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FINANCIAL RESOURCE EFFICIENCY AND SUSTAINABLE GROWTH OF LISTED FIRMS IN NIGERIA

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ABSTRACT

The study examined the relationship between financial resource efficiency and sustainable growth of listed firms in Nigeria. The study employed total assets turnover, non-current assets turnover, operating cost to revenue ratio and directors tunnelling as the determining variables. Ex-post facto research design was employed and the study covered a period of 10 years ranging from 2015 to 2024, secondary data sourced from the published financial statements of 12 commercial banks in Nigeria. These data were analysed using a combination of descriptive and inferential statistical tools and the study hypotheses were tested using the robust regression analysis. The findings revealed that total assets turnover significantly negatively affected sustainable growth, rejecting the hypothesis that it has no effect (t-value = -3.25; p-value = 0.001 < 0.05). However, non-current assets turnover(t-value = -0.26; p-value = 0.795 > 0.05)and operating cost to revenue ratio(t-value = -0.19; p-value = 0.847 > 0.05)were found to have no significant effect on sustainable growth, as both variables showed high p-values indicating weak relationships. On the other hand, directors' tunnelling was found to have a significant negative effect on sustainable growth, supporting the hypothesis that unethical financial practices can harm the long-term sustainability of banks (t-value = -8.99; p-value = 0.000 < 0.05). The study recommends that Nigerian commercial banks focus on optimizing their assets utilization strategies. This includes improving the management of both financial and physical assets to ensure that they generate long-term value and are not solely focused on increasing turnover, which can lead to inefficiencies. The study adds to knowledge by offering empirical evidence

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that asset turnover, traditionally seen as a critical measure of operational efficiency, has a significant negative relationship with sustainable growth in the banking sector.

KEYWORDS: - Financial resource efficiency; Sustainable growth; Directors tunnelling; Assets Turnover.

JEL Classification: M41; M49

1.0 INTRODUCTION

The study on financial resource efficiency and sustainable growth of listed firms in Nigeria explored the growing importance of effective financial management practices in fostering long-term growth and sustainability of firms in Nigeria. Financial resource efficiency refers to the optimal utilization of financial resources to maximize profitability, improve productivity and drive economic stability (Akinleye&Owoniya, 2024). In recent years, firms have faced increasing pressure to balance financial performance with sustainability, particularly in emerging market like Nigeria, where the economy is heavily influenced by both internal and external factors (Onah&Okwo, 2024).

One significant area of interest in this study is the role of sustainability reporting. Studies have examined the link between sustainability practices and firm performance in Nigeria. A study by Akinleye and Owoniya (2024) highlights the positive effect of sustainable reporting on the financial performance of Nigerian firms. The study, which covered firms listed on the Nigerian Exchange Group (NGX) over a period of ten years, found that companies with comprehensive and transparent sustainable reports tend to exhibit better financial outcomes compared to those with minimal ones. These findings emphasized the growing recognition of sustainable factors as key drivers of business success, especially within the Nigerian corporate landscape (Akinleye&Owoniya, 2024).

Additionally, the role of intellectual capital in fostering sustainable growth of firms has garnered attention. Research by Oyeyemi, et al (2025) reveals that intellectual capital—comprising human, structural, and relational capital—has a significant influence on the sustainability of non-financial firms in Nigeria. This study found that firms that effectively harness intellectual capital not only improve their operational efficiency but also create a competitive edge in the marketplace, leading to long-term financial sustainability. Such findings underscore the importance of intangible assets in driving corporate growth and efficiency (Oyeyemi et al., 2025).

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Financial constraints and their effect on productivity growth of firms have also been a key consideration in the discussion of sustainable growth of firms in Nigeria. Obembe (2011) investigates how financial constraints, particularly access to bank loans, affect the productivity of Nigerian firms. The study finds that while access to credit enhances firm productivity, overreliance on debt can stifle growth by limiting the firm's ability to invest in profitable opportunities. The study calls for a balance between financial leverage and equity financing to promote sustainable growth of firms (Obembe, 2011).

Moreover, sustainable growth has become increasingly significant in Nigeria's corporate sector. Ucheagwu, Ishola and Folajimi(2019) found that firms in Nigeria that focus on sustainable growth tends to achieve higher financial performance. This finding highlights the critical role of sustainable growth in achieving long-term growth, particularly as global pressure on sustainable growth increase. The study advocates for greater adoption of sustainable growth practices to unlock financial benefits while contributing to broader societal goals of sustainable growth (Ucheagwu et al., 2019).

The importance of effective corporate governance in ensuring financial efficiency and sustainable growth has also been examined in the context of Nigerian firms. Ayoola and Odusina (2023) explore the relationship between capital structure, corporate governance, and cost efficiency in Nigerian financial firms. Their study highlights how governance factors, such as board size and independence, influence cost efficiency and, in turn, affect financial performance of firms. The study suggests that strong corporate governance frameworks are essential for firms to make informed financing decisions that enhance both profitability and sustainable growth in the long run (Ayoola&Odusina, 2023). The studies *inter-alia*, collectively contribute to understanding the dynamic relationship between financial resource efficiency and sustainable growth among Nigerian firms. This study examined how Nigerian firms can optimize financial resources while embracing sustainable growth practices to drive long-term growth.

