

Operational Cost Control and Financial Performance of Conglomerate Firms in Nigeria

Korolo, Emmnuel Omolaye (Ph.D.)

Department of Accounting,
Federal University Otuoke
Bayelsa State, Nigeria

Email: koroloemmanuel@yahoo.com

ABSTRACT

This study examines the relationship between operational cost control and financial performance. The specific objectives are to examine the extent to which production cost, administrative cost, and selling and distribution costs affect the financial performance of conglomerate firms in Nigeria, using net profit margin as a measure of financial performance of manufacturing. The ex-post facto research design was used, which involves the use of secondary data extracted from the annual report of the five (5) conglomerates for the relevant years under consideration (2018-2023). The panel least squares regression techniques were employed to examine the implicit relationship between the variables. The study found a significant effect on production cost and selling and distribution cost. The study also finds a positive, insignificant effect on financial performance. Based on the findings, the study therefore concludes that there is a positive significant relationship between operational cost control and the financial performance of consummate firms in Nigeria. The study therefore recommends that firms should invest in technologies that streamline operations, improve management practices, and enhance employee productivity. Therefore, continuous monitoring and analysis of production costs should be conducted to identify areas for improvement.

Keywords: Cost, Control, Production, Administrative, and Financial

1.1 INTRODUCTION

In Nigeria's fast-paced commercial environment, conglomerates are crucial to the economy's expansion. They significantly impact several areas, such as finance, telecommunications, and manufacturing (Oduwole & Aodeji, 2020). Unpredictable economic conditions, a convoluted legal structure, and physical limitations characterize the environment in which these firms operate. The effective management

of operating costs in such an environment has a substantial impact on the competitiveness and sustainable performance of large conglomerates (Ajayi & Omankhanlen, 2018).

The dynamics of the global market and changes in oil prices are two factors that make Nigeria's economy susceptible to economic instability (Izedonmi & Gbegi, 2019). The success and viability of businesses are largely determined by their operational costs, which include the costs related to daily business operations. Operational cost management is crucial to influencing several aspects of a company's financial prosperity, competitive position, and long-term sustainability. One of its main characteristics is the impact it has on profitability through the operational cost performance connection. According to Cooper and Slagmulder (2003), effective operational cost control directly contributes to higher profitability by optimizing resource allocation, reducing waste, and increasing overall cost-effectiveness.

The cost structure of a company has a big impact on how resilient and financially stable it is during difficult times. To keep a firm's financial structure sound and help it weather economic downturns and uncertainty, operational cost control methods are essential (Shen & Zhu, 2011). This is especially important in sectors with profit margins where changes in costs can have a significant effect. To obtain a competitive edge in the market, operational cost control is essential. Businesses that successfully manage their operating expenses can provide competitive pricing, which could boost market share and put them in a better position to compete with other businesses in the same industry (Porter, 1985).

Controlling operational costs strategically not only protects money but also makes it easier to invest in projects aimed at innovation and expansion. By directing the savings from effective cost management toward R&D, market expansion, and technology adoption, businesses can promote long-term competitiveness and sustainability (Cagwin & Bouwman, 2022). Examining a wide range of indicators is necessary to determine how operational cost reduction affects performance. The effectiveness of operational cost management in creating value for stakeholders and shareholders is often assessed using financial measures like Return on Equity (ROE) and Return on Assets (ROA) (Drury, 2007).

1.2 STATEMENT OF THE RESEARCH PROBLEM

The operational cost control strategies of conglomerates in Nigeria have not been effective in increasing their overall business performance. Notwithstanding the increasing acknowledgement of the significance of operational cost management, there exists a marked deficiency of research, especially addressing conglomerates within the Nigerian business environment. This research tries to solve this essential gap by diving into the intricate dynamics of operational cost control within the particular setting of conglomerates operating in Nigeria's business environment.

