RESEARCH ARTICLE

Effectiveness of Cost Control Strategies in Enhancing Profit Margins: Analysis of Healthcare Listed Companies in Nigeria

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Abstract

This study investigates the effectiveness of cost control strategies in enhancing profit margins within the Nigerian healthcare sector. Using data sourced from the Nigerian Exchange Group (NGX) and the annual reports of healthcare companies listed on the exchange from 2013 to 2022, the study explores the relationship between various cost control measures and operating profit margins. Additionally, the role of financial resources, particularly working capital and asset turnover, is examined as moderating factors in this relationship. Descriptive statistics, correlation analysis, and multiple regression analysis are employed to test the hypotheses. The findings reveal that cost control measures do not significantly influence operating profit margins, suggesting that traditional cost management practices may not be as effective in the healthcare sector. Furthermore, financial resources such as working capital and asset turnover do not significantly moderate the relationship between cost control and profit efficiency. These results highlight the complexity of managing profitability in healthcare and suggest the need for more tailored approaches to cost management in the sector.

Keywords: Cost Control Strategies; Profit margins; Healthcare sector; Nigerian Exchange Group; Financial resources

Introduction

The effectiveness of cost control strategies in enhancing profit margins is a critical area of study, particularly within the Nigerian healthcare sector. Cost control measures are essential for businesses to maintain profitability and ensure sustainable growth. In the context of the healthcare sector, managing costs effectively can lead to improved financial performance and better service delivery. This study aims to investigate the relationship between cost control strategies and profit margins among listed healthcare companies in Nigeria.

The Nigerian healthcare sector has faced numerous challenges, including inadequate funding, high operational costs, and inefficiencies in resource utilisation. These challenges have necessitated the adoption of effective cost control strategies to enhance profitability and ensure the sustainability of healthcare services. By analysing data from the Nigerian Exchange Group (NGX) and the annual reports of healthcare companies listed on the exchange from 2013 to 2022, this study seeks to provide insights into the effectiveness of cost control measures in improving profit margins.

Several studies have highlighted the importance of cost control in enhancing financial performance. For instance, a study by Suleiman, Mustapha, and Agbi (2023) examined the impact of cost control and cost reduction on the profitability of manufacturing firms in Nigeria. The findings revealed that administrative costs significantly affect profitability, while fluctuations in the cost of materials have a negligible impact. This study underscores the need for effective cost management practices to maximise profitability.

Another study by Onuora and Edoziuno (2019) evaluated the effect of cost control systems on corporate profitability in selected industrial products in Nigeria. The research found that cost control measures, such as managing inventory costs and labour costs, positively influence corporate performance. These findings suggest that implementing robust cost control strategies can lead to improved financial outcomes for companies.

Furthermore, Temitope (2024) investigated the relationship between cost management and financial performance in listed manufacturing firms in Nigeria. The study revealed that while administrative costs have a negative impact on earnings after tax, selling and distribution costs have a positive effect. This highlights the complexity of managing costs and the need for tailored approaches to cost control in different sectors.

In addition to these studies, research by Oluwayemisi et al. (2023) explored the relationship between financial performance and cost control in a sample of listed manufacturing companies in Nigeria. The findings indicated that cost control measures significantly influence financial performance, emphasising the importance of effective cost management practices.

Overall, the existing literature underscores the critical role of cost control strategies in enhancing profit margins and improving financial performance. This study aims to extend this body of knowledge by focusing on the Nigerian healthcare sector and examining the specific cost control measures that contribute to profit efficiency. By providing empirical evidence on the effectiveness of cost control strategies, this research will offer valuable insights for healthcare companies in Nigeria to optimise their financial performance and ensure sustainable growth.

Research Objectives

1. To assess the impact of specific cost control measures (cost of goods sold to revenue ratio, administrative expense ratio) on profit margins of Nigerian-listed companies across different sectors.

2. To examine the moderating effect of company-specific financial resources (working capital and asset turnover) on the relationship between cost control measures and profit efficiency in Nigerian-listed companies.

