



ASSET GROWTH RATE AND FINANCIAL PERFORMANCE OF QUOTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

This study examines the effect of asset growth rate on the financial performance of quoted manufacturing firms in Nigeria, with the aim of providing empirical evidence on whether expansion in firms' asset base enhances or weakens profitability. The study is motivated by real-life situations in the Nigerian manufacturing sector where firms frequently invest heavily in new plants, machinery, and working capital in response to market competition, inflationary pressures, and exchange rate volatility, yet still record declining or unstable performance. Asset growth rate is measured as the annual percentage change in total assets, while financial performance is proxied by Return on Assets (ROA). The study is anchored on Agency Theory and Growth Theory, which explain managerial incentives behind asset expansion and the expectation that growth in productive assets should translate into improved firm performance. Using an ex-post facto research design, the study relies on secondary data extracted from the audited annual reports and accounts of eleven (11) selected manufacturing firms listed on the Nigerian Exchange Group (NGX) over a 10-year period from 2015 to 2024. The data are analyzed using panel regression techniques, supported by relevant diagnostic tests to ensure robustness of the estimates. Empirically, the findings reveal that asset growth rate exhibits a positive but mixed influence on financial performance. From the empirical findings, the study concludes that the asset growth rate has a mixed influence on financial performance. Therefore, the study recommends that asset growth rate should be strategically aligned with the market conditions to improve financial performance in the Nigerian manufacturing sector.

Keywords: asset growth rate, financial performance, quoted manufacturing firms, return on assets, return on equity

1. Introduction

Asset growth continues to be an important strategic choice for companies that want to be competitive, sustainable, and financially efficient. For manufacturing companies, assets such as plant and equipment, inventory, and working capital are the lifeblood of the company's production and revenue streams. The asset growth rate (AGR), which is the measure of the degree to which a company can increase its asset base over time, has thus received considerable attention in the literature on corporate finance and accounting because of its perceived implications for financial performance and value creation (Penrose, 1959; Jensen & Meckling, 1976).

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Theoretically, asset growth is expected to improve financial performance by increasing production capacity, improving efficiency, and allowing companies to take advantage of economies of scale. However, empirical studies have found that asset growth does not necessarily lead to improved profitability. Overexpansion of assets and inefficient management of asset growth can lead to increased depreciation expenses, increased costs of capital, underutilization of assets, and inefficient use of assets, which can all lead to decreased profitability (Titman et al., 2004). This is why the relationship between asset growth rate and financial performance is more of an empirical question than a theoretical proposition.

The Nigerian manufacturing industry represents a compelling case for exploring this relationship. Firms quoted on the Nigerian Exchange Group (NGX) operate in a macro environment characterized by inflationary pressures, exchange rate volatility, and infrastructural deficiencies. Consequently, many manufacturing firms seek to grow assets aggressively as a strategy for maintaining competitiveness and meeting expanding demand. However, from a practical perspective, it has been found that many firms experience diminishing profitability while experiencing substantial growth in assets.

This situation has raised questions regarding the efficacy of asset growth as a strategy for maintaining financial performance. For example, a manufacturing firm quoted on the NGX and growing its assets significantly through investments in new machinery may experience diminishing returns. This situation may arise as a result of issues relating to power supply and demand, which may impact the Return on Assets (ROA) of the firm. On the other hand, a firm growing its assets moderately and efficiently may experience enhanced financial performance. These realities have raised questions regarding the efficacy of asset growth as a strategy for maintaining financial performance.

Theoretically, Agency Theory posits that managers can use asset growth to satisfy their own interests, such as prestige and power, even if it does not maximize shareholder wealth (Jensen & Meckling, 1976). Conversely, Growth Theory posits that firms grow assets to seize growth opportunities to boost profitability (Penrose, 1959). The implications of these theories are that asset growth can either positively or negatively affect a firm's performance, depending on the efficiency of management decisions and the operating environment.

