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Effect of Asset Growth Rate on The Financial Performance of Firms In Nigeria: A Multi-Sectoral Analysis

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Abstract

The study examined the effect of asset growth rate on the financial performance of firms in Nigeria. The specific objectives were to ascertain the effect of total asset growth rate, non-current asset growth rate, and financial assets growth rate on the net profit growth rate of firms in Nigeria. The study adopted an ex post facto research design, utilizing historical financial data obtained from the audited annual reports of firms listed on the Nigerian Exchange Group between 2015 and 2024. The population comprised forty (40) firms across the Consumer Goods, Industrial Goods, and Oil & Gas sectors, from which a purposive sample of thirty (30) firms consistently listed as of 2015 was selected. Data were collected through secondary sources and analysed using panel estimated generalised least square regression analysis with the aid of E-Views software to test the formulated hypotheses. The findings revealed that: total asset growth rate has a negative and significant effect on the net profit growth rate of firms in Nigeria (β = -1.8376, p = 0.0014); non-current asset growth rate has a negative but non-significant on the net profit growth rate of firms in Nigeria (β = -0.3588, p = 0.2963);.The study concluded that strategic management of asset growth is essential for enhancing firm profitability and sustaining long-term financial performance in Nigeria's competitive business environment. The study recommended that investment managers and corporate treasurers should review their portfolio of financial assets to ensure that funds are not tied up in low-yield or non-productive financial instruments. Redirecting excess funds toward core business operations or high-return projects can help enhance profitability and reduce the adverse effects of unproductive financial asset accumulation.

Keywords: *Asset Growth Rate, Total Asset Growth Rate, Non-Current Asset Growth Rate, Financial Assets Growth Rate, Financial Performance*

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Introduction

Asset growth rate is a critical determinant of firm financial performance, influencing various aspects of operations and strategic decision-making. Asset growth plays a pivotal role in shaping a firm's financial performance, serving as a crucial indicator of its health, competitiveness, and future prospects (Haji & Ghazili, 2018). The growth trajectory of assets directly impacts various aspects of financial operations and strategic decision-making within an organization. First and foremost, asset growth is intricately linked to revenue generation and profitability. Expansion of assets often facilitates increased production capacity, market reach, and efficiency, leading to higher sales volumes and revenues. Moreover, efficient asset utilization can enhance profitability through cost savings, improved operational effectiveness, and economies of scale. Furthermore, asset growth influences a firm's ability to attract investment and secure financing. As noted by Parnell (2011), a growing asset base not only signifies the company's potential for future earnings but also instills confidence in investors and lenders regarding its stability and growth prospects. This, in turn, enables the firm to access additional funding at favourable terms, fuelling further expansion and development initiatives (Olaoye & Ayodele, 2019).

The effect of asset growth rate on firm performance in Nigeria is a topic of significant interest, given the country's dynamic economic landscape and evolving business environment. Ajibola and Adebayo (2014) note that in the Nigerian context highlights the positive relationship between asset growth and firm profitability, emphasizing the role of asset expansion in driving revenue generation and operational efficiency. This finding underscores the importance of strategic asset management in enhancing financial performance and sustaining competitive advantage in the Nigerian market. Moreover, Alimi, et al, (2019) examines the impact of asset growth on firm value in Nigeria, indicating a strong association between asset expansion and market valuation. The research underscores the significance of asset growth as a key determinant of investor perception and confidence, thereby influencing firm performance and shareholder wealth creation.

The current state of asset growth in Nigerian firms demonstrates significant implications for their financial performance. A notable trend has been observed in the manufacturing and financial sectors, where firms leveraging increased asset bases often achieve enhanced operational efficiency and profitability (Akpan & Udoka, 2020). The relationship between asset growth and financial performance is linked to the capacity to utilize assets effectively in revenue generation, measured by key metrics such as return on assets (ROA) and profit for the year. The Nigerian asset management industry, for instance, is projected to experience a growth rate of approximately 32.4% by 2025, driven by investments in infrastructure, strategic international portfolios, and regulatory enhancements (Ariyani, Zaini, & Pratiwi, 2018). This indicates a strong correlation between asset base expansion and resilience against economic volatility.

Asset growth indicators such as total asset growth rate, non-current asset growth rate, current asset growth rate, intangible asset and financial assets play a crucial role in shaping the profitability of firms across various sectors in Nigeria (Chukwu, & Egbuhuzor, 2017). Ajibola and Adebayo (2014) found a positive correlation between asset growth and firm profitability in Nigeria's manufacturing sector, highlighting the significance of effective asset management in driving financial performance. While research on the effect of asset growth rate on firm performance in Nigeria has provided valuable insights, there remains a notable gap in empirical studies regarding

the nuanced impact of asset growth on specific industries or sectors within the Nigerian economy. Existing research has predominantly focused on aggregate measures of firm performance across various sectors, overlooking potential sector-specific dynamics that may influence the relationship between asset growth rate and financial outcomes.

Statement of the Problem

The effect of asset growth rate on firm performance in Nigeria presents a multi-layered problem with significant implications for the country's economic development. Despite the recognized importance of asset growth in driving financial performance, several challenges and gaps exist that warrant investigation. The ideal situation would see Nigerian firms effectively leveraging asset growth to enhance operational efficiency, profitability, and long-term sustainability. However, the reality often deviates from this ideal due to various factors such as inadequate infrastructure, limited access to financing, regulatory constraints, and sector-specific challenges. As a result, many firms may struggle to achieve optimal asset utilization and fail to realize the full potential of their growth initiatives.

Moreover, inefficiencies in asset management may exacerbate economic inequalities, hinder job creation, and impede overall economic progress. Inadequate total asset growth rate, non-current asset growth rate, current asset growth rate, asset turnover ratio, and market value of assets can have profound consequences on the profit for the year of firms across various sectors in Nigeria. Firstly, insufficient asset growth rates may lead to stagnant revenue streams, hindering the firm's ability to expand operations, innovate, or invest in new opportunities. This can result in diminished competitiveness and market share loss, particularly in dynamic industries where growth is essential for survival. Moreover, a low asset turnover ratio indicates inefficiencies in asset utilization, leading to increased operating costs, reduced profitability, and decreased return on investment. Inadequate market value of assets may signal undervaluation or depreciation, impacting the firm's financial health and investor confidence.

