

**Management Efficiency and Economic Growth in Nigeria:
An Empirical Analysis of Listed Firms in Nigeria
2003 - 2023**

Dr Emmanuel Chika Obizue

Department of Banking and Finance,

Imo State University, Owerri, Imo State

+2348068099918 dremmanuelobizue@gmail.com

And

Benjamin Oludotun Lisoyi

Wesley University, Ondo

08026775700 oludotun.lisoyi@wesleyuni.edu.ng

And

Ogunniran, Olufemi Mathew

08062393815 femmyoniran@yahoo.com

Abstract

This study examined the relationship management efficiency and economic growth in Nigeria. Secondary data were sourced from the financial statement of the ten listed firms in the Nigerian exchange group. Real gross domestic product (RGDP) was used as proxy for economic growth which is the dependent variable while return on Investment (ROI) and Rate of Turnover (RTOV) were used as the indices for management efficiency as the independent variables. Panel data ordinary least square was used to estimate the relationship between the variables and the study found that the two explanatory variables exerted positive and significant impact on the dependent variable. Based on the findings in this study it was concluded that efficiency and effectiveness in corporate management are profound and very crucial factors in driving the Nigerian economic growth and improvements in management practices can lead to increased productivity and economic growth. The study recommends that both the government and organizational management should invest in human capital training and development programs to improve quality, skills, entrepreneurship and innovation/creativity to enhance their efficiency towards growing both the organizations and the Nigerian economy and that the government should try to improve the institutional framework thereby strengthening regulatory frameworks so as to reduce management corruption and inefficiencies to enhance business environments which supports management efficiency and economic growth.

Keywords: *Management Efficiency, Corporate Performance, Economic Growth, Return on Investment, Rate of Turnover*

Introduction

The relationship between management efficiency and economic growth has been a subject of intense debate among scholars and policymakers. In the context of Nigeria which is regarded as the Africa's largest economy, this relationship is particularly significant. Despite its vast natural resources and enormous potential, Nigeria's economic growth has been hindered by inefficiencies in corporate management. The consequences are stark and very evident in the existing stagnant economic growth, dwindling investor confidence and a pervasive sense of missed opportunities.

Barabezara and Kosieme (2019) posited that management efficiency is critical to the success of corporate firms as it enables them to optimize resources, minimize waste and maximize productivity. In Nigeria, however, corporate firms face numerous challenges that impede their ability to operate efficiently. These challenges include inadequate infrastructure, inefficient supply chains and lack of skilled manpower. Nigeria's business environment is characterized by a complex web of regulations, bureaucratic red tape, and corruption (Obizue, 2023). Despite these challenges, some Nigerian corporate firms have demonstrated remarkable resilience and adaptability, leveraging innovative management practices and strategies to drive growth and profitability. That notwithstanding, the overall impact of management efficiency on economic growth in Nigeria remains poorly understood.

It is noteworthy that Nigerian corporate firms have struggled to operate efficiently, leading to stagnant economic growth, dwindling investor confidence, and a pervasive sense of missed opportunities. Nwozuzu, Mba and Obioha (2019) observed that the country's economic growth rate has been volatile, averaging around 2% per annum over the past decade and this is significantly lower than the average growth rate of other emerging markets.

In the views of many scholars like Nkemakolam and Sulieman (2012), Ahanonu (2015), Ekeada and Akpan (2018), Abalanna (2022) and Geokeri and Anajo (2022), the inefficient management of corporate firms in Nigeria has far-reaching consequences and some of them are; inefficient allocation of resources leading to waste and misallocation of scarce resources, low productivity which hinders the country's ability to compete globally, stagnant economic growth with its significant implications for poverty reduction and economic development, dwindling investor

confidence hindering the country's ability to attract much-needed investment. In order to address these challenges, it therefore becomes essential to investigate the relationship between management efficiency and economic growth in Nigeria. This study aims to contribute to the existing literature by identifying the key drivers of management efficiency in Nigerian corporate firms as well as providing an empirical analysis of the impact of efficient management on economic growth in Nigeria.