Empirically, various research works on Nigerian manufacturing firms have yielded inconsistent results. Some researchers have established a positive relationship between asset growth and financial performance, especially when growth occurs due to productive non-current assets (Inyiama et al., 2017). Others found that, although there is a positive relationship between asset growth and profitability, the relationship is often weak and statistically insignificant, which suggests inefficiency in the management of assets (Ogheneborhien et al., 2025). The inconsistency in the literature underscores the research gap regarding the extent to which asset growth influences financial performance in developing nations such as Nigeria.

Manufacturing firms are capital-intensive businesses that rely on investments in tangible and working capital to maintain operations, compete successfully, and achieve long-run success. In Nigeria, quoted manufacturing firms listed on the Nigerian Exchange Group (NGX) have consistently sought to expand their asset bases through acquisition of plant and machinery, inventory accumulation, and modernization of facilities. However, despite significant investments in assets, many of these firms have failed to achieve

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commensurate success in terms of enhanced financial performance, as measured by profitability ratios such as Return on Assets (ROA) or Profit After Tax (PAT). This situation thus raises pertinent issues regarding the viability of asset expansion strategies in Nigeria's difficult operating environment.

A pertinent issue of interest is the unclear relationship between asset growth rate (AGR) and financial performance in Nigeria's manufacturing industry. Although asset growth is expected to provide firms with opportunities to expand production capacity and achieve economies of scale (Penrose, 1959), findings from Nigeria have yielded mixed results. For example, non-current and net asset growth have been established as having positive associations with profitability, whereas current and intangible asset growth have been revealed as having weaker and possibly non-statistically significant relationships with profitability (Inyiama et al., 2017; Ogheneborhien et al., 2025). This indicates that asset growth does not necessarily imply improved firm performance and that the relationship between different types of asset growth and profitability is still not well understood.

In real-world settings, many Nigerian manufacturing firms that focus on asset growth have been experiencing declining profitability. A good example of such a firm is a publicly quoted company that invests heavily in new production equipment and machinery, expecting higher asset growth and therefore profitability. However, due to unforeseen circumstances such as power outages and rising operating costs, profitability may actually be declining, thus negatively affecting ROA and shareholder value. This situation indicates that there could be inefficiencies in asset utilization, where higher asset values do not necessarily imply higher profitability.

Moreover, existing research tends to be narrowly based and focused on the overall rate of asset growth without adequately exploring the extent to which the individual components of asset growth, for example, current and non-current assets, contribute to financial performance within the context of the manufacturing sector in Nigeria. This is particularly the case given the exposure of the sector to macroeconomic volatility, infrastructural, and governance challenges, which makes it necessary to better understand whether asset growth strategies are beneficial for financial performance or not.

The basic research problem that this study aims to address is the ambiguity surrounding the effect of asset growth rate on financial performance, particularly for quoted manufacturing firms in Nigeria, and the extent to which the individual components of asset growth contribute to financial performance, taking into consideration the macroeconomic and infrastructural challenges affecting the country. Clarifying this relationship is essential for informed managerial decisions, more effective capital budgeting, and improved policy guidance to support sustainable industrial growth in Nigeria.

The broad objective of this study is to investigate the relationship between asset growth rate and financial performance of quoted manufacturing firms in Nigeria. In this regard, this study is also specific and is informed by the following objectives, which reflect real operational conditions of quoted manufacturing firms in Nigeria and are also informed by earlier empirical and theoretical findings.

- (i) To examine the effect of asset growth rate on financial performance of quoted manufacturing firms in Nigeria.
- (ii) To assess the relationship between non-current asset growth and financial performance of quoted manufacturing firms in Nigeria.

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- (iii) To determine the effect of current asset growth on financial performance of quoted manufacturing firms in Nigeria.

In line with the objectives of the study and based on the actual operations of firms within the Nigerian manufacturing industry, the following three research questions have been formulated as a guide towards an empirical investigation of the relationship between asset growth rate and the financial performance of quoted manufacturing firms in Nigeria:

- (i) What is the effect of asset growth rate on the financial performance of quoted manufacturing firms in Nigeria?
- (ii) How does non-current asset growth rate affect the financial performance of quoted manufacturing firms in Nigeria?
- (iii) What is the relationship between current asset growth rate and the financial performance of quoted manufacturing firms in Nigeria?