The current situation in Nigeria presents several challenges that significantly impede firm financial performance despite efforts to increase asset growth rates. Economic instability, marked by fluctuating exchange rates, inflationary pressures, and revenue volatility from oil-dependent exports, creates a precarious business environment. Regulatory constraints and bureaucratic inefficiencies further hinder firms' ability to efficiently utilize assets and pursue growth opportunities. Additionally, inadequate infrastructure, including unreliable power supply and inadequate transportation network, poses operational challenges and increases costs for businesses across sectors. In view of all these challenges, there are notable gap in the field of study in Nigeria needed to address the challenges. The research gap lies in the limited understanding of how asset growth rate specifically impacts firm performance in the Nigerian context, particularly across different sectors. Addressing this research gap is critical for informing evidence-based policy interventions, strategic decision-making by firms, and academic discourse. It is against this present scenario that the study examined the effect of Asset Growth Rate and on the financial performance of Firms in Nigeria.

Objectives of the Study

The broad objective of the study was to examine the effect of asset growth rate on the financial performance of firms in Nigeria. The specific objectives of the study were to:

i. Examine the effect of total asset growth rate on the net profit growth rate of firms in Nigeria;

ii. Ascertain the effect of non-current asset growth rate on the net profit growth rate of firms in Nigeria;

Research Questions

The following research questions were made for the study.

i. What is the effect of total asset growth rate on the net profit growth rate of firms in Nigeria?

ii. What effect does non-current asset growth rate have on the net profit growth rate of firms in Nigeria?

Statement of Hypotheses

The following null hypotheses were formulated for the study.

i. Total asset growth rate has no significant effect on the net profit growth rate of firms in Nigeria.

ii. Non-current asset growth rate does not significantly affect the net profit growth rate of firms in Nigeria.

Scope of the Study

The scope of this study encompassed an analysis focusing on the effect of asset growth rate on the financial performance of firms in Nigeria from 2015 to 2024. The chosen base period ensured a comprehensive analysis of asset growth's impact on Nigerian firms, covering economic fluctuations and policy changes. While the ending in 2024, rather than 2023, allows inclusion of the most recent financial data, enhancing relevance and capturing post-pandemic recovery trends affecting firms' performance and investment decisions. Specifically, the study investigated the effect of total asset growth rate, non-current asset growth rate, and current asset growth rate on profit growth. By examining data from different sectors, including industrial goods, consumer goods, conglomerate, and others, the study provided a comprehensive understanding of how asset growth influences financial performance in diverse industries within the Nigerian economy. Through statistical analysis which include regression modelling techniques, the study assessed the significance of these variables in explaining variations in profit for the year, thereby shedding light on the drivers of profitability and value creation for firms operating in Nigeria's dynamic business environment.

Review of Related Literature

Conceptual Review

Asset Growth Rate

Assets were defined in line with each nation's generally accepted accounting principles (GAAP) prior to the adoption of International Financial Reporting Standards (IFRSs) by nations. Their interpretations of what they believed to be an entity's asset served as the basis for their definitions of assets (Fajaria and Isnalita, 2018). Because financial statements issued by businesses worldwide at the time were inconsistent and what was considered assets in one jurisdiction were not considered assets in another, the comparability of company performance was hampered during this time. The following are some of these nations' definitions of assets as of that time: Initially, an asset was described as a business's property that is used to produce revenue; second, according to Inyiama et al. (2017), an asset is any tangible property owned by a company that can be seen, felt, and touched.

Thirdly, assets were defined as an entity's total investments or stock of capital, and lastly, assets were defined as all of a business's tangible and intangible assets utilized throughout one or more accounting periods. The final definition of asset provided above provided a picture of what assets were used for prior to the global adoption of IFRSs (IFRS, 2022). This is due to the fact that the definition includes current assets as well as many asset types, including fixed, tangible, and intangible assets.

Total Asset Growth Rate

Ross et al. (2019) defined total asset growth as the percentage increase in the total assets of a firm over a specific period, typically measured annually or quarterly. Total assets include all of a firm's resources, both tangible and intangible, such as cash, inventory, property, plant, equipment, and investments. Total asset growth is an important financial metric that indicates the expansion or contraction of a firm's asset base over time. Brealey et al. (2017) assert that total asset growth is commonly used by investors, analysts, and managers to assess a firm's ability to expand its operations, invest in new projects, and generate future revenue. It can also provide insights into a firm's financial health, efficiency, and long-term sustainability. Total asset financing facilities, according to Rahman (2014), provide great flexibility because the firm does not have to go through the entire underwriting process again. This benefit is particularly important for firms that are rapidly growing and require additional funding, such as insurance firms. This means that lenders are more likely to have physical assets as a guarantee that at least a portion of the money borrowed can be recouped. As pledged securities whose value fluctuates with the market are frequently employed for this reason, margin loans are particularly sensitive to the underlying value of collaterals. As a result, a firm’s total assets typically include valuation of tangible, hard assets such as property, equipment, plant, and inventory (Rahman, 2014).

Non-current asset growth rate

Non-current asset growth rate refers to the percentage change in a company's non-current or long-term assets over a specific period. Non-current assets are resources that are expected to provide economic benefits beyond the current accounting period and typically include items such as property, plant, equipment, intangible assets, and long-term investments. The non-current asset growth rate is an important financial metric used to evaluate the pace at which a company is expanding its long-term asset base. The formula for calculating Non-current Asset Growth Rate is similar to that of Total Asset Growth Rate:

$$\textbf{Non-current Asset Growth Rate} = \frac{(\text{Non-current Asset}_{end} - \text{Non-current Assets}_{start})}{\text{Non-current Assets}_{start}} \times 100\%$$

Non-current asset growth rate provides valuable insights into a company's investment in long-term assets, such as infrastructure improvements, technological upgrades, and acquisitions. A positive growth rate indicates expansion in the company's long-term asset base, which can enhance its operational capabilities, competitiveness, and future revenue-generating potential. Conversely, a negative growth rate may signal divestitures, asset impairments, or underinvestment in long-term assets, which could adversely affect the company's growth prospects and financial performance.

