Infrastructural Development and Sustainable Business Environment in Nigeria

Musa Idris
Department of Public Administration
Faculty of Administration
Ahmadu Bello University, Zaria
+234 803 477 2717, +234 705 133 7728
midris@abu.edu.ng
musaidrisaa@gmail.com

Abstract

The dearth of infrastructure and dwindling business activities inspite of the efforts made by successive administrations are increasingly becoming issues of grave public concern. The objective of this study is to examine the significance of the relationship between infrastructural development and sustainable business environment in Nigeria for the period 2000-2015. The study is hinged on the Economic Theory of Infrastructure and commons Management by Frischmann (2005). The research design was content analysis of secondary data (Ibrahim Index of African Governance) as published by the Mo Ibrahim Foundation. This was presented in tables and analysed using percentages and averages as well as the Pearson Correlation Coefficient to test the hypothesis. The study established a very poor state of infrastructure in Nigeria with an average of 17.50% and also a poor business environment (34.29%) in Nigeria. The result of the hypothesis tested indicated that there exist a positive but fairly weak relationship between infrastructural development and sustainable business environment in Nigeria. This implies that an improvement in the state of infrastructure in Nigeria will have a positive effect on the sustainability of the business environment in Nigeria. In view of these findings, the study recommended for government focus on the provision of basic core infrastructure such as electricity, rails, roads and ports. Modernization of air transport and decongestion of seaports is also critical to facilitating business in Nigeria. Others are customs and judicial reforms with a view to rationalizing procedures, processes and issuance of permits as these are expected to reduce the cost of doing business in Nigeria.

Keywords; Infrastructure, economic theory of infrastructure and commons management, sustainable business environment.

Introduction

The provision of adequate infrastructure and creation of a sustainable business environment have continued to remain elusive in Nigeria thereby becoming issues of great public concern. Sections 15(3a) and 17(3c-d) of the Constitution of the Federal Republic of Nigeria 1999 lay stress on the provision of infrastructure and creation of enabling business environment in Nigeria. The National Economic Empowerment and Development Strategy (NEEDS) also has as part of its policy, the development of infrastructure and the creation of a sustainable business environment (National Planning Commission, 2004).

Pursuant to this reforms in education, security, banking, justice and transport sectors among other sectors were undertaken (Bureau of Public Service Reforms, 2007; Fayeye 2007; Lambo, 2007; Lawal, 2007; Ogunsanya, 2007; Ojo, 2007; Okebukula, 2007; Soludo, 2007; & Zebadi, 2007). In spite of these efforts, the World Economic forum in 2012 ranked Nigeria 127 out of 133, 135 out of 139, 135 out of 142 and 130 out of 144 countries in 2009/2010, 2010/2011, 2011/2012, and 2012/2013 respectively in the provision of infrastructure (Usman, 2013).

While the country experienced an increase in the number of health institutions, between 1999-2010, access to health personnel decreased and infant mortality in 2010 was as high as 88 per 1000 higher than those of low, middle and high income countries of 70, 38 and 5 respectively National Institute of Legislative Studies; (NILS, 2013). The rail transport system remains largely archaic and inadequate. The air and seaports are equally ill-equipped. According to the Federal Ministry of Works, Nigeria currently requires about 300,000km road network for the desired scale of economic activities but the country has about 200,000km road network most of which is unpaved, (NILS, 2013). Electric power production in Nigeria stood at 27,094 kwh in 2011 as against 51,224, 156,586 and 289,576 for Algeria, Egypt and South Africa respectively (NILS, 2013). The International Bank for Reconstruction and Development (2010) doing business report indicates the existence of cumbersome procedures in starting business, processing construction permits, registering property, while enforcement of contract takes an average of 551 days and cost 36.3% of the claim to resolve a common dispute through courts. The research question is, is there any significant relationship between infrastructure and sustainable business environment in Nigeria?

