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Evaluation of Foreign Direct Investment (FDI) and Public-Private Partnerships Involving Chinese Investment in Nigeria.

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ABSTRACT

This research work evaluated the Foreign Direct Investment (FDI) and Public-Private Partnerships (PPP) schemes involving Chinese Investment in FCT Projects, Research objective which guided this work was to compare Chinese investments and PPP schemes as methods for infrastructure finance in FCT. Research questions were formulated and tested. To carry out the work, comparative analysis of both investment options was done using the Google Research tool, interviews and an extensive literature review to evaluate the use of Chinese Investment and Public-Private Partnership (PPPs) in FCT Projects to find out which option met Sustainability Development Goals (SDG 11) criteria. Findings from the work show that Infrastructure projects are massive, and complex with multiple stakeholders. The research also found out that Chinese investment has increased Nigerian debt stock and that infrastructure paucity leads to multiple challenges in Nigeria. The T-test result was less than 0.05, null hypothesis was upheld and it affirmed PPP as a preferred method of financing infrastructure in Nigeria and recommended for the use of PPPs as the most cost-effective method of infrastructure financing in Nigeria in order to meet up with SDG 11.

Keywords: Foreign, Direct Investment, Public, Private Partnerships, Chinese and Investment

INTRODUCTION

Infrastructure development and financing are the foundation for the economy of nations. Its deficit is one of the major factors militating against progress in Nigeria. This study examines the financing of infrastructure projects in Nigeria using China Investments. [1] argued that infrastructure projects include roads, rails, hospitals, schools, nuclear plants and dams. In their work on intersections and societal transformations – they opined that the aggregation of money and money-worth required to execute these mega projects is called infrastructure financing. From International Project Finance Association [2] Infrastructure Financing is a process which includes the development of investible funds into a pull, such as pension funds, insurance funds, private equity, structured debts and sovereign bonds to form an Infra Market to execute huge infrastructure projects. For instance, the Nigerian government establish InfraCo to finance infrastructure projects. According to [3] megaprojects are infrastructure projects, which are complex and difficult to deliver. In their study of 30 European Infrastructure projects, they posited infrastructure finance is essential to delivering positive project outcomes. This research examined sustainable infrastructure finance in developing countries, using a comparative analysis of Chinese investment and the Public-Private Partnership (PPP) scheme in Nigeria. It examined their impacts on meeting the objectives of Sustainable Development Goals (SDG 11).

The Central Bank of Nigeria [4] stated, that the accumulated debt stock of Nigeria stands at an estimated figure of $190B. Spending 92% of annual revenue on debt servicing has made the financing of infrastructure projects difficult. The huge national debt stock has made it a challenge to fund infrastructural projects. While the PPP option does not increase debt stock.

International Project Finance Association [2] stated that revenue shortage in the public sector due to population explosion, greater expectations from citizens and increasing pressure on the government to meet competing needs, made the seeking for an alternative infrastructure financing such as PPP imperative. [6] analyzed the link between economic development and poverty reduction. They posited that infrastructure development in the transport sector employs the skilled and unskilled. The report concluded that there is a symbiotic relationship between infrastructure finance and economic growth, enhancing the GDPs of Asian nations.

In addition, the paucity of infrastructure has restricted economic activities and increased the cost of goods and services in Nigeria. According to [6], lack of transport infrastructure has negatively impacted DIL Food businesses and is estimated to be N36B in foregone profits. Smaller firms have closed down, thereby contributing to unemployment and insecurity. He stated, that the projected government's revenue across three major businesses (Cement, Sugar & Flour) will amount to N2.1 trillion in forgone taxes by 2022. This tax revenue to the government may not be achieved if the problem persists. The study covers a period of ten (10) years (2011 – 2020). Generally, Infrastructure projects include transport, housing, education and technology. The accumulated debt stock of the Federal Government of Nigeria is estimated to be USD 100B according to [7]. The International Monetary Fund [8], posited that Nigeria is currently suffering from debt distress. It stated that Nigeria spends about 92% of its revenue on debt services. The aim of this work is to Evaluate the Foreign Direct Investment (FDI) and Public-Private Partnerships Involving Chinese Investment in FCT Projects by examining whether Chinese investments and/or PPP schemes meet Sustainable Development Goals (SDG 11) in Nigeria and by assessing the impacts of Infrastructure Foreign Direct Investment (FDI) Finance on the economy. The following hypotheses were propounded: HO_1There is no significant relationship between infrastructure finance via Chinese debts and/or PPP option and sustainable development goals and HO_2: There is no relationship between FDI Finance and the Nigerian economy.

