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Cash Management Practices And Market Value Of Listed Pharmaceutical Firms In Nigeria

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ABSTRACT
The inefficient management of cash resources has been a persistent challenge confronting many listed pharmaceutical firms in Nigeria, leading to concerns about their ability to maintain optimal liquidity and maximize shareholder value. In view of this, the study examined the relationship between cash management practices and market value of listed pharmaceutical firms in Nigeria. The study adopted an *ex-post facto* research design and utilized a panel data of seventy (70) pooled observations gathered from seven (7) listed pharmaceutical firms in Nigeria over ten (10)-year period (2014-2023) and employed a panel multiple regression technique to analyze the data via E-views 10.0 statistical package. The study findings revealed that cash conversion cycle has a non-significant positive relationship (Coeff. = 0.0037 {0.8232}) with the market capitalization of listed pharmaceutical firms in Nigeria, operating cashflow has a non-significant negative relationship (Coeff. = -0.1872 {0.1816}) with the market capitalization of listed pharmaceutical firms in Nigeria, cash ratio has a significant positive relationship (Coeff. = 3.5142{0.0004}) with market capitalization of listed pharmaceutical firms in Nigeria, cash turnover ratio has a non-significant positive relationship (Coeff. = 0.0005 {0.7862}) with the market capitalization of listed pharmaceutical firms in Nigeria while current ratio has a significant positive relationship (Coeff. = 1.4602 {0.0005}) with the market capitalization of listed pharmaceutical firms in Nigeria. It was thus concluded that effective cash management, particularly maintaining robust liquidity positions as reflected by cash ratio and current ratio, plays a crucial role in enhancing the market value of listed pharmaceutical firms in Nigeria. The recommendations made included that pharmaceutical firms in Nigeria should prioritize maintaining a healthy cash ratio by optimizing cash reserves and managing short-term liabilities effectively, thereby signaling financial stability and resilience to investors.
Keywords:

1.1 INTRODUCTION

Cash management practices refer to the strategies, policies, and procedures used by a company to manage its cash flows, liquidity, and financial resources. Effective cash management practices are crucial for the profitability and sustainability of pharmaceutical and healthcare organizations. In this sector, just like in others, cash is the lifeblood that enables companies to invest in research and development, meet operational expenses, and maintain liquidity (Ugo & Egbuhuzor, 2022). Efficient cash management involves monitoring and optimizing net cash payments and receipts to minimize disbursements and expenses, ensuring timely payment of expenses, such as salaries, rent, and utility bills (Nangih et al., 2020). Sound cash control is vital for pharmaceutical companies to manage their working capital,

including inventories of raw materials and finished goods, receivables from customers, and marketable securities (Musah & Kong, 2019). Financial managers must strike a balance between liquidity and investment returns, enabling informed decisions on borrowing and investment in research and development, marketing, and expansion (Eton et al., 2025). Accurate cash forecasting is critical for pharmaceutical companies to make informed decisions on resource allocation, investments, and funding requirements (Nwaobia et al., 2016).

Effective cash acquisition and utilization enable companies to meet liquidity requirements, invest in profitable projects, and pursue growth opportunities, such as mergers and acquisitions (Nwaobia et al., 2016). Conversely, poor cash management practices lead to cash flow problems, hindering companies' ability to invest in research and development, meet financial obligations, and respond to market opportunities (Egwu et al., 2021). In the pharmaceutical sector, cash flow issues have severe consequences, including delayed product launches, reduced research and development, and decreased competitiveness (Appah et al., 2021).

Effective cash management practices tend to enhance pharmaceutical companies' market value by demonstrating financial discipline, reducing debt, and increasing profitability (Olugbenga et al., 2014). Investors seek stable financial growth, profitability, and robust returns, making cash management a critical factor in investment decisions (Olugbenga et al., 2014). By optimizing cash management practices, pharmaceutical companies tend to improve their market value, attract investors, and achieve sustainable growth and profitability. Managers of pharmaceutical firms in Nigeria grapple with various obstacles such as high financial requirements, insufficient capital, and cash flow constraints, ultimately impacting overall performance and expected returns (Appah et al., 2021). Despite these circumstances, effective cash management practices can mitigate risks and enhance the financial performance of these firms. By employing strategic cash management techniques, firms can navigate economic uncertainties, optimize their cash resources, and generate superior investment returns. However, it is crucial to adapt strategies to the specific challenges faced by each organization and the prevailing market dynamics. Prioritizing sound cash management practices empowers business entities to leverage their cash effectively, ensuring financial stability, profitability, and sustainable growth. Through efficient cash planning, diligent cash flow management, and astute investment decisions, firms in Nigeria can optimize their financial performance, overcome challenges, and attract investors seeking higher returns.

1.2 Statement of the problem

The inefficient management of cash resources has been a persistent challenge confronting many listed pharmaceutical firms in Nigeria, leading to concerns about their ability to maintain optimal liquidity and maximize shareholder value. Despite the critical role of cash management in determining a firm's market value, many pharmaceutical companies in Nigeria struggle with poor cash conversion cycles, inadequate cash flow forecasting, and suboptimal investment of surplus cash, resulting in reduced profitability, increased financial distress, and a decline in market value.

In today's corporate landscape, cash management has emerged as a pivotal element in strategic planning for organizations. The potential variables are; cash conversion circle, operating cash flow, cash ratio and market capitalization which is the dependent variable. The availability of cash holds immense significance, serving as a catalyst for operational and financial well-being (Egwu et al., 2021). Astute managers recognize that effective cash management is the lifeline of their enterprises, with a strong emphasis on achieving financial objectives. It is therefore imperative for organizations to align themselves with cash management policies that effectively handle working capital, encompassing cash sales, debtors' collection, stock holdings, and payments to suppliers, ultimately fostering enhanced financial performance (Abughniem et al., 2020).

Ugo and Egbuhuzor (2022) emphatically asserted that the growth of the health sector hinges entirely on resourceful liquidity management. The impact of cash flows on a firm's market value simply cannot be overlooked. While holding cash confers certain advantages, it also incurs a cost – the opportunity cost of potential profits that could be earned if the cash was invested elsewhere (Soet et al., 2018). Optimal investment returns necessitate a high level of competence and efficiency in managing cash and other

liquid assets. Poor cash management exposes businesses to illiquidity and insufficiency, hindering the ability to meet daily liquidity requirements (Musah & Kong, 2019). Sufficiency in cash flow ensures prompt fulfillment of financial obligations, safeguarding the survival of firms. Essentially, cash flow represents a company's vascular system, and any depletion jeopardizes its very existence.

Extant literature on cash management and performance or market value indices lacks consensus. There has been evidence that has shown significant positive, positive but insignificant as well as significant negative relationships. The first strand of literature (for instances, Obiora, et al., 2022; Egwu et al., 2021; Idamoyibo, et.al., 2021; Kantudu & Umar, 2021; Aguguon, 2020) revealed a significant positive relationship between cash management and corporate firm performance surrogates. Invariably, Liman and Mohammed (2018) alongside Soet et al. (2018) showed insignificant positive relationship between the two variables under study. The second strand of literature (for instance, Ugo & Egbuhuzor, 2022; Omiete & Wobo, 2020; Nangih et al., 2020; Yusuf et al., 2019; Appah et al., 2021) documented a significant negative relationship between the variables in Nigeria's context. Also, other empirical studies conducted outside Nigeria (for instance, Adnan & Kamran, 2019; Musah & Kong, 2019; Schulz, 2017) revealed both positive and negative relationships. In addressing these anomalies in corporate setting, this study examined the relationship between cash management practices with particular emphasis on cash ratio, cash conversion cycle and current ratio and how they affect market value of listed pharmaceutical firms in Nigeria.