There is a need for empirical research that can educate policymakers and managers in conglomerates, providing them with actionable insight into the effectiveness of operational costs in achieving enhanced company performance. Nigerian conglomerates have unique problems, high rivalry, economic unpredictability, and difficulty in managing several business units. Understanding how these constraints impact operational cost control procedures is vital for designing effective strategies. The study seeks to thoroughly investigate the multifaceted features of operational cost control, including cost reduction, cost management, and the use of cost control technologies within the framework of Nigerian conglomerates. The findings are predicted to contribute not only to the academic understanding of these processes but also to offer practical insight for managers and policymakers in boosting the financial and operational health of conglomerates in Nigeria. Okwo and Ugwunta (2012) conducted a study on operational cost control and the performance of conglomerates in Nigeria, revealing that operational spending positively and significantly affected the profitability of beer enterprises in Nigeria. Akeem (2017) regarded cost overhead as an effective tool for managing and minimizing expenses. The study also indicated that cost conservation has a beneficial effect on the functioning of the company. Also, the study argues that poor operational cost control undermines the performance of conglomerates. In light of the divergent findings of previous studies, this research aims to examine the impact of operational cost control on the performance of conglomerates in Nigeria.

2.1 CONCEPTUAL CLARIFICATION

2.1.1 Cost

Cost is defined by Akenbor and Agwor (2015) as any monetary sacrifice undertaken to gain a benefit. Any organization's aims must be accomplished at the price of resources. Without cost, no productive activity can provide the profit that the corporation desires. Cost is defined by an accountant as a resource that is forgone to meet a certain purpose. This may be expressed in terms of the monetary amount necessary to purchase products and services. Cost is the amount of money spent on, or associated with, a given thing or activity. Generally, the cost of anything is the money spent to receive it.

2.1.2 Cost Control

To ensure that the enterprise's objectives and methods of achieving them are accomplished efficiently and economically, cost control is a component of marginal cost that includes setting unit costs as well as tracking and adjusting the performance of subordinates (Lockey, 2002). With budgeting and budgetary management as crucial processes, cost control is defined as keeping spending within a targeted or budgeted amount. This is accomplished by cost management, which compares actual and projected expenses based on location and remedial action taken (Arora, 2004). Cost

control, according to Lawyer (2014), is the full range of accounting and management procedures intended to increase company efficiency through cost containment or reduction. To make sure that the enterprise's goals and how they are achieved are carried out efficiently and inexpensively, Akeem (2017) states that cost control is concerned with a component of marginal cost that comprises calculating unit costs as well as monitoring and correcting subordinates' performance. Another way to define cost control is the management of a company's operating expenses to maintain spending within reasonable bounds.

Formal operating plans frequently include these as objective or customary cost constraints. Cost management initiatives should reduce wasteful spending, such as when material waste surpasses budget or productivity levels fall short of predetermined benchmarks, according to Akenbor and Agwor (2015). By acquiring new equipment, altering manufacturing processes and procedures, and so forth, a cost-cutting plan can be employed to reduce anticipated expenses. Cost control also describes management's attempt to affect how workers who are in charge of completing tasks, incurring costs, and earning money behave. Planning and control are the two steps of the two-phase management process. The methods used to assess whether actual performance aligns with those plans, however, are referred to as control. Through financial control and the budget process, management establishes general corporate objectives for every responsibility center and creates methods and guidelines for reporting and assessment (Siyanbola & Raji, 2013). Cost control aims to control a variety of expenses, including employee salaries, outside expert services, and phone, internet, and energy bills. Profitable businesses need to manage their spending in addition to making money. Overly high costs lead to low-profit margins, which makes it more difficult for a company to effectively compete. Excessive expenditures can cause a company's share price to drop and make it more difficult to attract investors. The importance of cost management as a survival strategy for businesses worldwide, particularly in developed nations, cannot be overstated because it effectively monitors spending against budget and fixes any financial irregularities within the company.

