Effect of Corporate Assets on Profitability of Pharmaceutical Firms in Nigeria

Azodo Ada Cynthia [1]; Okoro Emmanuel Ugochukwu [2]; Nwabuisi Anthony Okorie [2]

[1 & 2] *Department of Accountancy,*
Faculty of Management Sciences,
Enugu State University of Science and Technology (ESUT), Enugu State, Nigeria.

[2] *nwabuisi.okorie@esut.edu.ng*

Abstract

Research Objectives: The study examined the effect of corporate assets on profitability of pharmaceutical firms in Nigeria from (2018-2023). The specific objectives include: determine the effects of non-current assets on the profit for the year of pharmaceutical firms in Nigeria, ascertain the extent to which current assets affect profit for the year of pharmaceutical firms in Nigeria and examine the effect of intangible assets on profit for the year of pharmaceutical firms in Nigeria.

Methodology: The study employed secondary sources of data from the annual report of the selected pharmaceutical firms in Nigeria (May & Baker and Fidson Healthcare Plc). ***Ex-post facto*** research design was adopted. The study employed multiple regressions of the Panel Least Squares method.

Findings: The result revealed that Non-current assets have positive (coefficient 0.105098) and non-significant (P-value 0.2554) effect on profit for the year of pharmaceutical firms in Nigeria, Current assets have a positive (coefficient 0.056640) and non-significant (P-value 0.3809) effect to Profit for the year of pharmaceutical firms in Nigeria and Intangible assets have a negative (coefficient -30.65626) and non-significant (P-value 0.3052) effect on Profit for the year of pharmaceutical firms in Nigeria and also the Adjusted R-squared was 60%.

Recommendations: Pharmaceutical firms should prioritize investments in non-current assets, ensuring they are modern and efficient. This will not only enhance production capabilities but also improve long-term profitability. Pharmaceutical firms should implement robust inventory management systems to minimize wastage and ensure timely availability of products. Efficient credit management practices should be enforced to optimize receivables, reducing the risk of bad debts and Pharmaceutical firms should invest in research and development to create proprietary drugs and treatments, thus enhancing their intellectual property portfolio. Protecting these assets through patents and trademarks will provide a competitive edge and potentially higher profit margins.

Key words: *Corporate assets, Non-current assets, Current assets, Intangible assets, Profit for the year.*

1. Introduction

In the dynamic and competitive landscape of the pharmaceutical industry, corporate assets play a pivotal role in determining the financial health and profitability of firms. Assets, including tangible resources like equipment and facilities, and intangible resources like patents and intellectual property, are crucial for the operation and growth of pharmaceutical companies. The strategic management and utilization of these assets significantly influence a firm's ability to innovate, produce, and market pharmaceutical products effectively. Corporate assets refer to the resources owned by a corporation that are expected to provide future economic benefits. These assets are critical for a company's operations and are categorized into various types based on their nature and usage (Hasan et al, 2023).

Corporate assets contribute to profitability in various ways. For instance, investments in state-of-the-art manufacturing facilities and advanced technologies can enhance production efficiency and reduce operational costs. Similarly, intellectual property assets, such as patents for new drugs, can provide competitive advantages and enable firms to capture premium prices for their products. Effective utilization of assets not only supports operational efficiency but also drives innovation and market expansion (Ikpefan & Owolabi, 2023).

Tangible assets, such as production machinery, buildings, and equipment, directly contribute to a company's ability to produce goods and services. Efficient and well-maintained assets can enhance production capacity, improve product quality, and reduce operational costs, leading to increased sales and revenue. For instance, advanced machinery might enable faster production and higher output, which can drive higher sales volumes and profitability (Kester, 2021).

Effective management of corporate assets is essential for optimizing a company's resources and achieving long-term financial stability. This involves strategic planning, oversight, and operational control to ensure that assets contribute to the organization's goals and generate maximum value. The management of corporate assets begins with strategic planning, which involves identifying the most effective use of assets to align with the company’s long-term objectives. This includes determining the appropriate mix of tangible and intangible assets, deciding on capital expenditures, and making investment decisions. Strategic planning ensures that assets are allocated in a way that supports growth, enhances competitive advantage, and maximizes returns (Kim et al, 2023).

Understanding the effect of corporate assets on profitability is essential for pharmaceutical firms in Nigeria to navigate the complexities of the industry and achieve sustainable financial success. This study endeavors to provide a comprehensive analysis of this effect, shedding light on the critical factors that drive profitability and offering practical recommendations for enhancing asset management practices.

Statement of problem

Corporate assets are crucial for the operational success and profitability of organizations, but their management and utilization can present several challenges that affect financial performance. Understanding these problems is essential for devising effective asset management strategies and improving profitability. Pharmaceutical firms in Nigeria operate within a unique economic and regulatory environment characterized by a growing demand for healthcare products, fluctuating non-current assets, and evolving government policies. The sector faces numerous challenges, including high research and development costs, regulatory hurdles, and competition from both local and international players. Given these challenges, the efficient management of corporate assets becomes critical in ensuring that firms remain competitive and profitable (Mwangi et al, 2023)

Despite the substantial investment in corporate assets by pharmaceutical firms, there is limited empirical evidence on how these assets affect their profitability. This gap in knowledge necessitates an in-depth investigation to understand the effect of asset management practices on financial performance within this sector. One of the primary challenges is inefficient asset utilization. Organizations often struggle with optimizing the use of their assets, leading to underutilization or overutilization. Underutilized assets, such as idle machinery or unused office space, represent a waste of resources and can reduce potential revenue. Conversely, over utilized assets might suffer from wear and tear, leading to increased maintenance costs and potential production delays. Efficient management practices are required to balance asset use and maximize their contribution to profitability (Muhammad & Syed, 2023).

Assets, especially tangible ones like equipment and vehicles, depreciate over time, and intangible assets like patents amortize. This depreciation and amortization are recorded as expenses, which can reduce net income and affect profitability. Mismanagement of these processes, such as incorrect depreciation schedules or failure to account for the obsolescence of assets, can lead to inaccurate financial reporting and tax implications. Proper accounting for asset value and depreciation is critical to avoid misleading financial statements and ensure accurate profitability assessments (Melita et al, 2021).