1.3 Objectives of the study

The main objective of this study was to examine the relationship between cash management practices and market value of listed pharmaceutical firms in Nigeria. The specific objectives were to:

1. determine the influence of cash conversion cycle on market capitalization of listed pharmaceutical firms in Nigeria.
2. ascertain the effects of operating cashflow on market capitalization of listed pharmaceutical firms in Nigeria.
3. assess the effect of cash ratio on market capitalization of listed pharmaceutical firms in Nigeria.
4. investigate the influence of cash turnover ratio on market capitalization of listed pharmaceutical firms in Nigeria.
5. evaluate the effect of current ratio on market capitalization of listed pharmaceutical firms in Nigeria.

1.4 Research questions

This study sought to provide reliable answers to the following questions:

1. What is the effect of cash conversion cycle on market capitalization of listed pharmaceutical firms in Nigeria?
2. To what extent does operating cashflow affect market capitalization of listed pharmaceutical firms in Nigeria?
3. Of what magnitude does cash ratio affect market capitalization of listed pharmaceutical firms in Nigeria?
4. How does cash turnover ratio affect market capitalization of listed pharmaceutical firms in Nigeria?
5. How does current ratio affect market capitalization of listed pharmaceutical firms in Nigeria?

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual framework

2.1.1 Cash management practices

Cash management practices involve strategies and processes used in businesses to manage their cash inflow and outflow effectively, ensuring optimal liquidity and financial stability. Effective cash management practices is crucial for a company's financial health, as it involves monitoring, analyzing, and optimizing the net amount of cash receipts and cash expenses made by business firms (Ogbonnaya et al., 2016). Net cash flow is a vital measure of financial health, and cash management practices, such as

frequent cash flow analysis, are essential to address cash flow problems like illiquidity. Cash management performance involves planning, organizing, and controlling cash inflows and outflows in an entity during a particular period (Ejike & Agha, 2018). The amount of cash available significantly influences financial performance, and cash is the lifeblood of any corporate entity, necessary for acquiring assets to generate goods and services, determine profit, and maximize shareholder wealth as reported by (Akumu, 2017). Liman and Mohammed (2018) confirmed that corporate investment performance depends on a firm's ability to generate sufficient cash flows from various cash flow statement components.

Numerous studies have investigated cash management practices, including Ghanbari et al., (2015); Tariverdi et al., (2014); Gheshlaghi et al., (2014); Velnampy and Kajananthan (2013); Bingilar and Oyadonghan (2014); Nwanyanwu (2015); Amah et al. (2016); Nangih et al. (2020); Liman and Mohammed (2018); Abughniem et al. (2020); and Appah et al. (2021). This study explores the effect of cash management practices on market value, considering three explanatory variables as proxies for cash management practices: Cash conversion cycle, operating cashflow, and cash ratio.

2.1.2 Cash conversion cycle

The Cash Conversion Cycle (CCC) measures the duration in days between a company's payment for trade payables and collection from trade receivables, significantly impacting its market value (Richards & Laughlin, 1980). The CCC encompasses days of sales outstanding, days of inventory outstanding, and days of payables outstanding, which correlate with cash inflows and outflows (Nwaiwu & Oluka, 2017). A shorter CCC indicates better liquidity and cash flow management, leading to enhanced market value (Boubker & Hicham, 2021). Effective CCC management supports cash flow forecasting, enabling informed long-term funding and investment decisions, reducing bad debt risk, and improving liquidity, ultimately strengthening performance ratios and creditworthiness.

Trade receivables are influenced by credit collection policies and the rate of conversion into cash, with more liberal payment terms potentially increasing profitability but reducing liquid assets as opined by (Kirmomdo et al., 2016). Good CCC management is crucial for cash flow forecasting, supporting better long-term funding and investment decisions, reducing bad debt risk, and improving liquidity, leading to stronger performance ratios and increased creditworthiness. The incorporation of CCC into traditional indicators provides a more comprehensive assessment of a firm's liquidity status (Boubker & Hicham, 2021). Practical, operational, and commercial limitations exist on how low cash flow levels can drop without harming investment performance, emphasizing the significance of cash flow management in maintaining a healthy market value. As a result, the management of cash flows has a profound impact on performance indicators such as return on assets, return on capital employed, return on assets, cash value added, and market value.

2.1.3 Operating cashflow

Operating cash flow is a vital indicator of a company's liquidity and working capital management, providing insight into its ability to meet short-term obligations, such as funding research and development, purchasing raw materials, and paying suppliers (Nangih et al., 2020). This metric offers a comprehensive picture of a company's working capital adequacy and its capacity to meet day-to-day payment commitments, making it an essential tool for investors and analysts assessing market value (Oseifuah & Gyekye, 2017). In the pharmaceutical sector, operating cash flow is a critical measure of liquidity, as it considers the overall magnitude of each fund and provides a relative measure for inter-firm comparison (Nwaiwu & Oluka, 2017). A higher operating cash flow indicates a greater margin of safety for short-term creditors, enhancing market value and investor confidence. A fiscal deficit is an excess of the government’s total expenditure over its total revenue in an accounting year (Ekpo et al. 2024). Market risks encompass the challenges related to the external environment in which a start-up operates (Edet et al. 2024). Preference is given to exotic goods and products than those from the Nigerian soil as stated by (Umoh, 2018).

This metric is particularly important in the pharmaceutical industry, where companies face intense competition, high research and development costs, and stringent regulatory requirements. Operating cash flow represents the cash generated by a company's core business operations, such as sales, production,

and distribution, minus the cash used to support these operations, such as cost of goods sold, salaries, and other operating expenses (Nangih et al., 2020). A higher operating cash flow indicates a stronger liquidity position, enabling pharmaceutical companies to invest in growth opportunities, respond to market changes, and maintain their competitive edge, ultimately positively impacting market value. Operating cash flow is widely recognized as a key metric for assessing a company's liquidity and working capital management (Nwaiwu & Oluka, 2017). Describing a people based on their language is a common knowledge, (Umoh, 2025). In the pharmaceutical sector, effective management of operating cash flow is crucial for companies to navigate industry challenges and maintain a healthy market value. Creativity denotes bringing new ideas to reality through imagination. It suggests innovativeness through thought (Umoh & Ekpo, 2025). A positive operating cash flow is essential for pharmaceutical companies to invest in research and development, expand their product portfolios, and respond to changing market conditions, ultimately driving growth and profitability.

2.1.4 Cash ratio

In the pharmaceutical industry, the cash ratio is a vital indicator of a company's liquidity and financial health, representing the most liquid assets in its financial statements (Akenga, 2017). This ratio assesses a company's ability to pay its short-term obligations, such as funding research and development, purchasing raw materials, and paying suppliers, within a one-year period. A cash ratio lower than 1 may indicate financial difficulty, but it can also reflect a company's strategic decision to maintain low cash reserves (Akenga, 2017). The cash ratio compares a pharmaceutical company's most liquid assets, including cash, cash equivalents, and marketable securities, to its current liabilities, such as accounts payable, short-term debt, and accrued expenses (Boubker & Hicham, 2021).

A higher cash ratio indicates a stronger liquidity position, enabling pharmaceutical companies to invest in research and development to stay ahead of the competition, respond quickly to changes in the market or industry, maintain a competitive edge through strategic acquisitions or partnerships, and weather financial storms, such as economic downturns or unexpected expenses. Conversely, a lower cash ratio may indicate financial difficulty, making it challenging for pharmaceutical companies to meet their short-term obligations, such as paying suppliers or employees, invest in growth opportunities, such as new product development or marketing initiatives, and respond to changes in the market or industry, making them less competitive. Therefore, the cash ratio is a crucial metric for investors and analysts to assess a pharmaceutical company's financial health and liquidity position. By analyzing the cash ratio, investors and analysts can gain insight into a pharmaceutical company's liquidity position, financial health, and ability to create value for shareholders. Make-up designs enhance cultural esthetics, artistic style and tradition as cited by Umoh, (2018). A higher cash ratio can indicate a company's ability to invest in growth opportunities, respond to changes in the market, and maintain a competitive edge, ultimately positively impacting market value. Conversely, a lower cash ratio can indicate financial difficulty, making it challenging for companies to create value for shareholders, ultimately negatively impacting market value as postulated by s(Schull, 2017).