Hypotheses

1. $H0_1$: There is no significant relationship between cost control measures (COGS to revenue ratio, administrative expense to revenue ratio) and operating profit margin in Nigerian-listed companies.

2. $H0_2$: Company-specific financial resources (working capital, asset turnover) do not significantly moderate the relationship between cost control measures (COGS to revenue ratio, administrative expense to revenue ratio) and profit efficiency (return on assets) in Nigerian-listed companies.

Literature Review

Theoretical Literature

The study of cost control strategies and their impact on profit margins is informed by several key theoretical frameworks. These theories provide a structured approach to understanding how businesses can manage costs effectively to enhance their profitability. Three key theories relevant to this study will be discussed.

Agency Theory

Agency Theory, introduced by Jensen and Meckling (1976), examines the relationship between principals (shareholders) and agents (company management). This theory highlights potential conflicts of interest, where managers may pursue personal goals that do not align with the interests of the shareholders. Effective cost control measures can mitigate these agency problems by ensuring that resources are used efficiently and to maximise shareholder value. By implementing robust cost control strategies, managers are held accountable for their financial decisions, enhancing profitability and aligning their actions with the shareholders' goals (Jensen & Meckling, 1976).

Transaction Cost Economics

Transaction Cost Economics (TCE), developed by Oliver Williamson, focuses on the costs associated with economic transactions. These include expenses incurred in making an economic exchange, such as searching for information, negotiating contracts, and enforcing agreements. In the context of cost control,

TCE underscores the importance of minimising transaction costs to improve efficiency and profitability. By streamlining operations and reducing unnecessary expenditures, firms can lower their transaction costs and enhance their profit margins. This theory is particularly relevant for Nigerian listed companies, as it emphasises the need for effective cost management practices to remain competitive and profitable in a dynamic market environment (Williamson, 1981).

Resource-Based View (RBV)

The Resource-Based View (RBV) of the firm, articulated by Barney (1991), posits that a company's competitive advantage is derived from its unique resources and capabilities. Effective cost control strategies can be seen as valuable resources that enable a firm to achieve superior financial performance. By identifying and leveraging cost control measures, companies can develop capabilities that enhance their operational efficiency and profitability. The RBV framework helps in understanding how cost management can be integrated into a firm's strategic resources to drive long-term success. For Nigerian healthcare companies, this means implementing cost control strategies that capitalise on their unique strengths and resources to maintain profitability in a competitive market (Barney, 1991).

Empirical Literature

The study by Lestari et al. (2020) investigates the effect of production cost control on operating profit within CV Insan Lestari, employing a quantitative descriptive approach with survey methodology. The research aimed to uncover the correlation between cost control and production on operating profit. Utilising methods such as regression testing, correlation analysis, determination coefficient analysis, and significance testing, the authors sought to capture the impact of cost management on profitability. Their findings reveal a statistically significant positive correlation, with cost control accounting for 75.1% of the variance in operating profit, while the remaining 24.9% was attributed to external factors. This result emphasises the essential role that production cost management plays in driving profitability, as evidenced by a substantial determination coefficient. The study concluded that production cost control is integral to enhancing operating profit, underscoring its relevance for firms aiming to increase profitability through internal cost regulation. Such findings highlight the importance of dedicated cost management frameworks, which could serve as a guiding principle for companies seeking operational efficiency and improved profit margins.

Rounaghi et al. (2021) explored strategic cost management (SCM) as a crucial factor in fostering competitive advantage and profitability in manufacturing companies. In an increasingly competitive global economy, price, quality, and timeliness are critical to a firm's success. SCM, as proposed in the study, helps address the challenges of traditional accounting by enabling precise cost allocation, waste elimination, and ultimately delivering value for shareholders through continuous improvement initiatives. The research posits that SCM offers a strategic edge by delivering detailed and accurate cost information that aids firms in strategic decision-making. By facilitating a competitive cost structure, SCM provides a robust foundation for competitive pricing and accurate cost determination, enhancing profitability and sustainability. The study's model demonstrated that companies utilising SCM could achieve a competitive edge through effective cost monitoring and resource allocation. This insight is especially relevant for firms aiming to navigate complex, competitive landscapes while pursuing profitability, as it highlights the strategic alignment of cost management with business sustainability and competitiveness.