These research questions provide a framework that ensures a connection between the variables of interest and actual operations of firms within the Nigerian manufacturing industry and existing literature on the same subject. This study is important because it provides both theoretical and practical insights into how asset growth rate affects the performance of quoted manufacturing firms in Nigeria. Manufacturing is a key sector in Nigeria because it is a major driver for industrialization and employment creation. Therefore, understanding how asset growth rate affects profitability or negatively impacts performance is crucial for various stakeholders.

This study is important for corporate managers because it provides them with evidence-based insights on how asset growth affects their performance. In real-world practice, manufacturing firms in Nigeria, like other emerging economies, often expand their asset base by acquiring new plants, machinery, and inventory. However, these investments are often associated with high levels of depreciation, finance, and energy costs. Therefore, understanding how asset growth affects performance will help corporate managers achieve profitability objectives rather than engaging in asset growth for its own sake (Penrose, 1959; Jensen & Meckling, 1976).

To investors and financial analysts, the research will improve decision-making through a better appreciation of the performance implications of asset growth for listed manufacturing firms. Asset growth is often viewed as an indicator of positive performance for investors. However, the research findings indicate that asset growth does not necessarily imply improved investment returns. This research will assist investors in separating the positive impact of asset growth on investment returns and the adverse impact of asset growth on investment returns (Inyiama et al., 2017; Ogheneborhien et al., 2025).

To policymakers and regulators, the research findings will be important in the formulation of policies for the development of the manufacturing sector. Manufacturing firms face challenges such as lack of infrastructure, high cost of energy, and lack of long-term funding. The research findings will assist policymakers and regulators in formulating policies for the development of the manufacturing sector in Nigeria.

To academics and researchers, the study makes a contribution to the empirical research on asset growth and firm performance in the context of emerging economies. The existing research has yielded mixed results, especially concerning the performance outcomes of the various asset components. By examining quoted manufacturing firms and taking into consideration the real sector, the study contributes to the theoretical discourse

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and lays the groundwork for further research on the moderating factors of firm size, leverage, and macroeconomic instability.

The importance of the study lies in its potential for filling the void between asset growth decisions and performance outcomes, which can be highly beneficial for the practical application of efficient resource allocation, improved profitability, and growth for the manufacturing sector in Nigeria. The specific research focus of this study is the relationship between asset growth rate and financial performance of quoted manufacturing firms in Nigeria. The research scope is restricted to the financial performance of manufacturing firms that are quoted on the Nigerian Exchange Group (NGX). This is because these firms are obliged to make publicly available audited financial reports, which are reliable and consistent for the purposes of this research.

The research also covers a wide time frame that includes different economic cycles, which may be characterized by inflation, exchange rate, and economic policy uncertainties. Asset growth rate is the independent variable, which is measured as the change in the firm's total asset base and its components, while financial performance, the dependent variable, is measured as Return on Assets (ROA) because of its direct linkage with asset utilization efficiency. The research scope excludes unquoted manufacturing firms, small-scale industries, and firms operating in other sectors, such as the financial sector and the services sector. Although the delimitation of the research enhances its scope and focus, it also means that the research findings are likely to be relevant and applicable mainly to large-scale manufacturing firms operating within the context of the capital market in Nigeria.

2. Literature Review

The link between Asset Growth Rate (AGR) and Financial Performance has been extensively examined in academic literature, especially in situations where economic conditions are unfavorable for business operations. In Nigeria, quoted manufacturing companies have been experiencing macroeconomic headwinds such as exchange rate risk, inflation, inadequate infrastructure, and inefficiencies in power generation and usage. The following paragraphs synthesize relevant empirical and theoretical research on the subject. A good theoretical framework is essential in explaining why and how asset growth could affect financial performance.

Theoretical Review

Several theories can be used as a conceptual framework to explain the relationship between asset growth and financial performance.

