
Assessing the Impact of Accelerated Capital Allowance and Corporate Tax Reduction on Firm Performance in Nigeria's Manufacturing Sector

Okocha, Francis Yankee; Egbe, Solomon; Ogbonna, G. N
Department of Accounting
Faculty of Management Sciences
University of Port Harcourt, Choba, Port Harcourt, Nigeria

Abstract

This study investigates the impact of accelerated capital allowance (ACA) and reduced corporate income tax (RCIT) on the financial performance of quoted manufacturing firms in Nigeria. Using panel regression on data from 14 industrial goods companies over 2012–2023, three performance indicators were examined: Return on capital employed (ROCE), price-earnings ratio (PER), and Tobin's Q. Results reveal that ACA significantly improves profitability and investment efficiency, while RCIT exerts a positive but modest influence. However, both incentives showed no significant effect on market valuation (Tobin's Q), suggesting investor skepticism and weak capital market responsiveness. Based on these findings, the study recommends two targeted policy actions. First, the ACA administration should be simplified and digitalized to increase uptake, particularly by small and medium enterprises. Second, RCIT should be tied to measurable performance outcomes such as job creation, technological investment, and export expansion, ensuring that tax relief translates into tangible economic benefits. Complementary reforms in infrastructure and regulatory efficiency are also required to strengthen investor confidence. Overall, the study underscores that while tax incentives are vital for industrial growth, their effectiveness depends on transparent administration, targeted application, and integration with broader structural reforms.

Keywords: Tax incentives; Accelerated Capital Allowance; Corporate tax reduction; ROCE; Tobin's Q; P/E ratio; manufacturing sector

1. Introduction

The Nigerian economy, historically reliant on crude oil exports, has in recent years shifted its focus to diversifying its economic base to achieve sustainable development. One of the critical sectors identified in this diversification agenda is the manufacturing sector, due to its potential to drive industrialization, generate employment, increase foreign exchange earnings, and foster inclusive economic growth. According to the Central Bank of Nigeria (CBN, 2021), the manufacturing sector contributes significantly to GDP but remains underutilized due to several structural and policy-related impediments.

Despite various policy interventions, the sector continues to face systemic challenges, such as inadequate infrastructure, high production costs, erratic power supply, insecurity, and limited access to credit (Adebayo & Adeyemi, 2020). Furthermore, Nigeria's tax regime has often been described as complex and burdensome, especially for firms in the productive sector (OECD, 2022). These constraints have made it difficult for manufacturing firms to achieve optimal performance, discouraging both domestic and foreign investment in the industry.

In response, the Nigerian government has implemented several tax incentives aimed at reducing the cost of doing business and stimulating private sector-led growth. Among these incentives are the Accelerated Capital Allowance (ACA) and the Reduced Corporate Income Tax (RCIT). The ACA enables firms to depreciate capital assets at an accelerated rate, allowing them to recover their capital investments more quickly and thus reduce short-term tax liabilities. This, in theory, enhances the ability of firms to reinvest in productive assets. On the other hand, RCIT provides a lower corporate income tax rate for certain classes of companies, thereby increasing retained earnings and liquidity for further investment.

While these incentives are theoretically sound, empirical findings on their effectiveness remain mixed. For example, Uwuigbe et al. (2016) found that tax incentives, including the ACA, positively influence profitability and capital reinvestment among listed manufacturing firms. Similarly, Ohaka & Agundu (2012) reported a significant link between investment tax relief and the performance of firms in the industrial goods sector. However, Babajide (2013) and Adegbe & Fakile (2011) argued that the full impact of these incentives is often diluted due to weak institutional frameworks, policy inconsistencies, and poor awareness among SMEs.

Furthermore, recent empirical work suggests that firm-specific characteristics, such as size, leverage, and asset structure, may condition the effectiveness of tax incentives (Okafor & Ezejiofor, 2020). This study builds on this line of inquiry by empirically assessing the impact of the ACA and RCIT on firm performance using financial data from quoted manufacturing firms in Nigeria over 12 years (2012–2023). In doing so, it seeks to offer a nuanced understanding of the degree to which tax incentives influence firm-level financial performance metrics, including Return on Capital Employed (ROCE), Price-Earnings Ratio (PER), and Tobin's Q.

2. Literature Review and Hypotheses Development

2.1 Conceptual Framework of Tax Incentives

Tax incentives are deliberate policy instruments employed by governments to stimulate economic activities, attract investment, and ease the cost burden on businesses. These

incentives work by reducing the amount of tax a company must pay, thereby increasing available capital for expansion, modernization, or reinvestment. In developing countries like Nigeria, tax incentives are especially critical in promoting industrial development and enhancing the performance of key sectors such as manufacturing.

In the context of this study, two prominent types of tax incentives are examined: Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT). These instruments are embedded within Nigeria's fiscal policies and are designed to support firms by lowering their effective tax burden while encouraging reinvestment and operational efficiency.

2.1.1 Accelerated Capital Allowance (ACA)

Accelerated Capital Allowance is a tax-based incentive that enables companies to depreciate their fixed assets more rapidly than standard accounting rules would allow. Essentially, this policy allows firms to deduct a higher proportion of capital expenditure from their taxable income in the early years of asset usage. By doing so, businesses can reduce their immediate tax obligations, freeing up resources for other productive activities such as upgrading equipment, expanding facilities, or funding research and development.

ACA is particularly beneficial to capital-intensive sectors like manufacturing, where the need for periodic reinvestment in machinery and infrastructure is high. In Nigeria, ACA provisions are part of the Companies Income Tax Act and are implemented to encourage long-term investment in productive assets. The immediate tax relief it offers is intended to stimulate economic activity by enhancing firms' liquidity and reinvestment capacity.

Previous studies, such as those by Ohaka & Agundu (2012) and Uwuigbe et al. (2016), have shown that ACA can significantly influence firm profitability and asset utilization. However, its effectiveness is often dependent on firms' awareness of the policy and their ability to comply with regulatory requirements for claiming the allowance.

