OIL PRICE VOLATILITY, OIL CONSUMPTION AND PRODUCTIVITY IN SELECTED SECTORS IN NIGERIA: IMPLICATIONS FOR STRUCTURAL TRANSFORMATION

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BY

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE (M.Sc) DEGREE IN ECONOMICS IN THE DEPARTMENT OF ECONOMICS AND DEVELOPMENT STUDIES, COLLEGE OF MANAGEMENT AND SOCIAL SCIENCES, COVENANT UNIVERSITY, OTA, OGUN STATE, NIGERIA

JULY, 2023

ACCEPTANCE

This is to attest that this dissertation is accepted in partial fulfillment of the requirements for the award of the degree of Master of Science in Economics in the Department of Economics and Development Studies, College of Management and Social Sciences, Covenant University, Ota, Nigeria.

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DECLARATION

I, AGBOOLA, KENNY MARK (21PAF02293) declare that this research was carried out by me under the supervision of Dr. Romanus Osabohien of the Department of Economics and Development Studies, College of Management and Social Sciences, Covenant University, Ota, Nigeria. I attest that the dissertation has not been presented either wholly or partially for the award of any degree elsewhere. All sources of data and scholarly information used in this dissertation are duly acknowledged.

AGBOOLA, KENNY MARK

Signature and Date

CERTIFICATION

We certify that this dissertation titled "**OIL PRICE VOLATILITY, OIL CONSUMPTION AND PRODUCTIVITY IN SELECTED SECTORS IN NIGERIA: IMPLICATIONS FOR STRUCTURAL TRANSFORMATION"** is an original research work carried out by **AGBOOLA, KENNY MARK (21PAF02293)** in the Department of Economics and Development Studies, College of Management and Social Sciences, Covenant University, Ota, Ogun State, under the supervision of Dr. Romanus Osabohien. We have examined and found this work acceptable as part of the requirements for the award of Master of Science in Economics.

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DEDICATION

This research work is dedicated to my Lord Jesus Christ for His abundant grace to embark on this project and to complete it. And, to the Holy Spirit for His direction, instruction, and constant help throughout the duration of this project.

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LIST OF ABBREVIATIONS

VAR – Vector Autoregression

GARCH – Generalized Autoregressive Conditional Heteroscedasticity

OPV – Oil Price Volatility

IEA – International Energy Administration

WDI – World Development Indicator

AGOIC – Agriculture Oil Consumption

IDOIC – Industrial Oil Consumption

SROIC – Service Oil Consumption

AVA – Agriculture Value-Added per Worker

IVA – Industrial Value-Added per Worker

SVA – Service Value-Added per Worker

ABSTRACT

Crude oil, being a vital production input in Nigeria subsists in its controversy of whether it is to be accepted as a blessing or a curse. Particularly, it is pertinent to understand how fluctuations in oil prices fosters economic growth or otherwise clogs the wheel towards its structural transformation. Drawing upon a fundamental assumption, this research delves into an inquiry regarding the repercussions of oil price instability and oil consumption on the efficiency of the Nigerian economy. Additionally, this study evaluates the manifestation of structural transformation stemming from these impacts through implementation of the Vector Autoregression (VAR) technique. The study selects the three broad sectors (Agriculture, Industry, and Services) critical to the structural transformation of the economy as modeled by the Fisher-Clark theory. The presence of price variability in the oil market was confirmed through the application of the GARCH method, which utilized the conditional variances derived from the model as the data set for measuring the volatility of oil prices. Both the Vector Autoregression (VAR) model and the normalized equation's outcomes have demonstrated an unfavorable correlation between oil price volatility, real exchange rate, and agricultural and services sectors' productivity. In contrast, the industrial sector's productivity has demonstrated a favorable correlation with these variables. Additionally, whereas the productivity of the agricultural and industrial sectors is positively correlated with their respective oil consumption, the productivity of the service sector, on the other hand, exhibited a negative correlation with its oil consumption. Also, oil price volatility shows more variation for service sector productivity compared to other sectors. However, the result of the granger causality of the sectors productivities does not give evidence of structural transformation in the economy. The study therefore recommends the implementation of energy policies that imbues resilience in the sectors to enhance and sustain productivity despite fluctuations in oil prices.

Key Words: Oil Price, Oil Consumption, Volatility, Productivity, Structural Transformation