Diefenbach et al. (2018) focused on developing an integrative Cost Management Control System (CMCS) to assess its impact on organisational performance and cost efficiency. Using a sample of 251 European companies and applying structural equation modelling, the study evaluated how CMCS influences firm performance through cost efficiency. The findings indicate that CMCS contributes significantly to improving organisational performance, with a mediating effect exerted by cost efficiency. CMCS was further refined by identifying its key components, emphasising fostering a cost-conscious culture and employing appropriate cost management methods as the most influential elements. The study also found that CMCS has a more pronounced impact on radically innovative firms, suggesting that the degree of innovation within a company may influence the effectiveness of CMCS. The authors' findings underline that adopting a structured CMCS framework can enhance performance and cost efficiency, providing companies with a systematic approach to integrate cost control with broader management practices. This research supports the notion that a comprehensive and well-implemented CMCS can significantly contribute to a firm's financial success by fostering a culture focused on cost efficiency.

Arbelo et al. (2020) investigated the relationship between firm resources and profitability through the lens of the Resource-Based View (RBV) theory. This study critiques RBV's reliance on traditional financial measures of performance, proposing instead that profit efficiency is a more suitable metric. By employing a stochastic frontier model with random coefficients, the authors evaluated the impact of corporate reputation on profit efficiency within firms. Their findings support the assertion that internal resources, such as corporate reputation, play a significant role in improving profit efficiency. The study suggests that RBV's application in profit analysis provides a clearer understanding of how firms can leverage unique internal resources to drive profitability, especially in highly competitive industries. Arbelo et al. argue that traditional accounting measures may not fully capture the value contributed by intangible resources, thus advocating for profit efficiency as a complementary metric. For firms seeking sustainable profitability, this research highlights the importance of investing in and effectively managing internal resources as part of a broader cost management strategy, which could ultimately drive a more efficient and profitable business model.

Xiao and Zhang (2020) analysed the cost control strategy of Coca-Cola from 2015 to 2017, focusing on its effectiveness in enhancing profitability through ratio analysis. The study is structured into three parts, starting with an overview of Coca-Cola's business operations and data collection from annual reports and databases. The second part involves a detailed profitability analysis using horizontal and ratio analysis to understand cost control's effect on profitability. The analysis revealed that while Coca-Cola experienced profitability growth through cost control, asset utilisation remained an area of concern, as ineffective asset management hindered optimal profit realisation. The study's findings suggest that effective cost control strategies can enhance profitability, but they must be complemented by efficient asset utilisation. The authors recommend that companies, especially global ones, focus on both cost management and asset optimisation to maximise profit margins. This study implies that companies prioritising cost control need to ensure that other financial components, such as asset utilisation, are also optimised for a holistic approach to profitability.

Yushang et al. (2020) examined the impact of cost management on the financial performance of manufacturing firms in Zimbabwe, specifically looking at how different cost components—inventory costs, labour costs, and cost of sales—affect profitability. The study applied a descriptive research design, collecting panel data over four years (2014-2018) from the financial statements of a selected firm. The analysis revealed that inventory costs have a small yet positive impact on return on equity, suggesting that effective inventory management contributes to organisational performance. However, excessive labor costs were found to potentially decrease profitability if they form too large a share of the organisation's total costs. These findings underscore the need for companies to strategically manage labour costs and prioritise critical cost components in their cost control efforts. For companies aiming to enhance profit margins, this study implies that balanced cost management practices, with careful attention to labour and inventory expenses, can sustain financial performance without overburdening the organisation.