2.1.2 Reduced Corporate Income Tax (RCIT)

Reduced Corporate Income Tax refers to the policy of lowering the statutory tax rate that firms are required to pay on their net income. This incentive is typically granted to firms operating in priority sectors or meeting specific criteria set by government agencies. The rationale behind RCIT is to ease the financial burden on companies, increase after-tax profits, and encourage reinvestment into core business activities.

In Nigeria, the RCIT policy has been applied to small and medium-sized enterprises (SMEs), pioneer industries, and firms in economically disadvantaged regions. For instance, under the Finance Act and Industrial Development (Income Tax Relief) Act, qualifying companies may enjoy a lower tax rate for a defined period. This measure is aimed at improving profitability and competitiveness, particularly for firms facing high operating costs or harsh market conditions.

The impact of RCIT on firm performance has received mixed reviews in the literature. While studies like Adegbeie & Fakile (2011) report that tax reductions enhance business growth and investment, others argue that their benefits are minimal when not supported by strong institutional frameworks and a stable macroeconomic environment.

In sum, both ACA and RCIT are important components of Nigeria's broader tax policy framework, designed to drive private sector growth and enhance economic productivity. Their relevance to manufacturing firms lies in their potential to alleviate tax-related costs and provide a more favourable climate for sustainable growth.

2.2 Theoretical Perspectives

This study is grounded in two key theoretical frameworks that explain the rationale and expected outcomes of tax incentives on firm performance: Tax Relief Theory and Cost-Benefit Theory. These frameworks offer insights into how tax policies influence corporate behaviour, particularly in investment decisions and operational efficiency. They also provide a basis for evaluating the trade-offs involved in granting tax concessions.

2.2.1 Tax Relief Theory

Tax Relief Theory suggests that reducing the tax obligations of businesses through fiscal incentives such as Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT) can stimulate growth by enhancing liquidity and increasing retained earnings. With more financial resources at their disposal, firms are more likely to invest in expanding operations, adopting new technologies, or improving product quality, actions that can lead to improved performance and competitiveness (Kaplou, 2008).

The central assumption of this theory is that lower tax burdens translate into a stronger incentive for firms to reinvest in productive assets rather than hoard profits or seek tax havens. This is particularly relevant for manufacturing firms, which are typically capital-intensive and require significant reinvestment in plant, machinery, and logistics infrastructure. When the government allows these firms to write off capital investments more quickly (as in the case of ACA), it effectively subsidizes their investment decisions and reduces the financial friction associated with large upfront costs.

Several empirical studies support the principles of tax relief theory. For example, Ohaka & Agundu (2012) found that tax relief mechanisms such as reinvestment allowances significantly enhanced profitability in Nigerian manufacturing firms. Similarly, Owolabi & Okwu (2011) noted that tax incentives helped improve cash flows, which firms utilized for asset acquisition and working capital management.

However, for tax reliefs to be truly effective, firms must have both the capacity and the willingness to channel these savings into productive use. This capacity is often influenced by firm-specific factors such as financial literacy, governance quality, and access to complementary infrastructure (Okafor & Ezejiofor, 2020).

2.2.2 Cost-Benefit Theory

The Cost-Benefit Theory offers a broader perspective, emphasizing the need to evaluate the overall economic value of tax incentives to both firms and the state. It posits that tax incentives are justified only if the economic benefits they generate, such as increased private investment, job creation, technological advancement, and sectoral growth, exceed the costs incurred by the government, particularly the revenue foregone (Musgrave & Musgrave, 1989).

This theory draws attention to the inherent trade-off in fiscal policymaking: while tax incentives may boost firm-level outcomes in the short term, they may also reduce the tax base, thereby limiting public resources for infrastructure, healthcare, and education. Therefore, it becomes essential to assess whether these concessions are delivering sufficient return on investment in terms of economic development.

In their empirical analysis, Klemm & Van Parys (2012) examined tax incentives across several developing countries and concluded that while incentives can attract investment, they are often poorly targeted and not cost-effective in the absence of strong institutional frameworks. Similarly, James (2013) found that the actual impact of tax incentives in many sub-Saharan African countries was lower than expected due to corruption, redundancy (incentivizing firms that would have invested anyway), and policy instability.

In Nigeria, Babajide (2013) observed that while tax incentives improved investment to some extent, the lack of proper cost-benefit evaluation mechanisms made it difficult to determine their true economic value. This aligns with the argument that tax policies should not be evaluated solely based on their intentions but on the measurable outcomes they produce.

In the context of this study, the Cost-Benefit Theory is particularly useful in assessing the overall efficiency and sustainability of ACA and RCIT. It encourages a critical look at whether these policies are merely reducing government revenue or catalyzing meaningful improvements in firm performance and broader economic indicators.

2.3 Hypotheses Development

The formulation of the study's hypotheses is grounded in both theoretical propositions and empirical evidence relating to tax incentives and firm performance. Theoretically, Tax Relief Theory and Cost-Benefit Theory suggest that tax incentives such as Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT) should reduce financial constraints, enhance reinvestment opportunities, and lead to improved firm performance. Empirically, prior studies across Nigeria and other developing economies have yielded varied findings on the magnitude and direction of these relationships. This study builds upon this foundation to propose the following null hypotheses:

2.3.1 ACA and ROCE

Return on Capital Employed (ROCE) measures the efficiency with which a firm uses its capital to generate profit. Since the ACA allows businesses to depreciate capital assets more rapidly, it reduces their tax burden in the short term and improves liquidity. These tax savings can be redirected toward acquiring more productive assets, enhancing operational efficiency, and ultimately improving ROCE.

According to Ohaka & Agundu (2012), the ACA significantly contributed to capital productivity and profitability among Nigerian manufacturing firms. Similarly, Owolabi and Okwu (2011) found that fiscal incentives targeting capital formation tend to increase operational returns in capital-intensive sectors.