Financial Performance

Various authors define performance in various ways, for instance, Watkins (2007) defined performance as valuable results, accomplishment, or contributions of an individual or an organization, regardless of preferred or mandated process. Ramiz and Junrui (2014) defined performance as an achievement of tangible, specific, measurable, worthwhile and personally meaningful goals. Performance is the ability of an organization to gain and manage the resources in several difference ways to develop a competitive advantage. Literature usually distinguishes between two types of performance, financial or economic performance and innovative performance. This study concentrated on financial performance.

Profit Growth Rate

Profit growth rate refers to the percentage increase or decrease in a firm's profit over a specific period, usually measured annually. It is a dynamic indicator of a company's financial health, reflecting its ability to expand revenue streams, control costs, and sustain profitability amidst changing economic conditions (Olowolaju & Alabi, 2024). Unlike absolute profit, which provides a static measure, profit growth rate captures performance trends and the trajectory of earnings, making it a crucial tool for strategic planning and investment analysis. Firms with a stable or positive profit growth rate are generally perceived as financially resilient, competitive, and attractive to investors, as they demonstrate capacity for value creation and sustainability (Okoli & Udeh, 2023). In emerging economies like Nigeria, where business environments are often volatile, profit growth rate serves as a benchmark for managerial effectiveness and adaptive strategies (Eze & Nwachukwu, 2022). Ultimately, consistent profit growth rate is critical in enhancing shareholder wealth, market valuation, and long-term business survival.

Theoretical Review

Stakeholder Theory

This theory was developed and advanced by Edward Freeman Richard (1984). The purpose of the formulation of this theory was because of the fact that the various activities of companies are believed to affect those with both direct and indirect interests. For one to be a stakeholder in an entity, he/she must contribute directly or indirectly to the existence of such company. There are different categories of stakeholders but for simplicity, the major kinds of stakeholders are government, employees, creditors, shareholders, competitors, customers, local communities, suppliers and among others. The interest of government is tied to income taxes payable by a company and which constitutes the revenue of the government; the interest of employees is tied to job security and the continuous inflows of income inform of salaries and wages they often receive routinely; the interest of creditors is mostly on interest from the total amount borrowed to an entity and as well as the principal amount at maturity of the period agreed; the interest of competitors is mostly on the existence of other companies for the kind of strategies adopted to be successful in the markets; the interest of customers is mostly on the existence of companies for the kind of products offered to the markets; the interest of local communities is tied to corporate social responsibilities presented by companies to local dwellers where those entities are located and the interest of the suppliers is on the liquidity position of companies in order for them to be paid for goods supplied on account to the firms.

From the above elaboration, it is pertinent to say all the stakeholders have different interests in the existence of companies. The theory upholds that companies should be managed in such a way that the various interests of the stakeholders are affected optimistically. According to Freeman (1984) the theory does not highlight that the interests of all the stakeholders should be satisfied at the same time, however, it states that the various interests of the stakeholders are satisfied on step-by-step approach, and this is why general-purpose financial statements are always required to be presented to users irrespective of their diverse interests. The theory states that an entity should be managed in a way that would affect the primary stakeholders first who are the providers of funds and the real owners of the company before other stakeholders. Hence, the researchers adopted the theory in this study.

Empirical Review

Total Asset Growth Rate and the Profit Growth Rate

Charlie and Akpan (2020) conducted a study on tangible and Intangible Asset Ratios and the Performance of Deposit Money Banks in Nigeria. The study used secondary data, which were collected from published financial statements of ten (10) sampled DMBs from 2000 to 2017. The ex-post facto research design was adopted and Pooled multiple regression techniques were employed for the analysis and test of the hypotheses. Result reveals that the ratio of tangible to intangible asset has a significant negative effect on the ROA of DMBs in Nigeria. Based on this result, it is concluded that DMBs performance in Nigeria is negatively affected by its asset portfolio.

Kurniawan (2021) conducted a study on the analysis of the effect of Return on Asset, Debt to equity Ratio, and Total Asset Turnover on Share Return. The population in this study were all property and real estate sub-sector companies listed on the Indonesia Stock Exchange (IDX) which are listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 period as many as 54 companies. The method used by the author in analyzing the data in this study is descriptive and quantitative statistical analysis with panel data regression, the data is processed with e-views 10. The results showed that partially Return on Assets had no significant effect on Stock Returns, the partial debt to Equity Ratio had no significant effect on Stock Returns, Total Asset Turnover partially had a positive and significant effect on Stock Returns.

Doddy (2021) explored the effect of Total Asset Turnover, Net Profit Margin, and Debt to Equity Ratio on profit growth in automotive companies listed in Indonesia stock exchange. The population used in this study were 13 companies and a sample that met the criteria (purposive sampling) was 7 companies. Data collection techniques used in this study using documentation techniques and data sources used in this study are secondary data sources. The data analysis technique used in this study is a quantitative technique with multiple linear regression analysis, hypothesis testing and coefficient of determination test. Data management using SPSS (Statistical Package for the Social Sciences) version 20 for windows. The results of this study are partially total asset turnover has no effect on profit growth. Partially, net profit margin has no effect on profit growth. Partially the debt to equity ratio has an effect on profit growth.

Ndung'u et al (2022) examined the Effects of Total Assets on Financial Performance of Food and Beverage Manufacturing Firms in Nakuru County, Kenya. The study was guided by economic theory of firm growth. The study adopted descriptive survey research design with a target population of 15 food and beverage manufacturing firms. The unit of observation was 15 food and beverage manufacturing firms in Nakuru County. The unit of analysis was

56 employees in the finance department. The study utilized primary data. Questionnaires were used to collect primary data desirable for the study. Piloting was done in Kericho County. Data was analyzed using both descriptive and inferential statistical methods. Descriptive analysis was done using frequency, percentage, means and standard deviations to describe the basic characteristics of the population. Inferential statistics involved the use of Pearson's Product Moment correlation and multiple regression model. The finding of the study was presented in table form. There exists a moderate positive and significant relationship between total assets and financial performance of food and beverage manufacturing firms in Nakuru county Kenya.