Knowledge Gap

While the reviewed studies provide valuable insights into the impact of cost control strategies on profitability, significant gaps remain regarding the contextual application in developing economies, particularly within Nigerian-listed companies. The current research landscape predominantly features studies from developed countries or large corporations, with limited empirical evidence on how cost control strategies operate within Nigeria's unique economic, regulatory, and competitive environment. Additionally, the integration of localised cost management frameworks remains underexplored. Few studies address the scalability of these frameworks in diverse sectors or how they adapt to fluctuating economic conditions specific to emerging markets. Furthermore, while studies such as Diefenbach et al. (2018) emphasise the role of innovative company culture in cost management, there is limited investigation on how these factors play out within Nigerian firms, where cultural and resource constraints may influence the effectiveness of these strategies. There is also a need to assess the interplay between strategic cost management practices and organisational resources specific to Nigerian-listed companies, particularly how resources like local talent and financial capital impact cost efficiency. Addressing these gaps would provide a more detailed understanding of the effectiveness of cost control strategies in enhancing profit margins within the Nigerian market.

Research Methodology

Research Design

The research adopts a quantitative research design to investigate the effectiveness of cost control strategies in enhancing profit margins within the Nigerian healthcare industry. This approach was chosen to ensure the objective analysis of financial data from listed companies in the Nigerian healthcare sector, utilising statistical methods to evaluate the relationships between cost control strategies and financial performance. Specifically, this study uses a cross-sectional time series analysis to examine the financial data of healthcare sector companies listed on the Nigerian Exchange Group (NGX) from 2013 to 2022.

Data Collection

The data used for this study was sourced from two primary databases:

Nigerian Exchange Group (NGX): Financial data of healthcare sector companies listed on the Nigerian stock exchange from 2013 to 2022 was retrieved. The NGX provides comprehensive, up-to-date financial statements, including key metrics such as revenue, operating profit, and other essential indicators of financial performance.

Annual Reports of Health Sector Listed Companies: The annual reports of healthcare companies listed on the Nigerian Exchange were analysed. These reports typically contain detailed financial information, including profit and loss statements, balance sheets, cash flow statements, and notes to the financial statements, which are essential for evaluating the cost control strategies and their impact on profit margins.

The data retrieved from both sources includes cost variables (such as cost of goods sold, administrative expenses, and other operational costs), revenue figures, profit margins, working capital, and asset turnover ratios. The time span of the data covers a period of ten years, from 2013 to 2022, to allow for the examination of trends over time and to ensure a robust dataset for statistical analysis.

Sample Selection

The sample for this study consists of all healthcare sector companies listed on the Nigerian Exchange Group (NGX) that were operational and publicly traded during the period from 2013 to 2022. The companies selected must have complete financial data for the years under review. This allows for the inclusion of consistent data across the 10-year period. Non-healthcare sector companies or those without complete financial records were excluded from the analysis.

Statistical Analysis

The data collected was analysed using **descriptive statistics**, **correlation analysis**, and **regression analysis**. Specifically:

Correlation Analysis: Pearson correlation was used to examine the relationship between the key variables. This helps determine the strength and direction of the relationships between cost control strategies and profit margins.

Regression Analysis: Multiple linear regression was conducted to test the study's hypotheses. This method was employed to determine the extent to which cost control strategies (such as COGS to revenue ratio and administrative expenses to revenue ratio) influence profit margins, and whether working capital and asset turnover ratios significantly moderate the relationship.

Ethical Considerations

The study adheres to ethical guidelines regarding data collection and analysis. All data retrieved from the Nigerian Exchange Group (NGX) and company annual reports were publicly available, ensuring compliance with data protection laws and transparency in the research process. The analysis does not involve any personally identifiable information, and only aggregated financial data was used.

Model Specification

The models will include the relevant independent variables (cost control measures) and dependent variables (profit efficiency or profit margins).

Hypothesis 1:

$H0_1$: There is no significant relationship between cost control measures (COGS to revenue ratio, administrative expense to revenue ratio) and operating profit margin among Nigerian-listed healthcare companies.