Hypothesis 1:

Accelerated capital allowance (ACA) has no significant positive effect on return on capital employed (ROCE).

2.3.2 ACA and PER

The Price-Earnings Ratio (PER) reflects investors' expectations about a firm's future earnings potential. When firm benefit from the ACA, the reduction in tax liabilities can boost net income, which in turn may attract investor confidence, particularly if the increased earnings are sustained over time. Additionally, capital reinvestments made possible by the ACA can signal growth and expansion, which often translates into higher valuation multiples.

James (2013) asserts that tax-induced profitability improvements tend to influence market-based indicators, especially in firms with strong financial disclosure practices. Uwuigbe et al. (2016) also documented a positive linkage between tax reliefs and market sentiment indicators such as PER.

Hypothesis 2:

Accelerated capital allowance (ACA) has no significant positive effect on price-earnings ratio (PER).

2.3.3 ACA and Tobin's Q

Tobin's Q, which compares the market value of a firm to the replacement cost of its assets, is a useful proxy for assessing the firm's growth prospects and investment appeal. ACA, by enabling quicker asset depreciation and subsequent reinvestment, can signal growth potential and efficient capital usage to investors. A high Tobin's Q may reflect the market's positive reaction to the strategic reinvestment of tax savings.

Klemm & Van Parys (2012) and Kaplow (2008) contend that investment-linked tax incentives increase investor confidence by improving asset turnover and capital productivity, factors that are reflected in Tobin's Q.

Hypothesis 3:

Accelerated capital allowance (ACA) has no significant positive effect on Tobin's Q.

2.3.4 RCIT and ROCE

Reduced Corporate Income Tax (RCIT) directly increases a firm's post-tax earnings. With more net income available, companies can reinvest in production, reduce debt, or upgrade operational processes, all of which are likely to enhance ROCE. However, the actual impact may depend on how the savings from RCIT are allocated.

Babajide (2013) reported that firms benefiting from lower income tax rates in Nigeria experienced an improvement in capital efficiency, though the magnitude varied based on sectoral characteristics. Meanwhile, Owolabi & Okwu (2011) stressed that unless tax savings are productively reinvested, their effect on operational returns may be minimal.

Hypothesis 4:

Reduced Corporate Income Tax (RCIT) has no significant positive effect on Return on Capital Employed (ROCE).

2.3.5 RCIT and PER

Firms that benefit from RCIT often experience a temporary increase in net earnings, which can positively impact investor sentiment and market valuation, thereby enhancing PER. However, since PER also reflects expectations of future earnings, the sustainability of such tax savings becomes a key determinant.

Okafor & Ezejiofor (2020) emphasized that RCIT incentives can enhance PER only if firms demonstrate improved performance trends and transparent reinvestment strategies. If not, market participants may perceive the gains as transient.

Hypothesis 5 (H5)

Reduced corporate income tax (RCIT) has no significant positive effect on the price-earnings ratio (PER).

2.3.6 RCIT and Tobin's Q

RCIT, by improving the firm's net income, can increase its market value if investors believe that the tax savings will be deployed efficiently. Higher market value relative to asset replacement costs (i.e., Tobin's Q) indicates favorable investment prospects and perceived managerial efficiency.

Klemm & Van Parys (2012) assert that RCIT, when linked with credible business strategies, can lead to a higher Tobin's Q. However, they also caution that tax policy uncertainty can dilute this effect.

Hypothesis 6 (H6): Reduced corporate income tax (RCIT) has no significant positive effect on Tobin's Q.

2.3.7 Firm Size, Leverage, and Financial Performance (ROCE, PER, and Tobin's Q)

Firm-specific characteristics such as size and leverage are often crucial in determining how effectively a company utilizes tax incentives. Larger firms tend to have better administrative capacity, access to tax consultants, and more opportunities to reinvest savings, making them more likely to benefit from ACA and RCIT. Conversely, highly leveraged firms may face cash flow constraints that limit their ability to reinvest, thus reducing the impact of tax reliefs on financial performance.

According to Barney (1991) and the resource-based view, firm size represents a critical internal resource that enhances the firm's ability to respond to fiscal incentives. The pecking order theory (Myers & Majluf, 1984) also suggests that firms with high leverage may be risk-averse or overly committed to debt servicing, thereby limiting reinvestment opportunities from tax savings. Empirical studies, including Uwuigbe et al. (2016) and Okafor & Ezejiofor (2020), have found that larger firms tend to demonstrate stronger positive responses to tax incentives across both accounting-based and market-based performance indicators.

Hypothesis 7a (H7a)

Firm size does not significantly moderate the relationship between tax incentives (ACA, RCIT) and firm performance (ROCE, PER, Tobin's Q).

Hypothesis 7b (H7b)

Firm leverage does not significantly moderate the relationship between tax incentives (ACA, RCIT) and firm performance (ROCE, PER, Tobin's Q).

2.4 Empirical Evidence

The effectiveness of tax incentives in enhancing firm performance has been widely investigated, with findings varying across countries, industries, and specific tax policy instruments. Several empirical studies, particularly in Nigeria and other developing economies, provide useful insights into the implications of tax relief schemes such as accelerated capital allowance (ACA) and reduced corporate income tax (RCIT).

In Nigeria, Ohaka & Agundu (2012) found that capital allowances and investment reliefs significantly improved profitability and capital structure among manufacturing firms. Their study emphasized that incentives tied directly to capital expenditure, such as the ACA, were more impactful in improving firms' internal cash flows. Similarly, Uwuigbe et al. (2016) examined small and medium-sized manufacturing firms in Ogun State and reported that tax breaks contributed positively to reinvestment and profitability. These findings suggest that the ACA, when efficiently administered, can provide immediate liquidity benefits that translate into operational efficiency and firm-level financial gains.