Non-current Asset Growth Rate and the Profit Growth Rate

Ofor and Farajimakim (2020) focused on the effect of assets utilization of net worth of big-cap companies quoted in the Nigeria Stock Exchange Market between the 2012 and 2016 financial year. In this study, four specific objectives, research questions, and hypotheses were formulated. The ex-post facto research design was utilized while Secondary sources of data were derived from the panel data collected from annual financial reports of twenty companies with high market capitalization. The data collected was analysed using panel ordinary least square regression analysis, however, the study also conducted some preliminary analysis such as descriptive statistics and correlation analysis. The study revealed that both current assets (CASU) and tangible non-current assets (TNCAU) were positively and significantly affect the net worth of companies with a big market capitalization in Nigeria at a 10% significant level.

Shafiquea et al., (2021) used a sample dataset of 30 listed textile companies on the Pakistan Stock Exchange from 2015 to 2019 to investigate the effects of asset utilization and corporate growth on financial performance. According to the findings of the study, asset utilization influences the financial performance of the company before any investment decision is made. The results of the study, which used descriptive statistics and panel regression techniques, show that asset utilization and corporate growth have a significant and positive influence on financial performance.

Charlie and Edet (2023) analysed the asset growth and profitability of listed manufacturing companies in Nigeria: Evidence from Post Adoption period of IFRSs. The research design adopted in the study was ex-post facto owing to the fact that the study required secondary data. The nature of data was panel data. The dependent variable was Profitability (PRT) while the independent variable was Asset Growth (AG) sub-divided into Non-Current Asset Growth (NCAG), Current Asset Growth (CAG), Net Asset Growth (NAG) and Total Asset Growth (TAG). The descriptive statistics and simple linear regression statistical tools were used to analyse the relevant data collected for the study. All analysis was conducted at 5% level of significance. From the outcomes of the analysis, it was discovered that NCAG, NAG and TAG had positive and significant influence on PRT ($P<0.05$) of the quoted manufacturing companies in Nigeria and CAG had positive and insignificant influence on PRT ($P>0.05$) of the listed manufacturing companies in Nigeria.

Mmuogbo et al (2024) analysed the Effect of Asset Growth on Financial Performance of Manufacturing Firms in Nigeria. The data were analysed using Descriptive analysis and robust Panel Regression analysis for correcting multicollinearity and heteroscedasticity. Non-current assets growth, current assets growth, net assets growth, and total asset growth were used as proxies for asset growth (independent variables), while return on assets (ROA) and

return on equity (ROE) were used as proxies for financial performance (dependent variable). The result shows that the non-current assets growth rate and current asset growth have a significant negative effect on the ROA of manufacturing firms in Nigeria. However, the outcome is insignificant when financial performance is proxied as ROE. Findings also show that total asset growth has an insignificant effect on ROA and ROE. On the other hand, findings revealed that while net asset growth is insignificant to

Gap in Empirical Literature

The empirical gap in the effect of asset growth rate on the financial performance of firms in Nigeria, based on a multisectoral analysis (2015–2024), arises from several dimensions. Despite reviewing 120 studies—both local and international—three key gaps persist: Most prior studies concentrated on either specific sectors, such as banking or manufacturing, or on aggregate measures of firm performance without delving deeply into sectoral heterogeneities. For instance, limited attention has been given to understanding how asset growth interacts with firm-specific factors like operational efficiency, risk management, or market structure across sectors (e.g., consumer goods, industrial goods, and oil and gas). This leaves a gap in understanding the impacts of asset growth across diverse industries in Nigeria. Foreign studies dominate the discourse on asset growth and financial performance, particularly in developed economies with stable markets. In the Nigerian context, existing research often excludes regional variations in economic policies, infrastructure, and market dynamics. This lack of focus on Nigeria's unique economic environment, characterized by policy fluctuations and currency volatility, limits the generalizability of findings to local firms. Most reviewed studies rely on traditional regression models without incorporating advanced econometric techniques like panel dynamic models, which could better account for endogeneity and causality. Moreover, few studies integrate multi-period and cross-sectoral comparisons, limiting insights into temporal and sectoral trends. The previous studies did not address the different sectors of the economy, the researcher also observed the time gap, addressing these gaps is crucial to enhancing the understanding of asset growth's role in Nigeria's multi-sectoral financial performance. It is against this that study examined the effect of asset growth rate on the financial performance of firms in Nigeria, based on a multisectoral analysis (2015–2024)

Methodology

Research Design

The *ex post facto* research design employed in studying the effect of asset growth rate on the financial performance of firms in Nigeria involves analyzing existing data retrospectively. This design leverages historical financial data from various sectors in Nigeria to assess the effect of asset growth rate on financial performance of firms in Nigeria. This research design allows for the comprehensive exploration of the relationship between asset growth rate and financial performance in Nigerian firms, providing valuable insights for stakeholders and informing strategic decision-making. The research collected financial data from publicly available sources such as annual reports, financial statements, and databases covering a specified period, typically spanning several years.

Area of Study

The area of this study covers firms operating within Nigeria, specifically those listed on the Nigerian Exchange Group (NGX) across three major sectors—Consumer Goods, Industrial Goods, and Oil & Gas. These sectors were selected

due to their significant contributions to Nigeria's Gross Domestic Product (GDP) and their critical role in the country's economic development. The study focuses on assessing how variations in asset growth rates influence the financial performance of these firms within the Nigerian business environment. By analysing data from listed companies, the study provides insight into sectoral differences in financial performance, investment behaviour, and growth patterns over the period 2015–2024.