2.1.3 Production Costs

A company's production costs are the expenses it incurs when creating goods and services. These expenses can be roughly divided into three categories: semi-variable (such as utilities, transportation, etc.), variable (such as labor, raw materials, etc.), and fixed (such as depreciation, rent, insurance, etc.). Kieso and Associates, 2021. One of the most important aspects of any business's financial management is production costs, which include all of the charges a company incurs when creating goods or services. These expenses fall into one of three general categories: In contrast to variable costs, which fluctuate according to production volume, fixed costs are fixed and independent of changes in production level. Mixed costs, sometimes referred to

as semi-variable costs, consist of both fixed and variable expenses. Production cost management is, understandably, a difficult operation that requires striking a balance between maximizing profit and cutting costs. Production expenses are important for reasons other than basic accounting and planning. A firm's competitive advantage also depends on efficient cost control. By cutting production costs, for instance, a company may be able to sell its goods or services at a discount, giving it a competitive advantage. Cost control techniques can also assist a company in preserving or increasing profitability, which is essential for long-term expansion and viability. Numerous companies are implementing cutting-edge methods to streamline their manufacturing processes and cut expenses in the fiercely competitive economic climate of today. Among them are lean manufacturing and automation. Just chain management, adoption of technology, etc.

2.1.4 Administration Cost

The expenses a business incurs to run its daily operations, which include both fixed and variable components and are reported as expenses as they are incurred, are referred to as administration costs (Horngren et al., 2018). For efficient cost management, it is critical to comprehend both the constant and variable components of administration costs, as demonstrated by Horngren et al.'s (2018) analysis. The authors stress that although administration costs are sometimes regarded as an essential overhead expense, if they are not effectively handled, they can significantly affect a company's profitability. The writers also stress how crucial it is to differentiate between fixed and variable administration costs when examining a company's cost structure. While variable administration expenses should be tracked and managed to reduce waste and inefficiencies, fixed administration costs should be assessed based on their contribution to overall organizational efficiency. Horngren et al.'s (2018) study on administrative costs also provides insightful information about cost-cutting tactics for businesses trying to increase profitability. According to the authors, businesses can lower their administrative expenses by implementing the following strategies: rent and salaries.

2.1.5 Selling and Distribution Cost

Cost Accounting: A Managerial Emphasis by Horngren et al. (2018) defines selling and distribution costs as commissions, transportation, and costs related to selling and distributing goods and services. Usually, when these charges are incurred, they are documented as such. The costs associated with marketing and promoting the company's goods and services, as well as the salaries, benefits, and commissions paid to salespeople who are in charge of generating sales, are all included in the advertising cost and sales salaries and commissions, which are essential components of selling and distribution. The costs of transporting goods from the point of production to the point of sale, whether by transportation to wholesalers, retailers, or directly to consumers, are included in the selling and distribution costs. Lastly, as they cover expenditures for touring, handling, and inventory management, which guarantees that goods are ready

for sale when needed, warehousing and inventory costs can be categorized as part of selling and distribution costs. In summary, selling and distribution costs include a variety of expenditures related to marketing, selling, and providing goods and services to consumers, including advertising, commissions, sales salaries, and transportation charges. These expenditures constitute an essential part of a company's overall cost structure and are fundamental to revenue generation and profitability.