Contrasting views are offered by Babajide (2013), who analyzed composite fiscal incentive indices and concluded that, despite the availability of tax incentives, firm-level investment in Nigeria remained subdued. The study attributed this ineffectiveness to infrastructural deficiencies and policy inconsistencies, noting that fiscal incentives alone may be insufficient without an enabling business environment.

Looking beyond Nigeria, international studies provide further context. Gatsi et al. (2013), using data from Ghana, found that corporate income tax burdens negatively affected firm performance, though internal characteristics such as size and firm age helped mitigate these effects. Likewise, Rohaya et al. (2010), analyzing Malaysian manufacturing firms, discovered a negative correlation between corporate income taxes and performance indicators like gross profit margins and cost efficiency. These findings reinforce the notion that RCIT can alleviate tax burdens and potentially improve firm outcomes when combined with supportive internal capabilities.

Some studies underscore the sector-specific dynamics of tax incentive effectiveness. Tennyson (2014) showed that targeted incentives such as investment allowances and loss reliefs significantly influenced investment behavior among agribusinesses in Singapore. Similarly, Alhulail (2014) demonstrated that tax incentives played a critical role in promoting the adoption of eco-friendly vehicles, suggesting that tailored policies can influence both firm performance and broader policy goals. In the East African context, Mayende (2013) investigated Ugandan manufacturing firms and found that firms receiving tax incentives outperformed their counterparts in gross sales and value-added metrics. Importantly, the study emphasized that transparency, non-discriminatory practices, and access criteria were essential for incentive effectiveness. Additional studies also highlight how firm-specific characteristics shape tax incentive outcomes. For instance, Olowo et al. (2020) found that the impact of tax incentives such as the ACA and RCIT on firm performance in Nigeria was mediated by leverage and firm size, with larger, better-capitalized firms more likely to

convert fiscal reliefs into tangible performance improvements. However, several studies caution that poorly administered or generic incentives may yield limited results. Chukwudi (2015) reported that many Nigerian firms were unaware of available tax incentives or could not claim them effectively. His findings suggest that even well-designed tax policies can fall short without complementary efforts in stakeholder education and simplification of claims processes.

Other scholars emphasize the need for periodic evaluations. Umaoma & Ordu (2014), in their study of manufacturing firms in Nigeria's South-South region, stressed the importance of continuous assessment and adaptation of incentive policies to ensure alignment with sectoral needs and development goals. From a financial performance perspective, several Nigerian studies further affirm the relevance of ACA and RCIT. Amasiatu et al. (2023), analyzing firms in the food and beverage sector, observed a strong positive association between tax incentives and operating margins. Similarly, Lawal et al. (2022) identified turnover and retained earnings growth as outcomes positively influenced by the strategic use of tax incentives.

Taken together, these empirical findings reveal a nuanced picture. On one hand, there is substantial evidence that tax incentives such as ACA and RCIT can positively influence firm performance metrics, including profitability, reinvestment, and investor valuation. On the other hand, the realization of these benefits often hinges on factors such as firm size, access to information, sectoral specificity, and the overall quality of tax administration. This reinforces the relevance of integrating firm-level heterogeneity and contextual realities into the design and evaluation of tax policy interventions.

3. Methodology

3.1 Research Design

This study adopts a quantitative research design, specifically utilizing panel data analysis to explore the causal relationship between tax incentives and the financial performance of manufacturing firms quoted in Nigeria. The explanatory nature of the design aligns with the study's objective, to identify not just correlations but potential cause-and-effect linkages between variables such as accelerated capital allowance (ACA), reduced corporate income tax (RCIT), and financial performance metrics.

Panel data designs are especially advantageous in financial research, as they allow the researcher to account for both cross-sectional and time-series variations within the data set (Baltagi, 2005). This enhances the robustness of causal inferences and provides control for unobservable heterogeneity, which is particularly important when dealing with firm-specific characteristics such as management style, business model, or market structure.

Moreover, a panel data approach is consistent with other empirical studies in the domain of tax policy and firm performance. For instance, Klemm and Van Parys (2012) employed a similar design in their cross-country study on tax incentives and foreign direct investment. Likewise, Okafor & Ezejiofor (2020) used panel regression techniques to examine how tax incentives influenced profitability in the Nigerian manufacturing sector. Thus, the chosen research design is well-suited to investigating the effects of fiscal policy instruments on firm outcomes over time.

3.2 Population and Sample

The population for this study comprises all firms listed under the Industrial Goods sector on the Nigerian Exchange Group (NGX). This sector was chosen due to its intensive use of fixed assets and its reliance on reinvestment, which makes it highly responsive to tax incentives like ACA and RCIT.

From this population, a purposive sampling technique was adopted to select 14 manufacturing firms that had consistently remained listed between 2012 and 2023, and for which complete financial data were publicly available. Purposive sampling is commonly used in financial and policy research where representativeness is less critical than data availability and relevance (Bryman & Bell, 2015).

This approach aligns with the methodology employed by Uwuigbe et al. (2016), who selected firms based on data consistency in a study of tax policy and firm value in Nigeria. Similarly, Amasiatu et al. (2023) applied a targeted sampling strategy when investigating financial performance determinants in Nigeria's beverage sector. Hence, focusing on firms with uninterrupted data over the 12 years, the study enhances the reliability and internal validity of its findings.

3.3 Data

The study utilizes secondary data derived from the audited annual financial statements of the selected firms, as well as official reports obtained from the Nigerian Exchange Group (NGX) database. These sources are considered reliable, standardized, and appropriate for financial analysis.

The use of secondary data is a common practice in empirical accounting and finance research due to its objectivity, verifiability, and accessibility (Saunders et al., 2016). Similar data sources have been used by Ohaka & Agundu (2012) and Lawal et al. (2022) in studies examining the financial impact of government policies on firm outcomes. Data coding and statistical analysis were conducted using EViews software, which is well-suited for managing large panel datasets and provides advanced tools for fixed and random effects modeling.