The objective of this study is to examine the significance of the relationship between infrastructure and sustainable business environment in Nigeria for the

period 2000-2015. The hypotheses postulated for this study states that; there is no significant relationship between infrastructure and sustainable business environment in Nigeria. The timeframe for this study is 2000-2015. This timeframe marks a period of return to sustainable democratic governance in Nigeria after a prolonged period of successive military dictatorship. Democratic regimes are expected to be more development oriented than military regimes. The study has a national rather than state or regional coverage for maximum utility. Contextually, infrastructure in this study comprise of supply of electricity, road and rail networks, quality and safety of air transport as well as functional seaports. Others include access and quality telephone network services, digital connectivity and access to adequate and portable water (Mo Ibrahim Foundation, 2014).

Extensive studies have been undertaken on infrastructural development and other related issues. These include those of Akinwale (2010), Ogbuagu, Ubi and Effion (2014), Uhumwuagbo and Christopher (2012), Oyedele (2012) and Sunday and Okon (2013). However, the studies of Akinwale (2010), Ogbuagu et al (2014) and Oyedele (2012) were merely narrative and descriptive but not empirical. Ohunmwugho's (2012) "Analysis of Socio-Political Implication of Infrastructural Decay in Nigeria" used only questionnaire based on the perception of the respondents. This was not complemented with secondary data. The study also used chi-square statistics to test the hypotheses instead of more robust inferential statistical tools. This study therefore has methodological weaknesses. Sunday and Okon (2013) attempted an empirical study on "Infrastructure Investment, Institutional Quality and Economic Growth in Nigeria" with mixed results using correlation to test the hypotheses. Empirical studies that square on infrastructure and sustainable business environment in Nigeria are therefore scanty. This study seeks to cover this knowledge-gap.

Conceptual and Theoretical Frameworks

This section critically reviews the concepts of infrastructures and sustainable business environment, empirical studies and discusses the economic theory of infrastructure and commons management as propounded by Frischman (2005). There are different perspectives to the concept of infrastructure. These are the narrow and broad perspectives. The narrower perspective as sheared by Akinwale (2010), Sohail & Cavill (nd) and Sunday and Okon (2013) sees infrastructure as physical facilities such as electricity power infrastructure, transportation infrastructure, water infrastructure, communication infrastructure as well as health and education infrastructure (Akinwale, 2010). Sohail and Cavill (nd) opined that infrastructure consist of physical networks or installations ranging from water

supplies, sanitation, drainage, access roads and paving streets, solid waste management and community buildings. Sunday and Okon (2013) identifies transportation networks (road, rail, air and sea), building for community, sewerage systems and reservoir as well as hospital and schools as constituting infrastructure.

The broader perspective concepualises infrastructure as comprising of hard and soft (Ogbuagu & Effiom 2014; & Oyedele (2012) and as traditional and non-traditional by Frischman (2005). Ogbuagu and Effiom (2014) reiterating the views of Oshikoya et al (1999) and Ubi et al (2011) identifies; telecommunications, power, transportation, water supply and sewerage as constituting hard-core infrastructure. The soft-core infrastructure on the other hand consist of the provision of health and education, type of governance, transparency/accountability and protection of property rights. Similarly, Frischman's (2005) identifies what he describes as traditional and non-traditional infrastructure. The traditional infrastructure consists of transportation systems, governance system, such as courts, communication systems and basic public services and facilities such as schools, sewers and water systems. The non-traditional infrastructure according to Frischman (2005) on the other hand include environmental resources like lakes, atmosphere and ecosystem. While Ogbuagu and Effiom (2014); and Oyedele (2012) agrees to the categorization of infrastructure into soft-core/hard-core and traditional/non-traditional the components of each category differs. The definition of Sunday and Effiom (2013) though in the narrow perspective comprised of both soft-core and hard-core infrastructure perspective of Ogbuagu and Effiom (2014). Thus, the composition of infrastructure is of greater significance that the categorization seeks to emphasis.

Infrastructure as used in this study consist of; supply of electricity, adequacy and safety of rail network, quality and safety of air transport, the extent of telephone and information technology infrastructure as well as access to adequate and portable water for drinking and for use as ports (Mo Ibrahim Foundation 2014). These facilities fall with the category of hard-core infrastructure as categorized by Ogbuagu and Effiom (2013) and Oyedele (2012).

Business environment refers to those factors that influences business operations on continuous basis. It is a combination of internal and external physical and operating factors that affect the flow of business activities. Such factors include

maintenance of law and order, security of lives and property, competition, technology and socio-cultural factors (Adeoye, 2013 & Erumegbe, 2015).