2.1.6 Financial Performance

The ability of the management team to create value for the company determines how well the business performs. It focuses on how financial resources provided to an organization are carefully used to achieve the organization's overarching business objectives, maintain the organization's operations, and increase the firm's prospects for the future. The main points of contention are whether or not enough use was made of all available resources, whether or not the company's revenue was in line with or higher than anticipated, and whether or not wise financial decisions were made (Adekunle & Asaolu, 2013). Performance is the outcome of an organization's capacity to obtain and manage resources in a variety of ways to create a competitive advantage, claims Iswaria (2007). Financial and non-financial performance are the two types of performance, he said. A company's ability to use resources and generate revenue from its primary mode of operation is evaluated subjectively by its financial performance. The phrase can also be used to compare companies in the same industry or to compare industries or sectors based on their level of aggressiveness, as well as to describe a company's overall financial health over a specific period (Stewart, 2009). Company performance is important to management because it is the outcome of an individual or group of individuals within an organization fulfilling their responsibility and authority to achieve the goal lawfully, morally, and ethically, and in compliance with their morals. The performance of a company is evaluated on three levels. A company's productivity, or how well inputs are converted into outputs, is the first dimension. The second dimension is profitability, or the ratio of a company's earnings to its costs. The market premium, or the difference between a firm's market value and its book value, is the third dimension (Weinraub, 2004). This multifaceted view of performance necessitates the creation of various models or interaction frameworks that capture the diverse relationships between performance and its determinants, emphasizing the multiple linkages between dependent and independent variables within the estimated models (Ostroff, 2003).

2.2 THEORETICAL REVIEW

Kaizen Costing Theory

As the costing counterpart of the Kaizen approach, the Kaizen Costing theory was developed in 2001 and serves as the foundation for this research project (Industrial and Financial Systems, 2001). The idea behind kaizen costing is to continuously improve the production process at the lowest possible cost by making little, gradual

changes (Ansari & Lockwood, 2004). This strategy maintains the product's competitiveness by guaranteeing that goods not only fulfill but also surpass customer expectations for quality, usability, and cost. By methodically getting rid of any processes that can raise manufacturing costs without improving the quality of the final product, these improvements are made (Rof, 2012). Beyond the office, the Kaizen philosophy emphasizes ongoing improvement in social and personal spheres of life. This idea, which originated in Japan but is currently being embraced globally, has drastically changed management techniques everywhere (Ogundele, 2004). Kaizen Costing, according to Blocher et al. (1999), is the use of continuous improvement with a particular focus on cost reduction. Its main goal is to increase the effectiveness of the processes involved in manufacturing and service delivery. Kaizen Costing is used throughout the manufacturing stage of a product's life cycle, as opposed to target costing, which is used during the design stage. This distinction highlights Kaizen Costing's focus on incremental process enhancements as opposed to revolutionary discoveries. Kaizen Costing is a continuous improvement technique that promotes continuous cost savings by aiming for greater performance standards (Adeniji, 2011). Achieving the cost-cutting goals established for every activity depends on methods like value engineering and analysis. Kaizen Costing focuses on the process, aiming for continuous, gradual improvements over time, whereas target costing concentrates on the product and mostly lowers costs through product adjustments. In addition to promoting cost reduction, kaizen costing improves the general efficacy and efficiency of production operations. It encourages staff members at all levels to offer suggestions for process improvements, fostering a culture of continuous improvement. Improvements are certain to be long-lasting and ingrained in the organization's culture thanks to this inclusive approach. Businesses can gain a competitive edge through steady, small improvements that streamline production procedures and cut waste by incorporating Kaizen Costing into their operations. This structured approach to continuous improvement underscores the significance of Kaizen in modern management practices, highlighting its role in fostering sustainability and long-term success within a rapidly evolving corporate landscape.

2.3 EMPIRICAL REVIEW

The impact of cost management on the financial performance of publicly traded consumer goods companies in Nigeria was examined by Fadare and Adegbie (2020). The study's population consisted of twenty-seven (27) consumer goods companies that were listed on the Nigerian Stock Exchange. For the study, ten (10) distinct companies were selected at random. Throughout this inquiry, the strategy that was employed was purposive sampling. The study made use of data that had already been gathered. Data was gathered from a few chosen businesses between 2009 and 2018. Both descriptive and inferential statistical analysis (regression) were used in the study. The cost of sale, the cost of selling and distribution, the cost of administration,