3.4 Variables and Model Specification

3.4.1 Variables

The study evaluates the impact of two independent variables, accelerated capital allowance (ACA) and reduced corporate income tax (RCIT), on three dependent variables representing firm performance. Return on capital employed (ROCE) measures the profitability of a firm relative to the capital invested in it. Price-earnings ratio (PER) reflects investor sentiment and expectations of future profitability. Tobin's Q indicates the market value of a firm relative to the replacement cost of its assets, capturing long-term investment potential. These performance indicators were selected based on their broad acceptance in financial literature and their capacity to capture different dimensions of firm performance: operational (ROCE), market-based (PER), and investment potential (Tobin's Q). This tripartite approach aligns with the frameworks used by Klemm & Van Parys (2012), Uwuigbe et al. (2016), and Gatsi et al. (2013).

3.4.2 Model Specification

The panel regression model is specified as:

$$\text{Performance}_{it} = \beta_0 + \beta_1 \text{ACA}_{it} + \beta_2 \text{RCIT}_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{Leverage}_{it} + \mu_i + \epsilon_{it}$$

Where performance is the firm performance indicator (ROCE, PER, or Tobin's Q) for firm i in year t . ACA_{it} and RCIT_{it} represent the values of the tax incentives. Size and Leverage are control variables, μ_i captures firm-specific effects, and ϵ_{it} is the error term. This model allows for the assessment of both direct and moderated effects of tax incentives on firm performance.

4. Results and Discussion

4.1 Descriptive Statistics

The descriptive statistics presented in Table 4.1 summarize the central tendency and dispersion of the variables used in the study, offering a foundational understanding of the dataset covering Nigerian manufacturing firms between 2012 and 2023.

The mean ROCE of 0.45 (or 45%) suggests that, on average, the firms in the sample generate a fairly healthy return on the capital employed in their operations. However, the maximum value of 10.22 and minimum of 0.01 indicate wide disparities in performance across firms. The relatively high standard deviation (0.98) further supports this variability. The positive skew implies that while most firms perform moderately, a few firms have exceptionally high capital efficiency. This dispersion is consistent with the findings of Uwuigbe et al. (2016), who observed substantial performance variation among listed Nigerian manufacturers due to differences in size, capital structure, and reinvestment capacity.

The mean PER of 17.07 aligns with typical investor valuation levels in emerging markets, but the maximum value of 156.14 and minimum of 0.13 highlight notable volatility in market sentiment toward these firms. The high standard deviation (23.05) indicates significant dispersion, likely driven by external shocks or investor expectations. These fluctuations reflect the findings of James (2013) and Lawal et al. (2022), who note that capital markets in developing economies like Nigeria tend to react more sensitively to earnings volatility and fiscal policy announcements, including tax incentives.

The mean Tobin's Q of 0.49 suggests that most of the firms in the sample are undervalued in the market relative to their asset replacement costs, a scenario typical of firms in developing economies facing poor investor confidence or inefficient market signaling. With a maximum of 1.66 and minimum of 0.08, the variation implies that while some firms may be seen as growth prospects, others are not perceived favorably by investors. According to Klemm and Van Parys (2012), this could be indicative of weak corporate governance or limited market confidence in the reinvestment potential of tax savings.

ACA has a mean value of ₦732,225, but a median of ₦2,482, indicating a highly skewed distribution. Some firms benefit significantly more than others from this incentive, possibly due to differences in capital intensity or awareness of how to apply for the ACA. The maximum value (₦65.15 million) vs. the minimum (–₦397,454) further confirms this disparity, and the high standard deviation (₦6.06 million) reflects the heterogeneous application and benefit of the ACA scheme. Similar asymmetry was noted by Ohaka &

Agundu (2012), who attributed it to inconsistencies in administrative enforcement and firm-level knowledge gaps about ACA eligibility.

The average RCIT is ₦50,409.95, with a median of zero, indicating that a significant number of firms did not benefit from corporate tax reductions in a given year. The standard deviation of ₦201,845 shows considerable variability, with some firms enjoying significant relief (maximum ₦1.91 million) and others even showing negative values (possibly due to restatements or deferred tax liabilities). Babajide (2013) noted similar inconsistencies, suggesting that RCIT may not be uniformly applied across all firms, especially in the absence of clear qualification standards or effective implementation by tax authorities.

Firm size, measured in total assets, has a mean of ₦10.7 billion and a maximum of ₦874 billion, with a high standard deviation (₦93.2 billion), illustrating vast differences in firm scale. This variation implies that larger firms may have more financial capacity and better institutional knowledge to access and utilize tax incentives, an observation supported by the Resource-Based View (Barney, 1991) and findings by Okafor & Ezejiofor (2020), who observed that firm size significantly moderates the impact of fiscal policy on firm performance.

Leverage has a mean of 2.35, indicating that, on average, firms are more debt-funded than equity-funded. The range is wide (0.03 to 42.66) with a standard deviation of 4.95, which suggests substantial differences in capital structure decisions across the firms. High leverage may constrain the ability of some firms to reinvest tax savings productively, as they may prioritize debt servicing. This aligns with Pecking Order Theory (Myers & Majluf, 1984) and studies such as Rohaya et al. (2010), which observed that highly leveraged firms tend to benefit less from tax incentives due to their limited reinvestment capacity.

The descriptive statistics reveal considerable variability in firm performance and exposure to tax incentives, underscoring the relevance of firm-specific factors such as size and leverage in determining how effectively firms can utilize ACA and RCIT. These initial insights provide empirical justification for the use of fixed-effects panel regression to control for heterogeneity and further assess the impact of tax incentives on firm performance.

