ECONOMIC IMPLICATIONS OF TRANSPORT INFRASTRUCTURE ON THE NIGERIAN ECONOMY: A STUDY OF ROAD TRANSPORT CHOICE AND COST OF DOING BUSINESS

By

GAMBIYO SULEIMAN PUROKAYO

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ABSTRACT

Transportation infrastructure is vital for growth of economies worldwide, and for developing-country catch-up drive. The objective of this study is to examine the current state of road transport infrastructure with emphasis to travel choice and its impacts on the cost of doing business. Data was sourced from some locations in the Northeast Nigeria. Two main theories formed the springboard of this study: public finance theory, and infrastructure theories. Multinomial logit and ordinary least square (OLS) are the main tools of analysis. The results of multinomial logit (marginal effects) show that worsening conditions in the terrain affects transport choice, preference of individuals and cost of doing business. This has implications of price of transportation, agricultural productivity, and cost of transactions. OLS results for public investment and maintenance estimated showed low investment expenditure on roads due to fiscal problems.This has generally effected cost of doing business manifested in high transport prices, prices of goods and services. These results are supported by findings of World Bank, Sub-Saharan Africa Transport Policy and others agencies. Nigeria's infrastructure deficit remains one of the binding constraints to growth in the economy. The overall marginal change in network access showed increased access due to new highways. However these gains have not been sustained due crisis in the locations. Participation of the private sector is road building is still very low to compliment public expenditure. The study recommends higher prioritization for roads in the budget space; this supports the goals of the national transport policy of 2010, that 90 percent of all movement of goods and people is by road transportation.

Keywords: road conditions, cost of doing business, infrastructure, transport choice

ABSTRAK

Infrastruktur pengangkutan adalah penting bagi pertumbuhan ekonomi di seluruh dunia dan merupakan pemangkin kepada negara membangun. Objektif kajian ini adalah untuk mengkaji keadaan semasa infrastruktur pengangkutan jalan dengan memberi penekanan kepada pilihan perjalanan dan kesan ke atas kos bagi menjalankan perniagaan. Data telah diperoleh daripada beberapa lokasi di Timur Laut Nigeria. Dua teori utama yang digunakan dalam kajian ini adalah Teori Kewangan Awam dan Teori Infrastruktur. Logit Multinomial (MNL) dan kaedah Kuasa Dua Terkecil Biasa atau *Ordinary Least Square* (OLS) merupakan kaedah utama dalam analisis kajian ini. Keputusan logit multinomial (kesan marginal) menunjukkan bahawa keadaan yang teruk di sesuatu kawasan akan memberi kesan kepada pilihan pengangkutan, keutamaan individu dan kos untuk menjalankan perniagaan. Hal ini memberi implikasi kepada harga pengangkutan, pengeluaran pertanian, dan kos urus niaga. Keputusan OLS bagi pelaburan awam dan penyelenggaraan anggaran menunjukkan perbelanjaan pelaburan awam terhadap jalan raya adalah rendah disebabkan oleh masalah fiskal. Secara umumnya, kos untuk menjalankan perniagaan dimanifestasikan dalam harga pengangkutan, harga barangan dan perkhidmatan yang tinggi. Dapatan ini disokong oleh hasil kajian Bank Dunia, Dasar Pengangkutan Sub-Sahara Afrika dan agensi-agensi lain. Kekurangan infrastruktur di Nigeria masih menjadi salah satu kekangan kepada pertumbuhan ekonomi. Perubahan marginal dalam keseluruhan akses rangkaian sudah bertambah baik dengan adanya lebuh raya yang baharu, tetapi ianya masih tidak berubah disebabkan oleh krisis yang berlaku. Penyertaan sektor swasta dalam pembinaan jalan raya masih rendah bagi menampung perbelanjaan sektor awam. Kajian ini mencadangkan bahawa infrastruktur jalan raya perlu diberi keutamaan dalam ruangan bajet: ini adalah untuk menyokong matlamat Dasar Pengangkutan Negara tahun 2010, yang mana 90 peratus daripada semua pergerakan barangan dan orang awam adalah dengan menggunakan kemudahan pengangkutan jalan raya.

Kata kunci: keadaan jalan raya, kos menjalankan perniagaan, infrastuktur, pilihan pengangkutan

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LIST OF ABBREVIATIONS

AASHTO	American Association of State Highways and Transportation Official
AGIS	Abuja Geographic Information System
AGOA	African Growth Opportunity Act
AICD	Africa Infrastructure Country Diagnostic
AU	African Union
CFA	Communaute Financiere Africaine
CPI	Consumer Price Index
DCM	Discrete Choice Model
ECOWAS	Economic Community of West African States
EU	European Union
FERMA	Federal Road Maintenance Agency
FGN	Federal Government of Nigeria
FMW	Federal Ministry of Works
FRSC	Federal Road Safety Corp
ICRC	Infrastructure Concession Regulatory Commission
IMF	International Monetary Fund
IRF	International Road Federation
IRIN	Integrated Regional Information Network
KBE	Knowledge-Based Economy
LGA	Local Government Area
LNC	Lagos-Niger Corridor

MDGs	Millennium Development Goals
ME	Marginal effect
MNC	Multinational Corporation
MNL	Multinomial Logit
MTEF	Mid-Term Expenditure Framework
NBBRI	Nigerian Bureau for Road Research Institute
NCFRP	National Cooperative Freight Research Program
NEEDs	National Economic Empowerment Development Strategy
NEPAD	New Partnership for African Development
NERFUND	National Economic Reconstruction Fund
NTP	National Transport Policy
NZIER	New Zealand Institute for Economic Research
OAU	Organization of African Union
PCA	Principal Component Analysis
PPP	Public-Private Partnership
R&D	Research and Development
RONET	Road Network Evaluation Tools
RUM	Random Utility Model
SMEDAN	Small Medium Enterprises Development Agency
SMEs	Small Medium Enterprises
SSA	Sub-Saharan Africa

SSATP	Sub-Saharan Africa Transportation Policy
USAID	United States Aid Agency for international Development
VMT	Value of Miles Travel

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Transport economics is concerned with various aspects of the transportation system. It covers choice of roads and users, various goods (types of modes), induced demand for transport types, cost minimization of types of routes and modes. The transportation system follows demand and supply theories. Increase in population and growth of new cities, costs of congestions (urban sprawl), logistics management, generalized cost of travel, complications in networks and others aspects, all results in changes. These had introduced sophistication in theory and measurements used in transportation models. Transport economists are interested in the economic problems of moving goods and people (Button, 2010). Transport has long been recognized as an important determinant of the location of economic activity, and therefore, the policy instrument for economic development (Lane, 2014). Greene and Hensher (2013), on the other hand, examined various aspects of demand for transport, especially the dimensions of heterogeneity of individuals in the demand for transport for various levels of activity.

The working of the transportation system depends on the characteristics and peculiarities of the economy. In Nigeria, the working of the transportation system is best described in the background study of the economy – given available stock of roads, pricing, fiscal issues related to investments and maintenance of road networks and other factors. The population of Nigeria is about 175 million people (see Appendix III).

The contents of the thesis is for internal user only

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