The findings of this study have important implications for policymakers, corporate leaders, and scholars. Policymakers can use the findings to inform policies aimed at improving management efficiency and promoting economic growth. For corporate leaders, the findings of this study will be useful in identifying areas for improvement and development of strategies to enhance management efficiency. Scholars can use the findings for further research studies and to advance the existing literature on management efficiency and economic growth.

The specific objectives of this study are to examine the effect of return on investment of listed firms on the economic growth of Nigeria and also to ascertain the impact of rate of turnover of listed firms on the economic growth of Nigeria.

From these specific objectives, two research questions and two null hypotheses were respectively stated to guide this study. They are; what is the effect of return on investment of listed firms on the economic growth of Nigerian and to what extent does rate of turnover of listed firms impact on Nigerian economy. The two null hypotheses states that there is no significant effect and impact of return on investment and rate of turnover of listed firms respectively on the economic growth of Nigeria.

Literature Review

Conceptual Dialectics

It is necessary to examine and clarify some concepts related to this study.

Management

Management is a dynamic process of getting things done by others in the team for the purpose of achieving common goals effectively and efficiently.

Efficiency

The term efficiency can be defined as the ability to achieve an end goal with little to no waste, effort or energy (Ashiedu and Emezienwa, 2021). Being efficient means you can achieve your results by putting the resources you have in the best way possible. In a more general sense, efficiency is the ability to do things well, successfully and without waste. In more mathematical or scientific terms, it signifies the level of performance that uses the least amount of inputs to achieve the highest amount of output.

Management Efficiency

Management Efficiency is the ability of an organization or professionals to use the available resources, time and money to achieve the organizational goals. Efficiency in management focuses on achieving short-term improvements and objectives by implementing the steps needed to achieve organisational goals. Akasi and Igwe (2019) viewed efficiency in management as performing activities with the minimum wastage of resources.

Obizue (2023) asserted that a management is said to be efficient when it is performing or functioning in the best possible manner with the least waste of time and effort, having and using requisite knowledge, skill and industry competence, capability, professionalism and proficiency giving rise to the much desired and expected realization of set goals of an organization. According to Bamidele (2024) refers to optimum utilization of resources so that the organization can maximize profit. Simply put, efficient management relates to the effective operation as measured by comparing production with cost of energy, time, and money invested in a process. Management efficiency is a determinant of corporate profitability. It is the whole effort of firms' management executives to effectively and efficiently allocate or apply various resources towards satisfying the various stakeholders of the bank. It focuses on the level of efficiency and prudence which organisations demonstrate in the management of their operational expenses and this is an attribute of its profitability level. Ahanonu (2015) confirmed that efficient cost management is a prerequisite for improved profitability of business organisations. The higher the efficiency level of a firms, the higher their profit levels. There is always the evidence that superior management raise profits and market shares through efficient application of an organisation's capital while poor management dwells in increasing cost that ruins their profit level. Babalola and Oluwade

(2018) found a direct negative connection between operating expenses and profitability among Nigerian banks and concluded that operating expenses appear to be an important determinant of banks profitability; the implication being that there is immediate negative correlation between lack of efficiency in expenses management and banks profitability in Nigeria. In other words, Doyran (2012) posited that there is a positive relation between efficient expense management (management quality) and profitability.

Efficiency in management is a necessary requirement to acquire the right type of asset to yield the highest rate of return and maintain optimal balance between the cost of capital and the return from the investment. The issue is not simple for most bank managers because asset management is constrained by other factors other than profitability. In the banking sector, bank managers are further constrained to maintain a delicate balance between the needs for liquidity and the demands for profitability (Akinwale and Obosi, 2013). This constraint arises because the operation actions of bank managers which tend to promote profitability often endanger the liquidity position of the bank. It is the idea of Oluwale and Tobyson (2024) that how well a firm operates with optimal liquidity and profitability demands amidst other industry requirements are measures to determine their level of management efficiency. In view of this, Mudariara and Obloga (2018) posited that corporate managers should adopt operational strategies for prudent activities that would cause them to emerge successful and profitable in their endeavours. Duru and Ejike (2014), Abalanna (2022), Akarandu and Ndubueze (2022) generally agreed that the following are the consequences when organisations fail to ensure efficiency in their management; stagnant economic growth, low productivity, inflation, unemployment, reduced profitability, reduced investor confidence, bankruptcy, poverty, income inequality, social unrest, brain drain, low morale among employees, stifled innovation, poor decision-making, as managers may not have the necessary skills or expertise to make informed decisions et.