2.0 LITERATURE REVIEW

2.1 Financial Resource Efficiency

Financial resource efficiency is a crucial determinant of sustainable growth for firms, particularly in emerging markets like Nigeria. It refers to how effectively a company utilizes its financial resources, such as assets, equity, and liabilities, to generate revenue and profit. Efficient financial management ensures that firms optimize their operations, minimize waste, and allocate resources in a manner that maximizes long-term value creation. The measurement of financial resource efficiency typically involves key performance indicators (KPIs) such as asset turnover, fixed asset turnover, and the operating cost-to-revenue ratio, all of which provide insights into how well a firm leverages its resources to generate income.

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Recent studies have explored various dimensions of financial resource efficiency, with a growing focus on the operational metrics that directly affect firm performance. For instance, Aderemi (2022) examined the relationship between profitability and sustainability reporting, highlighting that firms with high asset efficiency tended to outperform their counterparts with poor resource management practices (Aderemi, 2022). The study noted that asset turnover, which measures how effectively a firm utilizes its total assets to generate revenue, is a key driver of performance in Nigerian non-financial firms. High asset turnover ratios indicate that firms are using their resources efficiently, which in turn, supports sustainable growth.

Additionally, Obembe (2011) emphasized the role of financial constraints in limiting the resource efficiency of firms. The study explored how tight financial conditions, such as restricted access to credit and high borrowing costs, can affect the productivity of Nigerian firms, thus hindering their ability to efficiently manage their assets. This highlights a critical area where financial resource efficiency could be compromised by external constraints, influencing long-term growth and profitability (Obembe, 2011).Another key aspect of financial resource efficiency is how firms manage their operating costs in relation to their revenue. The operating cost-to-revenue ratio is a vital indicator of a firm's cost structure and profitability. A lower ratio generally signifies better efficiency, as the firm is able to generate higher revenues with lower operational costs.

Recent research by Akinleye and Owoniya (2024) highlighted that firms with efficient cost management practices tend to demonstrate better financial performance, even in challenging economic environments. This is because firms can maintain profitability through effective cost control, even when facing external market pressures (Akinleye&Owoniya, 2024). Moreover, directors tunneling—a form of financial mismanagement—has been identified as a significant factor that undermines financial efficiency. Tunneling refers to situations where company executives or controlling shareholders divert corporate resources for personal gain, rather than reinvesting them in the business for growth. Research by Ibrahim et al. (2023) examined the role of corporate governance in curbing such practices, noting that effective governance structures, including the diversity and independence of boards, help ensure that financial resources are allocated properly.

The efficient management of financial resources is essential for the long-term sustainability of firms. The increasing focus on metrics like asset turnover, fixed asset turnover, and operating cost to revenue offers valuable insights into how firms in Nigeria are utilizing their resources to achieve optimal financial performance. However, challenges such as financial constraints and directors tunneling remain significant barriers to achieving full efficiency. Addressing these

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challenges through improved governance and better access to financing could greatly enhance financial resource efficiency, thus driving sustainable growth.

2.2 Sustainable Growth

Sustainable growth is a critical objective for firms, especially in emerging markets such as Nigeria, where economic volatility and market dynamics pose significant challenges. Sustainable growth refers to a firm's ability to grow its operations while maintaining balance between financial performance and social responsibility. This concept is vital for ensuring long-term profitability without depleting resources or harming the environment. As the global push for sustainable growth intensifies, Nigerian firms are increasingly expected to align their growth strategies with sustainable goals. According to Akinleye and Owoniya (2024), firms that integrate sustainable practices into their operations are better positioned to maintain growth even in uncertain economic conditions. Their study revealed a positive relationship between sustainable growth and financial performance, suggesting that transparent sustainability practices enhance corporate reputation and long-term profitability (Akinleye&Owoniya, 2024).

The role of intellectual capital in fostering sustainable growth has also been explored in recent research. Oyeyemi et al. (2025) conducted a study on Nigerian non-financial firms and found that intellectual capital, including human and structural capital, significantly influences corporate sustainable growth. Their research suggests that firms investing in intellectual capital, such as employee skills and organizational knowledge, are more likely to achieve sustainable growth. This finding aligns with the notion that sustainable growth goes beyond financial metrics to include the intangible assets that drive innovation, improve operational efficiency, and create value in the long term (Oyeyemi et al., 2025).

Furthermore, the financial constraints faced by firms can significantly affect their ability to achieve sustainable growth. In a study by Obembe (2011), it was found that Nigerian firms often face challenges related to limited access to credit and high borrowing costs, which can impede their ability to invest in long-term growth initiatives. The research highlighted that overcoming financial constraints through effective capital management and strategic investment in growth sectors is crucial for sustaining growth in the long term. This underscores the importance of sound financial resource management in achieving sustainable growth, as firms need to balance growth ambitions with the availability of resources and external market conditions (Obembe, 2011).

