sector(with least ranking) as well but very minimal involvement in the areas of portable water provision, the reason being that both the government and the private sector were yet to formulate ways of yielding income from the said sectors. Stakeholders expressed opinions that Public Private Partnership model remained an initiative that can best be employed in tackling the growing complex and multifunctional issues in building infrastructure projects as well as to help meet the demands for creative, functional and efficient delivery of projects. It was also viewed that the strategy also allows private investors to participate in profitable social development projects through partnership with the public sector.

6.3 Recommendations

Based on the conclusion drawn above, the following recommendations are hereby proposed:

- 1. The government should put more efforts to improve the level of awareness on the involvement of the private sector participation in the provision of infrastructure through public enlightenment both locally and internationally stating the benefits that are obtainable both for citizens and investors.
- 2. Government should demonstrate a sure touch in assessing the return that is required by the private sector in return for taking responsibility for risk considering the fact that if expected returns from a project are too low bidders will divert their skills and resources to other more attractive projects in different countries and jurisdictions. The government and the private sectors should fashion out adequate and improved means of generating income from every sector of the economy so as to encourage private sector involvement considering the fact that no investor would invest in a sector where their investments cannot be recouped. This can be achieved via adequate training and development of contributing parties more especially the local talents in the area and structuring of competence.
- 3. Government should modify the traditional relationship between infrastructure and profit making as the desire of every private investor is a worthy return, thereby turning a traditionally indirectly profitable activity into a directly profitable activity and to the satisfaction of all parties involved.

References

- Adeniyi, O. (2008). *Assessment of Public Private Partnership in Infrastructural Development,* B. Tech Project (Unpublished), Federal University of Technology, Akure, Nigeria.
- Adewuyi, A. (2004). *Effect of government Economic policies on Construction Industry in Nigeria*, PGD Thesis (Unpublished), Federal University of Technology Akure, Nigeria.
- Akintola, A.A. (2006). *Problems and Prospect of the Adoption of E-Tendering in Nigerian Construction Industry*, B. Tech Project (Unpublished), Federal University of Technology Akure, Nigeria.
- Alabi, K. (2000). Why Nigeria lags in construction. *Civil and Engineering Policy Magazine*, July 24-30, 1, 10.
- Cheung, E. & Chan, A.P. C. (2011). Evaluation model for assessing the suitability of PPP projects. *Journal of Management in Engineering*, 27 (2), 80-89
- Dada, M.O., & Oladokun, G. (2008). Critical Success factors in public-private-Partnership projects in Nigeria: A perceptual Survey" in Karter, C., Ogunlana, S.O., and Kaka, A. (Eds.), *Transformation through construction: Joint 2008 CIB W065/055 Symposium proceedings*, Herriot Watt University, Edinburgh, pp. 1-10.
- Deloitte Research, (2006). Closing the Infrastructure Gap: The Role of Public-Private Partnerships. Available from: www.deloitte.com (Accessed 5th June, 2011)
- Department for International Development (2007). Private Sector participation in Infrastructure Development. Available from: www.dfid.gov.uk/pubs/files (Accessed 2nd October, 2011)
- Doyin, A. (2006). *Solutions to International Challenges in PPP Model Selection: A Cross-* sectoral Analysis, paper prepared for Deloitte Research and the London School of Economics, March 13, 2006.
- Ehebha, L.R. (2011). *An Appraisal of Performance of Public Private Partnership in Provision of Infrastructural Facilities in South Western Nigeria*, Master of Project Management Project (Unpublished), University of Lagos, Lagos.
- Forrer, J., Kee. J.E., & Newcomer, K.E. (2010). Public Private Partnerships and the public accountability question. *Public Administration Review*, May/June, pp 475-484
- Harris, S. (2008). Public Private Partnerships: Delivering Better Infrastructure Services International Financial Services, London. Retrieved February 1, 2011, from www.ifsl.org
- Herizonte, B. (2006). Infrastructure in Latin America, Slow! Government Obstacle ahead. The Economist, Vol. 41, pp 4-18.
- Ikechukwu, S. (2007). Public Private Partnership for accelerating infrastructure development in Nigeria. A paper presented at a 2 day regional workshop for Stakeholders on Public Private Partnership in West Africa held at The Nigerian Universities Commission Auditorium, Abuja from 12 to 13 October, 2007.
- Nijkamp P., VanDer Burch M., & Gabriella V., (2002). "A Comparative Institutional Evaluation of Public Private Partnership in Dutch Urban Land-use and Revitalization Projects." *Urban Studies*, 39, 1865-1880.
- Ogunlana, S.O. (2010, February). Sustaining 20:20:20 Vision through construction: A stakeholder participatory approach. *Being a lecture delivered under the distinguished lecture series of the School of Post-Graduate Studies*, University of Lagos in February 10, 2010.
- Olaloku O., Adejugbe F., Fajana O., & Tomori A., (1979). Structure of Nigerian Economy, Macmillan Press Ltd, Lagos.
- Sarmento, J.M. (2010). Do PPPs create value for money for the public sector? The Portuguese experience *OECD Journal on Budgeting*, 2010/1, 93-119
- Seeley, I.H. (1984). Quantity Surveying Practice. London, Macmillan Press Ltd.

The Private Stake in the UK's Prison," *BBC News*, Retrieved June 4 2006, (http:// news.bbc.co.uk/hi/English/static/indepth/uk/2001/prison_ppp/ default.stm).

United Nations Economic Commission for Europe UN/ECE (2000). "Guidelines on Private Public Partnerships for Infrastructure development". A paper presented at United Nations Economic, Geneva.

UNISON (2005). Overview of Public Private Partnerships in the UK <u>retrieved March 10, 2011 from http://www.unison.org.uk/pfi/</u> Willis, C.J. (1987). *Practice and Procedure for Quantity Surveyor* 9th edition London Press, London.