Economic Growth

Okpara (2018) defined economic growth as the increase in the production of goods and services in an economy over a specific period of time. It is typically measured by the percentage change in the gross domestic product (GDP) of a country. The major measures and indicators of economic growth are; Gross Domestic Product (GDP), GDP Growth Rate, Gross National

Income (GNI), Per Capita Income, Unemployment Rate, Inflation Rate etc. some factors that could affect economic growth are technological advancements, investment in human capital, stable and effective institutional framework, fiscal policy on government spending and taxation, monetary policies, extent of international trade and globalization (Okpara, 2018). He further emphasized that stable rate of economic growth can be beneficial and evident in reducing poverty and unemployment thereby improving the standard of living of the people, improved infrastructural development and attraction of domestic and foreign investment.

The Relationship between Management Efficiency, Corporate Performance and Economic Growth in Nigeria

Management efficiency refers to the ability of an organization to achieve its goals and objectives using the minimum amount of resources (Bamidele, 2024). In Nigeria, management efficiency is critical to the success of corporate firms, as it enables them to optimize resources, minimize waste, and maximize productivity.

Corporate performance refers to the ability of an organization to achieve its financial and non-financial goals. In Nigeria, corporate performance is influenced by a range of factors, including management efficiency, innovation, and entrepreneurship. Obizue (2023) observed that management efficiency is critical to corporate performance as it enables firms to respond to changing market conditions, innovate, invest, adapt to new technologies and create job opportunities giving rise to increased productivity and upward trend in the economic growth of a nation.

In the words of Ebeneza, Adebola and Alamezie (2022), economic growth refers to the increase in the production of goods and services in an economy over a specific period of time. Management efficiency and corporate performance are key factors to economic growth which in turn helps in improving living standards, reducing poverty, and increasing economic opportunities (Duru and Ejike, 2013).

The relationship between management efficiency, corporate performance, and economic growth is complex and interdependent. The level of efficiency offered by corporate management leads to high corporate performance thereby enabling firms to optimize resources, minimize waste and maximize productivity. Despite the importance of management efficiency and corporate

performance to economic growth, Nigerian firms face several challenges which include and not limited to inadequate infrastructure, power supply, transportation networks, and communication systems; corruption and poor governance leading to inefficient allocation of resources and undermine trust in institutions; limited access to finance which limits their ability to invest in new technologies, innovate, and expand; inadequate availability of skilled and trained workers leading to reduced productivity and competition (Nwozuzu, Mba and Obioha, 2019).

Babalola and Oluwale (2018) advised that it is very important for business organisations to strive and improve in their management efficiency and corporate performance. In doing so, Nigerian firms can adopt several strategies like investing in new technologies, such as enterprise resource planning (ERP) systems which will help them to improve management efficiency and reduce costs (Nkemakolam and Sulieman, 2012). Akinwale and Obosi (2013), Ekeada and Akpan (2018), Akarandu and Ndubueze (2022) and Obizue (2023) shared the view that developing strategic partnerships with other firms, both domestically and internationally to access new markets, technologies, and skills as well as investments in skills and training programs to develop the skills and competencies of their workers and fostering a culture of innovation by encouraging experimentation, learning from failure and recognizing and rewarding innovative potentials are ways that management strategies can be enhanced to make it more effective in actualizing the set goals of business organisations as well as attaining national economic goals. By some fiscal policies on corporate management, efficiency and financial performance will be enhanced leading to an upward trend in the growth of Nigerian economy (Babalola and Oluwale, 2018).