Table 4.1: Descriptive Statistics Summary

	ROCE	PER	TOBIN_S_Q	ACA	RCIT	FS	LEV
Mean	0.449702	17.06964	0.487024	732225.0	50409.95	1.07E+10	2.350476
Median	0.180000	10.89000	0.365000	2482.000	0.000000	3634068.	1.070000
Max	10.22000	156.1400	1.660000	65152245	1912805.	8.74E+11	42.66000
Min	0.010000	0.130000	0.080000	-397454.0	-	173543.0	0.030000
Std. Dev.	0.983954	23.05311	0.387585	6060681.	144872.0	9.32E+10	4.954464

Note: ROCE, return on capital employed; EPS, earnings per share; Tobin's Q; ACA, accelerated capital allowance; RCIT, reduced corporate income tax; LEV, leverage; FS, firm size

4.2 Correlation Matrix

Table 4.2 reveals several noteworthy relationships among the study variables. ROCE shows a strong and statistically significant positive correlation with leverage ($r = 0.690$, $p < 0.01$), indicating that firms with higher debt usage tend to report higher returns on capital employed,

possibly due to more aggressive asset utilization or the financial discipline that accompanies debt obligations, as supported by Myers & Majluf (1984) in the Pecking Order Theory. Additionally, ROCE has a moderate, significant correlation with PER ($r = 0.375$, $p < 0.01$), suggesting that firms with higher operational returns tend to be favorably valued by investors. Interestingly, Tobin's Q correlates weakly and negatively with ROCE ($r = -0.002$) and ACA ($r = -0.069$), though neither is statistically significant, hinting at a possible disconnect between operational efficiency and market valuation, a phenomenon often observed in underdeveloped capital markets (see Klemm & Van Parys, 2012). ACA and RCIT both exhibit negligible and insignificant correlations with performance indicators (ROCE, PER, Tobin's Q), suggesting that the direct bivariate relationships may be weak and require further exploration through multivariate regression analysis to assess their impact while controlling for confounding variables. Firm size (FS) appears to have minimal influence on any of the variables, while RCIT maintains no significant correlation with performance indicators, supporting earlier findings by Babajide (2013) that tax incentives may have limited observable effects in environments with weak policy implementation. Overall, the matrix justifies the need for deeper econometric testing to uncover conditional or moderated relationships.

Table 4.2: **Correlation Matrix**

Variables		ROCE	PER	Tobin's Q	ACA	RCIT	LEV	FS
ROCE	Pearson	1.0000						
	Correlation							
	Sig. (2-tailed)							
PER	Pearson	.375**	1.0000					
	Correlation							
	Sig. (2-tailed)	.000						
Tobin's Q	Pearson	-.002	.184*	1.0000				
	Correlation							
	Sig. (2-tailed)	.982	.017					
ACA	Pearson	-.013	-.005	-.069	1.0000			
	Correlation							
	Sig. (2-tailed)	.864	.944	.371				
RCIT	Pearson	-.069	-.053	-.057	-.003	1.0000		
	Correlation							
	Sig. (2-tailed)	.371	.492	.463	.971			
LEV	Pearson	.690**	.333**	-.102	-.043	-.063	1.0000	
	Correlation							
	Sig. (2-tailed)	.000	.000	.187	.582	.414		
FS	Pearson	-.042	.023	.039	-.013	.016	-.031	1.0000
	Correlation							
	Sig. (2-tailed)	.593	.764	.617	.866	.839	.688	
	N	168	168	168	168	168	168	168

Note: ROCE, return on capital employed; EPS, earnings per share; Tobin's Q; ACA, accelerated capital allowance; RCIT, reduced corporate income tax; REINV, reinvestment allowance; LEV, leverage; FS, firm size

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.3 Regression Results

This section presents the results from the fixed-effects panel regression analysis conducted to examine the impact of Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT) on the financial performance of selected Nigerian manufacturing firms. The financial performance indicators used as dependent variables are Return on Capital Employed (ROCE), Price-Earnings Ratio (PER), and Tobin's Q. Control variables include Firm Size (FS) and Leverage (LEV). The choice of the fixed-effects model was confirmed by the Hausman specification test, indicating the appropriateness of controlling for time-invariant firm-specific effects.

4.3.1 Regression Model for ROCE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACA	0.0032	0.0011	2.91	0.004**
RCIT	0.0025	0.0008	3.13	0.002**
FS	0.0001	0.00005	2.02	0.045*
LEV	0.0458	0.0087	5.27	0.000***
_cons	-0.061	0.019	-3.21	0.001**

ACA and RCIT both have positive and statistically significant coefficients, suggesting that tax incentives enhance firm profitability as measured by ROCE. These findings are consistent with Ohaka & Agundu (2012) and Lawal et al. (2022), who observed that tax benefits reduce cost pressures and enhance reinvestment potential, leading to improved capital efficiency. The positive effect of firm size is modest but significant, implying that larger firms are better positioned to benefit from such fiscal policies. Leverage also shows a significant positive effect on ROCE, supporting the notion that debt-financed firms in this sample are able to effectively use borrowed funds for productive operations.

4.3.2 Regression Model for PER

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACA	0.0124	0.0067	1.85	0.067*
RCIT	0.0087	0.0049	1.78	0.078*
FS	-0.0022	0.0012	-1.83	0.071*
LEV	0.6200	0.1556	3.98	0.000***
_cons	6.2431	1.2984	4.81	0.000***

ACA and RCIT have positive, though marginally significant, effects on the price-earnings ratio. This suggests that investors may perceive tax incentives as signals of improved earnings potential, although the influence is not robust. Leverage again demonstrates a strong and significant positive association with PER, likely reflecting the market's confidence in firms that effectively manage debt. Firm size, however, has a negative coefficient, possibly

indicating that smaller firms are seen as more agile or attractive from a growth perspective, echoing insights from Okafor & Ezejiofor (2020).

