EVALUATION OF EFFICIENCY OF NIGERIA'S LISTED DEPOSIT MONEY BANKS AND INSURANCE COMPANIES

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (Ph.D) DEGREE IN FINANCE, IN THE DEPARTMENT OF BANKING AND FINANCE, COLLEGE OF MANAGEMENT AND SOCIAL SCIENCES, COVENANT UNIVERSITY, OTA, OGUN STATE, NIGERIA

AUGUST, 2021

ACCEPTANCE

This is to attest that this thesis is accepted in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy (Ph.D) in Finance in the Department of Banking and Finance, College of Management and Social Sciences, Covenant University, Ota, Nigeria.

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DECLARATION

I, **OSUMA, GODSWILL OSAGIE (16PAG01399)** declare that this research was carried out by me under the supervision of Prof. Ochei A. Ikpefan and Dr. Alexander E. Omankhanlen of the Department of Banking and Finance, College of Management and Social Sciences, Covenant University, Ota, Nigeria. I attest that the thesis has not been presented either partially or wholly for the award of any degree elsewhere. All sources of data and scholarly information used in this thesis are duly acknowledged.

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CERTIFICATION

We certify that this thesis titled " **Evaluation of Efficiency of Nigeria's Listed Deposit Money Banks and Insurance Companies**" is an original work carried out by **OSUMA, GODSWILL OSAGIE (16PAG01399)** in the department of Banking and Finance, College of Management and Social Sciences, Covenant University, Ota, Ogun State, Nigeria, under the supervision of Prof. Ochei A. Ikpefan and Dr. Alexander E. Omankhanlen. We have examined and found this work acceptable as part of the requirements for the award of Doctor of philosophy (Ph.D) degree in Finance.

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DEDICATION

I dedicate this thesis wholly to the Holy Spirit for His guidance all through this research work.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABC:	African Banking Corporation
AFS:	Audited Financial Statement
ATM:	Automated Teller Machine
BBWA:	British Bank of West Africa
CAMELS:	Capital Adequacy; Asset Quality; Management Efficiency, Earnings Capacity, Liquidity and Sensitivity to Market Risk
CBN:	Central Bank of Nigeria
CRS:	Constant Return to Scale
DEA:	Data Envelopment Analysis
DCO:	Dominion Colonial Overseas
DFA:	Distribution Free Analysis
DMBs:	Deposit Money Banks
DMUs:	Decision Making Units
DSU:	Deficit Spending Units
EFA:	Econometrics Frontier Analysis
FBN:	First Bank of Nigeria
FDH:	Free Disposal Hull
FI:	Financial Institutions
GE:	Gross Earnings
GPW:	Gross Premium Written
GTB:	Guaranty Trust Bank
IC:	Intellectual Capital
IT:	Information Technology
KPIs:	Key Performance Indicators
LAA:	Loans and Advances
MDAs:	Ministries, Departments, and Agencies
MPI:	Malmquist Productivity Index
NAICOM:	National Insurance Commission
NAL:	Nigerian Acceptances Limited

NBCI:	Nigerian Bank for Commerce and Industry
NDIC:	Nigerian Deposit Insurance Corporation
NIDB:	Nigerian Industrial Development Bank
NII:	Net Interest Income
NPI:	Net Premium Income
NSE:	Nigerian Stock Exchange
OE:	Operating Expenses
POS:	Point of Sale
PZ:	Paterson Zochonis
ROA:	Return on Asset
ROE:	Return on Equity
SE:	Scale Efficiency
SEM:	Structural Equation Model
SFA:	Stochastic Frontier Analysis
SSU:	Surplus Spending Units
TA:	Total Assets
TFA:	Thick Frontier Analysis
TSA:	Treasury Single Account
UPL:	Underwriting Profit/Loss
USA:	United States of America
VRS:	Variable Return to Scale

ABSTRACT

Over the years, the measurement of banks efficiency and its performance has been done with the use of certain key performance indicators (KPIs) such as liquidity ratio, profitability ratio, bank's capital adequacy, and asset quality of the banks amongst others. However, these KPIs do not interpret the true and fair view of the bank's efficiency and profitability because it fails to directly measure the managerial capacity of converting an organization's inputs into outputs in the same organization. The study, therefore, adopted a two-stage methodological approach [non-parametric data envelopment analysis (DEA) and regression analysis] with the help of Microsoft excel solver and e-views to analyze the efficiency and performance of 11 listed deposit money banks and 22 insurance companies. The study made use of three (3) inputs (total deposit, total asset, and operating expenses) and three (3) outputs (net interest income, loans and advances, and gross earnings) for the deposit money banks. While 22 listed insurance companies were also analyzed using two (2) inputs (total asset and gross premium written) and two (2) outputs (net premium income and underwriting profit/loss) for the envelopment models. For profitability, two models were formulated, which include, the net interest income (NII) model for deposit money banks and net premium income (NETPRE) model for insurance companies. From the data envelopment analysis, the study found that eight (8) deposit money banks were efficient at all envelopment models. At the same time, the remaining three (3) deposit money banks were not fully efficient at all envelopment models despite their profitability. For the insurance companies, only five (5) were efficient at all envelopment models while, the remaining seventeen (17) were not fully efficient at all envelopment analysis despite their profitability. From the profitability models (both DMBs and insurance companies), the study found that industry-specific variables were positive and statistically significant at 0.005 level of significance. The study concludes that big or large financial disclosures accrued to financial institutions does not secure its improved efficiency level which could metamorphose into financial instability. The study recommends that regulatory assessment of DMBs and Insurance companies performance should not be solely carried out by inferring on their financial figures, other categorical examples such as, number of employees, and standard working hours, which represents input and output variables, respectively can be used in analyzing firm's performance. In essence, a performance review should be carried out both qualitatively (non-numerical) and quantitatively.

Keywords: Efficiency; Data Envelopment Analysis; Frontier Analysis; Profitability.