Theories

This study adopted two theories viz; institutional theory and revenue based theory.

Institutional Theory: This is a social science theory that has its root in the works of several scholars but was formally developed by Philip Selznick (1949), John Meyer and Brian Rowan (1977) and Paul Dimaggio and Walter Powell (1983) and has been applied to different context including organisations, industries and societies. This theory explains how institutions like norms, values and regulations influence and shape the behaviours and actions of individuals and organisations. It talks about isomorphism which reveals how organisations and their management

become similar in structure, behaviour and strategy due to institutional pressure leading to enhanced management efficiency, productivity, industry or sector improvement and overall economic growth. The import of this theory is that it provides the opportunity and framework to understand how institutions shape management actions and outcomes by making appropriate, legitimate and reputable business decisions towards organisational goal achievement, stakeholders' satisfaction and positive economic impact.

Revenue-Based Theory: The concept of revenue-based theory which is also known as revenue management or revenue optimization has been developed and refined by scholars like; Robert Cross (1997), Gary Benneth (2001), David Hayes (2001) etc. This is a strategic approach to efficiently manage a company's revenue streams to maximise profitability. It takes the form of analyzing customers' demand and willingness to pay to optimize pricing strategies, inventory management, customer segmentation to tailor prices to segments and demand forecast to ensure that products and services are available when customers and clients need them. This measure helps management to increase revenue and profitability and contribute in enhancing host economy. The major challenges of this theory are customer resistance to price changes, complexity in implementation, high quality of data, regulatory compliance etc.

Empirical Review

Akinwale and Obosi (2013) investigated the impact of CAMELS on the performance of deposit money banks in Nigeria from 1990 to 2015. He used profit after tax for banks' profitability and CAMELS as the determinant variables. The unit root test result indicated a mixed order of integration hence the researchers proceeded with the bounds test and ARDL and the result disclosed that a significant relationship exists between CAMELS and banks' profitability in Nigeria given most of the independent indices showing positive coefficients in both the current year and lagged periods. The result specifically recorded that capital and management efficiency significantly affect banks' performance. The researcher recommended that the management of the deposit money banks should sustain and also enhance their management efficiency in establishing a more proactive internal control system that will effectively and efficiently monitor credit and liquidity risk mechanisms and also concluded that it will take cost prudence to avoid

asset-liability mismatch and also checkmate variation between budget and actual towards attaining an ever increasing profit level.

Okpara (2018) in their study on the determinants of economic development in a developing economy used management efficiency and profitability of corporate entities as the independent variables which they sourced from the CBN bulletin. They evaluated the performance of 20 Nigerian firms between 1990 and 2018. Using OLS regression procedure, their findings suggested that firms' specific characteristics, in particular operational efficiency and cost have positive and significant impacts on their performances which also translates to their contribution to economic development in Nigeria. As for the impact of macroeconomic indicators, the researchers concluded that the variables have no significant impact on the economy of Nigeria, hence recommended that the government should effectively monitor the efficiency of corporate management and as well ensure that they adequately comply with the various economic regulations on ground.

Ashiedu and Emezienwa (2021) investigated the management efficiency components in manufacturing sector and its effect on Nigerian economy. The study selected ten firms from the Nigeria exchange market and collected their data from 2000 to 2015. The data were analyzed using Autoregressive Distributed Lag (ARDL) and the result showed that the key determinants of management efficiency in the sector that enormously affect economic growth in Nigeria are financial performance, market size, return on investment. It was concluded that management efficiency in the manufacturing sector has profound impact on the economy of Nigeria.

Geokeri and Anajo (2022) carried out a report on analyzing the effect of management efficiency and profitability banks in Ghana. The study was a quasi-experimental design which adopted regression analysis model to measure profitability of the selected banks as the dependent variable and liquidity, deposits, loans and other investments as the independent variables. The study results showed that liquidity and other investments positively and significantly affected the profitability of banks in Ghana while loans had positive and insignificant effect on their profitability.