2.1.5 Cash turnover ratio

The cash turnover ratio shows how many times a company or organization “uses up” or “turns over” its cash in a given period, usually a year. It is calculated by dividing net revenue by average cash and cash equivalents (beginning cash plus ending cash divided by two) so numbers from the income statement link with the balance sheet (Nangih et al., 2020). If a company has revenue of $100,000 and average cash of $20,000, its cash turnover ratio is 5.0, meaning its cash was fully replenished five times during that period. A high cash turnover ratio means the entity is efficient in using its cash to support operations and revenue generation, not leaving cash idle (Boubker & Hicham, 2021; Nangih et al., 2020). However, if that ratio becomes extremely high, it might signal that little cash cushion is held, exposing the entity to risk if unexpected costs arise (Oseifuah & Gyekye, 2017). The introduction of new products or techniques or of a new that consumers are not yet familiar with as cited by (Umoh, 2024). The ratio is most meaningful when compared across firms in the same industry or across periods within the same firm, because what is “good” cash turnover in one industry might be weak in another (Nangih et al., 2020).

In practice, cash turnover ratio gives insight into how well management manages liquidity and operational efficiency. If the ratio improves over time, it suggests that less cash is idle, more is used to drive production, sales, or services. For public or private entities under resource constraints, improving cash turnover may help free up cash for expansion, debt repayment, or investment. Empirical studies of cash management in Nigeria have focused more often on the cash conversion cycle or working capital measures, but findings suggest that efficiency of cash use matters to performance (Ghanbari et al., 2015; Sulfiana et al., 2025). For example, in a study of Nigeria's food and beverage firms, efficient cash management was linked to better financial performance, which is consistent with the idea that better cash turnover should support value creation (Nangih et al., 2020). Because cash is the most liquid resource, being able to turnover cash steadily without large idle balances shows flexibility. Yet reliance solely on high cash turnover is risky if revenues fall or unexpected spending occurs. That is why good managers balance turnover and safety.

2.1.6 Current ratio

The current ratio shows how well a business can meet its short-term debts using assets that are expected to be turned into cash within one year. It is calculated by dividing current assets (like cash, accounts receivable, inventory) by current liabilities (debts, payables due soon). (Boubker & Hicham, 2021) document that, a current ratio above 1.0 means the business holds more short-term assets than short-term debts; a ratio below 1.0 suggests possible liquidity trouble. Investors, creditors, managers use this metric to judge whether a firm is safe in the near term. But a very high ratio might also hint that too much money is tied up in slow assets (like inventory) and not used productively. Sulfiana et al. (2025) posit that the current ratio is one of the most used liquidity ratios in financial analysis, especially when comparing companies in the same sector. Because industries differ in how fast assets convert to cash (for example retail vs services), benchmarks or typical values of current ratio vary across sectors. Thus the current ratio offers insight but must be interpreted cautiously in context (Ogbeide and Akanji, 2025).

In studies of Nigerian firms, the current ratio is often linked to profitability or performance but results vary. One recent study of Nigeria's manufacturing firms showed that current ratio had a negative but not statistically significant effect on profit after tax (Eton et al., 2025). The attempt to capture nature in its most proximal form may appear illusive especially when art and life differ in substance and form based approach as stated by Umoh & Atakpo, (2025). Another investigation of consumer goods firms in Nigeria tested how current ratio affects returns on assets and equity; that work underscored the need for balance, too low a ratio risks insolvency; too high might hurt profit because of idle resources (Gachenga, 2025). Additional research in working capital management argues that liquidity measures, including current ratio, must be used with caution: firms must optimize between liquidity and efficiency to maximize performance (Fernando, 2025). Civilization has sponsored a great shift in interest and patronage of African Ritual Drama, (Umoh, 2024). Because of those mixed findings, many scholars advise combining current ratio analysis with other ratios, like quick ratio, cash conversion cycle, turnover metrics, to get fuller picture (Nangih et al., 2020). Overall, current ratio offers a first look at liquidity health but should be complemented by deeper analysis before making investment or lending decisions (Ghanbari et al., 2015; Sulfiana et al., 2025).

2.1.5 Market value

The concept of market value has been considered from various perspectives, including earnings quality, financial performance, stock growth, and investment returns (Liman & Mohammed, 2018). Shareholders' wealth maximization model, which is the primary corporate objective, can be expressed as a motivator for the financial objective of public corporations, such as maximizing market value and profitability simultaneously. Market capitalization is the best matric that can be used in measuring market value. Effective cash management practices play a crucial role in achieving this objective, as they enable companies to optimize their liquidity, reduce costs, and increase profitability, ultimately leading to an increase in market value. The commonly used financial objectives are to maximize shareholders' wealth, profitability, and growth in market value as seen in Emenyi[1], 2024 and Emenyi[2],2024. Creativity denotes

bringing new ideas to reality through imagination. It suggests innovativeness through thought as cited by (Umoh & Ekpo, 2025).

From the perspective of growth in market value, an increase in market value would mean more wealth for shareholders, either through dividend payouts or retained profits reinvested to further increase market value in the future (Soet et al., 2018). In a play, there are numerous expressions donating numerous concepts or even many statement implying a single concept as cited by Emenyi[1], (2024) Cash management practices, such as efficient cash flow management, working capital optimization, and short-term investment strategies, are essential in achieving growth in market value. Effective cash management practices, such as minimizing cash conversion cycles and optimizing cash reserves, can contribute to a higher ROA, ultimately leading to an increase in market value. In addition, cash management practices can also impact market value by reducing the risk of liquidity crises, minimizing the cost of capital, and increasing the company's creditworthiness (Samuel et. al., 2024).

2.1.6 Market capitalization (Mcap)

A company's market capitalization, or market cap, reflects its perceived size and value, based on the total value of its outstanding shares (Kimmel et al., 2017). Effective cash management is crucial in driving market capitalization, as it enables companies to boost liquidity, reduce costs, and increase profitability, ultimately enhancing market value (Liman & Mohammed, 2018). Efficient cash flow management and smart short-term investments can minimize liquidity risks and lower capital costs, contributing to increased market capitalization (Soet et al., 2018). Companies with robust cash management practices are more resilient to financial shocks, can maintain investor trust, and attract new investors, all of which can drive up market capitalization. Entrepreneurship is believed to be the corner stone for poverty alleviation and key factor to national development as cited by Emenyi and Okpokpo, (20230.

Nangih et al., (2020) opined that market capitalization companies are often seen as more stable and less risky, making it easier to secure investors and access capital markets. Conversely, companies with low market capitalization may face challenges in accessing capital markets and managing cash flows, underscoring the importance of effective cash management in maintaining a healthy market capitalization. By grasping the interplay between market capitalization and cash management, companies can refine their financial strategies to achieve their objectives and maximize shareholder value (Udomah & Emenyi, (2023).