The allocation of capital towards asset acquisition and investment is another challenge. Organizations must make strategic decisions about where to invest their resources, balancing the need for new assets against the potential return on investment. Poor investment decisions, such as purchasing high-cost assets without clear financial benefits or failing to invest in necessary upgrades, can negatively impact profitability. Effective capital budgeting and evaluation of asset investments are essential for aligning asset purchases with the organization's strategic goals and enhancing financial performance (Mary et al, 2021),

Managing intangible assets, such as intellectual property, brand value, and proprietary technologies, presents unique challenges. These assets are often difficult to value and measure, making it challenging to assess their impact on profitability. Additionally, protecting and leveraging intangible assets requires ongoing investment and strategic management.

Mismanagement or undervaluation of these assets can lead to missed opportunities for revenue generation and competitive advantage.

Objectives of the Study

The broad objective of the study is to appraise the effect of corporate assets on profitability of pharmaceutical firms in Nigeria.

The specific objectives are to:

i. Determine the effects of non-current assets on the profit for the year of pharmaceutical firms in Nigeria.

ii. Ascertain the extent to which current assets affect profit for the year of pharmaceutical firms in Nigeria.

iii. Examine the effect of intangible assets on profit for the year of pharmaceutical firms in Nigeria.

Research Questions

The following questions are stated for this study:

1. What are the effects of non-current assets on the profit for the year of pharmaceutical firms in Nigeria?
2. To what extent does current assets affect the profit for the year of pharmaceutical firms in Nigeria?
3. What is the effect of intangible assets on profit for the year of pharmaceutical firms in Nigeria?

Statement of Hypotheses

The following hypotheses null are stated for this study:

i. Non-current assets do not have a significant effect on the profit for the year of pharmaceutical firms in Nigeria.

ii. Current assets do not have a significant effect on the profit for the year of pharmaceutical firms in Nigeria.

iii. Intangible assets do not have a significant effect on the profit for the year of pharmaceutical firms in Nigeria.

Significance of the Study

The study will be of immense significance to these groups;

Pharmaceutical Companies: The primary beneficiaries are pharmaceutical firms operating in Nigeria. Insights gained from the study can help these companies optimize their asset management strategies, improve operational efficiency, and make informed investment decisions. By understanding how different types of assets impact profitability, companies can better allocate resources, reduce costs, and enhance overall financial performance.

Investors and Shareholders: Investors and shareholders of pharmaceutical companies stand to benefit from the study's findings as well. Improved asset management and enhanced profitability directly affect the financial returns on their investments. The study's insights can help them make more informed decisions about investing in or supporting pharmaceutical firms based on their asset utilization and profitability potential.

Financial Analysts and Consultants: Professionals involved in financial analysis and consulting for pharmaceutical companies will benefit from a deeper understanding of the relationship between corporate assets and profitability. The study's findings can enhance their ability to provide strategic advice, conduct financial assessments, and offer recommendations for improving asset management practices.

Policymakers and Regulators: Government agencies and regulators overseeing the pharmaceutical industry can use the study's findings to better understand the economic impact of asset management practices on the sector's profitability. This knowledge can inform policy decisions and regulatory frameworks aimed at supporting the industry's growth and ensuring efficient resource utilization.

Academic Researchers and Institutions: The academic community, including researchers and institutions focused on business management, finance, and pharmaceutical studies, will benefit from the study's contributions to existing literature. The findings can serve as a basis for further research and provide valuable insights into asset management and profitability in the pharmaceutical sector.

1.7 Scope of the Study

The study on the effect of corporate assets on profitability of pharmaceutical firms in Nigeria from 2023-2023. The study covered the following proxies; Non-current assets, current assets, intangible assets and profit for the year.

2. Review Of Related Literature

Conceptual Review

Corporate assets

Corporate assets are fundamental resources owned by a company, crucial for its operations and financial health. They represent the value of what the company controls and utilizes to generate revenue and sustain its activities. Understanding these concepts is essential for effective asset management and strategic planning. The effect of corporate assets on the profitability of pharmaceutical firms in Nigeria is multifaceted and plays a crucial role in determining financial performance. These assets, which include both tangible and intangible resources, directly influence how effectively companies operate and generate profits (Korankye & Adarquah, 2023).

In the pharmaceutical industry, operational assets such as manufacturing equipment, laboratories, and production facilities are vital for maintaining efficiency. The quality and condition of these assets affect production processes, product quality, and overall operational efficiency. Advanced and well-maintained equipment can enhance productivity, reduce production costs, and minimize downtime. As a result, pharmaceutical firms can produce higher quantities of products at lower costs, which boosts their profitability. Intangible assets such as patents, research facilities, and proprietary technologies are critical for pharmaceutical firms (Kim**,** 2023)

Compliance with industry regulations requires significant investments in both tangible and intangible assets. For example, pharmaceutical firms need to invest in regulatory-compliant production facilities and quality control systems. Failure to comply with regulatory standards can result in fines, legal issues, and operational disruptions, all of which can negatively impact profitability. By managing compliance-related assets effectively, firms can avoid these risks and maintain a positive financial outlook. Efficient utilization of assets, including inventory management and equipment maintenance, directly affects profitability. In the pharmaceutical industry, managing inventory levels of raw materials and finished products is crucial to avoid stockouts or excess inventory, both of which can impact financial performance. Additionally, regular maintenance of production equipment prevents costly breakdowns and ensures consistent production quality. Proper asset management practices help in controlling operational costs and enhancing overall profitability (Kester, 2021).

Intangible assets such as intellectual property (IP) and brand reputation have a significant impact on profitability. Strong IP, including patents and trademarks, can provide exclusive rights to market certain drugs, thereby increasing revenue potential. Similarly, a well-established brand reputation can attract more customers and command higher prices for products. Managing and leveraging these intangible assets effectively can lead to increased market share and improved financial performance. Strategic investment in assets is crucial for long-term profitability. Pharmaceutical firms need to make informed decisions about where to allocate capital, whether for acquiring new technology, expanding facilities, or investing in new product lines. Poor investment decisions can lead to wasted resources and lower returns, while well-planned investments can enhance productivity and profitability. Proper capital allocation ensures that assets contribute positively to the firm’s financial goals.