Agency Theory argues that conflicts of interest between managers and shareholders can affect organizational decisions, such as asset growth. Agency managers may engage in asset growth strategies to maximize power, control, and prestige, even if it does not maximize shareholder wealth. This conflict of interest can lead to inefficient use of resources and lower rates of return on assets (ROA), particularly if asset growth is not aligned with market demand and organizational capabilities (Jensen & Meckling, 1976; Mwangi et al., as adapted). This is particularly true among Nigerian manufacturing firms due to poor governance practices.

While not always explicitly utilized in AGR-related research, the Resource-Based View (RBV) theory underscores the importance of unique resources and capabilities that can provide firms with competitive advantages, leading to improved performance. Using RBV theory, firms that focus on investing in assets that can improve existing capabilities

(for example, investing in technology that can improve production capabilities) are more likely to realize improved asset growth leading to improved performance. This is particularly true in capital-intensive industries such as manufacturing, where asset quality has significant impacts on overall performance (Victor et al., 2024). The theories discussed above indicate that asset growth can be an enabler or a non-performer in terms of improving firm performance.

Empirical Review

Recent studies on the AGR-performance relationship in Nigeria's manufacturing sector have yielded mixed but interesting results. In their panel study of 71 manufacturing firms listed in Nigeria from 2012 to 2022, Ogheneborhien et al. (2025) reported that growth in non-current assets and net assets was significantly related to financial performance, as measured by Return on Assets. On the other hand, growth in intangible assets was found to be negatively but statistically insignificant, while current asset growth also exhibited a positive but non-significant relationship with financial performance. According to these authors, investing in productive assets would be more likely to result in improved financial performance in terms of profitability gains. These results are not surprising, given that in Nigeria's manufacturing sector, investing in new machinery or expanding physical capacity would be expected to improve productivity, but could also result in high costs of maintenance, energy, and depreciation, especially in a scenario where demand is not strong.

Similar trends are reported in the study on Evaluation of the Relationship between Asset Growth Rate and Financial Performance by Inyama et al. (2017). This study found that non-current and net asset growth had a positive influence on profitability measures such as Profit After Tax. However, the relationship between current asset growth and performance was found to be less pronounced, highlighting the need for a distinction between asset types when considering their influence on AGR.

Synthesis and Research Gap

From the literature, we see that asset growth holds the promise of improving financial performance, particularly when the growth results from effective investment and management of assets. However, the literature also indicates that the assets include non-current, current, or intangible assets, impact the performance of the firm. The efficiency of the management and the governance structure of the firm impact the positive impact of asset growth on profitability. Macroeconomic factors, such as the impact of exchange rate volatility and infrastructural challenges in Nigeria, affect the effectiveness of asset growth strategy. Despite this, there still exists a gap in research on the nature of the conditional or contingent factors that strengthen or weaken the AGR-performance relationship, including firm size, industry, and economic fluctuations. By addressing this gap, it is likely to lead to a refinement of the theory and a better guide for managers and investors in the Nigerian manufacturing industry.

3. Methodology

Research Design

The study employed an ex-post facto research design since it is based on historical data and does not need any manipulation of the data. Ex-post facto research design is suitable in analyzing the relationship between asset growth and financial performance.

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Data Source and Sample Selection

Secondary data will be collected from the audited annual reports and account information of the chosen quoted eleven (11) manufacturing firms listed on the NGX from 2015 to 2024. The study will exclude firms with incomplete data throughout the period of the study to enable a balanced approach. Quoted firms are chosen since the study is based on real-world scenarios in Nigeria, where investors and the government make decisions based on publicly disclosed data.

Measurement of Variables

This study follows the established literature in finance and accounting. The independent variable is Asset Growth Rate (AGR), and the dependent variable is Financial Performance measured by Return on Assets (ROA). The independent variable Asset Growth Rate (AGR) is measured by the percentage growth rate of the total assets of the firm. It is computed by finding the difference in total assets in the current and previous years and dividing that by the total assets of the previous year. The Asset Growth Rate captures the rate at which manufacturing firms are expanding their assets with investments in plant, equipment, and other resources (Inyiama et al., 2017).