Sources of Data

The study made use of secondary data extracted from the audited Annual Reports and statements of account of the selected firms in Nigeria. Time-series cross section data were used because the data for the study relates to different years. Data were collected from the annual financial statements of these companies over a ten-year period (2015-2024). The financial performance metrics analysed included the profit for the year. The asset growth rate was calculated as the annual percentage change in total assets, non-current asset growth rate, current asset growth rate, intangible asset growth rate and financial asset growth rate.

Population of the Study

The population of this study comprises all firms listed on the Nigerian Exchange Group (NGX) under the Consumer Goods, Industrial Goods, and Oil & Gas sectors as of 2024. These firms represent a cross-section of the Nigerian economy and provide a comprehensive basis for evaluating the relationship between asset growth rate and financial performance. The total population consists of forty (40) firms drawn from **Consumer Goods**, **Oil and Gas, and Industrial Goods.**

Sample Size Determination

The sample size for this study comprises firms purposively selected from the total population based on their consistent listing on the Nigerian Exchange Group as at 2015. The purposive sampling technique was adopted to ensure that only firms with continuous financial data covering the study period (2015–2024) were included in the analysis. This approach allows for the availability of reliable longitudinal data necessary for the ex post facto research design employed. A total of thirty (30) firms met these criteria and were selected across the three sectors.

Specification of Models

The multiple regression analysis was adopted because it is known to estimate how well the set of independent variables predicts the dependent variable. The study adopted the model of Chukwu & Egbuhuzor (2017). The model was stated as follows:

$PGR_t = \beta o + \beta_1 TAGR + \beta_2 NAGR + u_1 \ldots\ldots\ldots\ldots i$

PGR_{it}: Profit Growth Rate for firm *i* in year *t.*

TAGR : Total asset growth rate of firm *i* in year *t.*

NAGR : Non-current asset growth rate of firm *i* in year *t.*

Bo **:** Constant Term (Intercept)

β_1 **:** coefficient of Total asset growth rate

β_2 : coefficient ofNon-current asset growth rate

u; Error term

Description of Variables

The research variables were structured into dependent and independent variables for analysis.

Table 3.1 Description of Variables

Variable Acronym	Variable Name	Variable Type	Measurement	Source
PGR	Profit Growth Rate	Dependent	[(Current Period net profit - Previous Period net profit) / Previous Period net profit] × 100**.**	Aldridge (2015)
TAGR	Total asset growth rate	Independent	Total assets include all of a company's resources, both tangible and intangible, such as cash, inventory, property, equipment, investments, and intellectual property. The formula for calculating Total Asset Growth Rate is: Total Asset Growth Rate = $\frac{(\text{Total Asset}_{end} - \text{Total Assets}_{start})}{\text{Total Assets}_{start}} \times 100\%$	(Penman , 2007).
NCAGR	Non-current asset growth rate	Independent	The formula for calculating Non-Current Asset Growth Rate is similar to that of Total Asset Growth Rate: Non-current Asset Growth Rate = $\frac{(\text{Non-current Asset}_{end} - \text{Non-current Assets}_{start})}{\text{Non-current Assets}_{start}} \times 100\%$	(Damodaran, 2016)

Source: Researcher Compilation 2026.

Method of Data Analysis

The study employed multiple regression analysis to evaluate the effect of asset growth rate on the financial performance of firms across key sectors. This method estimates relationships between the dependent variable (financial performance). The software that aided this estimation is the E – views software. The study involved the use of the empirical method which adopts regression analysis using the panel estimated generalised least square regression analysis. Regression is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, to estimate and/or predict the population mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter (Gujarati & Porter, 2009). The data were analysed using Descriptive Statistics, Correlation Analysis, and Regression Analysis.

Data Presentation and Analysis

Data Presentation

The main objective of this study was to examine the effect of asset growth rate on the financial performance of firms in Nigeria. The specific objectives were to ascertain the effect of total asset growth rate, and non-current asset growth rate, and financial assets growth rate on the net profit growth rate of firms in Nigeria. Secondary data were obtained from the audited annual reports of firms listed on the Nigerian Exchange Group between 2015 and 2024. The population comprised forty (40) firms across the Consumer Goods, Industrial Goods, and Oil & Gas sectors, from which a purposive sample of thirty (30) firms consistently listed as of 2015 was selected. Data were collected through secondary sources

Data Analysis

Table 4.1: Descriptive Statistical Analysis

	PGR	TAGR	NCAGR
Mean	-12.12998	17.22046	13.89411
Median	0.307336	10.50143	3.015402
Maximum	13618.31	590.1459	641.1772
Minimum	-8315.415	-63.03284	-82.14470
Std. Dev.	1146.630	54.15176	52.78017
Skewness	4.496723	8.010244	7.128125
Kurtosis	83.96516	83.85351	75.35117
Jarque-Bera	82953.00	84924.32	67974.15
Probability	0.000000	0.000000	0.000000
Sum	-3638.993	5166.139	4168.232
Sum Sq. Dev.	3.93E+08	876791.6	832938.3
Observations	300	300	300

Source: Author's Computation from Eviews 10.0 Statistical Software

The Profit Growth Rate (PGR) in Table 4.1 shows a mean value of -12.13%, indicating that on average, firms experienced a decline in profitability over the study period. The extremely wide range—from a minimum of -8315.42% to a maximum of 13618.31%—suggests substantial variability in profit performance among firms, possibly due to economic shocks or firm-specific events. The standard deviation of 1146.63 confirms a high level of dispersion around the mean, implying that profit growth rates are highly volatile. The skewness (4.50) and kurtosis (83.97) indicate a sharply non-normal distribution, heavily skewed to the right with extreme outliers. The Jarque-Bera probability (0.000) confirms this deviation from normality. However, according to the Central Limit Theorem, the sample size of 300 observations is large enough to ensure that the sampling distribution of the mean PGR approximates normality, making the mean a reliable measure of central tendency despite the skewed raw data.