The International Bank for Reconstruction and Development (IBR&D) (2010) doing Business Report for Nigeria identified factors that influence business sustainability. These according to the bank are; security, procurement processes, macro-economic stability, incidence of corruption and the nature of investment climate. Others include strength of institutions, quality of infrastructure, extent of market regulation and strength of financial institutions in the country.

The Mo Ibrahim Foundation (2014) in the same operational manner identifies the indicators of business sustainability as; competitiveness, investment climate, availability of rural financial services, and the extent of bureaucracy and red-tape. Others are the cumbersomeness of customs procedures and soundness of banks. These indicators are in many respects similar to those identified by Adeoye, (2013), Eruemegbe, (2015), and the IBR & D, (2010).

Studies by Frischman, (2005), Ogbuagu and Effiom (2014), and Sunday and Okon (2013) asserts that infrastructure represents intermediate input in production, affects profitability and income. Availability of infrastructure lowers cost of production and presents new production opportunities and trade. Quality of infrastructure also has a strong linkage with indicators of social wellbeing (Sunday & Okon, 2013. Reiterating the view of Jhingan (2013), Ogbuagu and Effiom (2014) adds that infrastructure provides the basic foundation on which the take-off into self-sustaining growth is made possible and assured. Existing literature no doubt thus points to the complementarity of infrastructure with sustainable business environment. The concern of this study is to examine the level of significance of that relationship in Nigeria.

The theoretical framework for this study is the "Economic Theory of Infrastructure and Commons Management" by Frischmann (2005). It was used by Akinwale (2010); and Ogbuagu and Effiom (2014) in their studies – "The Menace of Inadequate Infrastructure in Nigeria" and "Corruption and Infrastructural Decay; Perceptible Evidence from Nigeria" respectively. The theory postulates that infrastructural resources generate value when used as input into a wide range of productive processes. The theory asserts that the output from these processes are often public goods that have strong positive linkages with indicators of social wellbeing and externalities benefitting the society as a whole. In relation to this study, the provision of adequate and qualitative infrastructure such as electricity,

roads, rails and ports, water and communication networks will facilitate and create an environment for sustainable business operations in Nigeria.

Methodology

The research design is content analysis of secondary data from Mo Ibrahim Foundation using it Ibrahim Index of African Governance (IIAG) for the period 2000-2015. The foundation is the leading and most Afro-centric non-governmental organization committed to providing data on quality governance for research purpose as well as for promoting and rewarding good governance in Africa. The IIAG scores and ranks countries in Africa on the quality of governance using four main categories, fourteen sub-categories and a hundred indicators (Mo Ibrahim Foundation, 2016). The main categories are; safety and rule of law, Participation and Human Rights, Sustainable Economic Opportunity and Human Development. Both infrastructure and business environment are sub-categories of the sustainable economic opportunity category. The choice of this data can be justified on the bases of being complete, reliable and user-friendly. The data on the independent and dependent variables (infrastructure and sustainable business environment respectively) is presented in tables and analysed using percentages and averages as well as Pearson Correlation Coefficient to test the hypothesis.

Discussion of Findings

The data on the independent and dependent variables of the study as obtained from the Mo Ibrahim Foundation are presented and discussed in this section.

Table 1: Level of Infrastructural Development and Sustainable Business Environment in Nigeria.

Year	Infrastructural Development. (%)	Sustainable Business Environment (%)
2000	15.4	35.0
2001	15.5	35.0
2002	15.7	35.0
2003	15.9	35.0
2004	16.2	30.6
2005	16.5	31.0
2006	16.8	31.2
2007	15.0	34.8
2008	16.7	34.6
2009	17.6	38.2
2010	16.2	33.7
2011	17.7	33.1
2012	19.0	35.2
2013	19.7	35.0
2014	19.8	36.0
2015	26.3	35.3

Sources; *Mo Ibrahim Foundation; Ibrahim Index of African Governance Country Insight, Nigeria 2015 & 2016*

As indicated in table 1, the rate of infrastructural development in Nigeria for the period 2000-2015 ranges from the lowest of 15.0% in 2007 to the highest of 26.3% in 2015. The scores have been undulating and not steady. For instance, while Nigeria recorded marginal improvements between 2000-2006, the score for 2007 fell to 15.0% which is below the 2000 figure of 15.4%. After the instabilities in scores for infrastructural development for the period 2007-2010, Nigeria's scores in the infrastructural development resumed a sluggish and marginal rise to 17.7%, 19.0%, 19.7% and 19.8% for 2011, 2012, 2013 and 2014 only to record a big leap but still a poor score of 26.3%. Nigeria's average score in infrastructural development for the period 2000-2015 was only a dismal 17.50%.