and the cost of financing were the criteria used in the study to assess cost management. The net profit margin, return on capital, and earnings per share were used to assess financial success. The research's conclusions indicate that the net profit margin was negatively impacted by marketing and distribution expenditures, cost of sales, financing charges, and administrative costs. The study discovered that cost management proxies may affect return on capital employed, net profit margin, and earnings per share in both positive and negative ways, but these impacts fell short of statistical significance. The research indicates that the financial performance of the chosen organizations under examination is not significantly impacted by effective cost management. As a result of the investigation, the author developed a research interest in the topic after discovering that cost management and corporate performance have been analyzed from multiple perspectives. The main areas of concentration include cost management and overall financial performance, inventory management and financial performance, cost management, and cost reduction and financial performance. Fewer studies have been done on the relationship between cost control and business performance than there are on the relationship between inventory management and financial performance. Despite the paucity of studies, conflicting results were found. Lasisi and Nuhu (2015), for example, discovered that the main problem facing manufacturing firms is the high overhead costs that these businesses must pay.

Furthermore, although they are not statistically significant, Fadare and Adegbie (2020) discovered that cost management proxies may have both favorable and unfavorable effects on return on capital employed, net profit margin, and earnings per share. The results of Godwin, Amos, and Sunday (2019), who discovered that efficient cost control significantly and favorably impacted the profit margin that manufacturing companies enjoyed, conflicted with this. This study aimed to examine the relationship between high levels of company performance and efficient cost management. Additionally, it sought to shed light on how research methods and findings could be enhanced to better represent the current world.

Maja et al. (2019) did a study that demonstrated the important role labor cost control plays in performance. They investigated the impact of various factors on a Croatian company's profitability. A model that divided the factors influencing profitability into three categories—company-specific, industry-specific, and macroeconomic—was developed as a result of the research. The analysis concentrated on 59 distinct businesses operating in Croatia's industrial sector between 2006 and 2015. Since the developed model incorporates both the General Method of Moments (GMM) and the dynamic component of profitability, a dynamic panel estimator was used. Consequently, the use of a dynamic panel estimator was necessary. To the best of our knowledge, no dynamic analysis of the variables influencing profitability has

been conducted using data from the Croatian manufacturing sector; therefore, the development of such a model adds to the body of existing research. The investigation's conclusions showed that a company's profitability was significantly impacted by several characteristics, including age, labour costs, industry concentration, GDP growth, and inflation. Factors that significantly affect corporate productivity include the gross domestic product, controlled inflation, and labour cost reductions.

In a similar vein, Godwin, Amos, and Sunday (2019) looked into how cost control affected the degree of profitability attained by a few Nigerian manufacturing firms. As of December 31, 2017, 78 distinct manufacturing companies that were listed on the Nigerian Stock Exchange comprised the study's sample. Five of the 23 distinct consumer products companies that made up the sample frame were examined throughout ten years (2005–2017). The study endeavour employed the judgemental sampling method. Before the financial statements were made public, the regulatory agencies examined the accounts and conducted an audit. Both descriptive and inferential statistical analysis (regression) were used in the study. It was revealed that there is a significant inverse relationship between the cost of raw materials (CoRM) and the profit that manufacturing companies in Nigeria make before taxes. The study's conclusions indicate that, during the study period, Nigerian manufacturing enterprises' profitability was significantly enhanced by their ability to control expenses. Even though the outcomes of the research suggested that the chosen manufacturing companies were subjected to a significant amount of positive effects, a panel data analysis would have been better suitable for a cross-sectional study to arrive at a more accurate conclusion.

Gulfen and Sule (2016) assessed how operational costs affected business performance in Turkey and found that cost containment, as shown by administrative expenses, had a detrimental effect on business success. This was one of the conclusions drawn from their study on the connection between company performance and operating costs. The study examined data from 16 distinct businesses that were listed between 2008 and 2015 on the Istanbul Stock Exchange. The study covered the costs of general administration, sales and distribution, marketing, and research and development as independent variables. The variable under measurement was return on equity.