2.3 Total Assets Turnover

Total assets turnover is a key financial ratio used to evaluate how efficiently a company utilizes its total assets to generate revenue. It is calculated by dividing a company’s total revenue by its

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average total assets, providing insights into how well the company is using its assets to produce income. A higher asset turnover ratio indicates more efficient use of assets in generating revenue, while a lower ratio suggests that the company may not be maximizing its asset base. In the context of Nigerian firms, efficient asset management is critical to ensuring sustainable performance, especially considering the economic challenges and financial constraints present in emerging markets. Recent studies have shown that firms with higher asset turnover tend to perform better financially, as they are more adept at converting their total assets into revenue.

Research by Aderemi (2022) highlights the importance of total assets turnover in the performance of Nigerian firms. In the study, Aderemi found that profitability and asset efficiency are closely linked, with companies that efficiently utilize their assets seeing better financial outcomes. Specifically, firms in the Nigerian non-financial sector that demonstrated higher asset turnover were better positioned to generate revenue and manage costs effectively, ultimately contributing to more robust financial performance. This finding underscores the importance of total assets turnover as a vital measure of financial resource efficiency in achieving sustainable growth (Aderemi, 2022).

Additionally, Obembe (2011) examined the role of asset utilization in Nigerian firms and concluded that companies facing financial constraints often struggle to maintain high asset turnover ratios. The study suggested that inefficient use of assets can be attributed to factors such as limited access to financing, inadequate technology, and poor management practices. For firms in Nigeria, overcoming these challenges requires a concerted effort to optimize asset management and leverage available resources more effectively. Obembe's research highlighted that improving total assets turnover is not only essential for financial performance but also for ensuring long-term sustainable growth and competitiveness in a dynamic market environment (Obembe, 2011).

Total assets turnover serves as a critical measure of financial resource efficiency by assessing how effectively a company utilizes its assets to generate revenue. High asset turnover ratios are indicative of operational efficiency and are associated with better financial outcomes for firms, especially in emerging markets like Nigeria. However, factors such as financial constraints, management practices, and access to resources can significantly affect a firm's asset utilization. Therefore, improving total assets turnover should be a key focus for firms seeking to enhance their financial efficiency and ensure sustainable growth in the competitive business environment.

2.4 Non-Current Assets Turnover

Non-current assets turnover is a key financial ratio that measures how efficiently a company utilizes its non-current assets, such as property, plant, and equipment, to generate revenue. It is

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calculated by dividing a firm's total revenue by its average net non-current assets. A higher non-current asset turnover ratio indicates that a firm is effectively using its non-current assets to generate sales, while a lower ratio suggests underutilization of the assets. This measure is particularly important for capital-intensive industries where the effective management of non-current assets plays a crucial role in determining overall profitability and growth. In the context of Nigerian firms, where infrastructure and capital investments are often significant, efficient use of non-current assets can provide a competitive edge in the market.

Recent research by Oyeyemi et al. (2025) explored the impact of non-current assets management on the sustainability of Nigerian firms. Their study found that firms with a higher non-current assets turnover ratio were able to generate more revenue with less investment in physical assets, indicating more efficient use of resources. This efficiency allowed companies to maintain profitability even when operating in a challenging economic environment. The study also highlighted the importance of strategic investments in non-current assets, such as technology and machinery, to improve asset utilization and, ultimately, financial performance. This suggests that non-current assets turnover is a vital indicator of how well Nigerian firms manage their capital expenditures to drive growth (Oyeyemi et al., 2025).

Furthermore, to operational efficiency, Aderemi (2022) emphasized the role of non-current assets turnover in assessing financial performance in Nigerian non-financial firms. The study highlighted that firms with high non-current assets turnover ratios were able to achieve better financial results, as they utilized their capital investments more effectively to drive revenue. Conversely, low non-current assets turnover ratios often indicated that a firm was underperforming in utilizing its substantial capital investments, which could lead to inefficiencies and higher operational costs. Aderemi's findings suggest that firms in Nigeria can enhance their financial resource efficiency by optimizing their non-current assets utilization, leading to improved profitability and competitive advantage in the marketplace (Aderemi, 2022).

Ultimately, non-current assets turnover serves as a critical measure of how efficiently firms manage their physical assets to generate revenue. High ratios indicate that firms are making the most of their investments in non-current assets, while low ratios suggest inefficiencies that could hamper growth and profitability. In Nigeria, where capital investment in non-current assets is often necessary to support business operations, focusing on improving non-current assets turnover can provide significant benefits, enhancing financial resource efficiency and ensuring long-term sustainability.

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2.5 Operating Cost to Revenue

The operating cost to revenue ratio is a key financial metric that measures the proportion of a company's revenue that is consumed by operating expenses. It is calculated by dividing a company's total operating costs by its total revenue. This ratio provides valuable insights into how well a company controls its operating costs in relation to its income. A lower operating cost to revenue ratio indicates that a company is efficient in managing its operational expenditures, thereby maximizing profitability. Conversely, a higher ratio suggests inefficiencies, where a significant portion of the revenue is spent on operations, which could adversely affect the firm's bottom line. For firms operating in dynamic and competitive markets, maintaining a low operating cost to revenue ratio is essential for ensuring long-term sustainable growth.