REVIEW OF RELATED LITERATURE

Financing infrastructure projects through loan investments is a means of strengthening economy, grow bilateral relationship among countries but could promote huge corrupt practices in a country with poor financial discipline and regulation. Nations without sound Fiscal Financial Management and systems, run the risk of wasting public borrowed funds. It is argued that the use of alternative infrastructure financing by the private sector yield better output than public loans. PPP is private sector driven, it has better risk and financial management to meet SDG objectives. Conceptually, the debate on Chinese investments in Africa is on. [9], explored China's new relationship in Africa, and the impacts on its traditional partners. [10] examined the role of infrastructures in societal transformations, in response to climate change, and concluded that infrastructures follow the classical project life cycle (PLC concept). Modern societal functioning is premised on the provision of functional and sustainable infrastructures. Financing costs and structures are essential for meeting these objectives. [11] proposed a phase-out implementation strategy to meet sustainability objectives. Sustainable infrastructures are megaprojects, which are long-term, capital-intensive and difficult to implement and provide positive externalities [12]. There are constraints on public funds to finance infrastructure, lack of transparency, and difficulty in obtaining credit [13]. [14] asked three important questions about the China-Africa relationship. They posited, that African nations have received investment inflows, but the inflows come with certain drawbacks. [15] opined, that there is widespread corruption in Chinese investments, and projects are not market-driven. A strong link between China's domestic policy and its firms' outward investment behaviours in Africa exists, [16]. This thesis explores the contradicting debates on Chinese investments to contribute to the debate, and see how it fits into the sustainability ecosystem. However, the researcher examined the concept of PPP and how it has contributed to Infrastructure Financing. Infrastructures are measured against sustainability criteria. [17], stated that PPP projects in low-income countries, lack the skills and capacity to deliver projects. [18], argued that China's increased trade with and investment in Africa has boosted the continent's growth, but has also generated considerable controversy and debate. This thesis explores how Chinese investments or PPPs meet SDG 11 objectives.[19] measured infrastructure project characteristics and performance in Europe. They studied 30 megaprojects across Europe and found that the failure rate exceeds 67%. Their findings are consistent with project failure in Nigeria, whether using PPP or through Chinese loans. [20] in his work, identified Infrastructure Finance as the most essential component in delivering nation infrastructural projects. He posited that Infrastructures are necessary for the functioning of any economy and society and posited that Infrastructure could either be economic or social. [21], studied 49 African countries, covering 2,005 deals; they found the top five destinations for China investments are Nigeria, South Africa, Zambia, Ethiopia, and Egypt as shown in Table 1.

Table 1: Top Investments Destinations in Africa

Country	Number of projects	Number of firms
Nigeria	404	240
South Africa	280	152
Zambia	273	125
Ethiopia	255	114
Egypt	197	99
Congo (DRC)	193	80
Ghana	192	90
Angola	189	80
Zimbabwe	167	68
Tanzania	149	85
Sudan	148	78
Kenya	137	71
Algeria	123	75
Mozambique	94	41
Uganda	89	45
Gabon	71	23
Mali	68	33
Namibia	66	30
Mauritius	65	40
Cameroon	60	28

Source: China's Ministry of Commerce Transaction-level ODI Data.

Source: Why is China investing in Africa? IMF Report by [21].

Theories: Sustainable development theory is the idea that human societies must live and meet their needs without compromising the ability of future generations to meet their own needs. The "official" definition of sustainable development was developed for the first time in the Brundtland Report in 1987 [22]. While the Sustainable Development Goals (SDGs), known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity [23]. It broadly set out 17 objectives that target various thematic issues. SDG 11 deals exclusively with Cities and Communities development which requires infrastructure development and finance. The UN promotes cities and communities SDG 11 on a global scale. To finance SDG 11, developing nations rely on China or use PPPs. According to [4], Nigeria's population was estimated at 167 million as of October 2011, (adjusted to 180 million in 2016), with a total area mass of 923,769 square kilometres. It is one of the most rapidly urbanizing countries in Africa and over 48 per cent of the population in Nigeria lives in the urban areas, covering less than 10 per cent of the habitable land areas. With an estimated annual national population growth rate of just over 2 percent and an annual urban population growth rate of about 4 percent, Nigeria has a population that is becoming more and more skewed to the urban areas, towns and cities. The high growth rate of the urban population arises from both a higher birth rate and more importantly the increasing rural-urban migration. The empirical reviews shows that Nigeria population growth is faster than infrastructure development. Typical road in Fig 2.4 below.