Nigeria's scores in creating a sustainable business environment (SBE) for the period 2000-2015 though higher than those of infrastructural development are not encouraging either. These range from the lowest of 31.0% in 2005 to the highest of 38.2% in 2008. The SBE scores like those of infrastructural development have not been steady either but undulating. From stagnated scores of 35.0% from 2000-2003, the figure fell briefly to 30.6% in 2004. However, the SBE scores rose marginally to 31.0%, 31.2% and 34.8% in 2005, 2006 and 2007 respectively. This sluggish rise was again briefly interrupted in 2008 with a score of 34.6% and then

rising again to the highest of 38.2% in 2009. This was neither maintained nor improved upon as the scores discordantly fell and rose for the period 2010-2015.

It is however, worthy to note that the SBE highest score of 38.2% in 2009 was preceded by a rise in infrastructural development from 15.0% in 2007 to 16.7% in 2008. It is equally interesting to note that the SBE scores for 2000-2003 remained stagnant despite the marginal increases in infrastructural development for the same period. Nigeria's average in creating a SBE for the period 2000-2015 was only 34.29%.

Table 2: Correlations

		Infrastructure	Sustainable Business Environment
Infrastructure	Person Correlation	1	.243
	Sig. (2-tailed)		.364
	N	16	16
Sustainable Business Environment	Person Correlation	.243	1
	Sig. (2-tailed)	.364	
	N	16	16

The Pearson Correlation Coefficient value obtained from the test of the hypothesis is .243 indicating a positive but weak relationship between infrastructural development and creation of a sustainable business environment in Nigeria for the period 2000-2015.

Conclusions and Recommendations

The data presented and analysed in Tables 1 and 2, this study established that Nigeria's scores in infrastructural development with an average of 17.50% is a very poor performance. This indicates a very poor state of infrastructure in the country. Although, Nigeria recorded higher scores in creating a sustainable business environment with an average of 34.29%, this can be described as poor and not impressive either. The hypothesis tested indicates that there exist a positive but weak relationship between infrastructural development and business sustainability in Nigeria for the period 2000-2015.

These revelations are in conformity with the Economic theory of Infrastructure and Commons Management by Frischmann (2005). This means that Nigeria's very poor scores in infrastructural development is partly responsible for the poor

rate of business sustainability in the country. This implies that an improvement in infrastructural development is capable of improving business sustainability in Nigeria.

In view of the foregoing, the study recommends for continuity of ongoing projects particularly electricity supply and rehabilitation of the moribund rails, modernization of airports and reforms aimed at decongesting the sea ports. Equally important is the rationalization of processes ad procedures in customs, obtaining business licenses and permits, and enforcing contracts by reforming the judiciary. Further research is suggested on the effect of corruption in creating a sustainable business environment in Nigeria.

References

Adeoye, M.O. (2013). The impact of business environment on entrepreneurship performance in Nigeria. Computing, Information System Development, Informatics and Allied Research. Vol.4, No.4, pp.59-66

Akinwale, A.A. (2010). The menace of inadequate infrastructural in Nigeria. African Journal of Science, Technology, Innovation and Development. Vol.2, No.3, pp.207-223.

Bureau of Public Service Reforms (2007). Nigeria Public Service reform, sectoral reform initiatives, strategies, implementation status, gains and challenges, 2004-2005 report, Abuja; Bureau of Public Service Reforms.

Eruemegbe, G.O. (2015). Impact of business environment on organization performance in Nigeria, a study of Union Bank of Nigeria. European Scientific Journal, pp.478-494.