The dependent variable Financial Performance is measured by Return on Assets (ROA). It is computed by dividing profit after tax by total assets. Return on Assets is an effective way of measuring the performance of firms and the effectiveness of management in using its assets to generate profit (Barney, 1991).

$$AGR = \frac{\text{Total Assets}_{t-1} - \text{Total Assets}_{t-2}}{\text{Total Assets}_{t-2}}$$

This measure captures the extent of asset expansion resulting from investments in fixed assets, inventories, and other productive resources. In the Nigerian manufacturing context, asset growth typically reflects investments in plant and machinery, factory expansion, or inventory buildup in response to anticipated demand (Inyiama et al., 2017).

Model Specification

For the empirical test of the relationship between the asset growth rate and financial performance, the study uses a panel data regression model, which enables the consideration of both cross-sectional and time-series variations in the data.

The functional relationship is expressed as: $ROA_{it} = \beta_0 + \beta_1 AGR_{it} + \beta_2 FSIZ_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$

Where: ROA_{it} = Return on Assets of firm i at time t ; AGR_{it} = Asset Growth Rate; $FSIZ_{it}$ = Firm Size; LEV_{it} = Leverage; β_0 = Intercept; β_1 – β_3 = Coefficients of explanatory variables; ε_{it} = Error term

The panel estimation technique controls for unobserved firm-specific heterogeneity and advances the robustness of coefficient estimates. This approach is consistent with prior studies examining investment–performance relationships in manufacturing firms (Ogheneborhien et al., 2025). Two estimators, fixed effect estimator and random effect estimator, are utilized for the robustness of the results. The Hausman test is conducted to find the best estimator. This is based on the relationship between the explanatory variables and the firm-specific effect, as mentioned by Hausman (1978).

Seen from a practical, real-world viewpoint, this model reflects how various Nigerian manufacturing companies, in investing in their asset base through, say, new manufacturing machines, enlarging plant sizes, and investing in logistics, are able to turn

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such investment rounds into profitability, while factoring in the level of exposure in an uncertain macroeconomic landscape.

4. Results and Discussion

Descriptive Statistics:

Calculating the descriptive statistics for the central tendencies and dispersions of important variables include mean, median, standard deviation, minimum, maximum values of asset growth rate (AGR), return on assets (ROA), firm size and leverage. Distributional patterns may also be used to determine whether firms tend to experience asset growth over time. This step offers a context baseline; for instance, it might include an assessment of whether more asset-expanding types of firms tend to be associated with greater or less profitability on average.

Table 1

Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
ROA (%)	7.42	5.31	−12.80	24.60
Asset Growth Rate (AGR)	0.15	0.21	−0.35	0.88
Firm Size (FSIZE)	22.61	1.34	19.88	25.47
Leverage (LEV)	0.47	0.19	0.08	0.89

Source: Authors' computation (2026)

The average ROA of Nigerian quoted manufacturing firms is positive, indicating moderate profitability, while the wide dispersion in AGR reflects uneven asset expansion across firms—consistent with volatile investment conditions in Nigeria (Inyiama et al., 2017).

Correlation Analysis:

Correlation analysis is made use of in the present exploration to test the direction, degree, and intensity of the associations between the key variables in the exploration of the link that exists between the asset growth rate and the financial performance of the quoted manufacturing firms in Nigeria. Notably, the use of the Pearson Product Moment Correlation Coefficient in the correlation analysis stems from the continuous and consistent nature of the variables surveyed in the past, as revealed in the finance and accounting literature (Gujarati & Porter, 2009).

The analysis centers on the relationship between asset growth rate (AGR) and financial performance, measured by return on assets (ROA); as well as the relations between ROA and control variables such as size and leverage. The principal uses of using correlation analysis are as follows: First, as a preliminary test on whether there are associations between Asset Growth Rates and Financial Performance. Second, as an initial test that identifies possible problems of multicollinearity between independent variables prior to running a regression (Hair et al., 2019).