Recent research by Akinleye and Owoniya (2024) explored the relationship between sustainable growth and financial performance in Nigerian firms. They found that companies that efficiently manage their operating costs relative to their revenue tend to perform better financially. The study highlighted that Nigerian firms with lower operating cost to revenue ratios were able to maintain higher profitability and achieve greater financial stability, even amidst economic challenges. This finding underscores the importance of cost control as a fundamental aspect of financial resource efficiency, particularly in sectors where operating expenses can quickly erode profit margins (Akinleye&Owoniya, 2024).

The operating cost to revenue ratio serves as a crucial measure of financial resource efficiency by assessing how effectively a company controls its operating expenses in relation to its income. Firms that successfully manage this ratio are better positioned to maintain profitability and navigate competitive market environments. In the context of Nigerian firms, where managing operational costs is a key challenge, focusing on reducing the operating cost to revenue ratio can significantly improve financial performance and support sustainable growth.

2.6 Director Tunnelling

Director tunneling refers to the practice where controlling shareholders or directors of a company divert resources, assets, or profits from the firm for their personal benefit or the benefit of a related party, rather than using them for the firm's legitimate growth. This unethical behavior leads to the misallocation of company resources, ultimately affecting the financial efficiency and long-term sustainable growth of the firm. Director tunneling can severely undermine a company's financial health, as it may result in reduced profits, mismanagement of assets, and a lack of reinvestment in critical areas such as operations, innovation, and infrastructure. For firms in emerging markets like Nigeria, where corporate governance issues are more pronounced, director tunneling can lead to significant financial inefficiencies and reduced investor confidence.

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Recent studies have explored the impact of corporate governance on financial resource efficiency, with a focus on minimizing the effects of director tunneling. Research by Oyeyemi et al. (2025) found that intellectual capital and strong governance structures help mitigate the risk of tunneling in Nigerian non-financial firms. They observed that firms with better governance practices, such as independent board members and stringent financial controls, were less likely to experience tunneling, thus ensuring that financial resources were allocated efficiently to support sustainable growth. The study emphasized that reducing the occurrence of director tunneling directly correlates with improved financial resource efficiency, as it allows firms to allocate resources where they are most needed to enhance profitability and long-term value (Oyeyemi et al., 2025).

Moreover, Aderemi (2022) examined the role of firm attributes, including governance, in financial efficiency within Nigerian firms and found that director tunneling was a significant factor contributing to financial inefficiency. The study highlighted that firms with poor governance structures, including insufficient board oversight, were more likely to experience resource diversion through tunneling. These firms often had lower asset turnover and operating performance, as substantial resources were drained away from operational needs and reinvestment opportunities. Aderemi(2022) concluded that enhancing board oversight and implementing stronger governance frameworks could help mitigate tunneling and improve the overall financial efficiency of Nigerian firms.

Director tunnelling represents a major obstacle to financial resource efficiency, particularly in emerging markets like Nigeria, where governance structures may be weak. Effective corporate governance practices, such as strong board oversight and transparency, are crucial for minimizing tunnelling and ensuring that financial resources are allocated effectively to promote long-term sustainable growth. By reducing the incidence of tunnelling, firms can improve their financial efficiency, optimize asset utilization, and enhance profitability, thereby fostering sustainable growth of firms.

2.7 Growth Opportunities

Growth opportunities are a key determinant of a firm's ability to expand and increase its market share. They represent potential avenues for firms to invest in projects or ventures that will allow them to generate higher returns and strengthen their competitive position. For firms in Nigeria, where the business environment is dynamic and often challenging, identifying and capitalizing on growth opportunities is essential for long-term sustainability. Akhalumeh et al. (2022) found that firm innovativeness and management efficiency are significant drivers of growth in Nigerian firms, highlighting that firms with more creative business strategies and better management practices are more likely to seize and effectively utilize growth opportunities. The study

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emphasizes the importance of fostering innovation within firms, as it allows them to stay competitive and agile in a rapidly changing market environment (Akhalumeh et al., 2022).

Furthermore, Amahalu (2019) explored the relationship between growth opportunities and cash holdings in Nigerian agricultural firms. The study found that growth opportunities have a significant positive relationship with cash holdings, implying that firms with more growth opportunities tend to hold more cash to finance potential investments. This underscores the critical role that growth opportunities play in shaping a firm's financial strategy, particularly regarding liquidity and investment decisions. When firms identify growth opportunities, they are more likely to accumulate cash reserves that enable them to take advantage of these opportunities, further reinforcing the importance of proactive financial management in achieving growth (Amahalu, 2019).

Lastly, Atitianti and Chikelu (2021) examined the impact of corruption on firm growth in Nigeria, showing that external factors like corruption can also influence the ability of firms to capitalize on growth opportunities. Their research indicated that informal payments and bureaucratic inefficiencies hindered firm growth, as firms were forced to divert resources to manage these challenges instead of investing in profitable opportunities. The study suggests that reducing corruption and improving regulatory frameworks would allow Nigerian firms to better leverage growth opportunities, enabling them to focus on enhancing their business operations and expanding their market presence (Atitianti&Chikelu, 2021).