2.1.7 Cash management practices and market capitalization (Mcap)

The relationship between cash management practices and market capitalization (Mcap) of listed pharmaceutical firms in Nigeria is multifaceted and critical for financial health and sustainability. Effective cash management practices enable firms to optimize their liquidity, ensuring they can meet short-term obligations while also investing in growth opportunities. This, in turn, can positively impact market capitalization, as investors value companies that demonstrate strong financial management and stability as reported by Obiora et al., (2022). Cash management practices such as maintaining optimal cash reserves, efficiently managing accounts receivable and payable, and minimizing cash conversion cycles can enhance a firm's ability to generate cash flows and reduce financial distress risks. For listed pharmaceutical firms in Nigeria, where the business environment can be volatile and subject to various regulatory and economic challenges, robust cash management practices are particularly crucial (Aguguon, 2020). By maintaining a healthy cash position and demonstrating prudent financial management, these firms can signal to investors their ability to navigate challenges and capitalize on opportunities, potentially leading to an increase in market capitalization (Uwonda & Okello, 2013).

Furthermore, research has shown that firms with effective cash management practices tend to have better financial performance and higher market valuations, as investors are more likely to invest in companies that exhibit strong financial discipline and management acumen (Soet et al., 2018). Therefore, the adoption of sound cash management practices is not only essential for the operational stability and growth of pharmaceutical firms but also plays a significant role in enhancing their market value and attractiveness to investors.

2.1.8 Cash conversion cycle and market capitalization (Mcap)

The relationship between cash conversion cycle (CCC) and market capitalization (Mcap) of listed pharmaceutical firms in Nigeria is crucial in understanding the financial performance and investor attractiveness of these companies. The CCC, which represents the time it takes for a company to convert its investments in inventory and other resources into cash inflows from sales, plays a significant role in determining the liquidity and efficiency of operations. In the context of pharmaceutical firms, effective cash management practices are essential for sustaining operations, managing working capital efficiently, and supporting growth initiatives (Kimmei et al., 2017). A shorter CCC indicates that the company is able to quickly convert its products into cash, thereby freeing up resources for further investments or debt repayment, which can positively impact market value and investor perception (Appah et al., 2021).

Conversely, a longer CCC may signal inefficiencies in inventory management, production processes, or collection policies, potentially leading to cash flow constraints and reduced market capitalization (Ugo & Egbuhuzor, 2022). Investors often consider the CCC as a key metric to assess the operational efficiency and financial health of pharmaceutical firms, as a well-managed CCC can enhance profitability, reduce financial risks, and contribute to a higher Mcap by signaling robust cash flow generation and sustainable business performance (Aguguon, 2020). Therefore, maintaining an optimal cash conversion cycle is vital for listed pharmaceutical companies in Nigeria to support their market valuation, attract investors, and drive long-term growth in the competitive pharmaceutical industry landscape.

2.1.9 Operating cashflow and market capitalization (Mcap)

The relationship between operating cash flow and market capitalization (Mcap) of listed pharmaceutical firms in Nigeria is significant, as operating cash flow is a key indicator of a company's financial health and ability to generate cash from its core operations. A strong operating cash flow position enables firms to invest in growth opportunities, meet debt obligations, and return value to shareholders, all of which can positively impact market capitalization as postulated by Yusuf et al., (2019). Investors and analysts often view operating cash flow as a more reliable metric than net income, as it is less susceptible to accounting manipulations and provides a clearer picture of a company's ability to generate cash. For listed pharmaceutical firms in Nigeria, a stable and growing operating cash flow can signal to investors that the company is well-managed and has a strong potential for future growth, leading to an increase in market capitalization (Guda, 2013).

Adnan and Kamran, (2019) reported that firms with weak or declining operating cash flows may be viewed as riskier investments, potentially leading to a decrease in market capitalization. Research has shown that operating cash flow is a significant predictor of market value, and firms that consistently generate strong operating cash flows tend to have higher market capitalizations. Therefore, the ability of listed pharmaceutical firms in Nigeria to generate robust operating cash flows is crucial not only for their operational sustainability but also for enhancing their market value and attractiveness to investors asstated by (Kirmomdo et al., 2016).

2.1.10 Cash ratio and market capitalization (Mcap)

The relationship between the cash ratio and market capitalization (Mcap) of listed pharmaceutical firms in Nigeria is a critical aspect of evaluating the financial health and investor attractiveness of these companies. The cash ratio, which is a liquidity metric that compares a company's cash and cash equivalents to its current liabilities, provides insights into the organization's ability to meet its short-term obligations without relying on external financing (Fodio et al., 2013). In the context of pharmaceutical firms, maintaining an optimal cash ratio is essential for ensuring operational stability, managing financial risks, and supporting growth prospects (Akenga, 2017). A higher cash ratio suggests that the company has sufficient liquid assets to cover its immediate liabilities, indicating strong liquidity position and financial resilience, which can enhance investor confidence and positively influence market capitalization (Nwanyanwu et al., 2015). A person or a legal organization may own a product or may use a service (Akpaetor & Akpan, 2022).

Investors often view a high cash ratio favorably as it signals a company's ability to weather economic uncertainties, pursue strategic opportunities, and withstand market downturns, which could lead to higher

Mcap due to perceived lower financial risk and increased investment appeal. On the contrary, a lower cash ratio may raise concerns about the company's short-term liquidity position, potentially impacting market valuation and investor sentiment (Ejike & Agha, 2018). Therefore, the cash ratio is a key financial indicator that investors consider when assessing the financial soundness and market value of listed pharmaceutical firms in Nigeria, highlighting the importance of effective cash management practices in driving sustainable growth and maximizing shareholder value in the dynamic pharmaceutical industry landscape (Amahetal, 2016).

2.1.11 Cash turnover ratio and market capitalization

Cash turnover ratio measures how many times a firm's cash balance is utilized or "turned over" during a time period in generating revenue. It is calculated by dividing revenue by average cash and cash equivalents (or some variation of that). A higher cash turnover ratio implies that the firm uses its cash more actively to support sales or operations rather than letting it sit idle (Boubker & Hicham, 2021). In theory, a firm that manages cash more efficiently signals to investors that it is resourceful, disciplined, and able to generate higher output from given cash resources. Such signals may lead the market to assign a higher valuation to the firm, thereby pushing up its market capitalization. Market capitalization is the total value of outstanding shares in the market (Nangih et al., 2020). Thus, when cash turnover ratio rises (firm uses cash more effectively), investors may believe the firm's future growth prospects, profitability or liquidity strength are better; such beliefs encourage higher demand for its shares and thus higher share price (Ogbeide and Akanji, 2025). Over time that effect lifts market capitalization.

However, this relationship is not always straightforward. If a firm's cash turnover ratio becomes extremely high, it might imply risk, too little cash buffer for abrupt expenses, liquidity stress, or increased reliance on short-term borrowing (Eton et al., 2025). Investors might discount such risk and prevent higher valuation. Because market capitalization depends on investor perception, expectations, risk premium, not just internal efficiency metrics, a firm with moderate, stable cash turnover might be valued more than one with erratic high turnover (Gachenga, 2025). Unemployment of graduates from Nigerian tertiary organization has grow to be a prime countrywide problem (Mbang et al. 2023). In a play, there are numerous expressions donating numerous concepts or even many statement implying a single concept (Umoh, 2021). Empirical studies about firm efficiency and value use related measures like asset turnover, current asset management, liquidity ratios, showing that good asset management correlates with higher firm valuation or Tobin's Q (Fernando, 2025). Some research on turnover (in stock markets) treats turnover as a liquidity measure, the higher turnover of shares, the more trading relative to market cap, suggesting markets reward liquidity (World Bank, "Stocks traded, turnover ratio" indicator) (World Bank, 2025). Also, CFO turnover and liquidity management research find that firms reduce cash holdings after new CFO and liquidity shifts relate to market valuation dynamics (Ghanbari et al., 2015; Sulfiana et al., 2025). When investors view liquidity and efficiency as positive signs, the firm's cash turnover behavior contributes to market value. Employee's personality refers to a combination of behavioral, physical and mental characteristics that are unique for the individuals as cited by (Etim, Brownson & Akpaetor, 2023). Thus overall, a positive, though moderated, relationship likely exists: better cash turnover supports higher market capitalization if firms maintain balance between efficiency and safety.