Non-current assets

Non-current assets, also known as long-term assets, play a crucial role in shaping the profit for the year of pharmaceutical firms in Nigeria. These assets, which include property, plant, equipment, and long-term investments, are essential for the long-term operations and growth of the company. Their impact on profitability is substantial, influencing various aspects of financial performance. Non-current assets such as manufacturing facilities, laboratory equipment, and production machinery are vital for the pharmaceutical industry. These assets enable firms to produce and test pharmaceutical products efficiently. The quality and capacity of production equipment directly affect the volume of products manufactured and the cost of production. Efficient and modern equipment can reduce production costs and increase output, which contributes positively to the profit for the year. Conversely, outdated or poorly maintained assets can lead to higher operational costs and decreased productivity, negatively impacting profitability (Mwangi et al, 2023)

Non-current assets are subject to depreciation (for tangible assets) and amortization (for intangible assets). Depreciation of equipment and facilities is recorded as an expense on the income statement, reducing net income and thus impacting profit for the year. Similarly, amortization of intangible assets such as patents and trademarks affects financial statements. While these charges are non-cash expenses, they can still influence profitability by reducing reported earnings. Effective management of depreciation and amortization schedules helps in better financial planning and can mitigate their negative impact on profit. Investments in non-current assets often involve substantial capital expenditures. Pharmaceutical firms may invest in new technology, research facilities, or expanding production capacity to support growth and innovation. These capital expenditures are crucial for long-term success but require careful planning to ensure they contribute to profitability. Well-planned investments in non-current assets can enhance operational efficiency, improve product quality, and support the development of new products, all of which can drive higher profits. However, poor investment decisions or overspending on assets can strain financial resources and adversely affect profitability (Muhammad & Syed, 2023).

The efficient use of non-current assets is critical for maintaining and enhancing profitability. For example, properly utilized production facilities and equipment can maximize output and minimize operational costs. On the other hand, underutilized or inefficient assets can lead to increased maintenance costs and lower production levels, which can negatively affect profit margins. Regular monitoring and maintenance of non-current assets ensure they operate at peak efficiency, thereby supporting better financial performance. Non-current assets often contribute to long-term value creation for pharmaceutical firms. Investments in research and development facilities, for example, can lead to the development of new and innovative drugs, which can generate significant revenue over time. Additionally, owning valuable intellectual property and patents can provide a competitive edge and create opportunities for revenue through licensing agreements. The long-term benefits derived from these assets contribute to sustained profitability and growth (Melita et al, 2021).

The management of non-current assets also impacts a firm's financial stability and risk profile. Properly managed assets provide a stable base for operations and can help mitigate financial risks associated with production and research activities. Conversely, mismanagement or significant financial strain associated with acquiring or maintaining non-current assets can affect a firm's profitability and overall financial health. Non-current assets significantly impact the profit for the year of pharmaceutical firms in Nigeria through their role in operational efficiency, the effects of depreciation and amortization, capital investment decisions, asset utilization, long-term value creation, and financial stability. Effective management and strategic use of these assets are essential for enhancing profitability and achieving long-term success in the pharmaceutical sector.

Current assets

Current assets are crucial to the day-to-day operations and financial health of pharmaceutical firms in Nigeria. These assets, which include cash, accounts receivable, inventory, and short-term investments, directly influence the profit for the year by affecting liquidity, operational efficiency, and overall financial performance. Current assets play a key role in maintaining liquidity and ensuring smooth cash flow. Cash and cash equivalents, as well as receivables, are critical for meeting short-term obligations and financing daily operations. Adequate liquidity allows pharmaceutical firms to promptly pay suppliers, manage operational expenses, and invest in new opportunities without incurring additional costs from borrowing. Efficient management of current assets ensures that the firm has sufficient cash flow to avoid financial strain and capitalize on revenue-generating opportunities, which positively impacts profitability (Mary et al, 2021).

Accounts receivable, which represent money owed by customers for products sold on credit, can significantly affect profitability. Delays in collecting receivables can lead to cash flow issues and increased borrowing costs. Efficient management of accounts receivable, including timely invoicing and collection efforts, helps ensure that cash is collected quickly and used effectively. This not only improves liquidity but also reduces the risk of bad debts, thereby protecting the firm's profit margins. Inventory management is particularly critical in the pharmaceutical industry, where firms need to balance stock levels of raw materials and finished products. Excess inventory ties up capital and incurs holding costs, such as warehousing and insurance, which can erode profitability. On the other hand, inadequate inventory levels can lead to stockouts, affecting production and sales. Effective inventory management ensures that firms maintain optimal stock levels, minimizing costs associated with excess inventory while avoiding disruptions in supply, thus supporting better financial performance (Martina, 2022),

Short-term investments, including marketable securities and other liquid assets, can provide additional income through interest, dividends, or capital gains. While these investments are not as critical as core operational assets, they contribute to overall profitability by generating additional revenue streams. Strategic management of short-term investments ensures that pharmaceutical firms can take advantage of market opportunities while maintaining sufficient liquidity for operational needs. The efficient management of current assets contributes to overall operational efficiency. For instance, effective use of working capital—consisting of current assets minus current liabilities can streamline operations and reduce operational costs. By optimizing the use of current assets, firms can improve productivity, reduce wastage, and enhance their ability to respond to market demands, all of which contribute to higher profitability.

Current assets directly influence cost management and profit margins. Efficient management of cash, receivables, and inventory can reduce operational costs and improve profit margins. For example, faster inventory turnover reduces carrying costs, while efficient accounts receivable management minimizes the need for costly financing. By controlling these aspects effectively, pharmaceutical firms can enhance their profitability and financial stability. Current assets significantly affect the profit for the year of pharmaceutical firms in Nigeria by influencing liquidity, cash flow, and operational efficiency. Effective management of cash, accounts receivable, inventory, and short-term investments ensures that firms maintain financial health, reduce costs, and capitalize on revenue opportunities, ultimately leading to improved profitability.