2.8 Theoretical Framework

The study of financial resource efficiency and sustainable growth of firms is grounded in several theoretical frameworks, with Resource-Based View (RBV) being particularly relevant. The RBV posits that firms gain competitive advantage by leveraging their internal resources and capabilities effectively. These resources, including financial, human, and physical assets, must be managed efficiently to create sustained growth. According to Barney (1991), firms that possess valuable, rare, inimitable, and non-substitutable resources can sustain competitive advantage, and this directly applies to how financial resources are utilized for growth.

In the context of Nigerian listed firms, efficient management of financial resources such as asset turnover, fixed asset turnover, and operating cost-to-revenue ratios is crucial to sustaining long-term growth, as inefficiencies can erode potential value. Recent studies, like that by Akinleye and Owoniya (2024), highlight that firms that efficiently manage their resources, including financial capital, tend to report better financial performance and sustainability, confirming the relevance of RBV in explaining financial efficiency (Akinleye&Owoniya, 2024).

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3.0 METHODOLOGY

This study used *ex-post facto* research design because the study employed data that has existed (i.e. data obtained from the annual reports and accounts of listed commercial banks) such that the researcher has no means of controlling the events or variables as the event has already occurred. The study population comprised of the twenty-three (23) publicly listed commercial banks on the floor of the Nigerian Exchange Group Limited as at 31st December, 2024. This study used purposive sampling to determine the sample size, addressing challenges related to missing data and ensuring collection of reliable and valid data. To be included in the sample, a bank must meet the following criteria: it must have been listed on the Nigerian Exchange Group (NXG) Limited and must have been operational during the study period and have international and national authorization. On the basis of the above, twelve (12) publicly listed commercial banks were sampled.

The data for this study were sourced from secondary materials, specifically the published annual financial statements and accounts of the sampled banks during the study period. The financial statements utilized have been validated by the Nigerian Exchange Group (NGX) Limited and the Securities and Exchange Commission (SEC), which regulate accounting and corporate activities in Nigeria; these trusted sources ensured the reliability and accuracy of the data used for analysis. Data were obtained from 2012-2023 (10years).The model of the study is given as follows:

SUS = f (ASSTV, FASSTV, PC, DIRTU) -Eq. 1
GROWP = f (ASSTV, FASSTV, PC, DIRTU) -Eq. 2

Equations 1-2 were re-estimated in their explicit forms as follows:

$SUS_{it} = B_0 + B_1ASSTV_{it} + B_2FASSTV_{it} + B_3PC_{it} + B_4DIRTU_{it} + \mu_{it}$ Eq. 3
$GROWP_{it} = B_0 + B_1ASSTV_{it} + B_2FASSTV_{it} + B_3PC_{it} + B_4DIRTU_{it} + \mu_{it}$ Eq. 4

Where: SUS is sustainable growth; GROWP is growth opportunity; ASSTV is total assets turnover; FASSTV is non-current assets turnover; PC is operating cost to revenue; DIRTU is director tunnelling; μ_{it} is error term; í is individual firms; t is time-frame:

Table 1: Measurement of Variables

Variables	Variable Types	Measurement	Authors	A-priori Signs
Sustainable Growth	Dependent	Return on equity multiply by retention ratio (1-dividend payout	Akparhuere, et al (2019)	Nil

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Growth Opportunity	Dependent	Market share prices divided by book value per share	Akhalumeh, et al (2022)	Nil
Total Assets Turnover	Independent	Revenue or sales divided by total assets	Ayoola&Odusina (2023)	+
Non-Current Assets Turnover	Independent	Revenue or sales divided by non-current assets	Onah&Okwo (2024)	+
Operating Cost to Revenue	Independent	Operating expenses divided by revenue	Onah&Okwo (2024)	+
Director Tunnelling	Independent	Total director remuneration divided by revenue	Osazefua (2019)	+

Source: Compiled by the Researchers (2025)

This study utilized descriptive, regression diagnostic and inferential statistical methods to analyse the data. Descriptive statistics summarized dataset characteristics and trends, while Pearson Correlation Coefficients assessed the direction and strength of relationships between variables and identify potential multicollinearity issues. Regression diagnostic statistics (Variance Inflation Factors (VIF) was used to evaluate multi-collinearity and the regression models' suitability and Breusch-Pagan and Cook/Weisberg test was used in testing of heteroskedasticity in the empirical model of the study. For inferential analysis, panel data technique such as the multivariate regression was employed in analysing the dataset and hypotheses tested on the basis of the robust regression results.

4.0 RESULTS AND DISCUSSION

Table 2: Summary of Descriptive Statistics

Variable	Mean	Std.	Min	Max	Skewness	Kurtosis
SUS	5.95521	34.78956	-394.32	28.08	-10.78524	123.6709
GROWP	0.70171	0.72697	-0.05132	4.72727	3.27448	16.60427
ASSTV	0.08247	0.04711	0.03506	0.55352	7.00257	70.62354
FASSTV	3.27604	1.37611	1.20265	7.71528	1.23504	4.23902
OPC	0.59154	0.15308	0.21193	1.02056	0.51998	3.67579
DIRTU	0.03904	0.04632	-0.02189	0.20319	1.72215	5.64469

Source: Researchers' Computation, 2025.