2.1.12 Current ratio and market capitalization

The current ratio equals a firm's current assets divided by its current liabilities. It shows whether short-term assets (cash, receivables, inventory) are enough to pay short-term debts. A higher current ratio suggests better liquidity position (Nangih et al., 2020). Market capitalization means the total value of a company's shares in the market: share price times number of shares. When investors evaluate a firm, they often look at liquidity, because a firm that struggles to pay short-term obligations may face distress (Sulfiana et al., 2025). Thus firms with healthy current ratio may attract more investors, pushing up share price and hence market capitalization. Some recent empirical work in Nigeria's manufacturing sector looked at working capital measures, including current ratio, and their effect on firm value (proxied by market capitalization). That study found that current ratio had no significant effect on market capitalization for consumer goods manufacturing firms in Nigeria between 2010 and 2023 (negative

coefficient = -6.96, $p > 0.05$) (IIARD, 2025). This suggests that in that sector liquidity, as measured by current ratio, did not influence how the market values those firms strongly (Fernando, 2025). Another recent study in Nigeria's service firms found that current ratio significantly affects firm value (as measured in their sample) (Gachenga, 2025). These mixed findings imply that the strength of the link between current ratio and market capitalization might depend on industry, market conditions, size, investor perception, or firm strategy (Eton et al., 2025).

2.2 Theoretical framework

The study anchored on Trade-off theory with justifiable reasons.

2.2.1 The Trade-off theory by Kraus and Litzenberger, (1973)

Effective cash management practices are crucial for maintaining a healthy market value, as they enable firms to optimize their liquidity, reduce costs, and increase profitability (Kraus & Litzenberger, 1973). The trade-off theory postulates that the optimal cash level of a firm is maintained at the breakeven point where the marginal cost and benefit of holding cash are equal, thereby maximizing shareholders' wealth (Orshi, 2016). This delicate balance is essential, as sufficient cash outflow outweighing inflow can signify weak liquidity control, debt, bad inventory, feeble investment skills, and financial managers' incompetence to critically engage in optimal financing decisions. A firm's cash or liquidity position and performance status are two economic expressions with unidirectional movement, implying that cash flow and investment performance have diametrically opposing ends (Al-Abass, 2017). A metaphor is a name directly given to something in an indirect reference (Umoh, 2025).

The pursuit of one would entail a trade-off of the other, highlighting the importance of maintaining an ideal level of liquidity to create cost and benefits of handling cash symmetry. The liquidity trade-off hypothesis suggests that a firm must aim for an optimal level of liquidity to minimize the opportunity cost characterized by low liquidity return, which can be accredited to liquidity premium and possible tax obligations (Abughniem et al., 2020). Effective cash management practices, such as maintaining a cash buffer against unexpected losses, minimizing the costs of obtaining external capital, and lessening the risk tie nexus with selling the firm's assets, are essential for maintaining a balanced liquid-performance nexus. However, cash handling also has its drawbacks, such as increasing agency costs, particularly for firms with higher leverage (Boubker & Hicham, 2021). To maintain a balanced liquid-performance nexus, an appropriate level of liquid resources is required. Firms must carefully manage their cash flows, short-term assets, and equivalent payables to ensure sustained corporate existence and reputation.

METHODOLOGY

3.1 Research design

This study adopted an ex-post facto research design. This design was suitable because the data for the analysis had already existed, leaving no room for the researcher to manipulate the variables (dependent and independent) under study.

In this study, the population comprised of seven (7) pharmaceutical firms listed on the floor of the Nigerian Exchange Group from 2014 to 2023. These firms were as follows: Ekocorp PLC, Fidson Healthcare PLC, Glaxo Smithline PLC, May and Baker Nigeria PLC, Morison industries PLC, Neimeth international pharmaceuticals PLC and Pharma-Deko PLC.

The sample of the study and the population were the same. Thus, the sample size of this study also stood at seven (7). This is because the study population was sizeable enough to handle. A purposive sampling technique was employed to select the required sample for this study. However, due to the relatively small number of listed pharmaceutical firms, the study adopted a census approach, where all listed pharmaceutical firms on the stock exchange were included in the sample. This approach helped to minimize sampling bias and ensure that the results were generalizable to the entire population of listed pharmaceutical firms in Nigeria as a whole. The study adopted content analysis to extract data from financial reports, which was then collated using Microsoft Excel software, and utilized panel data methodology to analyze the relationship between cash management practices and market value. A total of seventy (70) pooled observations were obtained, comprising 7 cross-sectional observations for each year

and 10 time-series observations for each firm, offering advantages such as more informative data, increased degrees of freedom, enhanced efficiency, and the ability to handle diverse data and examine fixed and random effects on the longitudinal data set

The study utilized standardized simple linear regression (Ordinary Least Square-OLS) in Eviews 10.0 to analyze the data. The data met the assumptions of linear regression, including linearity, homoscedasticity, normality, and independence. The Durbin-Watson statistic fell within the acceptable range of 2-3, indicating no serial correlation (Gujarati et al., 2012; Kothari & Gaurav, 2014; Tabachnick & Fidell, 2007). The significance level was set at 5% ($\alpha = 0.05$). The null hypothesis (H_0) was accepted if the p-value is greater than or equal to 0.05, and rejected in favor of the alternative hypothesis (H_1) if the p-value was less than 0.05.

The model for this study was adapted from the study of Idamoyibo, et al. (2021) and modified to suit the scope of this study. It is as presented below;

Mcap = f(cash conversion cycle, operating cashflow, cash ratio, cash turnover ratio, current ratio)

Therefore; $$Mcap_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 OPC_{it} + \beta_3 CAR_{it} + \beta_4 CTR_{it} + \beta_5 CUR_{it} + \mu_{it}$$

Where;

Mcap = Market capitalization of listed pharmaceutical firms in Nigeria
CCC = Cash conversion cycle of listed pharmaceutical firms in Nigeria
OPC = Operating cashflow of listed pharmaceutical firms in Nigeria
CAR = Cash ratio of listed pharmaceutical firms in Nigeria
CTR = Cash turnover ratio of listed pharmaceutical firms in Nigeria
CUR = Current ratio of listed pharmaceutical firms in Nigeria
β_0 = Intercept or regression constant
$\beta_1, \beta_2, \beta_3$ = Regression coefficients
μ = stochastic error term

Measurement/operationalization of variables

Table 3.1 captures the measurement of the variables defined in the model above.

Table 3.1: Measurement of variables

Variables/proxy	Measurement	Source(s)
Market capitalization (Dependent variable)	Current market price per share multiplied by the total number of outstanding shares	Kantudu and Umar (2021), Akenga, (2017).
Cash conversion cycle (Independent variable)	It is measured by subtracting the average trade payables payment period from the addition of average days of inventory and average trade receivables collection period.	Omiete and Wobo, (2020), Aguguon, (2020).
Operating cashflow (Independent variable)	Natural logarithm of net cashflows generated from operating activities.	Omiete and Wobo, (2020)
Cash ratio (Independent variable)	It is measured by dividing total cash and cash equivalents by total current liabilities.	Idamoyibo, et al., (2021).
Cash turnover ratio (Independent variable)	It is measured by dividing revenue by average cash and cash equivalents	Omiete and Wobo, (2020), Akenga, (2017).
Current Ratio (Independent variable)	It is measured by dividing current assets by current liabilities	Aguguon, (2020).

Source: Researcher's compilation, (2025).