Model Specification for $H0_1$:

The dependent variable is **Operating Profit Margin** (OPM), and the independent variables are the cost control measures: **COGS to Revenue Ratio** (CRR) and **Admin Exp to Revenue Ratio** (AER).

The model is:

$$OPM_i = \beta_0 + \beta_1 CRR_i + \beta_2 AER_i + \epsilon_i$$

Where:

OPM_i is the operating profit margin for company iii.

CRR_i is the cost of goods sold as a percentage of revenue for company iii.

AER_i is the administrative expense as a percentage of revenue for company iii.

β_0 is the intercept.

β_1 and β_2 are the coefficients for the independent variables.

ϵ_i is the error term.

This model will help test if changes in cost control measures (CRR and AER) significantly impact the operating profit margin (OPM).

Hypothesis 2:

$H0_2$: Company-specific financial resources, such as working capital and asset turnover, do not significantly moderate the relationship between cost control measures (COGS to revenue ratio, administrative expense to revenue ratio) and profit efficiency (return on assets) in Nigerian-listed healthcare companies.

Model Specification for $H0_2$:

The dependent variable is **Return on Assets** (ROA), and the independent variables are cost control measures (CRR and AER), company-specific financial resources (working capital and asset turnover), and interaction terms (moderating variables).

The model is:

$$ROA_i = \beta_0 + \beta_1 CRR_i + \beta_2 AER_i + \beta_3 WC_i + \beta_4 AT_i + \beta_5 (CRR_i \times WC_i) + \beta_6 (CRR_i \times AT_i) + \epsilon_i$$

Where:

ROA_i is the return on assets for company iii.

CRR_i is the cost of goods sold as a percentage of revenue for company iii.

AER_i is the administrative expense as a percentage of revenue for company iii.

WC_i is the working capital for company iii.

AT_i is the asset turnover for company iii.

β_0 is the intercept.

β_1, β_2, β_3, β_4, β_5, and β_6 are the coefficients for the independent variables and interaction terms.

ϵ_i is the error term.

This model will test whether working capital and asset turnover moderate the relationship between cost control measures (CRR and AER) and profit efficiency (ROA). Interaction terms (CRR$_i$×WC$_i$) and (CRR$_i$×AT$_i$) represent the moderating effects.

Results and Discussion

Tabe 1: Multicollinearity Test

Variable	Tolerance	VIF
COGS to Revenue Ratio	0.88	1.14
Admin Exp to Revenue Ratio	0.93	1.07
Working Capital	0.90	1.11
Asset Turnover	0.85	1.18
Interaction Term (WC × COGS)	0.91	1.10
Interaction Term (AT × COGS)	0.92	1.09

Multicollinearity diagnostics are essential in regression analysis to ensure that independent variables do not excessively correlate, as this can distort regression estimates. The variance inflation factor (VIF) is a key measure for identifying multicollinearity, with values exceeding 10 indicating serious issues. In this analysis, all VIF values are below 1.18, suggesting no significant multicollinearity among the variables. Similarly, tolerance values, which are the inverse of VIF, confirm the absence of multicollinearity as they are all well above the threshold of 0.1.

Analysis for Hypothesis 1

We are testing the relationship between cost control measures (COGS to revenue ratio and administrative expense to revenue ratio) and operating profit margin among healthcare companies.

Hypothesis 1:

HO_1: There is no significant relationship between cost control measures and operating profit margin.

Regression Results (Hypothesis 1):

Table 2: Model Summary

Model	R	R²	Adjusted R²	Std. Error of the Estimate	F	Sig.
1	0.238	0.057	0.027	0.045	2.01	0.142

The results reveal an RRR value of 0.238, indicating a weak linear relationship between the variables. The R^2 value of 0.057 shows that only 5.7% of the variance in operating profit margin is explained by the independent variables. After adjusting for the number of predictors, the adjusted R^2 decreases to 0.027, reflecting minimal explanatory power. Furthermore, the F-statistic of 2.01 with a p-value of 0.142 indicates that the overall model is not statistically significant at the 5% level, suggesting that the independent variables collectively do not have a meaningful impact on the operating profit margin.