The researcher concluded that loan advancement is a major source of revenue to banks but when borrowers fail to repay as agreed, it become a loss to the banks thereby reducing their level of operation.

Obizue (2023) adopted the ex-poste factor research design and made use of the econometric procedure in estimating the relationship between CAMELS and the performance of deposit money banks in Nigeria. Secondary data from the financial statements information were collected on five deposit money banks were randomly selected based on the access to data at the time of the study. The study found that CAMELS indices capital adequacy, management efficiency, earnings, liquidity and sensitivity to interest rate were statistically significant in affecting banks' performance in Nigeria except earnings. In conclusion, the study remarked that the financial intermediation activities of deposit money banks are key determinants of economic development in many nations including Nigeria.

Gap in Literature

Despite the significant body of research on management efficiency and economic growth, there are several gaps in the existing literature: there are few empirical studies on management efficiency and economic growth in Nigeria giving rise to limited understanding of the concept of management efficiency and its impact on economic growth in Nigeria. The few studies that exist in the body of knowledge did not use the panel data analytical tool and the variables like, return on investment and rate of turnover of corporate firms to represent the independent variable as adopted in this study. For this reasons, this study aims to address these research gaps by providing an empirical analysis of the relationship between management efficiency and economic growth in Nigeria while also considering the contextual factors that influence this relationship.

Methodology

For the purpose of this study, the quasi-experimental research design was employed in obtaining, analyzing and interpreting the relevant data for hypotheses testing towards the investigation of the relationship between management efficiency and economic growth in Nigeria. According to Uzoagulu (1998), adopting the quasi-experimental research design gives the researcher the opportunity to observe one or more variables over a period of time. The population of this study

was made up of all the organisations listed in the exchange group which the researchers was not able to ascertain the actual number. However, due to availability of required data, the researchers purposefully selected one firm from each of the major sectors of the Nigerian economy giving a total of ten firms used in this study.

The study used cross sectional panel data for the analysis and these were sourced from the financial statement of the quoted firms. Real gross domestic product (RGDP) was used as proxy for economic growth which is the dependent variable while return on investment (ROI) and rate of turnover (RTOV) were used as the indices for management efficiency as the independent variables. Owing to the cross-sectional nature of the data used in this study, the panel data ordinary least square was used to estimate the relationship between the variables. This approach, which is a quantitative technique, includes tables and the test of the hypotheses formulated by using ordinary least square regression analysis at 5% level of significance. To arrive at a result that was not lead to spurious regressions, the study tested for stationarity at different levels in the variables making up the model. The Hausman test was carried out and the Fixed effect model was appropriately chosen for further analysis other than the Random Effect. Other tests that were carried out on the model include test of Durbin Watson Test and test of model specification so as to achieve the objectives of our study, answer the research question and also test the hypotheses. The study employed the coefficient of determination (R^2), the student T-test and F-test to statistically evaluate the analytical model and determine the reliability of the results obtained.

Model Specification

The literature that was reviewed in this study revealed that management efficiency can be affected by several generic factors so it is therefore pertinent examine its effect on economic growth hence the regression models below was formulated to capture the effect of independent variables on the dependent variables.

$$Y = \beta_0 + \beta_{1xit} + \mu \quad \dots\dots (1)$$

Where:

- Y = Dependent Variable
- β_{1xit} = Independent variable
- β_0 = Regression Intercept
- μ = Error Term

Disaggregating Equation 1 to form the multiple regression models

The linear regression model is formulated as follows:

$$RGDP = f(ROI, RTOV) \dots\dots (2)$$

Transforming equation (2) to testable form

$$ROA = b_0 + b_1ROI + b_2RTOV + U_t$$

Where:

RGDP = Real Gross Domestic Product

ROI = Return on Investment

RTOV = Rate of Turnover

U_t = Stochastic Error Term (unexplained variables in the model)

b_0 = Regression Intercept or Constant

$b_1 - b_2$ = Coefficient of Independent Variables to the Dependent Variables

A-priori Expectation of the Result

The independent variables are expected to have positive and direct effects on the dependent variable. This implies that a unit increase in any of the explanatory variables is expected to increase the dependent variable proportionately and this can be expressed thus; $b_1, b_2, b_3 > 0$.