Intangible assets

Intangible assets, though not physical, have a profound impact on the profitability of pharmaceutical firms in Nigeria. These assets, which include intellectual property such as patents, trademarks, copyrights, and brand reputation, play a critical role in driving financial performance and shaping the competitive landscape of the industry. Patents are one of the most significant intangible assets for pharmaceutical firms. They provide exclusive rights to market and sell specific drugs or treatments, which can lead to substantial revenue streams. A firm that holds patents for innovative medications can set higher prices due to the lack of competition, enhancing profit margins. The ability to protect intellectual property through patents not only secures a competitive edge but also facilitates the recovery of R&D investments, contributing positively to the profit for the year (Olabode, & Adesanya, 2018)**,**

Brand value is another crucial intangible asset that affects profitability. A strong brand reputation can drive consumer preference and loyalty, allowing firms to command premium prices for their products. In the pharmaceutical industry, a well-regarded brand can also influence the prescription patterns of healthcare providers and enhance market share. Effective management and promotion of brand assets help in maintaining a positive market perception and generating higher sales, thereby improving overall profitability. Intangible assets such as patents and proprietary technologies can be leveraged for licensing agreements. Pharmaceutical firms can earn revenue through royalties by granting other companies the right to use their intellectual property. These licensing agreements provide additional income streams without the need for direct involvement in manufacturing or marketing. The revenue from royalties contributes to the firm's profit for the year and can significantly enhance financial performance (Adebayo & Akinola, 2019)**,** Effective management of intangible assets can also influence cost efficiency. For example, well-managed intellectual property rights can reduce legal and operational costs associated with protecting and enforcing these rights. Additionally, leveraging proprietary technologies can lead to more efficient production processes and cost savings. Improved efficiency in managing intangible assets supports better financial performance by reducing operational costs and enhancing profit margins (Chukwu, & Eze, 2020),. While intangible assets contribute positively to profitability, they are subject to amortization, which affects financial statements. Amortization of intangible assets like patents and trademarks is recorded as an expense, which can reduce net income. Proper management of amortization schedules and financial reporting ensures that the impact on profitability is accurately reflected and that the financial health of the firm is transparently reported. Intangible assets significantly impact the profit for the year of pharmaceutical firms in Nigeria through their influence on revenue generation, brand recognition, licensing opportunities, competitive advantage, and cost management. By effectively managing and leveraging these assets, firms can enhance their financial performance, drive innovation, and achieve sustained profitability in a competitive industry

Profit for the Year

The "profit for the year" of pharmaceutical firms in Nigeria is a key financial metric that represents the company's net income after all expenses, taxes, and costs have been deducted from its total revenue over a given period. This measure is crucial for assessing the financial performance and overall health of these firms, reflecting their ability to generate earnings from their operations. The foundation of the profit for the year lies in the revenue generated from the sale of pharmaceutical products. For pharmaceutical firms in Nigeria, revenue is driven by factors such as the launch of new drugs, market demand, pricing strategies, and competition. Strong sales performance, achieved through effective marketing and product development, boosts total revenue and, consequently, the potential for higher profit margins. Successful product launches and market penetration can significantly enhance revenue streams, positively impacting profitability (Oluwaseun,& A jibola, 2021)**,**

The calculation of profit for the year involves deducting the cost of goods sold (COGS) from total revenue. COGS includes expenses directly associated with the production of pharmaceutical products, such as raw materials, manufacturing costs, and labor. Efficient management of COGS is critical for improving gross profit margins. By controlling production costs and optimizing supply chain processes, pharmaceutical firms can reduce COGS and increase the gross profit, which contributes to higher overall profitability. After calculating the operating profit, other financial adjustments such as interest expenses, taxes, and any non-operating costs are deducted. Interest expenses related to debt and tax liabilities can impact the final profit for the year. Effective financial management, including strategic tax planning and minimizing debt costs, helps in optimizing after-tax profit. Ensuring compliance

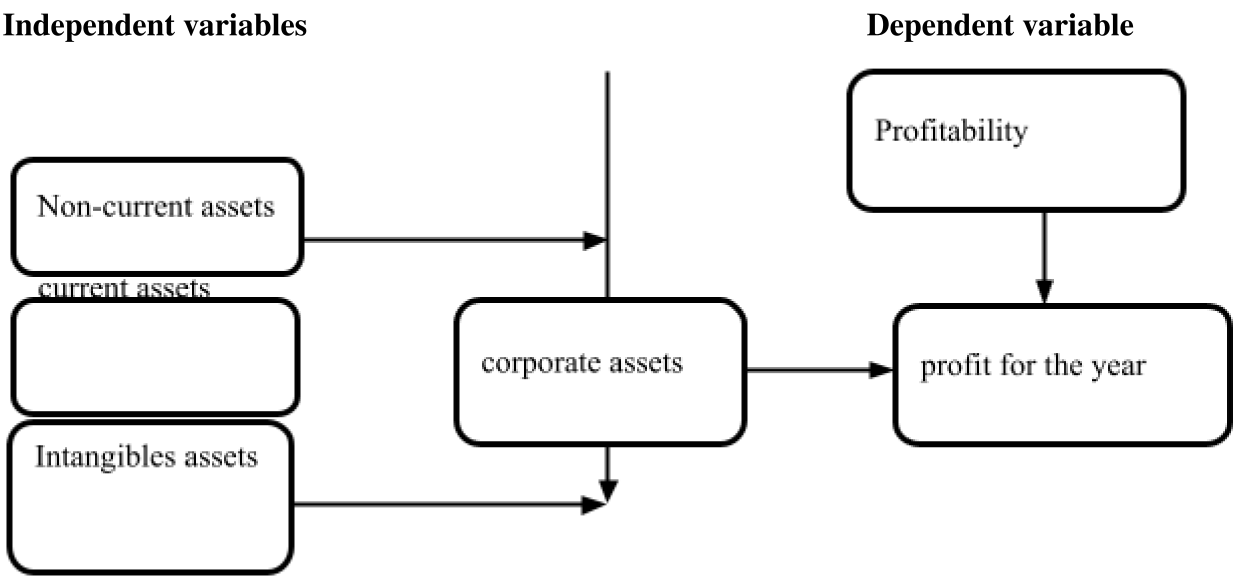
ISSN: 2251-032X Volume 7, Issue 1, Pages 161 - 183: 2024

with tax regulations while managing financial obligations is crucial for maximizing net income (Akinwale, & Ojo, 2023).