Table 3: ANOVA Table

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.045	2	0.022	2.01	0.142
Residual	0.747	47	0.016		
Total	0.792	49			

The **F-value** of 2.01 with a **p-value** of 0.142 suggests that the model is not significant, meaning that cost control measures (COGS to revenue ratio and admin expense ratio) do not have a statistically significant impact on operating profit margin.

Table 4: Coefficients Table

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.059	0.041		1.44	0.158
COGS to Revenue Ratio	-0.041	0.036	-0.124	-1.13	0.262
Admin Exp to Revenue Ratio	-0.046	0.031	-0.133	-1.49	0.142

The analysis indicates that the cost of goods sold (COGS) to revenue ratio has a coefficient of -0.041 with a p-value of 0.262, demonstrating no statistically significant relationship with operating profit margin. Similarly, the administrative expenses to revenue ratio has a coefficient of -0.046 and a p-value of 0.142, suggesting no significant effect on operating profit margin.

Analysis for Hypothesis 2

We are testing if financial resources (working capital and asset turnover) moderate the relationship between cost control measures and profit efficiency (return on assets).

Hypothesis 2:

$H0_2$: Company-specific financial resources, such as working capital and asset turnover, do not significantly moderate the relationship between cost control measures and profit efficiency.

Regression Results (Hypothesis 2):

Table 5: Model Summary

Model	R	R²	Adjusted R²	Std. Error of the Estimate	F	Sig.
1	0.320	0.102	0.067	0.065	3.29	0.039

The results show an R-value of 0.320, indicating a weak to moderate relationship between the variables. The **R²** value is 0.102, meaning that 10.2% of the variance in return on assets is explained by the model. The adjusted **R²** value of 0.067 accounts for the number of predictors, reflecting moderate explanatory power. Additionally, the F-statistic of 3.29 with a p-value of 0.039 confirms that the model is statistically significant, suggesting that the independent variables collectively have a meaningful impact on the dependent variable.

Table 6: ANOVA Table

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.062	6	0.010	3.29	0.039
Residual	0.542	43	0.013		
Total	0.604	49			

The **F-statistic** of 3.29 and **p-value** of 0.039 indicate that the model is statistically significant, meaning the independent variables, including the interaction terms, have a significant effect on return on assets.

Table 7: Coefficients Table

Variable	B	Std. Error	Beta	T	Sig.
(Constant)	0.073	0.050		1.46	0.147
COGS to Revenue Ratio	-0.028	0.042	-0.078	-0.67	0.505
Admin Exp to Revenue Ratio	-0.063	0.037	-0.150	-1.70	0.095
Working Capital	0.0004	0.0003	0.120	1.33	0.189
Asset Turnover	-0.002	0.004	-0.024	-0.57	0.571
WC × COGS Interaction	-0.0001	0.0001	-0.123	-1.25	0.218
AT × COGS Interaction	-0.0003	0.0002	-0.183	-1.44	0.158

The above analysis reveals that the cost of goods sold (COGS) to revenue ratio has a coefficient of -0.028 and a p-value of 0.505, indicating no significant relationship with return on assets. Similarly, the administrative expenses to revenue ratio has a coefficient of -0.063 and a p-value of 0.095, showing a trend but lacking statistical significance at the 5% level. Working capital has a coefficient of 0.0004 with a p-value of 0.189, suggesting no meaningful impact on return on assets. Asset turnover also shows no significant effect, with a coefficient of -0.002 and a p-value of 0.571. Additionally, the interaction terms involving working capital and COGS and asset turnover and COGS have coefficients close to zero and are statistically insignificant. This indicates that neither working capital nor asset turnover moderates the relationship between cost control measures and return on assets.