Results and Analysis

Table 1: UnitRootTestResult

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Poolunitroottest:S
ummarySample:
20032023
Exogenous variables: Individual
effectsAutomatic selection of
maximum
lagsAutomaticlaglengthselection
basedonSIC:0
Newey-WestautomaticbandwidthselectionandBartlettkernelBalanced
observationsforeach test
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Method	Statistic	Prob.**	Cross-section	Obs
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S

Null:Unitroot(assumescommonunitrootprocess)				
Levin,Lin&Chut*	-	0.0000	70	100
	49.48011			
Null:Unitroot(assumesindividualunitrootprocess)				
Im,PesaranandShinW-stat	-11.9251	0.0000	70	100
ADF-FisherChi-square	220.040	0.0000	70	100
PP-FisherChi-square	256.174	0.0000	70	100

**ProbabilitiesforFishertestsarecomputedusingansymptoticChi-squaredistribution.Allthertestsassumeasymptoticnormality.

For the unit root, Levin, Lin & Chu statistics, Im, Pesaran and Shin W-statistic, ADF-Fisher Chi-square and PP- Fisher Chi-square tests were specified and the summary results indicate that the series were all stationary at level thereby giving credence for the rejection of the null hypothesis of a unit root.

Table 2: Regression Results on Management Efficiency and Economic Growth in Nigeria

Pooled Regression Results				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROI	0.924560	0.401431	2.321771	0.0213
RTOV	0.830121	0.410422	1.947213	0.0526
C	-0.619782	2.709210	-0.227822	0.7190
ECM(-1)	0.949027	0.038019	24.05441	0.0000
R-squared	0.879272	Mean dependent var		5.700549
Adjusted R-squared	0.876528	S.D. dependent var		4.787911
S.E. of regression	1.671672	Akaike info criterion		3.921820
Sum squared resid	230.4272	Schwarz criterion		4.039441
Log likelihood	-164.7660	Hannan-Quinn criter.		3.957878
F-statistic	200.7211	Durbin-Watson stat		2.014420
Prob(F-statistic)	0.000000			

Fixed Regression Results				
Variables	Coefficients	Std. Error	t-Statistics	Prob.

ROI	0.537718	0.340441	1.560411	0.0211
RTOV	0.052410	0.541160	0.132002	0.0454
C	4.677150	2.664405	1.790010	0.0639
ECM(-1)	0.267847	0.082380	2.860231	0.0051

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.838189	Mean dependent var	5.711416
Adjusted R-squared	0.824117	S.D. dependent var	4.793290
S.E. of regression	1.274280	Akaike info criterion	3.481132
Sum squared resid	121.7105	Schwarz criterion	3.794240
Log likelihood	-134.3015	Hannan-Quinn criter.	3.622531
F-statistic	90.65003	Durbin-Watson stat	1.700218
Prob(F-statistic)	0.000000		

Random Regression Results

Variables	Coefficients	Std. Error	t-Statistics	Prob.
ROI	0.893515	0.301414	2.814651	0.0039
RTOV	0.821440	0.320560	2.520014	0.0125
C	-0.60434	2.080320	-0.84711	0.7133
ECM(-1)	0.940210	0.031011	30.93310	0.0000

Effects Specification

S.D.		Rho	
Cross-section random	0.000000	Cross-section random	0.0000
Idiosyncratic random	1.284340	Idiosyncratic random	1.0000
Weighted Statistics			
R-squared	0.843133	Mean dependent var	5.700698
Adjusted R-squared	0.876796	S.D. dependent var	4.791288
S.E. of regression	1.681759	Sum squared resid	231.9218
F-statistic	202.6384	Durbin-Watson stat	2.014420
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.881145	Mean dependent var	5.700698
Sum squared resid	231.9218	Durbin-Watson stat	2.014420

Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	61.910216	3	0.0000

Based on the panel data analytical method, the fundamental question lies on the most appropriate, consistent and suitable methods that will be selected or adopted. Therefore, some means of selecting the most suitable method among the different approaches especially between the fixed effect model (FEM) and random effect model (REM) is needed. But when such a

correlation exists, the Hausman test is usually applied to make this choice. Given the result in the table above, the probability of the Hausman test revealed a probability of 0.0000 which is less than 0.05, therefore, the study adopt the fixed effect model.

Individual Test (T-Test):

From the Fixed Effect regression result, the followings were obtained and analysed thus; The result showed the ROI had positive coefficient of 0.537718 and probability of 0.0211 while RTOV also recorded positive coefficient of 0.541160 and probability of 0.454. Going by this results, both ROI and RTOV positively and significantly correlated with RGPD hence their respective null hypotheses which stated that they do not have significant relationship with RGPD is hereby rejected since their probability values of 0.0211 and 0.0454 are respectively below the 0.05 significance level.

Joint Test (F-Test):

The result showed the F-calculated value as 90.65003 and the F-statistic probability value as 000000. Given the fact that the P-value of the F-statistics is lower than the level of significance $\alpha = 0.05$ [5%], the regression model is hereby judged statistically significant and this supports the conclusion that the explanatory variables exert joint statistically significant influent on the dependent variable.

Coefficient of Multiple Determinations (R²): The computed coefficient of multiple determinations (adjusted R²) of 0.824117 implies that 82.41% of the total variations in the economic growth of Nigeria are accounted for, by the explanatory variables while the remainder is attributed to variables that are influenced by other factors not included in the regression model.

Auto/Serial Correlation Test using Durbin Watson statistics (DW): The DW value of 1.700218 from the fixed results tends towards 2 and is greater than the lower limit indicating that there is no evidence of positive first order serial correlation.

Discussion of Findings

The fixed effect regression result showed that the explanatory variables (return on investment and rate of turnover) positively and significantly impacted on the economic growth in Nigeria within the period understudied. This positive effect of the variables confirms and conformed the a-priori expectations in this study. The positive effect of the variable is validated by the findings of Obizue (2023) in his study on CAMELS and financial performance of deposit money banks

where it was found that CAMELS indices such as capital adequacy, management efficiency, earnings, liquidity were statistically significant positive in affecting banks' performance in Nigeria. It can rightly be deduced that anything that positively affects the banking sector will potentially affect the entire economy because the financial sector is the bedrock of every economy and Nigeria is not an exceptions. Different researchers like Akinwale and Obosi (2013), Akasi and Igwe (2019), Barabezara and Kosieme (2019), Bamidele (2024) in their various studies confirmed the significant correlation between management efficiency and economic growth and this aligns with the very findings in this study. Particularly, Ashiedu and Emezienwa (2021) investigated the management efficiency components in manufacturing sector and its effect on Nigerian economy and concluded that management efficiency in the manufacturing sector has profound impact on the economy of Nigeria. This aligns and gives further credence to the findings in this current study.

Conclusion

The study has explored the relationship between management efficiency and economic growth in Nigeria. The findings in this study suggest that efficiency and effectiveness in corporate management are profound and very crucial factors in driving the Nigerian economic growth and improvements in management practices can lead to increased productivity and economic growth

Recommendations

The following are the recommendations proffered in this study in line with the findings of this work;

1. Both the government and organizational management should invest in human capital training and development programs to improve quality, skills, entrepreneurship and innovation/creativity to enhance their efficiency towards growing both the organizations and the Nigerian economy
2. The government should try to improve the institutional framework thereby strengthening regulatory frameworks so as to reduce management corruption and inefficiencies to enhance business environments which supports management efficiency and economic growth

3. The government should encourage competition and innovation by supporting small and medium-sized enterprises and startups to drive economic growth