The study conducted by Murat, Ferdi, and Duygu (2016) examined the effects of organisational expenses on a company's short- and long-term profitability in Turkey. A dynamic panel data analysis was performed utilizing data collected from a sample of 46 publicly traded industrial companies on the Borsa Istanbul stock exchange between 1998 and 2012. Organizational costs increase a company's long-term profitability significantly, even if they may not have a statistically significant effect on short-term profitability. It has been demonstrated that a one-unit rise in organizational expenses drives up gross profit by 10.19 units, net operating income by 2.37 units, and net income by 1.39 units.

Furthermore, by carrying out a thorough investigation into the impact of cost control and cost reduction strategies on organizational performance in Nigeria, with a focus on administrative costs as a useful instrument for cost reduction and control, Lawal (2017) illustrated the crucial role that cost control plays in shaping firm performance. He accomplished this by carrying out a thorough investigation of how cost control and reduction strategies affect Nigerian organizations' performance. For the study, primary sources of data were examined. It was written in a descriptive style. According to the findings of the research, reducing expenditures has a beneficial impact on the performance of an organization. It emphasized the crucial aspect of cost-cutting methods and recommended that firms perform periodic cost assessments to rein in excessive spending and, as a result, get rid of expenses. In addition, it highlighted the vital nature of cost-cutting measures. According to the findings of the research, for a business to achieve higher profit growth via the creation of high-quality products and services, it is required for the business to first manage its expenses and then reduce them to an acceptable level.

Apergis and Soros (2014) investigated the relationship between organizational costs and corporate performance in the United States. Panel analysis was utilized in the study to separate the energy industry into two separate subsectors: those that sell fossil fuels for the production of electricity and those that sell renewable energy for the same purpose. According to the study's findings, companies that promote renewable energy sources saw a greater impact on profitability from organisational costs. Ozturk and Zeren (2015) looked into how organizational costs affected Turkish firms' performance. Using data from Turkish manufacturing companies from 2007-Q1 to 2014-Q3, they analysed and examined the impact using the Durbin-Hausman panel cointegration test, which was created by Westerlund (2008), the Common Correlated Effects (CCE), and the Coefficient Estimator, which was created by Pesar. In Turkey, the authors discovered that organisational expenses negatively impacted business performance (2006). The findings indicate that organisational expenses positively affect the growth of sales in manufacturing. Similar to this, Siyanbola and Raji (2013) assessed how cost management affected the profitability of Nigerian manufacturing companies to show how important cost management is to a business's performance. The company that was the subject of this study was West African Portland Cement Plc (WAPCO), where cost control was seen as a strategic issue. The cost of materials was the main tactic employed to achieve successful cost control. The data analysis technique made use of the Pearson correlation model. The study's findings showed that an industry's profitability is positively impacted by efficient cost control.

3.0 METHODOLOGY

The research design adopted for this study is the ex-post factor research design because the researcher relies on historic accounting data, also known as secondary data, obtained from five-year annual financial reports of quoted conglomerate firms in

Nigeria. For this study, the population consists of all six (6) conglomerate companies listed on the Nigerian Exchange Group. The data extracted from the annual audited Financial Statement of Conglomerates Company in Nigeria was meticulously examined, and relevant data was extracted from the period of 2018-2023, covering five (5) years. The study used the ordinary least squares regression technique to examine the relationship between the variables.

3.1 Model Specification

This study adopts the following method:

$$PAT = F(PRC, AMC, SDC)$$

$$PAT = \alpha_0 + \alpha_1 PRC + \alpha_2 AMC + \alpha_3 SDC + \epsilon$$

Where:

PAT = Profit After Tax

PRC = Production Cost

AMC = Administration Cost

SDC = Selling and distribution cost

α_0 = Constant

$\alpha_1 - \alpha_4$ = Intersect Parameters

ϵ = Error term

4.0 ANALYSIS AND DISCUSSION OF FINDINGS

Table 1: Descriptive Statistics

| | PAT | PRC | AMC | SDC |
|--------------|-----------|----------|----------|----------|
| Mean | 3842988. | 31054372 | 6267422. | 1593360. |
| Median | 119200.0 | 9552820. | 2994497. | 93520.00 |
| Maximum | 32475394 | 99209852 | 26942911 | 8794927. |
| Minimum | -3992995. | 944.0000 | 343.0000 | 178.0000 |
| Std. Dev. | 8734021. | 35153244 | 7473714. | 2915935. |
| Skewness | 2.019073 | 0.743949 | 1.359662 | 1.609514 |
| Kurtosis | 6.540964 | 1.969733 | 3.958559 | 3.866938 |
| Jarque-Bera | 30.04693 | 3.411763 | 8.659963 | 11.57679 |
| Probability | 0.000000 | 0.181612 | 0.013168 | 0.003063 |
| Sum | 96074711 | 7.76E+08 | 1.57E+08 | 39833989 |
| Sum Sq. Dev. | 1.83E+15 | 2.97E+16 | 1.34E+15 | 2.04E+14 |
| Observations | 25 | 25 | 25 | 25 |

From Table 1, we observed that the average value of Profit After Tax (PAT), production cost (PRC), administrative cost (AMC), and selling and distribution cost

(SDC) are ₦3,842,988, ₦31,054,372, ₦6,267,422, and ₦1,593,360. Respectively. The variability in the distributions as captured by the standard deviation suggests that the standard deviations of PAT, PRC, AMC, and SDC were found to be slightly dispersed from their mean with values of ₦8,734,021, ₦35,153,244, ₦7,473,714, and ₦2,915,935 above their respective mean values. Moreover, the skewness values indicate that PAT is positively skewed. In conclusion, the Jarque-Bera statistic suggests that all of the variables were normally distributed since the probability of the Jarque-Bera statistic p-value exceeds the 5% significance threshold.

4.1 CORRELATION ANALYSIS.

Correlation measures the degree of linear association between two or more variables. From Table 2, a negative, insignificant association was observed between the dependent variable (PAT) and all the independent variables (PRC, AMC, and SDC).

Table 2: Correlation and Covariance Analysis

| Covariance | | | | |
|-------------|----------|----------|----------|----------|
| Correlation | PAT | PRC | AMC | SDC |
| PAT | 7.32E+13 | | | |
| | 1.000000 | | | |
| | | | | |
| PRC | 1.68E+14 | 1.19E+15 | | |
| | 0.570939 | 1.000000 | | |
| | | | | |
| AMC | 5.34E+13 | 1.95E+14 | 5.36E+13 | |
| | 0.852094 | 0.772469 | 1.000000 | |
| | | | | |
| SDC | 2.04E+12 | 7.88E+13 | 5.40E+12 | 8.16E+12 |
| | 0.083605 | 0.800750 | 0.257955 | 1.000000 |
| | | | | |

Unit Root Test

Stationarity implies that the mean, variance, and covariance are constant across different periods. The existence of unit roots can lead to serious issues such as spurious regressions and errant behavior variables due to econometric assumptions for analysis not being valid. This study tested for the stationarity of all variables used by applying a one-panel unit root test, namely, the Levin, Lin & Chu test. According to Table 4 below, all variables were stationary at levels; thereby indicating that all variables were integrated of order zero, i.e., I(0).

Table 3: Unit Root Test Results

| VARIABLES | LEVIN, LIN & CHU TEST | REMARKS | RESULT |
|-----------|-----------------------|---------|------------|
| SDC | 0.0000 | I(0) | Stationary |
| PRC | 0.0000 | I(0) | Stationary |
| PAT | 0.0000 | I(0) | Stationary |
| AMC | 0.0000 | I(0) | Stationary |

Source: Author's Computation

4.2 HAUSMAN TEST

The Hausman specification test (1978) was conducted to determine whether either a fixed or random effect model is suitable for the study. The fixed effect model is applied to dominate for omitted variables that are constant over time but vary between observations. The Random effect model is used when some omitted variables are constant between observations but vary over time. From Table 5 below, Hausman's specification test with a loan loss provision value of 0.2323 suggests that the fixed effect model is appropriate; the study, therefore, rejects the null hypothesis.