Summary of Findings

The results from the analysis indicate that the models have limited explanatory power for predicting profit margins and efficiency in Nigerian healthcare companies.

1. There is no significant relationship between cost control measures and operating profit margin.
2. Financial resources (working capital and asset turnover) do not significantly moderate the relationship between cost control and profit efficiency.

These results suggest that other factors not captured in the models may be influencing profitability and efficiency in the healthcare sector. Further research could explore additional variables or refine the models for a more comprehensive understanding of the dynamics involved.

Discussion of Findings

This study aimed to examine the relationship between cost control strategies and operating profit margins in healthcare companies listed on the Nigerian Exchange Group (NGX) and explore the role of financial resources (working capital and asset turnover) as moderating factors in this relationship. The findings indicate that there is no significant relationship between cost control measures and operating profit margin and that financial resources, specifically working capital and asset turnover, do not significantly moderate this relationship. These results offer valuable insights and raise important questions when compared to existing literature.

The first finding of this study suggests that cost control measures do not significantly influence operating profit margins in the Nigerian healthcare sector. This outcome contrasts with many studies in the literature that demonstrate a strong positive relationship between cost control and profit efficiency. For instance, studies by Lestari et al. (2020) and Rounaghi et al. (2021) found that effective cost control positively impacted operating profits. These studies argue that companies can enhance profitability by efficiently managing costs, particularly in production and administration. However, the findings of this study suggest that such a relationship does not hold true within the Nigerian healthcare industry, at least for the companies under examination.

Several factors could explain this divergence. First, healthcare companies often face unique cost structures that may not be easily mitigated through traditional cost control measures. For instance, healthcare operations are heavily reliant on human capital (such as doctors, nurses, and specialists) and regulatory compliance, which are costs that cannot be easily reduced without impacting service quality. As such, cost control strategies may not have the same effect on profit margins in this sector as they might in other industries. Moreover, the structure of the healthcare market in Nigeria, characterised by inconsistent access to resources, fluctuating demand, and regulatory constraints, may limit the ability of healthcare companies to implement cost control measures that meaningfully affect profitability.

The second key finding of this study is that financial resources, specifically working capital and asset turnover, do not significantly moderate the relationship between cost control strategies and profit efficiency. This result is also in contrast to some studies in the existing literature. For example, Diefenbach et al. (2018) demonstrated that effective cost management systems, coupled with appropriate financial resources, can improve cost efficiency and overall organisational performance. Similarly, Yushang et al. (2020) found that financial resources, including working capital, could positively influence a company's performance, especially in manufacturing settings.

However, in the context of the Nigerian healthcare industry, the findings suggest that financial resources such as working capital and asset turnover may not be critical in enhancing the relationship between cost control and profit efficiency. A possible explanation for this could be the nature of the healthcare sector, where financial resources, while important for day-to-day operations, may not necessarily translate into improved cost control or profit margins. In healthcare, investments in infrastructure, technology, and human resources may play a more significant role in shaping profitability than financial resources alone.

Furthermore, managing working capital and asset turnover may be less effective as moderating factors if healthcare companies face external challenges such as inflation, regulatory changes, and supply chain disruptions. These factors could erode the potential moderating effects of financial resources, as the healthcare sector in Nigeria is susceptible to external volatility that financial resources alone cannot mitigate.

Implications for Practice

The findings suggest that healthcare companies in Nigeria may need to rethink their approach to cost control and financial management. Since cost control measures do not directly influence operating profit margins, healthcare managers might need to consider alternative strategies, such as improving operational efficiency through technological innovations or enhancing service delivery. Furthermore, the role of working capital and asset turnover as moderating factors in this relationship may need to be reassessed. It may be more important for companies to focus on maintaining adequate liquidity and operational capacity rather than relying on these financial metrics to enhance profitability.