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Data presentation

The data for this study is presented in Table 4.1 (appendix 1). The data comprise a panel data of seventy (70) pooled observations across seven (7) listed pharmaceutical firms in Nigeria for ten (10)-year period (2014-2023). The data include the dependent variable–market capitalization of listed pharmaceutical firms in Nigeria and the independent variables which were cash conversion cycle, operating cashflow, cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria

4.2 Data analysis

Various statistical techniques were utilized in the analysis of data. These include descriptive statistics, regression assumption tests and simple linear regression analysis. The results from the Ordinary least squares regression analysis were used in the testing of the research hypotheses as stated in the first section of this work.

4.2.1 Descriptive statistics

This was conducted to understand the behaviour of the data using various statistics including mean, standard deviation, skewness, and kurtosis. The result for the descriptive statistics analysis is as presented in Table 4.2;

Table 4.2 Descriptive statistics results

	MCAP	CCC	OPC	CAR	CTR	CUR
Mean	23.99638	28.76783	12.02145	0.227673	90.52167	1.214756
Median	23.98120	27.25500	11.98610	0.083600	31.51358	1.146155
Maximum	27.31470	86.42000	16.90770	1.427600	756.3973	2.604314
Minimum	20.31300	11.49000	6.987500	0.004500	0.284885	0.147613
Std. Dev.	2.072042	13.39434	2.569483	0.341804	142.4414	0.707343
Skewness	-0.339021	1.621644	0.128944	2.096116	2.503303	0.256448
Kurtosis	1.952790	7.056701	2.062377	6.505214	9.747756	1.994397
Jarque-Bera	4.539468	78.67926	2.758127	87.09557	205.9117	3.716706
Probability	0.103340	0.000000	0.251814	0.000000	0.000000	0.155929
Sum	1679.747	2013.748	841.5014	15.93710	6336.517	85.03290
Sum Sq. Dev.	296.2418	12379.18	455.5546	8.061252	1399979.	34.52304
Observations	70	70	70	70	70	70

Source: Researcher's computation (2025).

Table 4.2 shows that Market capitalization, Cash conversion cycle, operating cashflow, cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria have mean scores of approximately 23.99, 28 days, 12.02, 0.22, 90.52 and 1.214 respectively. This indicates the central or average values for these variables from 2014 to 2023.

The median values obtained for Market capitalization, Cash conversion cycle, operating cashflow, Cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria were approximately 23.98, 27days, 11.98, 0.08, 31.51 and 1.146 respectively. These constitute the middle values for the distributions of these variables under the period covered in this study (2014-2023).

In terms of the level of variability and dispersion in the distribution of these variables, the standard deviations obtained for the variables- Market capitalization, Cash conversion cycle, operating cashflow, Cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria were 2.072, 13.39, 2.56, 0.34, 142.44 and 0.707 respectively. This indicates varying levels of variability in the distribution with cash conversion cycle indicating high variations in the distributions. Similarly, the skewness values obtained for these variables were -0.339, 1.62, 0.12, 2.09, 2.50 and 0.256. This quantifies the asymmetry of the distributions.

In addition, the Kurtosis values obtained for Market capitalization, Cash conversion cycle, operating cashflow, Cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria were given as approximately 2, 7, 2, 6, 2 and 9 and 2 respectively. Since the values of the kurtosis are greater than zero (0), it indicates a leptokurtic distribution, hence the presence of outliers in the data.

4.2.2 Model evaluation

The suitability of the data was assessed through coefficient and residuals diagnostics. These include normality test, multicollinearity test and heteroscedasticity test.

4.2.2.1 Normality test

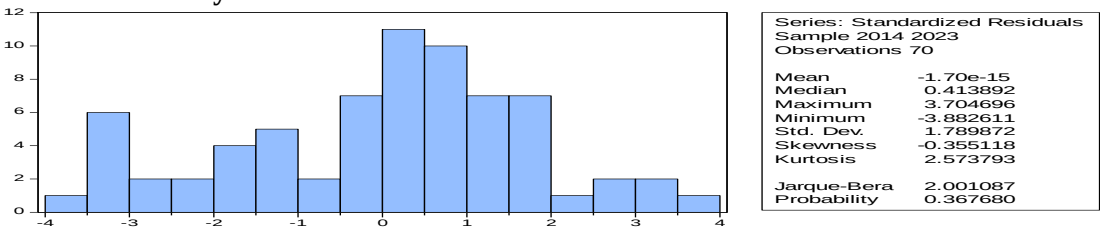

Figure 4.1 Jarque-Bera Normality test results

Source: E-views 10.0 Output in appendix II

A significant Jarque-Bera test result implies that the data do not follow a normal distribution. On the other hand, a non-significant result indicates that there is insufficient evidence to reject the assumption of normality. If the p-value associated with the Jarque-Bera test is below a predetermined significance level ($p<0.05$), then we reject the null hypothesis and conclude that the data do not follow a normal distribution. With a p-value of 0.367680, there is sufficient evidence to conclude that the data were normally distributed.

4.2.2.2 Multicollinearity test

In examining the association among the variables, the study employed the Spearman Rank Correlation Coefficient (correlation matrix), and the results are presented in the table below**.**

Table 4.3 Spearman's rank correlation matrix

	MCAP	CCC	OPC	CAR	CTR	CUR
MCAP	1.000000					
CCC	0.020716	1.000000				
OPC	-0.022063	0.135109	1.000000			
CAR	0.014907	0.110089	0.117045	1.000000		
CTR	-0.042114	-0.195155	-0.276676	-0.214197	1.000000	
CUR	-0.257003	0.019998	0.489235	0.670452	-0.588522	1.000000

Source: E-views 10.0 Output, (2025).

The correlation analysis showed that all independent variables- Cash conversion cycle, operating cashflow, Cash ratio, cash turnover ratio and current ratio of listed pharmaceutical firms in Nigeria over the period under study have coefficients lesser than 0.80 respectively confirming absence of multicollinearity issues.

4.2.2.3 Heteroscedasticity test

Table 4.4 Cross-section dependence/ Heteroscedasticity test

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	22.30224	21	0.3823
Pesaran scaled LM	-0.879183		0.3793
Pesaran CD	1.580222		0.1141

Source: E-views 10.0 Output (2025).

The statistics and probability value associated with the Breusch-Pagan LM test otherwise known as the Breusch-Pagan Godfrey test help determine whether there is evidence of heteroscedasticity in the regression model. A low p-value ($p<0.05$) suggests evidence against the null hypothesis in favour of the alternate hypothesis which indicates the presence of heteroscedasticity in the regression model. With a p-value of 0.3823, there is sufficient evidence accept the null hypothesis, thus, conclude that the predictor variables were homoscedastic.

4.2.2.4 Autocorrelation

Autocorrelation tests examine whether the residuals are independently distributed or if there is a systematic pattern of dependence. The Durbin-Watson statistic is commonly used to test for autocorrelation, with values close to 2 indicating no significant autocorrelation. The Durbin-Watson statistic value of 1.657868 suggests a mild positive autocorrelation present in the residuals of the regression model.

4.3 Test of hypotheses

Each of the hypotheses in this study were tested based on the result obtained from the panel multiple regression analysis. The result that relates to these hypotheses is summarized in Table 4.5;

Table 4.5 Panel multiple regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.17028	1.823326	14.90150	0.0000
CCC	0.003791	0.016895	0.224411	0.8232
OPC	-0.187824	0.139080	-1.350474	0.1816
CAR	3.514284	0.944331	3.721455	0.0004
CTR	-0.000567	0.002083	-0.272349	0.7862
CUR	-1.460225	0.395069	-3.696128	0.0005

R-squared	0.253815	Mean dependent var	23.99638
Adjusted R-squared	0.195519	S.D. dependent var	2.072042
S.E. of regression	1.858474	Akaike info criterion	4.159205
Sum squared resid	221.0512	Schwarz criterion	4.351933
Log likelihood	-139.5722	Hannan-Quinn criter.	4.235759
F-statistic	4.353926	Durbin-Watson stat	1.654642
Prob(F-statistic)	0.001793		

Source: Researcher's computation using E-views 10.0 (2025).