For the Total Asset Growth Rate (TAGR), the mean value of 17.22% indicates that firms generally experienced moderate expansion in their total asset base. The minimum and maximum values (-63.03% and 590.15%) suggest that while some firms significantly contracted, others experienced substantial growth. The standard deviation (54.15) indicates a relatively high spread, though not as extreme as PGR. The distribution's skewness (8.01) and kurtosis (83.85) reveal a strong right skew and heavy tails, meaning that a few firms achieved exceptionally high asset growth relative to others. The Jarque-Bera test ($p = 0.000$) rejects normality, but due to the large sample ($n = 300$), the Central Limit Theorem implies that inferential analysis based on the mean remains statistically valid.

The Non-Current Asset Growth Rate (NCAGR) has a mean of 13.89%, suggesting modest average growth in long-term investments such as property, plant, and equipment. The range between -82.14% and 641.18% shows that some firms reduced their non-current assets significantly, while others expanded considerably. With a standard deviation of 52.78, variability is notable but not excessively high relative to the mean. The skewness (7.13) and kurtosis (75.35) denote extreme right-tail bias and peakedness, implying that a small number of firms disproportionately drove up the mean. The Jarque-Bera p-value of 0.000 confirms non-normality, but again, the Central Limit Theorem supports the use of the mean for inference given the sufficiently large number of observations.

Table 4.2: Pearson Correlation Matrix Results

Correlation Probability	PGR	TAGR	NCAGR
TAGR	0.032410 0.5760	1.000000 -----	
NCAGR	-0.057367 0.3220	0.551905 0.0000	1.000000 -----

Source: Author's Computation from Eviews 10.0 Statistical Software

Table 4.2 presents the Pearson Correlation Matrix results, examining the relationship between Profit Growth Rate (PGR) and various asset growth indicators. The correlation between PGR and Total Asset Growth Rate (TAGR) is positive but very weak (r = 0.0324) with a probability value of 0.5760, indicating that the relationship is statistically insignificant. This suggests that changes in total assets have little to no direct influence on profit growth among the firms studied. Similarly, the correlation between PGR and Non-Current Asset Growth Rate (NCAGR) is slightly negative (r = -0.0574) and statistically insignificant (p = 0.3220), implying that variations in long-term asset investments do not consistently translate into profit changes. These weak relationships reflect that asset expansion, whether total or non-current, may not immediately or linearly impact profitability.

Table 4.3: Multicollinearity Test
Variance Inflation Factors
Date: 10/28/25 Time: 04:29
Sample: 1 300
Included observations: 300

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
TAGR	3.877908	2.939776	2.668970
NCAGR	2.773307	1.939338	1.813262
C	4874.197	1.147821	NA

Source: Author's Computation from Eviews 10.0 Statistical Software, 2026

The multicollinearity test in Table 4.3 uses the Variance Inflation Factor (VIF) to assess whether the independent variables in the model are highly correlated with each other, which could distort the reliability of coefficient estimates. The essence of this test is to ensure that each explanatory variable provides unique information about the dependent variable without excessive overlap. Generally, a VIF value above 10 indicates serious multicollinearity concerns, while values below 5 are acceptable. In this table, all variables—TAGR (2.67), and NCAGR (1.81), —have VIF values well below the critical threshold. This indicates that there is no significant multicollinearity among the independent variables, meaning they are sufficiently distinct and can be reliably used together in the regression model without inflating the standard errors or weakening the statistical validity of the estimates.

Table 4.4: Cross-Section Dependence Test

Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in residuals
Equation: Untitled
Periods included: 10
Cross-sections included: 30
Total panel observations: 300
Note: non-zero cross-section means detected in data
Cross-section means were removed during computation of correlations

Test	Statistic	d.f.	Prob.
Pesaran CD	2.431938		0.0150

Source: Author's Computation from Eviews 10.0 Statistical Software, 2026

Table 4.4 presents the results of the Cross-Section Dependence Test, specifically the Pesaran CD test, which checks whether residuals across different cross-sectional units (e.g., firms) are correlated. The essence of this test lies in identifying whether the behavior of one firm influences or is influenced by another, a common issue in panel data analysis. The null hypothesis assumes no cross-sectional dependence among residuals. The reported probability value of 0.0150 is less than the 0.05 significance level, leading to the rejection of the null hypothesis. This means that there is evidence of cross-section dependence in the data—suggesting that unobserved common factors or inter-firm linkages may exist, such as industry-wide shocks or macroeconomic influences affecting firms simultaneously. Hence, panel estimated generalized least square regression was used in order to account for this dependence, to avoid biased results.

Table 4.5: Heteroskedasticity LR Test

Panel Cross-section Heteroskedasticity LR Test
Null hypothesis: Residuals are homoskedastic
Equation: UNTITLED
Specification: PGR TAGR NCAGR C

	Value	df	Probability
Likelihood ratio	956.0498	30	0.0000

Source: Author's Computation from Eviews 10.0 Statistical Software, 2026

The heteroskedasticity test in Table 4.5 applies the Likelihood Ratio (LR) method to detect whether the variance of residuals is constant (homoskedastic) or varies across observations (heteroskedastic). The essence of this test is to validate one of the key assumptions of classical linear regression—that the error term has a constant variance. A probability value less than 0.05 indicates the presence of heteroskedasticity, meaning the residuals do not have uniform variance. In this case, the LR test probability of 0.0000 leads to rejection of the null hypothesis of homoskedasticity. This implies that the residuals are heteroskedastic, suggesting that the variability in profit growth differs across firms, possibly due to differences in firm size, asset structure, or market dynamics. Therefore, panel estimated generalized least square regression was used to ensure valid inference in the regression analysis.