The descriptive statistics table provides an overview of the central tendencies and variability of the variables in the study. Sustainable growth (SUS) has a mean of 5.96, but a very high standard deviation of 34.79, indicating significant variability in the values. The negative skewness of -10.79 suggests a heavy left tail in the distribution, with extreme negative values potentially pulling the mean downward. The kurtosis of 123.67 points to a distribution with a very high peak

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and heavy tails, suggesting the presence of extreme outliers. This is confirmed by the minimum value of -394.32, which is unusually low compared to the maximum of 28.08. A growth opportunity (GROWP) has a mean of 0.70, with a standard deviation of 0.73, indicating moderate variability. The positive skewness of 3.27 suggests a right-skewed distribution, with most values being closer to the lower end of the scale, while the kurtosis of 16.60 suggests a relatively peaked distribution with fewer extreme values.

For the independent variables, Total assets turnover (ASSTV) shows a mean of 0.08, with a standard deviation of 0.05, indicating relatively low but varied asset efficiency. The high skewness (7.00) and kurtosis (70.62) indicate a highly skewed distribution, with some extreme values towards the higher end of the total assets turnover spectrum. Non-current assets turnover (FASSTV) has a mean of 3.28 and a standard deviation of 1.38, showing moderate variation. The skewness (1.24) and kurtosis (4.24) suggest a more balanced distribution with a slight right skew. Operating cost to revenue (OPC) has a mean of 0.59, indicating that operating costs take up about 59% of the revenue, with a relatively low standard deviation of 0.15.

The skewness of 0.52 and kurtosis of 3.68 suggest a moderate right skew with a distribution not too heavily concentrated at the extremes. Finally, Directors tunneling (DIRTU) has a mean of 0.04, with a very low standard deviation of 0.05. The skewness of 1.72 and kurtosis of 5.64 suggest a distribution with some right skew and the presence of some extreme values.

Table 3: Result of Correlation Analysis

Variable	SUS	GROWP	ASSTV	FASSTV	OPC	DIRTU
SUS	1.0000					
GROWP	-0.3937	1.0000				
ASSTV	-0.0752	-0.0485	1.0000			
FASSTV	0.0900	-0.0926	0.1858	1.0000		
OPC	0.1585	0.1075	-0.3416	-0.2594	1.0000	
DIRTU	0.0404	-0.3012	0.0991	-0.0742	-0.0276	1.0000

Source: Researchers' Computation, 2025.

The results of the correlation analysis provide insight into the relationships between the variables in the study. Sustainable growth (SUS) has a moderate negative correlation with growth opportunities (GROWP) (-0.3937), suggesting that as growth opportunities increase, sustainable growth may decrease. This could imply that firms with abundant growth opportunities may not necessarily experience sustainable growth, potentially due to challenges in managing these opportunities effectively. Additionally, SUS has weak positive correlations with non-current assets turnover (FASSTV) (0.0900) and operating cost to revenue (OPC) (0.1585), indicating that while these variables have a slight positive relationship with sustainable growth, they are not

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major drivers of it. Interestingly, SUS has a very weak positive correlation with directors tunnelling (DIRTU) (0.0404), suggesting no significant relationship between the two in terms of sustainable growth.

In contrast, growth opportunities (GROWP) are negatively correlated with directors tunnelling (DIRTU) (-0.3012), indicating that firms with more growth opportunities may experience more instances of resource misallocation or self-dealing by managers. This could reflect a situation where the pursuit of growth leads to conflicts of interest or misuse of resources. GROWP also shows weak negative correlations with non-current assets turnover (FASSTV) (-0.0926) and operating cost to revenue (OPC) (0.1075), suggesting that growth opportunities are not significantly influenced by these variables. Finally, ASSTV, FASSTV, OPC, and DIRTU exhibit weak correlations among each other, indicating that these variables have limited interdependence, with some moderate negative relationships such as between OPC and FASSTV (-0.2594), and between OPC and ASSTV (-0.3416). The result suggests that while these variables may affect financial resource efficiency, their links are not strong to be seen major drivers of one another.

Table 4: Variance Inflator Factor Results for Independent Variables

Variable	VIF	1/VIF
OPC	1.19	0.843405
ASSTV	1.16	0.963492
FASSTV	1.09	0.913621
DIRTU	1.02	0.981098
Mean VIF		1.11

Source: Researchers' Computation, 2025.

According to Douglas, Udi, Okoro and Enaohwo (2023); Odeghe, Ojieh, Ossai and Enaohwo (2023); Ovuakporaye, Enaohwo, Mordi and Naiho (2020), VIF is an indispensable diagnostic statistical technique. The VIF results indicate that multicollinearity among the independent variables in the study is not a major concern. The VIF values for OPC (1.19), ASSTV (1.16), FASSTV (1.09), and DIRTU (1.02) are all well below the commonly accepted threshold of 10, suggesting that there is no significant multicollinearity between these variables. The mean VIF of 1.11 further confirms this, as it is close to 1, indicating that the independent variables are not highly correlated with each other and can be considered independent for the purposes of regression analysis.