Fig 1: A Typical Road in Nigeria; **Source:** pulse.ng 2018

Our reviews showed that various interventions have been used in the past to bridge the deficit in Nigeria; for instance, the First National Development Plan, 1962-1968 up to the end of the 4th Plan in 1985, and there was rapid infrastructure development [4]. Empirical evidence suggests that infrastructures can no longer be provided by the government, hence the alternative mode of financing infrastructure through PPPs. [24], in their work: Sustainable Development Goals (SDGs) is a long-term task, which puts forward high requirements on the sustainability of related policies and actions. They examined the actions of China from 1986 to 2020, which analyzed the China National Sustainable Communities (CNSCs) policy implemented over 30 years and its effects on achieving SDGs. The author compared our findings to the use of PPPs in other nations; the researcher found comprehensive planning as a predictor to sound infrastructure financing.

RESEARCH METHODOLOGY

Descriptive research method was design for the study while Google search tool was the instrument used in the research methodology to gather data in this study. According to [25], researchers frequently have to investigate phenomena about which few established models or theories exist. Infrastructure financing is considered to fit such a phenomenon objectively. Our primary source of data was the administration of a well-structured questionnaire for the target audience: Academia, PPP experts, Project Finance professionals, and the National Assembly, Lawyers, Engineers, Project Management professionals, Chartered Accountants and selected members of the general public. The author used online Google Scholar to collect data from 255 dataset. The population of the study consists of Google Online respondents while the 255 that responded formed the sample size. The questionnaire items were first validated by the supervisor and two other experts in Infrastructure Finance. The language, content and structure of the items were critically examined and corrected. The corrections made by these experts were incorporated into the final draft of the questionnaire. The reliability of the study was determined using the split-half method. The instrument was administered to the same group of respondents systematically. To ascertain the reliability coefficient of the instrument, the researcher used Kuder Richardson's formula 20. A reliability coefficient of r= 0.71 was obtained. The data collected for this study were analyzed with the aid of a frequency table and simple percentages, this was to make the analysis more understandable, as well as enable the researcher to derive conclusions from responses that were not subjected to hypothesis testing. The two hypotheses formulated in this study were analyzed using Chi Square (X^2) Statistical tool.

DATA ANALYSIS AND PRESENTATION

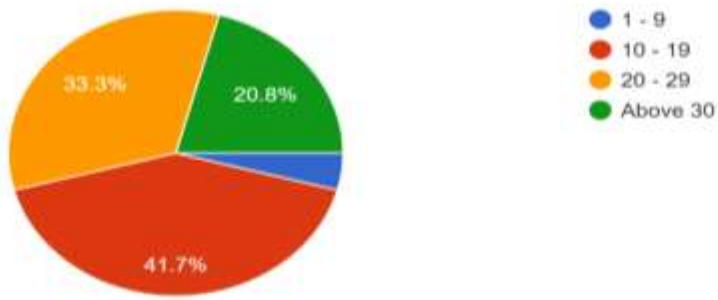
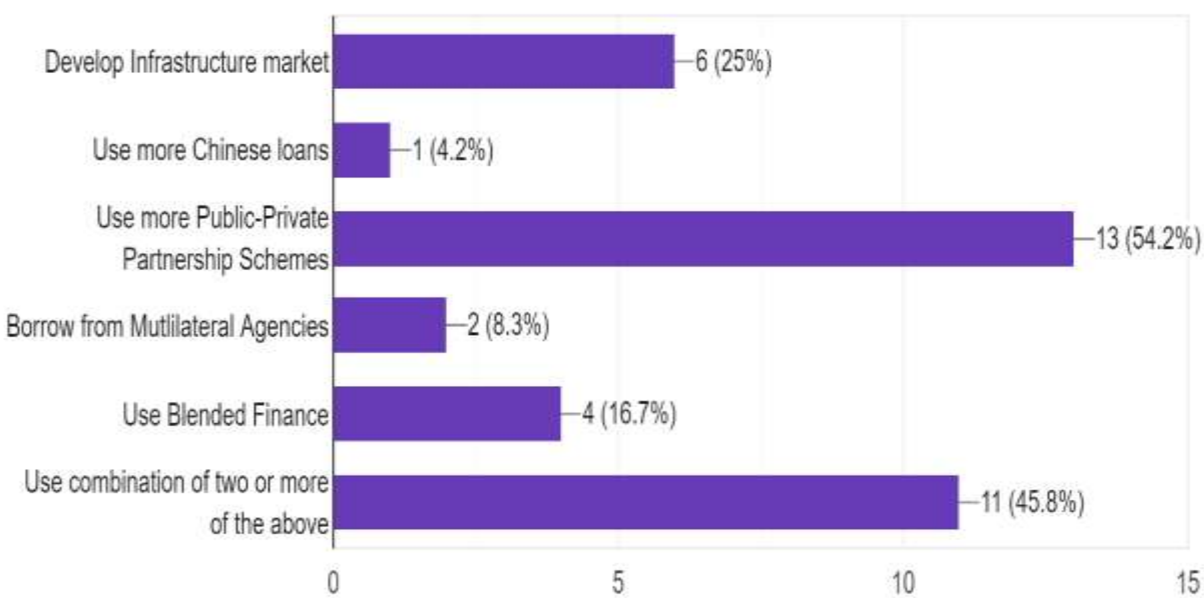