4.3.3 Regression Model for Tobin's Q

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACA	0.0004	0.0003	1.21	0.229
RCIT	0.0002	0.0002	1.10	0.274
FS	0.00001	0.00002	0.50	0.618
LEV	-0.0173	0.0041	-4.22	0.000***
_cons	0.2221	0.0710	3.13	0.002**

In the Tobin's Q model, ACA and RCIT show positive but statistically insignificant coefficients, suggesting that market valuation of the firms does not respond strongly to tax incentives, possibly due to investor skepticism or informational inefficiencies in the Nigerian capital market, as observed by Chukwudi (2015) and Klemm and Van Parys (2012). Leverage shows a significantly negative impact, indicating that firms with high debt levels may be perceived unfavorably by investors.

4.4 Discussion of Findings

This study set out to investigate the effect of two key tax incentives, Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT), on the financial performance of quoted manufacturing firms in Nigeria. Performance was evaluated using three distinct financial metrics: Return on Capital Employed (ROCE), Price-Earnings Ratio (PER), and Tobin's Q. The analysis also included firm-level control variables such as firm size (FS) and leverage (LEV), recognizing their potential influence on how tax incentives are utilized and perceived.

The regression results provide compelling evidence that ACA significantly enhances firm profitability, especially when measured through ROCE. This finding is consistent with theoretical expectations under the tax relief framework, which holds that allowing firms to depreciate capital assets more quickly can lower their tax burden in the short run, releasing internal capital for productive use. For manufacturing firms, where capital investment is crucial, the availability of ACA appears to enable more efficient use of invested capital, ultimately boosting returns. This aligns with empirical observations by Ohaka & Agundu (2012) and Lawal et al. (2022), who found that the ACA positively affects manufacturing profitability in Nigeria.

Similarly, RCIT demonstrated a positive and statistically significant relationship with ROCE. This result suggests that lowering the corporate income tax rate directly increases the pool of retained earnings available for reinvestment, thereby enhancing operational performance. These findings echo those of Rohaya et al. (2010), who reported that reductions in tax liabilities improve corporate liquidity and productivity, especially in capital-intensive industries. However, it is worth noting that these tax incentives are likely to be more effective

when implemented within a stable macroeconomic and regulatory environment, which remains a challenge in the Nigerian context.

The relationship between tax incentives and PER was also positive but less robust. While both ACA and RCIT exhibited positive coefficients, their significance levels were only marginal. This may reflect investor hesitation in fully pricing the benefits of tax incentives into stock valuations, possibly due to uncertainties surrounding the implementation and sustainability of these policies. Moreover, capital market inefficiencies and information asymmetry, which are prevalent in emerging economies like Nigeria, may limit the degree to which tax advantages translate into perceived market value. These findings are in line with Okafor & Ezejiofor (2020), who noted that market-based indicators in Nigeria often respond sluggishly to fiscal policy signals.

In contrast, Tobin's Q, used as a proxy for firm valuation and investment potential, showed no significant association with either ACA or RCIT. This result suggests that while tax incentives might improve internal financial metrics, they do not necessarily enhance the market valuation of firms. Several explanations are plausible. First, investors may not view tax incentives as sustainable drivers of long-term value, especially if they perceive them to be subject to policy reversals or political interference. Second, the Nigerian capital market, characterized by low depth and liquidity, might not fully incorporate firm-level financial improvements into stock prices. Klemm & Van Parys (2012) and Chukwudi (2015) similarly reported that tax incentives in developing countries often fail to influence market-based performance measures due to weak investor confidence and poor regulatory frameworks.

The control variables provided additional insight. Firm size was found to be a significant and positive predictor of ROCE, implying that larger firms are better positioned to benefit from tax incentives, perhaps due to superior managerial capability, better access to resources, or more advanced financial planning systems. This aligns with the Resource-Based View (Barney, 1991), which emphasizes the role of firm-specific resources in achieving competitive advantage. Conversely, firm size had a slightly negative association with PER, suggesting that smaller firms may be perceived by investors as more agile or growth-oriented.

Leverage was significantly and positively associated with ROCE and PER, indicating that, at least in the sample studied, firms effectively utilized debt to enhance performance. However, it showed a negative and significant relationship with Tobin's Q, reflecting investor concerns about high debt levels. This finding corroborates the Pecking Order Theory (Myers & Majluf, 1984), which posits that excessive reliance on external debt can be perceived as a signal of financial vulnerability, potentially undermining investor confidence.

Overall, the study's findings contribute meaningfully to the ongoing debate about the utility of tax incentives in enhancing firm performance. While ACA and RCIT appear to deliver tangible operational benefits, their influence on market valuation is limited, highlighting a potential disconnect between financial performance and investor perception. These results underscore the importance of complementing tax policy reforms with broader efforts to strengthen institutional credibility, market transparency, and infrastructural support.

5. Policy Implications

The empirical evidence from this study presents valuable insights that can guide policymakers, tax authorities, and industry stakeholders in optimizing the design and

implementation of tax incentives to promote manufacturing sector performance in Nigeria. Although Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT) have shown potential to enhance operational performance (as evidenced by their impact on ROCE and PER), their limited effect on market-based indicators like Tobin's Q signals the need for holistic reforms. The following implications are drawn from the study's findings:

5.1 Strengthen ACA Utilization through Simplification and Transparency

The Accelerated Capital Allowance (ACA) scheme holds promise as a tool for encouraging capital investment in manufacturing. However, bureaucratic bottlenecks and a lack of clarity in eligibility requirements often limit its uptake. To strengthen the effectiveness of the ACA, the government, through the Federal Inland Revenue Service (FIRS), should streamline the process of application, approval, and monitoring. A digital platform can be developed for real-time processing of ACA claims, minimizing human intervention and reducing delays. Additionally, sensitization programs targeting tax professionals, accountants, and business executives would increase awareness and correct utilization of ACA provisions. Enhanced transparency and accessibility would ensure that a broader segment of manufacturers, especially SMEs, benefit from the scheme.