Strategic investments in areas such as production capacity, market expansion, or acquisitions can impact the profit for the year. While such investments may involve initial costs, they have the potential to drive future revenue growth and profitability. Careful planning and execution of growth strategies ensure that investments align with long-term financial goals and contribute positively to overall profit (Yusuf, & Ibrahim, 2023).. In summary, the profit for the year of pharmaceutical firms in Nigeria is determined by subtracting all relevant expenses from total revenue. Effective management of revenue generation, cost of goods sold, operating expenses, financial adjustments, and external factors is essential for achieving and sustaining profitability. By optimizing these elements and adapting to market and regulatory conditions, pharmaceutical firms can enhance their financial performance and ensure long-term success.

Figure 2.1 Conceptual Framework: Diagram Showing Linkages between Variables

The diagram above is a conceptual framework which shows the relationship between the corporate assets and profitability of pharmaceutical firms in Nigeria. The diagram presents proxies of corporate assets which include Non-current assets, Current assets and intangible assets while proxies for profitability is profit for the year.



Source: Author's Compilation, 2024

Theoretical Framework

Theories of corporate assets may be classified under the following headings:

The Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory, proposed by Jay Barney in 1991, emphasizes that a firm's resources and capabilities are critical drivers of its competitive advantage and profitability. According to this theory, corporate assets, including both tangible and intangible assets, are central to a firm's ability to achieve superior performance and sustain profitability. In the context of the research on the effect of corporate assets on the profitability of pharmaceutical firms in Nigeria, RBV suggests that these firms' assets such as advanced manufacturing equipment, intellectual property (patents, trademarks), and strong brand reputation serve as valuable, rare, inimitable, and non-substitutable resources. These resources enable pharmaceutical firms to innovate, maintain high product quality, and efficiently manage production processes, which directly contribute to enhanced profitability. Firms that effectively leverage their corporate assets, in alignment with their strategic objectives, can achieve a competitive edge and improved financial performance. The RBV highlights the importance of managing and utilizing these assets to drive sustained profitability and growth in the pharmaceutical sector.

The Balanced Scorecard Theory

The Balanced Scorecard Theory, CAoduced by Robert S. Kaplan and David P. Norton in 1992, provides a comprehensive framework for evaluating a firm's performance by integrating financial and non-financial measures. This theory emphasizes that assessing performance solely based on financial outcomes is insufficient; instead, it suggests incorporating various perspectives, including customer, internal processes, and learning and growth. For the research on the effect of corporate assets on the profitability of pharmaceutical firms in Nigeria, the Balanced Scorecard Theory can be applied to understand how non-financial assets impact financial outcomes. For example, intangible assets such as intellectual property and brand strength, as well as tangible assets like production facilities and equipment, can be assessed through different perspectives of the Balanced Scorecard. The internal process perspective evaluates how well these assets support operational efficiency, while the learning and growth perspective focuses on how investments in R&D and employee training contribute to long-term capabilities. By aligning corporate assets with strategic objectives and performance metrics across various perspectives, pharmaceutical firms can enhance their overall profitability. This theory underscores the importance of a holistic approach to asset management, ensuring that investments in corporate assets lead to improved financial performance and sustainable growth.

Empirical Review

Non-current assets and profitability

Oluwaseun, and Ajibola, (2021)**,** Evaluating the Impact of Non-Current Assets on Financial Performance of Pharmaceutical Companies in Nigeria, the study used a descriptive research design and analyzed secondary data from financial statements using correlation and regression techniques. The study finds that non-current assets, especially investments in research and development, were shown to have a positive correlation with profitability. Companies with substantial R&D investments reported higher profitability due to the development of new and innovative products.

Olabode and Adesanya, (2018)**,** Impact of Intellectual Property on Profitability of Banks in Nigeria**.** The study utilized a quantitative approach, analyzing data from the annual reports of selected pharmaceutical firms over a ten-year period using multiple regression analysis. The study found that intellectual property assets, particularly patents and trademarks, have a significant positive impact on the profitability of pharmaceutical firms. Firms with a higher number of patents tend to have better profit margins due to reduced competition and the ability to charge premium prices.

Chukwu, and Eze, (2020), Asset Management and Profitability in Nigerian Oil and Gas firms. The study employed a panel data analysis covering a sample of 15 pharmaceutical firms over five years. Effective asset management, particularly inventory management and the efficient use of production facilities, was found to significantly enhance profitability. Firms that optimized their asset utilization reported higher return on assets (ROA) and net profit margins.

current assets and profitability

Okonkwo and Udeh, (2021), Corporate Assets and Firm Performance: A Study of Selected Nigerian Oil and Gas firms**.** The research utilized a case study approach, examining detailed financial records and conducting interviews with management. The study highlighted that corporate assets such as high-tech laboratories and advanced manufacturing plants are critical for maintaining competitive advantage and profitability. Companies with state-of-the-art facilities tend to achieve better financial performance.

Balogun and Sanusi, (2022), Analyzing the Influence of Asset Structure on Profitability of Nigerian Oil and Gas firms. The study employed econometric modeling techniques to analyze data from the financial statements of pharmaceutical firms over a six-year period. The study finds that asset structure, particularly the ratio of fixed to current assets, significantly affects profitability. Firms with a higher proportion of fixed assets relative to current assets were found to be more profitable, as these investments support sustained operational efficiency.

Eneh and Nwosu, (2022)**,** The Effect of Corporate Governance on Asset Utilization and Profitability in the Oil and Gas firms in Nigeria. This study used a longitudinal research design, tracking governance practices and financial performance over a ten-year period using panel data analysis. Findings**:** Strong corporate governance was linked to better asset utilization and higher profitability. Firms with transparent governance practices and effective asset management strategies reported superior financial performance

Intangible assets and profitability

Adebayo and Akinola, (2019)**,** The Role of Tangible and Intangible Assets in Enhancing Profitability in the Nigerian Banks. A mixed-method approach was adopted, combining financial ratio analysis with interviews of key industry stakeholders. The research indicated that both tangible and intangible assets are crucial for profitability. Tangible assets like modern manufacturing facilities improve operational efficiency, while intangible assets such as brand reputation and R&D capabilities drive long-term growth and profitability.

Adeyemi, and Ogundipe, (2023), Impact of Technological Assets on Profitability in the Nigerian Manufacturing firms. The study used a cross-sectional survey of pharmaceutical firms, supplemented by financial statement analysis and regression analysis. Findings: Technological assets, such as automated production systems and advanced research equipment, were found to significantly enhance profitability. Firms investing in cutting-edge technology reported higher production efficiency and lower operational costs.