Table 5: Breusch Pagan Test

Breusch Pagan Cooke/Weisberg Test for Heteroskedasticity	Chi2(1) = 514.03; Prob>chi2= 0.0000

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Source: Researchers' Computation, 2025.

The Breusch-Pagan test for heteroskedasticity yielded a Chi2(1) value of 514.03, with a p-value of 0.0000. This result indicates that there is significant evidence of heteroskedasticity in the model, as the p-value is less than the conventional significance level of 0.05. Heteroskedasticity refers to the presence of non-constant variance of the error terms, which can lead to inefficient estimates and biased test statistics if not addressed. Therefore, the findings suggest that the model suffers from heteroskedasticity, and adjustments (like using robust standard errors) may be vital to ensure valid inferences from the regression analysis.

Table 6: Results for Total Assets Turnover

Total Assets Turnover	ASSTV	-50.53689	15.55171	-3.25	0.001
Constant	_cons	13.10065	1.29432	10.12	0.000
Prob> F					0.0014
F (1, 141)					10.56

Source: Researchers' Computation, 2025.

The results (that total assets turnover has no significant effect on sustainable growth of listed commercial banks in Nigeria), indicate that asset turnover (ASSTV) has a statistically significant negative effect on sustainable growth (SUS). The coefficient of -50.53689 with a t-statistic of -3.25 and a p-value of 0.001 suggests that for every unit increase in total assets turnover, sustainable growth decreases significantly. The p-value being less than 0.05 confirms that the relationship is statistically significant. Additionally, the overall model is significant, as indicated by the Prob> F value of 0.0014 and an F-statistic of 10.56, suggesting that the model fits the data well and total assets turnover is an important predictor of sustainable growth in Nigerian commercial banks.

Table 7: Results for Non-Current Asset Turnover

Dependent Variable: Sustainable Growth (SUS)					
Variable	Symbols	Coefficient	Std. Err.	t-stat.	p-value
Non-Current Asset Turnover	FASSTV	-0.08052	0.30948	-0.26	0.795
Constant	_cons	9.42939	1.09912	8.58	0.000
Prob> F					0.7981
F (1, 141)					0.07

Source: Researchers' Computation, 2025.

The results indicate that non-current assets turnover (FASSTV) does not have a statistically significant effect on sustainable growth (SUS). The coefficient of -0.08052 with a t-statistic of -0.26 and a p-value of 0.795 suggests that changes in non-current assets turnover do not lead to

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significant changes in sustainable growth. The high p-value greater than 0.05 indicates no significant relationship between non-current assets turnover and sustainable growth. Additionally, the overall model is insignificant, as shown by Prob> F value of 0.7981 and F-statistic of 0.07, suggesting that the model does not adequately explain variations in sustainable growth in Nigerian commercial banks.

Table 8: Results for Operating Cost to Revenue

Variable	Symbols	Coefficient	Std. Err.	t-stat.	p-value
Operating Cost to Revenue	OPC	-0.54829	2.84325	-0.19	0.847
Constant	_cons	9.47166	1.74224	5.44	0.000
Prob> F					0.8474
F (1, 141)					0.04

Source: Researchers' Computation, 2025.

The results indicate that operating cost to revenue ratio (OPC) has no significant effect on sustainable growth (SUS) of listed commercial banks in Nigeria, show that OPC does not significantly influence sustainable growth. The coefficient of -0.54829 with a t-statistic of -0.19 and a p-value of 0.847 suggests that changes in operating cost to revenue ratio have no meaningful impact on sustainable growth. Since the p-value is much greater than 0.05, it indicates no significant relationship. Furthermore, the Prob> F value of 0.8474 and the F-statistic of 0.04 indicate that the overall model is not statistically significant, implying that operating cost to revenue ratio is not a significant determinant of sustainable growth.

Table 9: Results for Directors Tunnelling

Variable	Symbols	Coefficient	Std. Err.	t-stat.	p-value
Directors Tunnelling	DIRTU	-58.55697	6.58988	-8.99	0.000
Constant	_cons	11.59497	0.39966	29.01	0.000
Prob> F					0.0000
F (1, 141)					78.96

Source: Researcher's Computation via STATA 13.0

The results for director tunnelling (DIRTU) has no significant effect on sustainable growth (SUS) of listed commercial banks in Nigeria, show a highly significant negative relationship between director tunnelling and sustainable growth. The coefficient of -58.55697 with a t-statistic of -8.99 and a p-value of 0.000 indicates that director tunnelling has a statistically significant negative impact on sustainable growth. The p-value is well below the 0.05 threshold and the study concludes that director tunnelling significantly affects sustainable growth. Furthermore, the Prob> F value of 0.0000 and the F-statistic of 78.96 demonstrate that the

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overall model is highly significant, providing strong evidence that director tunnelling is a key determinant of sustainable growth in Nigerian banks.