Fig 2: Years of Experience

The data obtained from this study were presented using cross tabulation, simple percentage (%), pie charts and bar charts. From figure 2 above, out of the 24 respondents; 20.8% had over 30 years, 33.33 had experience from 20 to 29 years, 41.7% had experience from 10 to 19 years and 4.2% had the experience of 1 to 9 years. Over 50% of the respondents had more than 20 years of experience, an indication that the respondents are very experienced persons, whose opinions are highly reliable in the subject matter.

Table 2: Infrastructure Financing



25% opined that Nigeria should develop a robust infra market, 4.2% recommend the use of more Chinese loans, 54.2% agreed on the use of PPPs, 8.3% suggest the borrowing from Multilateral Agencies, 16.7% agreed on the use of blended finance and 45.8% recommend the use of two or combination to achieve optimum yield from infrastructure investments

TEST OF HYPOTHESIS

H_0 There was no relationship between infrastructure finance via Chinese debts or PPP option on sustainable development goals

Table 3: One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	T	Df	Sig. (2-tailed)	Mean Difference	Lower	Upper
There was no relationship between infrastructure finance via Chinese debts or PPP option on sustainable development goals	0.019	2	.000	8.27487	3.7401	10.8106

From the test of hypothesis above using one sample test t-statistics, based on the decision rule, accept null hypothesis if the value of the t-statistics is greater than 0.05, from the result; the value of the t-statistics (0.019) is below 0.05 (critical value) hence we reject the null hypothesis and conclude that there was no relationship between infrastructure finance via Chinese debts or PPP option on sustainable development goals. From the above findings, the researcher, therefore, accepted the alternate hypothesis (H_1) and rejected the null hypothesis (H_0). The alternate hypothesis (H_1) states that: There is a relationship between Chinese Loans and PPPs and the Nigerian economy.

CONCLUSION AND RECOMMENDATION

In this section, a summary of findings from the data analyzed in sections three and four are given, and conclusions were drawn from the findings that 100% of the respondents preferred PPPs to Chinese Investments/loans for Infrastructure Financing. Over 95% agree that Chinese loans increase the Nigerian debt profile. 100% of the respondents agreed that PPPs can meet Sustainable Cities and Communities Development Objective (SDGs 11). 91.7% agreed that PPPs enhance local employment, while 8.3% suggest Chinese Investments. 100% agree PPPs enhance the Nigerian private sector better than Chinese loans. The respondents preferred PPPs as the best alternative method of Financing Infrastructure in Nigeria. The work thus recommends the use of PPPs as the cost-effective method of infrastructure financing in Nigeria.

Contribution to Knowledge: The work provides further insight into this field of knowledge by systematically evaluating Chinese investments in Nigeria, as well as PPPs as a vehicle for financing Infrastructures. The work provides a comparative framework to assess Infrastructure Finance between Chinese investments and PPPs in Nigeria. After testing the framework in Nigeria, its application could be extended to other developing countries.

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