Okafor and Adekunle, (2023)**,** Corporate Asset Investment and Profitability of Nigerian Manufacturing firms. A comparative analysis of financial performance pre- and post-investment in corporate assets using t-tests and regression analysis. Findings: Investment in corporate assets such as new production facilities and IT IAastructure resulted in a significant increase in profitability. The study concluded that strategic investment in corporate assets is essential for long-term financial success.

Yusuf and Ibrahim, (2023)**.** Evaluating the Relationship Between Intellectual Capital and Profitability in Nigerian Manufacturing firms**.** The study used structural equation modeling (SEM) to analyze the relationship between intellectual capital components and profitability. Findings: Intellectual capital, including human capital and structural capital, was found to be a key driver of profitability. Firms that invested in employee training and organizational knowledge systems reported better financial performance.

Akinwale and Ojo (2023)**,** The Role of Asset Management Practices on the Financial Performance of Manufacturing firms in Nigeria. The study employed a mixed-method approach, combining quantitative analysis of financial data with qualitative interviews with asset managers. Findings: Effective asset management practices, including regular maintenance and strategic asset allocation, were found to significantly improve profitability. Firms that implemented robust asset management frameworks experienced lower operational costs and higher returns on assets.

Gap in Empirical Review

Despite the importance of corporate assets, there is limited empirical research focusing on their specific impact on the profitability of pharmaceutical firms in Nigeria. Previous studies have primarily concentrated on broader aspects of financial performance or have been conducted in different contexts, leaving a gap in understanding how asset management affects profitability in the Nigerian pharmaceutical sector. This study aims to address this gap by exploring the effect of corporate assets on profitability in Nigerian pharmaceutical firms. By

ISSN: 2251-032X Volume 7, Issue 1, Pages 161 - 183: 2024

examining various asset categories and their influence on financial outcomes, the research seeks to provide insights into how firms can optimize their asset utilization to enhance profitability. The findings of this study will offer valuable information for pharmaceutical managers, investors, and policymakers, contributing to more informed decision-making and strategic planning within the sector.

3. Methodology

Research Design

The researcher adopted ***ex-post facto*** research design. The choice of the ***ex-post facto*** design is because the research relied on already recorded events, and researchers do not have control over the relevant dependent and independent variables they are studying with a view to manipulating them (Onwumere, 2020).

Area of the Study

This research on the effect of corporate assets on profitability of Pharmaceutical firms in Nigeria.

Sources of Data

This study made use of secondary data covering a period of 6 years i.e. 2018 to 2023 and was obtained from annual reports of the selected Pharmaceutical firms in Nigeria.

Model Specification

The following model is used to evaluate the study:

PFY = F (NCA, CA, IA) ………………… (1)

Where:

PFY = Profit for the year

NCA = Non-current assets

CA = current assets

IA = Intangible assets

In a linear regression form, it will become:

$PFY_t = \beta o + \beta_1 NCA_t + \beta_2 CA_t + \beta_3 IA_t + \mu$ ………………… (2)

βo = Constant Term

β_1 = Coefficient of NCA

β_2 = Coefficient of CA

β_3 = Coefficient of IA

μ = Error Term

Description of Variables in the model.

The variables used in this study are divided into dependent and independent variables. Profit for the year is the dependent variable whereas Non-current assets, Current assets and Intangible assets formed the independent variables

Model Variables Description

Short Form	Details	Source of Data measurement
PFY	Profit for the year	Annual report of the selected pharmaceutical firms in Nigeria
NCA	Non-current assets	Annual report of the selected pharmaceutical firms in Nigeria
CA	Current assets	Annual report of the selected pharmaceutical firms in Nigeria
IA	Intangible assets	Annual report of the selected pharmaceutical firms in Nigeria

Source: Author's Compilation, 2024

Analytical Procedure

Time series data covering a period of 6 years was estimated using diverse techniques, such as descriptive statistics, and multiple regression.

Decision Rule

Reject the null hypothesis if the t – statistics is greater than 2.0 and the P-value is less than 5%, otherwise accept the null hypothesis.

4. Data Presentation and Analysis of Results

Presentation of Data

The data used in the research are presented in this section of the study. Table .1 below displays the data for non-current assets, current assets, intangible assets and profit for the year covering the period 2018-2023.

Table 1: Data showing the variables under study

DATA PRESENTATION

Years	Companies	NCA	CA	IA	PFY
May & Baker	2018	4,829,238	3,306,329		617,074
May & Baker	2019	5,518,892	3,955,036	40,632	710,233
May & Baker	2020	5,269,066	9,052,893	30,474	903,977

May & Baker	2021	5,188,296	12,116,369	21,571	910,840
May & Baker	2022	6,310,741	11,574,945	11,110	1,481,955
May & Baker	2023	6,658,077	13,070,510	7,143	868,863
Fidson Healthcare Plc	2018	12,907842	7,575,483	54475	-97,447
Fidson Healthcare Plc	2019	13,217,617	7,147,734	27736	407,188
Fidson Healthcare Plc	2020	14,228,780	13,013,704	23,530	1,205,039
Fidson Healthcare Plc	2021	16,625,029	17,480,381	21,277	3,719,913
Fidson Healthcare Plc	2022	20,163,983	22,817,308	23,544	4,187,158
Fidson Healthcare Plc	2023	23,706,144	38,284,982	25,577	3,607,593

Source: Financial Statement of May & Baker and Fidson Healthcare Plc

Panel Data Analysis.