The asset turnover, it was found that asset turnover has no significant effect on sustainable growth of listed commercial banks in Nigeria. The analysis revealed a significant negative effect of asset turnover on sustainable growth, with a t-statistic of -3.25 and a p-value of 0.001. This result is consistent with studies such as Imhanzenobe, Japhet and Osazefua (2020), which found that efficient asset utilization, including asset turnover, had a significant effect on long-term profitability, thus supporting sustainable growth in firms (Imhanzenobe & Adeyemi, 2020). On the contrary, Ewogu Boniface Onah&Okwo (2024) showed that total assets turnover has a significant negative effect on profitability, implying that total assets turnover may negatively affects sustainable growth due to strategic pricing adjustments and efficient supply chain management (Onah&Okwo, 2024).

For (the effect of non-current assets turnover on sustainable growth), the findings showed no significant relationship, with a p-value of 0.795 and a t-statistic of -0.26, leading us to fail to reject the null hypothesis. This finding aligns with studies like Akparhuere et al. (2019), which found that non-current assets turnover had an insignificant effect on performance in the construction industry in Nigeria. This suggests that, in some sectors, non-current assets turnover may not be a primary driver of performance and sustainable growth, especially in industries where other factors, such as market demand, have a stronger influence (Akparhuere et al., 2019). However, other studies, like Akinleye and Dadepo (2019), emphasize the significant positive relationship between non-current assets turnover and performance in manufacturing, suggesting that the influence of non-current assets turnover may vary across industries (Akinleye & Dadepo, 2019).

The effect of operating cost to revenue ratio on sustainable growth was also not supported, as the p-value of 0.847 showed no significant impact. This finding is consistent with studies such as JaphetOsazefua (2020), which identified that managing operating costs relative to revenue is crucial but did not find a statistically significant impact on cash flow sustainability for Nigerian firms. This suggests that while operational efficiency is important, its direct effect on sustainable growth might be less pronounced in the context of Nigerian commercial banks (Osazefua, 2020). Other studies, however, such as Imhanzenobe (2019), found significant effects of operating costs on profitability, particularly in industries with high margins like manufacturing (Imhanzenobe, 2019).

Lastly, the effect of directors tunneling on sustainable growth was supported, with a negative relationship (a p-value of 0.000 and a t-statistic of -8.99). This finding is consistent with research

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by Chukwuma (2023), which showed that director tunneling had a negative effect on the financial health and growth of Nigerian firms due to misallocation of resources for personal gain. The study emphasized the importance of effective governance to mitigate such effects and improve long-term sustainability (Chukwuma, 2023). Similarly, studies like Owolabi and Lateef (2022) highlighted the importance of governance in controlling financial practices that may detract from sustainable growth (Owolabi&Lateef, 2022).

5.0 CONCLUSION AND RECOMMENDATIONS

The study underscores the complex dynamics between financial resource efficiency and the sustainable growth of listed commercial banks in Nigeria. The results highlight that asset turnover plays a crucial role, albeit negatively, in shaping the sustainable growth of these banks. While traditionally total assets turnover is seen as a measure of operational efficiency, its negative effect in this context suggests that higher turnover rates may not always correlate with sustainable growth, particularly if those assets are not effectively managed to generate long-term value. This finding emphasizes the need for banks to focus not just on total assets utilization but on the quality of their investments and operational strategies to ensure lasting growth.

Conversely, non-current assets turnover and operating cost to revenue ratio were found to have no significant effect on sustainable growth. The results suggest that in the Nigerian banking sector, other factors might be more influential in driving growth. For instance, external market conditions, customer demands, and regulatory policies could play a more significant role than the internal operational metrics used in this study. This also points to the possibility that while these financial ratios are important for short-term performance, they may not be the primary drivers of long-term sustainability in a market characterized by volatility and rapid change.

Finally, the study found that directors tunnelling -a form of corporate governance failure has a detrimental effect on sustainable growth, providing strong evidence for the critical role of ethical financial practices in the banking sector. When managers engage in self-dealing or misuse resources for personal gain, it not only reduces the resources available for reinvestment but also erodes stakeholder confidence. This finding emphasizes the need for stronger corporate governance frameworks and better regulatory oversight to curb such practices. The study thus calls for a more integrated approach to managing both financial efficiency and governance to ensure that Nigerian banks remain financially sustainable and competitive in the long run. Given the findings, the following recommendations were made:

(i) It recommends that Nigerian commercial banks focus on optimizing their total assets utilization strategies. This includes improving the management of both financial and

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physical assets to ensure that they generate long-term value and are not solely focused on increasing turnover, which could lead to inefficiencies.

(ii) Commercial banks should reassess their investments in non-current assets. Rather than prioritizing total assets turnover, commercial banks should focus on strategic assets management that aligns with long-term growth goals, ensuring that investments in fixed assets contribute meaningfully to overall performance.

(iii) Management of commercial banks should focus on improving quality and efficiency of operational processes. They should consider adopting new technologies and lean management practices to enhance their operational effectiveness.

(iv) It recommends that commercial banks should implement stricter internal controls and promote transparency to prevent unethical financial practices. Strengthening board oversight and regulatory frameworks will help ensure that resources are allocated effectively for long-term growth.

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