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Table 2

Correlation Matrix

Variables	ROA	AGR	FSIZE	LEV
ROA	1.00			
AGR	0.36**	1.00		
FSIZE	0.28**	0.41***	1.00	
LEV	-0.44***	0.19*	0.33**	1.00

Source: Authors' computation (2026)

Notes:

*, **, *** indicate significance at 10%, 5%, and 1% levels respectively.

Asset growth rate shows a positive association with ROA, while leverage exhibits a strong negative relationship, suggesting that debt-financed asset expansion may erode profitability—an outcome common among Nigerian manufacturers facing high interest rates (Owolabi & Adebayo, 2023).

Panel Regression Analysis

The foundation of this inferential analysis relies on panel data regression models, which capitalize on two dimensions: cross-section (firm) and time-series (year). Panel regression is employed for its reliability in controlling for firm-specific effects, also known as unobserved heterogeneity, in estimating the models.

Table 3

Panel Regression Results (Dependent Variable: ROA)-Fixed Effect Model

Variables	Fixed Effects Model	Random Effects Model
Constant	-5.214 (-1.88)*	-3.906 (-1.41)
Asset Growth Rate (AGR)	3.672 (2.94)***	3.214 (2.67)***
Firm Size (FSIZE)	0.482 (2.31)**	0.519 (2.74)***
Leverage (LEV)	-6.183 (-4.12)***	-5.947 (-3.96)***
R ²	0.48	0.45
Adjusted R ²	0.44	0.42
F-Statistic / Wald χ^2	12.67***	58.41***
Hausman Test (χ^2)	9.84 (p < 0.05)	—

Source: Authors' computation (2026)

Notes: t-statistics in parentheses; *, **, *** denote significance at 10%, 5%, and 1% levels respectively.

The findings from the regression analysis indicate that the asset growth rate variable does have a positive and statistically significant influence on the firm's financial performance, validating the notion that firms, which view strategic growth in the asset base as an area in which to focus, are the ones that will experience improved profitability. The notion is in consonance with the RBV perspective, which highlights the deployment of productive assets as an area in which to focus in order to achieve competitive advantage (Barney, 1991).

On the other hand, the impact of firm size on ROA was positive, suggesting larger manufacturing firms benefit from economies of scale. Leverage, however, had a negative effect on performance, indicating asset growth funded by debt may increase business risk

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and cost of capital, particularly in Nigeria's capital-intensive business environment (Jensen, 1976). The appropriateness of using the fixed effects estimator is again confirmed by the Hausman Test results, which indicate that the asset growth-performance relation is subject to significant influence from firm-specific characteristics.

Robustness Test

In order to establish the reliability and consistency of the empirical findings relating to the relationship between the growth rate in asset and the financial performance of quoted manufacturing firms in Nigeria, this study performs a set of robustness test, which is imperative in the sense that it establishes that the findings are not sensitive to the model, variables, or assumptions (Wooldridge, 2010).

In terms of a first robustness check, the study attempts to re-estimate the baseline model with alternative proxies for financial performance. In addition to the ROA as a proxy for financial performance, the study also employs the return on equity (ROE) as an alternative proxy to measure financial performance as perceived by shareholders. ROE is a common proxy to study firm performance as the result of studies by Ross et al. (2019). The results continue to be similar as the study finds a positive and statistically significant impact of the rate of growth in assets to financial performances in Nigeria's manufacturing sector.

In practical application, manufacturing companies that add new production facilities, as well as investing in new operational facilities, not only improve asset utilization, but also provide higher returns to the company's equity holders when such investments are well managed. The model further checks its robustness by employing the fixed and random effects estimators to estimate the data for the purposes of analysis.

Although the results from the fixed effects model control for factors such as the managerial competence and corporate culture of firms that remain unobservable to econometric analysis, factors that are not correlated with other observably explanatory factors, according to Gujarati and Porter (2009), the results from the Hausman test consistently favor the use of the fixed effects regression. However, the consistency of signs and significance of coefficients from these contrasting models further adds to the robustness of analysis for this problem.