Table 2. Descriptive Statistics of the Industry Level

	PFY	NCA	CA	IA
Mean	1543532.	11218642	13282973	26097.18
Median	907408.5	9782960.	11845657	23544.00
Maximum	4187158.	23706144	38284982	54475.00
Minimum	-97447.00	4829238.	3306329.	7143.000
Std. Dev.	1443021.	6543953.	9594848.	12959.09
Skewness	0.930833	0.600472	1.533481	0.751660
Kurtosis	2.289820	2.054515	4.910097	3.409148
Jarque-Bera	1.985078	1.168105	6.527361	1.112547
Probability	0.370634	0.557634	0.038247	0.573342
Sum	18522386	1.356708	1.596708	287069.0
Sum Sq. Dev.	2.295613	4.715614	1.015615	1.689809
Observations	12	12	12	12

Source: Author's compilation using E-view 10.0 standard software

Table 2. above reveals the variable description of the 10 observations of the data for sampled mean of pharmaceutical firms in Nigeria. The normality of the distribution of the data series is shown by the coefficients of skewness, kurtosis and jarque-Bera probability. The probability of the jarque-Bera statistics from the above table shows that profit for the year, non-current assets and intangible assets are non-significant with P-value greater than 0.05. PFY (0.370634), NCA (0.557634) and IA (0.573342). The significant P-value shows that the variables are normally distributed because their probability value is greater than 5%. While the significant P-value of CA 0.038247 shows that the variable is abnormally distributed because its probability value is less than 5%. Skewness will also be a second confirmation of the above normal distribution with skewness coefficient which have values < 1. (PFY 0.930833, NCA 0.600472 and IA 0.751660) which shows that profit for the year, Non-current assets and Intangible assets are normally distributed. whereas the Skewness of intangible assets 1.533481 is > 1 which shows abnormal distribution. The kurtosis coefficient provides a s third level of confirmation that the profit for the year 2.289820 and non-current assets 2.054515 are normally distributed with the coefficients less than 3 while intangible assets 3.409148 and current assets 4.910097 are below 3 which showcases abnormal distribution.

Table 3: Regression Analysis

Dependent Variable: PFY

Method: Panel Least Squares

Date: 07/27/24 Time: 08:55

Sample: 2018 2023

Periods included: 6

Cross-sections included: 2

Total panel (unbalanced) observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NCA	0.105098	0.084857	1.238533	0.2554
CA	0.056640	0.060571	0.935101	0.3809
IA	-30.65626	27.71385	-1.106171	0.3052
C	383969.3	925856.6	0.414718	0.6908

Root MSE	751232.7	R-squared	0.717427
Mean dependent var	1627756.	Adjusted R-squared	0.596325
S.D. dependent var	1482197.	S.E. of regression	941720.1
Akaike info criterion	30.62409	Sum squared resid	6.21E+12
Schwarz criterion	30.76878	Log likelihood	-164.4325
Hannan-Quinn criter.	30.53289	F-statistic	5.924131
Durbin-Watson stat	1.444294	Prob(F-statistic)	0.024653

E-view 10.0 standard software

Table 4.2.3 reveals that non-current assets have a non-significant (P-value 0.2554) with positive effect (coefficient 0.105098) on profit for the year. Current assets have a non-significant (P-value 0.3809) with positive (coefficient 0.056640) effect on profit for the year and Intangible assets is found to have a non-significant (P-value 0.3052) with negative effect (coefficient -30.65626). The adjusted R-squared indicated that about 60% of the changes in profit for the year are accounted for by the explanatory variables (non-current assets, Current assets and Intangible assets) and . The remaining 40% could be explained by other factors capable of influencing profit for the year in the Nigeria economy. The probability of the F-statistics (0.024653) is non-significant which indicates the statistical fitness of the multiple regression model. The Durbin-Watson statistics range from 0 to 4. Since Durbin-Watson statistics 1.444294 is below 2, it shows that there is positive autocorrelation in the panel data extracted from Annual report of the selected pharmaceutical firms in Nigeria.

Test of Hypotheses

Decision Rule: Reject H0 if P-value is less than the A-value of 0.05, otherwise, do not reject.

Hypotheses One: Non-current assets have no significant effect on Profit for the year of pharmaceutical firms in Nigeria.

Decision: From the panel data regression in table 4.2.3, The P-Value of 0.2554 is greater than the P-Value of 0.05; therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. This implies that non-current assets have a positive and non-significant effect on profit for the year of pharmaceutical firms in Nigeria.

Hypotheses Two: Current assets have no significant effect on Profit for the year of pharmaceutical firms in Nigeria.

Decision: From the panel data regression in table 4.2.3, The P-Value of 0.3809 is greater than the P-Value of 0.05; therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. This implies that current assets have a positive and non-significant effect on profit for the year of pharmaceutical firms in Nigeria.

Hypotheses Three: Intangible assets have a non-significant effect on Profit for the year of pharmaceutical firms in Nigeria.

Decision: From the panel data regression in table 4.2.3, The P-Value of 0.3052 is greater than the P-Value of 0.05; Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. This implies that intangible assets have a negative and non-significant effect on Profit for the year of pharmaceutical firms in Nigeria.

Discussion of findings.

Non-current assets and profit for the year.

The result of the panel regression data shows that non-current assets have a positive and non-significant effect on Profit for the year of pharmaceutical firms in Nigeria. This implies that there is a positive effect of non-current assets on profit for the year because their coefficient is positive whereas non-current assets have non-significant effect on profit for the year because increase in non-current assets will likewise decrease in profit for the year at a non-significant level and vice versa. This result is in agreement with the finding of Yusuf, M. & Ibrahim, A. (2023) whose studies shows a positive and non-significant effect of non-current assets on PFY of Pharmaceutical firms in Nigeria

Current assets and profit for the year.

Current assets have a positive and non-significant effect on Profit for the year of pharmaceutical firms in Nigeria. This implies that when current assets increase, profit for the year increases in return. It is also in agreement with the finding of Okafor and Adekunle (2023) who studied the relationship between current assets and PFY of Nigeria. The author found out that there is no association between current assets and PFY of Nigeria indicating that null hypothesis was accepted.

Intangible assets and profit for the year

Intangible assets have a negative and non-significant effect on Profit for the year of pharmaceutical firms in Nigeria. This result is in agreement with the findings of Akinwale, O. & Ojo, E. (2023 whose studies establish that intangible assets have a non-significant effect on PFY of Nigeria.

5. Summary of Findings, Conclusion and Recommendations

Summary of Findings

The findings are summarized as follows:

1. Non-current assets have positive (coefficient 0.105098) and non-significant (P-value 0.2554) effect on profit for the year of pharmaceutical firms in Nigeria.
2. Current assets have a positive (coefficient 0.056640) and non-significant (P-value 0.3809) effect to Profit for the year of pharmaceutical firms in Nigeria.
3. Intangible assets have a negative (coefficient -30.65626) and non-significant (P-value 0.3052) effect on Profit for the year of pharmaceutical firms in Nigeria.