5.2 Reform RCIT Framework to Target Productivity and Employment

While RCIT has a positive influence on firm profitability, its effectiveness may be diluted when applied as a blanket policy across all sectors. A more strategic approach is to tie RCIT benefits to measurable outcomes such as job creation, export expansion, and technological innovation. For instance, a tiered RCIT system could be introduced, where firms demonstrating higher levels of domestic investment or employing large numbers of skilled workers receive deeper tax cuts. This performance-linked approach would ensure that tax foregone by the government translates into tangible economic gains. It also encourages firms to align with national development priorities such as industrialization, employment generation, and value addition.

5.4. Complement Tax Incentives with Structural Reforms

Tax incentives alone are not sufficient to drive sustainable manufacturing growth. As the regression analysis indicates, other firm-level and environmental factors, such as leverage and capital market perception, play significant roles in determining firm performance. Therefore, tax policy must be complemented by broader structural reforms. Chief among these is the need to address infrastructural deficits in power supply, transport logistics, and ICT. Moreover, regulatory reforms aimed at reducing red tape, simplifying business registration, and enhancing contract enforcement would improve the investment climate and amplify the impact of ACA and RCIT. These reforms would not only improve operational efficiency but also boost investor confidence, potentially enhancing market-based measures of firm value like Tobin's Q.

5.5 Institutionalize Monitoring and Evaluation Mechanisms

To ensure accountability and optimize resource allocation, the government should institutionalize robust monitoring and evaluation (M&E) frameworks for tax incentives. This involves periodic assessment of the cost-effectiveness of ACA and RCIT in terms of revenue foregone versus firm performance gained. Independent audits and impact assessments can be commissioned annually to guide the continuation, modification, or discontinuation of specific

tax relief programs. Data from such assessments would also provide evidence for future policy design, enhancing efficiency and stakeholder trust.

5.6 Foster Public-Private Dialogue and Stakeholder Engagement

Finally, successful tax incentive policies depend on continuous engagement between the government and the private sector. Policymakers should institutionalize regular forums for consultation with industry leaders, chambers of commerce, tax professionals, and academic researchers. These platforms will enable feedback loops, ensuring that incentive policies remain relevant, responsive, and effective in a dynamic economic environment. Collaborative design and implementation foster buy-in from stakeholders and enhance policy credibility.

6. Conclusion

The study assessed the effect of Accelerated Capital Allowance (ACA) and Reduced Corporate Income Tax (RCIT) on the financial performance of quoted manufacturing firms in Nigeria between 2012 and 2023. Empirical results show that ACA and RCIT significantly enhanced operational performance indicators such as ROCE, with ACA proving particularly effective due to its direct impact on capital reinvestment. RCIT also improved profitability, but to a lesser degree. However, both incentives had limited influence on market-based measures (PER was only marginally significant, while Tobin's Q remained insignificant). This outcome suggests a disconnect between firm-level financial improvements and investor perception, reflecting inefficiencies in the Nigerian capital market and structural challenges in the broader economy.

The findings confirm that tax incentives can serve as effective fiscal tools for stimulating profitability and reinvestment in manufacturing. Nonetheless, their success is contingent upon effective administration, complementary infrastructure, and alignment with broader economic development priorities.

7. Recommendations

Based on the findings, the study recommends the following:

- i. The Federal Internal Revenue Service (FIRS) should digitalize and simplify the accelerated capital allowance process to reduce bureaucratic barriers and ensure timely utilization by manufacturing firms.
- ii. The Revenue should ensure that RCIT be applied selectively and tied to clear economic outcomes such as employment generation, technological upgrading, or export performance, ensuring government revenue foregone yields measurable benefits.
- iii. The study also recommends that the need to address the weak effect of tax incentives on Tobin's Q, that the government must improve power supply, logistics, and corporate governance, thereby fostering investor confidence and aligning operational gains with market valuation.
- iv. The Tax Revenue should establish independent periodic reviews of ACA and RCIT to track their cost-effectiveness and adapt policies based on evidence.

- v. Finally, the FIRS should create structured forums where policymakers, manufacturers, and tax experts can jointly review and redesign incentive frameworks to ensure they remain relevant, transparent, and aligned with Nigeria's industrialization goals.

References

- Babajide, A. A. (2013). *Fiscal incentives and investment behavior in Nigeria*. *African Economic Review*, 21(3), 45–67.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Chukwudi, A. (2015). Infrastructure and manufacturing performance in Nigeria. *Development Policy Review*, 11(4), 59–76.
- James, S. (2013). *Effectiveness of tax and non-tax incentives and investments: Evidence and policy implications*. World Bank Policy Working Paper Series.
- Klemm, A., & Van Parys, S. (2012). Empirical evidence on the effects of tax incentives. *International Tax and Public Finance*, 19(3), 393–423. <https://doi.org/10.1007/s10797-011-9194-8>
- Lawal, B. A., Olayiwola, W. K., & Hassan, A. (2022). Tax incentives and financial performance of manufacturing firms in Nigeria. *Journal of Accounting and Finance in Emerging Economies*, 8(1), 115–130. <https://doi.org/10.26710/jafee.v8i1.2036>
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Ohaka, J., & Agundu, P. U. (2012). Reinvestment allowance and profitability of manufacturing firms in Nigeria. *International Journal of Finance*, 9(2), 34–49.
- Okafor, C. A., & Ezejiofor, R. A. (2020). Effect of tax incentives on the performance of selected manufacturing companies in Nigeria. *International Journal of Finance and Accounting Research*, 6(2), 1–15.
- Rohaya, M. D., Mohd-Salleh, N. Z., & Mastuki, N. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economics and Finance*, 1(2), 189–193.
- Uwuigbe, U., Oladipo, O., & Jimoh, A. (2016). Tax incentives and firm performance: A study of listed manufacturing companies in Nigeria. *Journal of Accounting and Taxation*, 8(7), 101–109. <https://doi.org/10.5897/JAT2016.0214>