Test of Hypotheses

Table 4.6: Panel Estimated Generalised Least Square

Dependent Variable: PGR
Method: Panel EGLS (Period SUR)
Date: 10/28/25 Time: 04:28
Sample: 2015 2024
Periods included: 10
Cross-sections included: 30
Total panel (balanced) observations: 300
Linear estimation after one-step weighting matrix
White period standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAGR	-1.837578	0.571082	-3.217712	0.0014
NCAGR	-0.358840	0.342979	-1.046246	0.2963
C	-17.25127	13.74356	-1.255226	0.2104

Weighted Statistics

R-squared	0.247915	Mean dependent var	0.028724
Adjusted R-squared	0.235124	S.D. dependent var	1.138177
S.E. of regression	0.995242	Sum squared resid	291.2092
F-statistic	19.38263	Durbin-Watson stat	1.988992
Prob(F-statistic)	0.000000		

Source: Author's Computation from Eviews 10.0 Statistical Software, 2026

The model diagnostics in Table 4.6 first confirm the validity and reliability of the estimated equation. The Adjusted R-squared (0.2351) indicates that approximately 23.5% of the variations in firms' profit growth rate (PGR) are explained by changes in total asset growth (TAGR), non-current asset growth (NCAGR), and financial asset growth (FAGR). Although the explanatory power is modest, it is acceptable for financial panel data involving multiple firms over several years. The Prob(F-statistic) = 0.0000 shows that the overall model is statistically significant at the 5% level, implying that the combined effects of the independent variables significantly explain variations in profit growth. The Durbin-Watson statistic (1.99), being close to 2, suggests that there is no serious autocorrelation problem in the model residuals, meaning the estimates are not biased by serial dependence. The constant term (C = -17.2513, p = 0.2104), although negative, is statistically non-significant at the 5% level, indicating that when all asset growth rates are held constant, the mean profit growth rate would decline slightly by 17.25%, but this effect cannot be statistically confirmed.

Test of Hypotheses I

H_{01}: Total asset growth rate has no significant effect on the net profit growth rate of firms in Nigeria.

The coefficient of TAGR (-1.8376, p = 0.0014) indicates that total asset growth has a negative and statistically significant effect on profit growth at the 5% level. Marginally, this means that a 1% increase in total asset growth leads to a 1.84% decrease in profit growth, holding other variables constant. This negative effect suggests that asset expansion in Nigerian firms may not immediately enhance profitability—possibly due to high financing costs, inefficiencies in asset utilization, or delayed returns on investment. Since the p-value is less than 0.05, the null hypothesis (H01: Total asset growth rate has no significant effect on net profit growth rate) is rejected. Therefore, total asset growth rate exerts a negative and significant effect on profit growth (β = -1.8376, p = 0.0014).

Test of Hypotheses II

H_{02}: Non-current asset growth rate does not significantly affect the net profit growth rate of firms in Nigeria.

The coefficient for NCAGR (-0.3588, p = 0.2963) reveals a negative but statistically non-significant effect on profit growth. The marginal interpretation suggests that a 1% increase in non-current asset growth would reduce profit growth by about 0.36%, but this change is not statistically meaningful at the 5% level. This implies that long-term asset expansion—such as in property, plant, or equipment—does not significantly affect profit growth in the short run, possibly because these assets generate returns over a longer horizon or require substantial maintenance costs. Given that the p-value exceeds 0.05, the null hypothesis is accepted, confirming that non-current asset growth rate has a negative and non-significant effect on profit growth (β = -0.3588, p = 0.2963).

Discussion of Findings

Total Asset Growth Rate (TAGR) and Profit Growth Rate

The study revealed that total asset growth rate has a negative and significant effect on the net profit growth rate of firms in Nigeria (β = -1.8376, p = 0.0014), suggesting that as firms expand their total asset base, their profitability tends to decline. This could occur when asset accumulation is not matched by efficient utilization, leading to higher maintenance, depreciation, and financing costs that outweigh the revenue benefits of expansion. This finding aligns with Marian and Ikpor (2017), who found that maintenance and repair costs exert a negative and significant impact on the return on assets of Nigerian banks, implying that asset expansion can reduce profitability when poorly managed. Similarly, Sanyaolu, Onifade, and Ajulo (2017) reported a negative and significant relationship between tangible assets and firm performance, supporting the notion that excessive investment in physical assets may lead to inefficiencies.

Non-Current Asset Growth Rate (NCAGR) and Profit Growth Rate

The finding that non-current asset growth rate has a negative but non-significant effect on net profit growth rate (β = -0.3588, p = 0.2963) implies that increases in long-term assets do not significantly influence profitability, possibly due to their delayed return cycles or underutilization. Fixed assets often require large upfront investments and may not immediately generate revenue, which explains the negative direction of the relationship. This result aligns with Okoro and Charles (2019), who found that revaluation of land and buildings has a negative but insignificant effect on return on assets, suggesting that non-current assets may not contribute directly to short-term profitability.

Similarly, Worlu and Omedero (2016) reported no significant effect of asset growth on firm performance, further reinforcing this result.

Summary of Findings, Conclusion, and Recommendations

Summary of Findings

The findings of the study were as follows:

1. Total asset growth rate has a negative and significant effect on the net profit growth rate of firms in Nigeria (β = -1.8376, p = 0.0014).
2. Non-current asset growth rate has a negative but non-significant on the net profit growth rate of firms in Nigeria (β = -0.3588, p = 0.2963).

Conclusion

The findings from the study reveal important insights into how different components of asset growth collectively shape the profitability dynamics of Nigerian firms. The evidence that total asset growth exerts a negative and significant effect on profit growth suggests that rapid asset expansion may often precede efficient utilization, potentially leading to reduced profit margins due to increased operational costs or underutilized investments. This outcome underscores the challenges firms face when balancing expansion with productivity efficiency, especially in environments where capital costs are high. Conversely, the positive and significant effects of current and intangible asset growth on profit growth highlight the central role of liquidity management, innovation, and intangible capital in driving earnings performance. The strong influence of current assets indicates that effective management of cash, inventories, and receivables directly supports profit stability and operational efficiency. Similarly, the significance of intangible asset growth underscores the value of intellectual capital and technology-driven assets as emerging contributors to profitability in modern corporate structures. The non-significant effects of non-current and financial asset growth rates imply that long-term investments and financial holdings may not yield immediate profit benefits, reflecting the longer gestation period of fixed investments and the speculative nature of financial assets.

Recommendations

1. Firm managers and financial controllers should carefully evaluate future asset expansion projects to ensure that new investments contribute directly to productivity and profitability. They should implement stronger asset utilization strategies and conduct cost-benefit analyses before acquiring additional assets to prevent overcapitalization and declining returns that negatively affect profit growth.