Conclusion

So far, this research has been able to carry out an empirical analysis of the effect and contribution of corporate assets on profitability of pharmaceutical firms in Nigeria covering the period 2018-2023. In the course of the work, the parameters used to proxy corporate assets are Non-current assets, current assets and Intangible assets. Based on the findings of the study, it can be concluded that the selected corporate assets contribute non-significantly to profit for the year of pharmaceutical firms in Nigeria

Recommendations

Bases on the finding, the study following recommendations were made:

1. Pharmaceutical firms should prioritize investments in non-current assets, ensuring they are modern and efficient. This will not only enhance production capabilities but also improve long-term profitability.
2. Pharmaceutical firms should implement robust inventory management systems to minimize wastage and ensure timely availability of products. Efficient credit management practices should be enforced to optimize receivables, reducing the risk of bad debts.
3. Pharmaceutical firms should invest in research and development to create proprietary drugs and treatments, thus enhancing their intellectual property portfolio. Protecting these assets through patents and trademarks will provide a competitive edge and potentially higher profit margins.

Contributions to Knowledge

The aim of every research is its contribution to existing knowledge; hence, this study contributes to the existing knowledge by evaluating the effect of corporate assets on profitability of pharmaceutical firms in Nigeria. It contributes to existing knowledge by establishing that non-current assets, current assets and intangibles have non-significant effect on profit for the year of pharmaceutical firms in Nigeria.

References

Adebayo, K.O. & Akinola, F.T. (2019), The Role of Tangible & Intangible Assets in Enhancing Profitability in the Nigerian Banks. *Journal of Management Research*, 4(1), 12 – 19.

Adeyemi, D. & Ogundipe, T. (2023), Impact of Technological Assets on Profitability in the Nigerian Manufacturing firms. *Journal of Contemporary Research In Business*. 4 (5), 21 – 367.

Akinwale, O. & Ojo, E. (2023), The Role of Asset Management Practices on the Financial Performance of Manufacturing Firms in Nigeria. *Journal of Contemporary Research In Business*. 4 (5), 12– 15.

Author: Olabode, O.A. & Adesanya, A.A. (2018), Impact of Intellectual Property on Profitability of Banks in Nigeria *Journal of Management Research*, 5(3), 13 – 18.

Balogun, O. & Sanusi, Y. (2022), Analyzing the Influence of Asset Structure on Profitability of Nigerian Oil & Gas firms

Chukwu, I. & Eze, P (2020), Asset Management & Profitability in Nigerian Oil & Gas firms. *Journal of Economics & International Finance, 6(8),* 173 – 189.

Eneh, A. & Nwosu, J. (2022), The Effect of Corporate Governance on Asset Utilization & Profitability in the Oil & Gas firms in Nigeria. *Lorem Journal of Business & Economics (LJBE)*, 1 (1), 11-17.

Hasan, A. K., Halil, E. A., Arzu, O. C., and Salih, D. (2023).The Relationship between Working Capital Management and Profitability: Evidence from an Emerging Market, *International Research Journal of Finance and Economics*, 62(19), 61 – 67.

Ikpefan, O.A., & Owolabi, F. (2023). Working capital management and profitability of the manufacturing sector: An Empirical Investigation of Nestle Nigeria PLC and Cadbury Nigeria Plc. *Global Journal of Management and Business Research*, 14(4), 33 – 43.

Kester, G. (2021). An analysis of working capital management results across Industries. *American Journal of Business.* 20(2), 44 – 54.

Kim, C. S., Mauer, D.C. and Sherman, A. E. (2023).Determinants of corporate liquidity.An analysis of cash holdings, *Journal of Business and Management,* 7 (2) 231-251

Korankye, T., & Adarquah, R.S. (2023). Empirical analysis of working capital management and its impact on the profitability of listed food and beverages firms in Ghana. *Research Journal of Finance and Accounting,* 4(1).124-131.

Lazaridis, I and Tryridis, D(2023). The relationship between working capital management and profitability of listed company in the athens stock exchange.*Journal of school of business and economics* vol 12(4) 226-231

Makori, D.M., & Jagongo, A. (2023). Working capital management and firm profitability: Empirical evidence from manufacturing and construction firms listed on Nairobi securities exchange, Kenya. *International Journal of Accounting and Taxation*, 1(1), 44 – 81.

Marian, M. O., Ikpor, i. M(2022). Impact of fixed asset investment on banks financial performance in nigeria.*Funai Journal of Accounting, Business and Finance*, 1(8),

Martina, H (2022), The relationship between assets and the capital structure of Croatian Small and medium-sized enterprise. *Journal of school of business and management* 4(2),126 – 231

Mary, M. R., John, S. and Laurie, S. (2021), "The Relationship between inventory management and firm profitability: sector consequences of catastrophic supply chain disruptions, *California Journal of Operations Management*, 8(2), 39 – 54.

Melita, S. C., Maria, E. and Petros, L. (2021).The effect of working capital management on a firm's profitability: empirical evidence from an emerging market, *Journal of Business & Economics Research*, 8 (12), 63 – 68.

Muhammad, A., and Syed, I. H. (2023).Impact of working capital management on firms' performance: evidence from non-financial institutions of KSE-30 Index, *Interdisciplinary Journal of Contemporary Research in Business*, 3 (5), 482 – 492.

Mwangi, L.W., Makau, M.S., & Kosimbei, G. (2023) Effects of working capital management on performance of nonfinancial companies listed In NSE, Kenya.*European Journal of Business and Management*, 6(11).195-205.

Okafor, N. & Adekunle, S. (2023)**,** Corporate Asset Investment & Profitability of Nigerian Manufacturing firms *Journal of Contemporary Research In Business*. 4 (5), 29 – 33.

Okonkwo, C. & Udeh, O. (2021), Corporate Assets & Firm Performance: A Study of Selected Nigerian Oil & Gas firms**.** *African Development Review,* 21 (9), 34 – 39.

Oluwaseun, M. & Ajibola, O. (2021)**,** Evaluating the Impact of Non-Current Assets on Financial Performance of Pharmaceutical Companies in Nigeria *Journal of Economics & International Finance, 6(8),* 173 – 189.

Yusuf, M. & Ibrahim, A. **(**2023)**.** Evaluating the Relationship Between Intellectual Capital & Profitability in Nigerian Manufacturing firms**.** *Journal of Contemporary Research In Business*. 4 (5), 45 – 33.