Fayeye, J.O. (2007). Reforming the security sector. In H. Salihu, E. Amali; and R. Olawepo (eds). Nigeria's Reform Programme, issues and challenges (pp.142-157). Ilorin; Faculty of Social Sciences, University of Ilorin.

Federal Republic of Nigeria (1999). Constitution of the Federal Republic of Nigeria 1999. Lagos; Federal Government Press.

Frischmann, B.M. (2005). An economic theory of infrastructure and common management. Minnesota Law Review. 89; 917, pp.917-976.

International Bank for Reconstruction and Development (2010). Doing Business in Nigeria Washington DC 20433.

Lambo, E. (2007). An overview of the health sector reforms. In H. Salihu, E. Amali and R. Olawepo (eds). Nigeria's Reform programme; issues and challenges (109-121). Ilorin; Faculty of Social Sciences, University of Ilorin.

Lawal, A. (2007). A cybernetic appraisal of reforms in the educational sector. In H. Salihu, E. Amali, R. Olawepo (eds). Nigeria's Reform Programme; issues and challenges (pp.91-108). Ilorin; Faculty of Social Sciences, University of Ilorin.

Mo Ibrahim Foundation (2014). Ibrahim Index of African Governance, Summary Report, www.moibrahimfoundation.ng

Mo Ibrahim Foundation (2015). Ibrahim Index of African Governance, Country Insight, Nigeria, www.moibrahimfoundation.ng

Mo Ibrahim Foundation (2016). A decade of African Governance 2006-2015, 2016, Ibrahim Index of African Governance Index Report, www.moibrahimfoundation.ng

National Institute for Legislative Studies (2013). Nigeria's Social Indicators. Abuja; National Assembly.

National Planning Commission (2004). Nigeria; national economic empowerment and development strategy; Abuja; National Planning Commission.

Ogbuagu, U., Ubi, P. & Effiom, L. (2014). Corruption and Infrastructural decay; perceptible evidence from Nigeria. Journal of Economic and Social Development. Vol.5, No.0, pp.20-27.

Ogunsanya, A. (2007). Transport sector reforms. In H. Salihu, E. Amali, and R. Olawepo (eds). Nigeria's Reform Programme; Issues and Challenges (pp.207-302). Ilorin; Faculty of Social Sciences, University of Ilori.

Ojo, B. (2007). Reforming the Justice sector. In H. Salihu, E. Amali; and R. Olawepo (eds). Nigeria' (pp.265-284. Ilorin; Faculty of Social Sciences, University of Ilorin.

Okebukola, P. (2007). The educational sector reform. In H. Salihu, E. Amali and R. Olawep (eds). Nigeria's Reform Programme; issues and challenges (pp.83-90); Faculty of Social Sciences, University of Ilorin.

Oyedele, O.A. (May 2012). The challenges of infrastructural development in democratic governance. Construction Economics and Management, 1, 6119, Rome, Italy, 6-10 May.

Sohail, M. & Cavill, S. (nd). Combating Corruption in infrastructural services; a toolkit. WEDC, http://wedc.boro.ac.uk/projects/newproject3.php?id=191

Soludo, C. (2007). The banking sector reforms. In H. Salihu, E. Amali, and R. Olawepo (eds). Nigeria Reform Programme; issues and challenges (pp.187-2002). Ilorin; Faculty of Social Sciences, University of Ilorin.

Sunday, O.A. & Okon, E.B. (2013). Infrastructure investment, institutional quality, and economic growth in Nigeria; an interactive approach. European Journal of Humanities and Social Sciences. Vol.26, No.1, pp.1342-1358.

Uhumwuangho, S.O. & Christopher, E. (2012). Analysis of socio-political implication of infrastructural decay in Nigeria. African Research Review; A International multi-disciplinary journal, Ethiopia, vol.6 (4). Serial No.27, pp.40-57, DOI: http://dx.doi.org/10-43/afroev.v6i4.4

Usman, S. (2013). National integrated infrastructure masterplan, an imperative for a sustainable economic growth and development. Abuja; National Planning Commission.

Zebadi, I.S. (2007). Security sector reforms. In H. Salihu, E. Amali, and R. Olawepo (eds). Nigeria's Reforms Programme; issues and challenges (pp.122-141). Ilorin; Faculty of Social Sciences, University of Ilorin.