References

- Abalanna, M. A., [2022]. Management Efficiency and Bank Performance in Nigeria. *International Journal of Finance and Statistics*, 10 [6], 1184 - 1198
- Ahanonu, A.M. [2015]. The Relationship between Management Concentration and Profitability. *Journal of Portfolio Management*, 37[2], 113 - 119

- Akasi, C. O., and Igwe, C. U. [2019]. The Impact of Management Efficiency on Deposit Money Banks' Profitability in Nigeria. *European Journal of business and management*, 12[12], 1417-1429.
- Akarandu, A.C and Ndubueze, M. [2022]. Analysis of Public Sector Financial Control Strategies as Tools for Economic Development in Nigeria. *Journal of Management Sciences*, 15[4], 772 - 889
- Akinwale, M. and Obosi, C.U. [2013]. Impact of CAMELS on the Performance of Deposit Money Banks in Nigeria. *Journal of Management Sciences*, 9[2], 131 - 147
- Ashiedu, J.C. and Emezienwa, O. (2021). Management Efficiency Components and their Effects on Economic Growth in Nigeria. *Journal of International Finance and Management*, 16(6), 2412 - 2426
- Babalola, M.C [2008]. Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability, *Journal of International Financial Markets, Institutions and Money*, 18, 121-136.
- Bamidele, O.C. [2024]. The Relationship between Capital Adequacy and Management Efficiency of Financial Institutions in Nigeria. *Journal of Money, Credit and Banking*. 4[2], 4140 – 4156
- Barabazara, F. and Kosieme, U.C. [2019]. Determinants of Management Efficiency in Developing Countries. *Journal of Banking and Finance*, 8[3], 119 – 131
- Doyran, C. [2012]. Effect of Fiscal Policy on Firm-Specific and Industry-Specific determinants of Financial Institutions Performance in Nigeria. *African Journal of Business and Social Science*, 3[19], 255 - 269
- Duru, E.J. and Ejike, M. [2014]. Relationship between Fiscal Policy and Banks' Performance in Nigeria. *Journal of Finance*, 3, 144 - 154
- Ebeneza, M., Adebola, A.M. and Alamezie, I. [2022]. Monitoring Bank Management Efficiency and Overall Performance in the Presence of Risk, *International Journal of Management and Contemporary Studies*, 12[5], 1161- 1175
- Ekeada, J. A. and Akpan, O. [2018]. The Role of Management in Banks' Profitability and Economic Growth in Nigeria, *International Journal of Finance*, 16[9], 2141 – 2156.

- Geokeri, B and Anajo, M.N. [2022]. Effects of Management Efficiency on the Performance of Financial Institutions in Ghana. *Journal of Strategic Management*, 20[4], 2110 - 2122
- Mudariara, O. and Obloga, M.E. [2018]. Bank Liquidity Management and Economic Growth in Developing Economies: Empirical Evidence, *Academic Journal of Management, Accounting and Finance*, 4[2], 91 – 112.
- Nkemakolam, O. T. and Suleiman, M. E [2012]. Analysis of Effect of Effective Financial Management on Corporate Performance and Economic Growth: Evidence from Nigeria. *Journal of Public Administration, and Governance*. 12[4], 3178-3193.
- Nwozuzu, A.A., Mba, T. and Obioha, M.N. [2019]. Effects of Management In-Service Training and Economic Growth in Nigeria. *International Review of Economics and Finance*, 23[7], 3023 - 3033
- Obizue, E.C. [2023]. CAMELS and Banks' Performance in Nigeria. *International Journal of Education, Research and Scientific Development*, 4[2], 234 - 249
- Okpara, U.C. [2012]. Determinants of Economic Development in Emerging Economies. *Journal of Economics and Social Sciences*, 6[2], 269 - 283
- Oluwale, E.L. and Tobyson, M.B. [2024]. Relationship between Management Efficiency and Economic Growth in Sub-Saharan Africa, *African Economic Review* 23[10], 101-116.