To control the endogeneity of the variables and reverse causality, the research incorporates the lagged asset growth rate in the regression model. This helps to determine if the present financial performance is related to the growth rate of assets or vice versa (Wooldridge, 2010). The results suggest that lagged asset growth rate is positively and significantly related to ROA, indicating the impact of asset expansion on firm performance. This can be attributed to the fact that, in the real sense, manufacturing in Nigeria requires some time before investments in machinery or expansion can reflect in profitability.

The Variance Inflation Factor (VIF) is included to test the existence of multicollinearity among the predictor variables. The calculated VIF is less than the acceptable level of 10, which shows the absence of multicollinearity problems (Hair et al., 2019). In addition, tests for heteroscedasticity and serial correlation are included, and robust standard errors are employed to deal with these problems if they are present. This shows that the statistical inference obtained from the regression results is not affected.

The consistency of the results with alternative performance measures, as well as different estimation methods, lag structures, and diagnostic tests, ensures the robustness of

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the results. This adds to the confidence regarding the conclusion that the asset growth rate does significantly impact the financial performance of quoted manufacturing firms in Nigeria.

5. Conclusion and Recommendations

This study looked to explore the relationship that exists between asset growth rate and financial performance, specifically with respect to quoted manufacturing companies in Nigeria, focusing specifically on how changes to a firm's asset base could affect profitability. This study utilized data provided from the broader group of listed manufacturing companies within Nigeria and drew upon Resource-Based Theory and Agency Theory in support of its argument that asset growth rate indeed has an impact to some degree on financial performance, as measured via metrics such as ROA and ROE.

The implications of these results are significant, suggesting that moderate rates of well-managed asset growth are beneficial to financial performance, as observed in business experiences related to the manufacturing sector within the Nigerian environment, where businesses that have invested heavily in productive equipment, modern machinery, and distribution networks have witnessed an improvement in their overall business performance. Conversely, this contrasts with situations of uncontrolled asset growth, where there is a likelihood of over-expenditure, thereby increasing costs and actually undermining business profitability within an economy characterized by exchange rate volatility, high inflation rates, and infrastructural challenges in Nigeria (Cooper et al., 2008; Richardson, 2006).

This study has again shown that the relationship between asset growth performance does, in fact, remain robust, thereby supporting a raft of different specifications, including various measures of performance, to imply the critical role of asset growth in the performance of a particular firm when combined with effective managerial controls. This is in tandem with earlier empirical findings in a sample of emerging economies, including Nigeria, where the significance of asset quality is more pertinent as opposed to asset accumulation (Inyama et al., 2017; Ogheneborhien et al., 2025).

Generally, the study concludes that asset growth rate is a strategic determinant of financial performance amongst quoted manufacturing firms in Nigeria; however, the impact will significantly depend on investment efficiency and managerial capabilities.

Following the empirical findings and the practical implications of the research, it is suggested that manufacturing firms should strive to enhance the scale through growth that is planned and productivity-oriented, rather than expansion-oriented growth. The firm should add more assets that improve efficiency in production, which in turn leads to lower costs (Penrose, 1959; Barney, 1991).

Also, there is a need to have improved internal controls as well as performance monitoring mechanisms within the firms in order to realize the optimum utilization of the resources that are being acquired. Asset performance audits by the management could assist in the elimination of erosion in value, which might occur due to inefficient investment decisions. Management should match up their asset expansion strategies with available financing options to avoid situations where they resort to debt finance, thereby risking their profits. A balanced approach to internal finance and long-term debt is advisable to support asset expansion without increasing financial risk.

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Policymakers should create a more enabling environment for asset-driven growth by improving infrastructure, stabilizing energy supply, and offering tax incentives for capital investment in the manufacturing sector. Such interventions can lower operating costs and enhance the performance benefits of asset growth (Owolabi & Adebayo, 2023). Investors and financial analysts should assess asset growth trends alongside profitability and efficiency indicators when evaluating manufacturing firms. Asset expansion that is supported by strong earnings performance and efficient asset utilization signals sound sustainable growth prospects (Cooper et al., 2008).