The multiple regression line is written as:

*MCAP = 27.1702849844 + 0.00379143653339*CCC - 0.187823968245*OPC + 3.51428384213*CAR + 0.000567274290529*CTR + 1.46022493854*CUR + μ*

The regression line reveals that cash conversion cycle (CCC) has a slight positive effect (0.0038 unit increase in MCAP per unit increase in CCC), Operating Cashflow (OPC) shows a negative relationship (-0.1878 unit decrease in MCAP per unit increase in OPC), suggesting high OPC may indicate inefficient resource use, Cash Ratio (CAR) has a strong positive effect (3.5143 unit increase in MCAP per unit increase in CAR), indicating liquidity boosts market value, Cash Turnover Ratio (CTR) has a minimal positive effect (0.0006 unit increase in MCAP per unit increase in CTR), and Current Ratio (CUR) shows a positive relationship (1.4602 unit increase in MCAP per unit increase in CUR), suggesting better short-term liquidity enhances market value, with the error term (μ) capturing omitted factors.

4.3.1 Hypotheses one

H_0: There is no significant relationship between cash conversion cycle and market capitalization of listed pharmaceutical firms in Nigeria.

H_1: There is significant relationship between cash conversion cycle and market capitalization of listed pharmaceutical firms in Nigeria.

In order to test whether the variations in market capitalization of listed pharmaceutical firms in Nigeria caused by cash conversion cycle is significant. The T-test was carried out at .05 significance level with Ttab of 1.995 given at $T_{0.05,7}$. From the result above, the Tcal of 0.22441 is less than Ttab given at $T_{0.05,7}$. Hence, the null hypothesis which states that there is no significant relationship between cash conversion cycle and market capitalization of listed pharmaceutical firms in Nigeria holds, thus accepted, and the

alternative hypothesis rejected. The null hypothesis is further accepted given that at $T_{0.05,7}$, its probability value (p-value = 0.8232) is greater than 0.05.

4.3.2 Hypothesis two

H_0: Operating cashflow does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria

H_1: Operating cashflow significantly relates with market capitalization of listed pharmaceutical firms in Nigeria

By way of testing whether the variations in market capitalization of listed pharmaceutical firms in Nigeria caused by operating cashflow is significant, the T-test was carried out at .05 significance level with Ttab of 1.995 given at $T_{0.05,7}$. However, the Tcal of 1.3504 is less than Ttab given at $T_{0.05,7}$. Hence, the null hypothesis which states that Operating cashflow does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria holds, thus accepted, and the alternative hypothesis rejected. The null hypothesis is further accepted given that at $T_{0.05,7}$, its probability value (p-value = 0.1816) is greater than 0.05.

4.3.3 Hypothesis three

H_0: Cash ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria

H_1: Cash ratio significantly relates with market capitalization of listed pharmaceutical firms in Nigeria

Regarding cash ratio, the T-test was also carried out at .05 significance level with Ttab of 1.995 given at $T_{0.05,7}$. Invariably, the Tcal of 3.7214 is greater than Ttab given at $T_{0.05,7}$. Hence, the null hypothesis which states that cash ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria fails to hold, thus rejected, and the alternative hypothesis accepted. The null hypothesis is further rejected given that at $T_{0.05,7}$, its probability value (p-value = 0.0004) is less than 0.05.

4.3.4 Hypothesis four

H_0: Cash turnover ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria

H_1: Cash turnover ratio significantly relates with market capitalization of listed pharmaceutical firms in Nigeria

For cash turnover ratio, the T-test was carried out at .05 significance level with Ttab of 1.995 given at $T_{0.05,7}$. However, the Tcal of 0.2723 is less than Ttab given at $T_{0.05,7}$. Hence, the null hypothesis which states that cash turnover ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria holds, thus accepted, and the alternative hypothesis rejected. The null hypothesis is further accepted given that at $T_{0.05,7}$, its probability value (p-value = 0.7862) is greater than 0.05.

4.3.5 Hypothesis five

H_0: Current ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria

H_1: Current ratio significantly relates with market capitalization of listed pharmaceutical firms in Nigeria

For current ratio, the T-test was also carried out at .05 significance level with Ttab of 1.995 given at $T_{0.05,7}$. Invariably, the Tcal of 3.6961 is greater than Ttab given at $T_{0.05,7}$. Hence, the null hypothesis which states that current ratio does not significantly relate with market capitalization of listed pharmaceutical firms in Nigeria fails to hold, thus rejected, and the alternative hypothesis accepted. The null hypothesis is further rejected given that at $T_{0.05,7}$, its probability value (p-value = 0.0005) is less than 0.05.

4.4 DISCUSSION OF FINDINGS

4.4.1 Cash conversion cycle and market capitalization of listed pharmaceutical firms in Nigeria.

The study's findings indicate that the cash conversion cycle (CCC) has a non-significant positive relationship with the market capitalization of listed pharmaceutical firms in Nigeria, with a coefficient of

0.0037 and a p-value of 0.8232. This suggests that for every unit increase in CCC, market capitalization increases by 0.0037 units, but this relationship is not statistically significant. The CCC measures the time it takes for a company to convert its investments in inventory and other resources into cash flows from sales. A positive relationship could imply that investors view a longer CCC as indicative of strategic investment in inventory and accounts receivable, potentially leading to future growth. However, the non-significant nature of this finding suggests that CCC may not be a key driver of market value for pharmaceutical firms in Nigeria. This could be attributed to various factors, including industry-specific characteristics, where pharmaceutical firms might prioritize regulatory compliance, R&D investments, and other non-cash factors over efficient working capital management.

Studies that align with this finding include those that found mixed or non-significant relationships between cash management metrics and firm performance. Ogbeide and Akanji (2025) found that cash flow from operating activities significantly increased financial performance of insurance companies, but didn't specifically focus on cash conversion cycle. Eton et al. (2025) found cash management had an insignificant effect on financial performance, which somewhat aligns with the non-significant relationship found in this study. Other studies like Gachenga (2025) focused on firm size moderating the relationship between cash management practices and financial sustainability but didn't specifically highlight cash conversion cycle's impact. Overall, there's limited direct alignment on this specific finding, suggesting more research is needed on cash conversion cycle's impact in specific sectors like pharmaceuticals.

4.4.2 Operating cashflow and market capitalization of listed pharmaceutical firms in Nigeria.

The study reveals that operating cashflow (OPC) has a non-significant negative relationship with the market capitalization of listed pharmaceutical firms in Nigeria, with a coefficient of -0.1872 and a p-value of 0.1816. This indicates that for every unit increase in OPC, market capitalization decreases by 0.1872 units, though this relationship is not statistically significant. Operating cashflow is typically seen as a vital indicator of a firm's ability to generate cash from its core operations. The negative relationship suggest that investors interpret high operating cashflow as a sign of inefficient use of resources, possibly indicating missed opportunities for growth investments or signaling potential cash hoarding.