2. Board directors and investment committees should strengthen their asset management policies by ensuring that investments in non-current assets are aligned with long-term strategic goals and supported by efficient operational plans. They should also improve maintenance practices and monitor asset performance to minimize idle or underutilized fixed assets that fail to enhance profitability.

Contributions to Knowledge

This study contributes to the literature by providing empirical evidence on how different components of asset growth influence the financial performance of firms in Nigeria. Using data from thirty firms consistently listed on

the Nigerian Exchange Group between 2015 and 2024, the research examined the effects of total, non-current, current, intangible, and financial asset growth rates on firms' net profit growth. By applying an ex post facto design and panel estimated generalized least squares regression, the study offers a comprehensive analysis of the relationship between asset expansion and profitability across key sectors such as Consumer Goods, Industrial Goods, and Oil & Gas. The findings extend understanding of how asset structure dynamics shape firm performance within an emerging market context, providing evidence that can inform corporate investment strategies and policy decisions in Nigeria's evolving financial environment.

References

Ajibola, M. O., & Adebayo, A. (2014). Asset growth and firm performance in Nigeria: Evidence from Manufacturing Sector. *Journal of Business Management and Economic Research,* 3(5), 074-086.

Akpan, E. S., & Udoka, C. O. (2020). Sectoral analysis of asset growth and firm performance in Nigeria. *International Journal of Finance and Banking Research*, 6(2), 07-18

Ariyani, T., Zaini, A., & Pratiwi, S. (2018). The effect of asset structure, profitability, company size, and company growth on capital structure in manufacturing companies in Indonesia. *Indonesian Journal of Accounting and Finance, 12*(2), 45–60. https://doi.org/xxxx

Brealey, R. A., Myers, S. C., &Allen, F. (2017). *Principles of corporate finance*. McGraw-Hill Education.

Charlie, O., & Akpan, W. (2020). Tangible and intangible asset ratios and the performance of deposit money banks in Nigeria. *Nigerian Journal of Business and Economic Studies, 16*(4), 222–240.

Charlie, O., & Edet, O. (2023). Asset growth and profitability of listed manufacturing companies in Nigeria: Evidence from the post-adoption period of IFRSs. *African Journal of Accounting and Finance, 16*(2), 234–249. https://doi.org/xxxx

Chukwu, O. C., & Egbuhuzor, O. M. (2017). The effect of tangible assets on the corporate performance of manufacturing firms in Nigeria. *International Journal of Business and Finance, 21*(2), 60–72. https://doi.org/xxxx

Doddy, Y**.** (2021). *The effect of total asset turnover, net profit margin, and debt to equity ratio on profit growth in automotive companies listed on the Indonesia Stock Exchange. International Journal ofTrade, Economics and Finance,* 10(1),45-60.

Fajaria, A. Z., & Isnalita. (2018). The role of asset definition in financial reporting: A global perspective. *International Journal of Accounting and Finance, 10*(2), 145–160. https://doi.org/xxxx

Haji, A. A., & Ghazali, N. A. M. (2018). The role of intangible assets and liabilities in firm performance: empirical evidence. *Journal of Applied Accounting Research.* https://doi.org/10.1108/JAAR-12-2015-0108

Iliemena, C. U., Eze, A. O., & Okwu, A. (2018). Human capital efficiency as a paradigm for improved bank performance in Nigeria. *International Journal of Economics and Finance, 10*(7), 139–150.

Inyiama, O. I, Ugbor, R, O. & Chukwuani, V. N. (2017)**.** Evaluation of the relationship between assets growth rate and financial performance of manufacturing firms in Nigeria. *International Journal of Managerial Studies and Research (IJMSR),5 (10) 63-73*

Kurniawan, H. (2021). *Analysis of the effect of return on assets, debt to equity ratio, and total asset turnover on share return. An International Review*, 21(5), 396-409.

Mmuogbo, U., Okoro, A., & Ifeanyi, S. (2024). The effect of asset growth on financial performance of manufacturing firms in Nigeria. *Journal of Management Studies, 18*(1), 75–90.

Ofor T. N. & Farajimakim, A. S. (2020). Effect of assets utilization of net worth of big cap companies quoted in Nigeria, *Journal of Accounting, Business and Social Sciences,* **3(**1), 111-127.

Okoro, S., & Charles, S. (2sdx019). Fixed assets revaluation and profitability: A cross-sectional study of commercial banks in Nigeria. *Journal of Financial Studies, 23*(5), 202–217. https://doi.org/xxxx

Olaoye, C. O., &Ayodele, J. E. (2019). Assets management and performance of selected quoted firms in Nigeria. *American International Journal of Business Management, 2(11), 65-76*

Parnell, J. A. (2011). *Strategic management: Theory and practice* (4th ed.). SAGE Publications.

Rahman, M. (2014). Total asset financing facilities and their flexibility: The underwriting process reconsidered. *Journal of Corporate Finance Studies, 18*(2), 140-150.

Ramiz, A., & Junrui, Z. (2014). Performance measurement and goal achievement. *Journal of Organizational Management, 10*(4), 78–92.

Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2019). *Corporate finance* (11th ed.). McGraw-Hill Education.

Shafiquea, A., Kashifb, A., Haiderc, A., Zaheerd, N. & Khan, S. (2021). Effect of asset utilization and corporate growth on financial performance. *International Journal of Innovation, Creativity and Change, 15(*5), 1104-1118

Worlu, R. O., & Omedero, A. (2016). The effect of human capital development on the financial performance of banks in Nigeria. *African Journal of Business Management, 10*(14), 328–336.

Yusuf, A. (2017). The effect of leverage on financial performance of quoted pharmaceutical companies in Nigeria. *Journal of Pharmaceutical Business and Finance, 20*(4), 150–162.

Zhang, N. (2017). Relationship between intangible assets and financial performance of listed telecommunication firms in China, based on empirical analysis. *African Journal of Business Management*, *11*(24), 751-757.