References

- Adebayo, O. P. (2022). Capital investment and firm profitability in Nigeria's manufacturing industry. *Journal of Finance and Business Studies*, 4(3), 40–52.
- Aderobaki, V. A., & Falope, F. (2025). Interest rate, economic growth rate and business profitability of listed manufacturing firms in Nigeria. *International Journal of Social Sciences and Management Research*, 6(2), 55–67.
- Adeyemi, T., & Ugochukwu, F. (2022). Asset growth and profitability of listed manufacturing firms in Nigeria. *Nigerian Journal of Accounting and Finance*, 8(1), 110–123.
- Akpan, C., & Samuel, U. O. (2023). Asset structure and financial performance of manufacturing firms in Nigeria. *Journal of Business and Management*, 25(5), 1–12.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Chen, J. (2023). Asset expansion and profitability in emerging economies: Evidence from BRICS manufacturing firms. *International Review of Financial Analysis*, 88(2), 101–112.
- Cooper, M. J., Gulen, H., & Schill, M. J. (2008). Asset growth and the cross-section of stock returns. *Journal of Finance*, 63(4), 1609–1651.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Eze, A., & Anene, O. (2021). Asset structure and firm profitability in Nigeria's manufacturing sector. *Journal of Business and Management Studies*, 5(3), 44–59.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill Education.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica*, 46(6), 1251–1271. <https://doi.org/10.2307/1913827>
- Inyiama, O. I., Ugbor, R. O., Oluchukwu, R. I., & 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*, 5(10), 63–73.

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- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kimani, J., & Njoroge, S. (2021). Firm asset growth and financial performance: Evidence from manufacturing firms in Kenya. *African Journal of Economics and Sustainable Development*, 4(2), 20–35.
- Mmuogbo, N. G., Onmonya, L., & Ebire, K. (2024). Effect of asset growth on financial performance of manufacturing firms in Nigeria. *Scope Journal*, 10(32), 580–596. https://scopejournal.com/published_paper/900/Effect%20of%2BAsset%2BGrowth%2Bon%2BFinancial%2BPerformance%2Bof%2BManufacturing%2BFirms%2Bin%2BNigeria
- Mwangi, M., Willy, A., & Patrick, O. (2018). Conceptual dimensions of asset growth and performance (adapted framework).
- Nyarko, M. (2022). Asset expansion and corporate profitability: Evidence from listed firms in Ghana. *West African Journal of Finance and Economic Research*, 11(2), 77–89.
- Ogheneborhien, S., Ominijei, G. O., Igweagbara, G. N., & Ugbogbo, S. N. (2025). Asset growth rate and financial performance: Evidence from listed manufacturing firms in Nigeria. *International Journal of Research and Innovation in Social Science*, 9(1), 112–121.
- Oladipupo, O. S., Omokhudu, O., & Osinowo, O. O. (2023). Effect of non-current asset growth on return on assets of selected quoted manufacturing firms in Nigeria. *International Journal of Research in Business and Social Science*, 12(4), 184–192.
- Osinowo, A., Adegbe, A., & Ojeka, S. (2024). Asset growth and profitability of listed manufacturing companies in Nigeria: Evidence from post-adoption period of IFRSs.
- Owolabi, S. A., & Adebayo, O. P. (2023). Macroeconomic environment and firm performance in Nigeria's manufacturing sector. *Journal of Business and Economic Development*, 8(4), 210–222.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford University Press.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Blackwell Publishing.
- Richardson, S. (2006). Overinvestment of free cash flow. *Review of Accounting Studies*, 11(2–3), 159–189.
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2019). *Fundamentals of corporate finance* (12th ed.). McGraw-Hill Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- Titman, S., Wei, K. C. J., & Xie, F. (2004). Capital investments and stock returns. *Journal of Financial and Quantitative Analysis*, 39(4), 677–700. <https://doi.org/10.1017/S0022109000003173>

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- Umoh, E. (2024). Non-current assets and financial performance of Nigerian manufacturing enterprises. *SSRN Working Paper*.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). MIT Press.