Studies like Okeke and Nworie (2025) found that increase in cash ratios significantly reduces return on equity of listed food and beverage firms in Nigeria, implying a negative relationship between cash management metrics and performance. Though they focused on return on equity rather than market capitalization, it suggests investors might view high operating cashflow cautiously. Similarly, Oluwaseun (2024) found cash turnover had a negative insignificant effect on profit margin of service firms in Nigeria. These studies somewhat align with the finding of a non-significant negative relationship between operating cashflow and market capitalization, possibly indicating that high operating cashflow might be perceived as inefficient resource utilization by investors in certain contexts

4.4.3 Cash ratio and market capitalization of listed pharmaceutical firms in Nigeria

The analysis shows that cash ratio (CAR) has a significant positive relationship with the market capitalization of listed pharmaceutical firms in Nigeria, with a coefficient of 3.5142 and a p-value of 0.0004. This indicates that for every unit increase in CAR, market capitalization increases by 3.5142 units, and this relationship is statistically significant. The cash ratio, a measure of a firm's liquidity and ability to meet short-term obligations, appears to be a crucial factor influencing market value. A high cash ratio signals financial stability and resilience, likely boosting investor confidence. In the pharmaceutical industry, where uncertainties like regulatory changes and high R&D costs are prevalent, strong liquidity positions are particularly valued. Investors may perceive firms with high cash ratios as better equipped to navigate financial challenges, invest in growth opportunities, and capitalize on strategic initiatives, thereby driving up market capitalization. Similarly, Lolkurum (2024) found cash ratio was positively linked to financial performance of companies listed at the Nairobi Securities Exchange. These studies align with the finding that cash ratio has a significant positive relationship with market capitalization, suggesting investors value firms with strong liquidity positions.

4.4.4 Cash turnover ratio and market capitalization of listed pharmaceutical firms in Nigeria.

The study finds that cash turnover ratio (CTR) has a non-significant positive relationship with the market capitalization of listed pharmaceutical firms in Nigeria, with a coefficient of 0.0005 and a p-value of 0.7862. This suggests that for every unit increase in CTR, market capitalization increases by 0.0005 units, but this effect is not statistically significant. The cash turnover ratio measures a firm's efficiency in utilizing cash to generate sales revenue. The weak positive relationship indicates that while efficient cash utilization is generally viewed favorably, it does not substantially impact market valuation in the pharmaceutical sector. The lack of significance could stem from the nature of pharmaceutical firms' operations, where sales cycles, product development timelines, and regulatory factors play more critical roles in determining value than short-term cash utilization efficiency. Consequently, CTR does not emerge as a key driver of market capitalization for these firms.

Oluwaseun (2024) found that cash turnover has a negative insignificant effect on profit margin of service firms in Nigeria, which doesn't align directly but suggests cash turnover's impact might vary by context. Overall, the non-significant positive relationship found in this study suggests cash turnover ratio is not a key driver of market value in pharmaceutical firms, aligning with studies indicating mixed or weak impacts of cash management metrics on performance.

4.4.5 Current ratio and market capitalization of listed pharmaceutical firms in Nigeria.

The results also indicate that current ratio (CUR) has a significant positive relationship with the market capitalization of listed pharmaceutical firms in Nigeria, with a coefficient of 1.4602 and a p-value of 0.0005. This implies that for every unit increase in CUR, market capitalization increases by 1.4602 units, and this relationship is statistically significant. The current ratio, an indicator of short-term liquidity, reflects a firm's ability to meet its short-term liabilities with its short-term assets. The positive and significant relationship suggests that investors highly value liquidity and financial health in pharmaceutical firms. Given the industry's inherent risks, including high R&D costs and regulatory uncertainties, a strong current ratio likely reassures investors about a firm's stability and operational resilience. This perception can enhance market valuation, as stakeholders view firms with robust liquidity positions as better positioned for sustained growth and capable of weathering potential financial challenges. Studies supporting the finding that current ratio (a measure of liquidity) has a significant positive impact on firm performance or market value include Lolkurum (2024), who found current ratio was positively linked to financial performance with significant influence. Kibogo et al. (2025) also found a strong positive relationship between cash management (including aspects like current ratio) and profitability of textile and apparel firms in Kenya

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings

This study examined the relationship between relationship between cash management practices and market value of listed pharmaceutical firms in Nigeria. The study covered ten (10)-year period with particular emphasis on cash conversion cycle, operating cashflow, cash ratio, cash turnover ratio and current ratio. Market capitalization however represented the dependent variable (Market value). Below is a summary of findings gathered through a panel multiple linear regression analysis.

1. Cash conversion cycle has a non-significant positive relationship (Coeff. = 0.0037 {0.8232}) with the market capitalization of listed pharmaceutical firms in Nigeria.
2. Operating cashflow has a non-significant negative relationship (Coeff. = -0.1872 {0.1816}) with the market capitalization of listed pharmaceutical firms in Nigeria.
3. Cash ratio has a significant positive relationship (Coeff. = 3.5142{0.0004}) with market capitalization of listed pharmaceutical firms in Nigeria.
4. Cash turnover ratio has a non-significant positive relationship (Coeff. = 0.0005 {0.7862}) with the market capitalization of listed pharmaceutical firms in Nigeria.
5. Current ratio has a significant positive relationship (Coeff. = 1.4602 {0.0005}) with the market capitalization of listed pharmaceutical firms in Nigeria.

5.2 Conclusion

This study examined the relationship between cash management practices and market value of listed pharmaceutical firms in Nigeria over a ten-year period. Focusing on key metrics such as cash conversion cycle, operating cashflow, cash ratio, cash turnover ratio, and current ratio, the analysis revealed mixed findings. While cash conversion cycle and cash turnover ratio exhibited non-significant positive relationships with market capitalization, and operating cashflow showed a non-significant negative relationship, cash ratio and current ratio emerged as significant predictors of market value. Specifically, firms with higher cash ratios and current ratios were associated with increased market capitalization, underscoring the importance of liquidity in driving investor confidence and firm valuation within the pharmaceutical sector. In conclusion, the findings proved that effective cash management, particularly maintaining robust liquidity positions as reflected by cash ratio and current ratio, plays a crucial role in enhancing the market value of listed pharmaceutical firms in Nigeria. These results imply that investors in this sector prioritize indicators of financial stability and short-term solvency.

5.3 Recommendations

The following recommendations are in line with the findings of the study and should be adhered to:

1. Pharmaceutical firms in Nigeria should maintain an optimal CCC rather than focusing solely on minimizing it, regularly reviewing and adjusting working capital management strategies to ensure CCC remains within industry benchmarks.
2. Pharmaceutical firms should strike a balance between generating cash from operations and investing in growth opportunities, channeling excess cash into strategic investments like R&D, product development, or expansion initiatives.
3. Pharmaceutical firms in Nigeria should prioritize maintaining a healthy cash ratio by optimizing cash reserves and managing short-term liabilities effectively, thereby signaling financial stability and resilience to investors.
4. Pharmaceutical firms should focus on improving operational efficiency in utilizing cash for revenue generation without compromising liquidity, regularly assessing cash management practices and identifying areas to enhance cash utilization effectiveness.
5. Pharmaceutical firms in Nigeria should prioritize maintaining a strong current ratio by optimizing current assets relative to current liabilities, improving accounts receivable collection processes, managing inventory efficiently, and ensuring adequate short-term asset coverage for liabilities.

5.4 Contributions to knowledge

1. Provides empirical evidence on the relationship between cash management practices and market value in Nigeria's pharmaceutical sector, filling a gap in existing literature specific to this region and industry.
2. Highlights the significance of liquidity metrics, specifically cash ratio and current ratio, in driving market valuation of pharmaceutical firms in Nigeria, underscoring investors' emphasis on financial stability.
3. Reveals that cash conversion cycle has a non-significant impact on firm value, suggesting that in Nigeria's pharmaceutical sector, CCC may not be a key driver of market capitalization, indicating industry-specific nuances.
4. Indicates investors view high operating cashflow cautiously, possibly interpreting it as a sign of inefficient resource utilization or missed growth opportunities, providing insight into market perceptions of cashflow management in pharmaceutical firms.
5. Offers guidance for pharmaceutical firms on optimizing liquidity management strategies (focusing on cash ratio and current ratio) to enhance market value, informing decision-making on working capital and investor communication.

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