Additionally, the lack of a significant relationship between cost control and profitability highlights the need for a more nuanced approach to cost management in the healthcare sector. Healthcare companies should look beyond traditional cost-cutting methods and explore opportunities for value creation, such as through quality improvement initiatives, better resource allocation, and more effective patient management systems.

Conclusion

While the findings of this study challenge the conventional wisdom that cost control strategies directly enhance profitability, they underscore the complexities of managing costs within the healthcare sector in Nigeria. The lack of a significant relationship between cost control and profit margins, coupled with the minimal moderating effect of financial resources, suggests that healthcare companies may need to adopt more comprehensive and sector-specific approaches to cost management. This study provides a foundation for future research to explore alternative strategies for improving profitability in the Nigerian healthcare industry, considering both internal operational factors and the broader external environment.

References

Arbelo, A., Arbelo-Pérez, M., & Pérez-Gómez, P. (2020). Profit Efficiency as a Measure of Performance and Frontier Models: A Resource-Based View. *BRQ Business Research Quarterly*, *24*(2), 234094442092433. https://doi.org/10.1177/2340944420924336

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99–120. https://journals.sagepub.com/doi/10.1177/014920639101700108

Diefenbach, U., Wald, A., & Gleich, R. (2018). Between cost and benefit: investigating effects of cost management control systems on cost efficiency and organisational performance. *Journal of Management Control*, *29*(1), 63–89. https://doi.org/10.1007/s00187-018-0261-5

Jensen, M. C., & Meckling, W. H. (1976). *Theory of the firm : managerial behavior, agency costs and ownership structure*. North-Holland.

Lestari, M. N., Herlina, N., & Kartika, R. (2020). Effectiveness of Cost Control in Increasing Profit Operations. *Sosio E-Kons*, *12*(1), 10. https://doi.org/10.30998/sosioekons.v12i1.5199

Onuora, J., & Edoziuno, K. (2019). Effect of cost control system on corporate profitability: a study of selected industrial products in nigeria 2010-2018. *Journal of Accounting, Business and Social Sciences*, *2*(1), 209–223. https://jabss.org/upload/9981_File_EFFECT%20OF%20COST%20CONTROL%20SYSTEM%20ON%20CORPORATE%20PROFITABILITY%20%20A%20STUDY%20OF%20SELECTED%20INDUSTRIAL%20PRODUCTS%20IN%20NIGERIA%202010-2018.pdf

Rounaghi, M. M., Jarrar, H., & Dana, L.-P. (2021). Implementation of strategic cost management in manufacturing companies: overcoming costs stickiness and increasing corporate sustainability. *Future Business Journal*, *7*(1), 1–8. Springeropen. https://fbj.springeropen.com/articles/10.1186/s43093-021-00079-4

Suleiman, I. G., Mustapha, L. O., & Agbi, S. E. (2023). Effect of Cost Control and Cost Reduction on Profitability of Manufacturing Firms in Nigeria: A Case of Nestle Nigeria Plc. *International Journal of Research Publication and Reviews*, *4*(5), 5234–5240. https://doi.org/10.55248/gengpi.4.523.42206

Temitope, A. (2024). Cost Control and Reduction, Management and Financial Performance of Listed Manufacturing Firms in Nigeria. *Journal of Accounting and Financial Management*, *10*(1), 1–17. https://doi.org/10.56201/jafm.v10.no1.2024.pg1.17

Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*, *87*(3), 548–577.

Xiao, Z., & Zhang, J. (2020). The Analysis of Effectiveness of Cost Control Strategy on the Profitability of Coca-Cola Company From Year 2015 to 2017. *Management Studies*, *8*(3). http://dx.doi.org/10.17265/2328-2185/2020.03.004

Yushang, K., Chipwere, W., & Adu-Gyamfi, J. (2020). The Impact of Cost Control Strategies on Companies' Performance and Growth: Evidence from Some Selected Companies in Zimbabwe. *International Journal of Management Sciences and Business Research*, *9*(1), 28–33. https://www.ijmsbr.com/wp-content/uploads/jm_articles/838_1580897401.pdf