Table 4: Hausman's Test

| | | Chi-Sq. | | |
|----------------------|----------|-----------|--------------|-------|
| Test Summary | | Statistic | Chi-Sq. d.f. | Prob. |
| Cross-section random | 4.284742 | 3 | 0.2323 | |
| | | | | |
| | | | | |

Table 5: Panel Least Squares Estimation

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------|---------------------------------------|--------------------|-------------|--------|
| C | -3309184. | 3041701. | -1.087938 | 0.2918 |
| PRC | 0.020629 | 0.213772 | 0.096498 | 0.9243 |
| AMC | 1.695127 | 0.699369 | 2.423796 | 0.0268 |
| SDC | -2.581031 | 2.343551 | -1.101333 | 0.2861 |
| | | | | |
| | Effects Specification | | | |
| | | | | |
| | Cross-section fixed (dummy variables) | | | |
| | | | | |
| R-squared | 0.810235 | Mean dependent var | 3842988. | |

| | | | |
|--------------------|-----------|------------------------|----------|
| Adjusted R-squared | 0.732097 | S.D. dependent var | 8734021. |
| S.E. of regression | 4520674. | Akaike info criterion | 33.74056 |
| Sum squared resid | 3.47E+14 | Schwarz criterion | 34.13060 |
| Log-likelihood | -413.7570 | Hannan-Quinn criteria. | 33.84874 |
| F-statistic | 10.36923 | Durbin-Watson stat | 1.836480 |
| Prob(F-statistic) | 0.000046 | | |
| | | | |
| | | | |

The test for the significance of regression on the effect of the impact of operational cost control and firm performance, the regression coefficients (β), the intercept (α), and the significance of all coefficients in the model were subjected to OLS to test the null hypothesis that the coefficient is zero. The F-statistic value at 10.36923 shows that a significant linear relationship exists between all independent variables (production cost, administration cost, and selling and distribution cost) and Profit After Tax. Furthermore, the 1.836480 value for Durbin Watson shows that there is no autocorrelation. The outcomes showed that all independent variables are not correlated, which might otherwise have influenced the outcome of the analysis. Based on the results of this study, the production cost has a coefficient of 0.020629, indicating a positive and insignificant effect on profit after tax (PAT). The p-value associated with this effect is 0.9243, which is greater than the significance level of 0.05. Consequently, we reject the null hypothesis and accept the alternative hypothesis. This means that production cost has a positive, insignificant effect on the profitability of conglomerate firms in Nigeria.

According to the findings of this study, the administration cost has a coefficient of 1.695127, indicating a positive relationship with profit after tax. However, the p-value is 0.0268, which is below the 0.05 significance level. This implies that the administration cost is significant with profit after tax (PAT). This means that the administration cost has a significant effect on the profitability of conglomerate firms in Nigeria. According to the findings of this study, the selling and distribution cost has a coefficient of -2.581031, indicating a negative relationship with profit after tax. However, the p-value is 0.2861, which is above the 0.05 significance level. This implies that the selling and distribution costs are significant, with profit after tax. This means that the selling and distribution cost has a significant effect on the profitability of conglomerate firms in Nigeria.

4.3 CROSS-SECTIONAL DEPENDENT TEST

An increasing body of literature on panel data concludes that panel-data models are likely to substantially exhibit cross-sectional dependence in the errors. Rodríguez-Caballero (2016) noted that if cross-sectional dependence exists in a panel data model, it can complicate statistical inference, and any estimators that do not take such into account could be inconsistent even if the number of cross-section dimensions N is large with a finite time dimension T . The above necessitates us to test for cross-sectional dependence, as such testing is very important in fitting panel-data models.

The results of the cross-sectional dependence tests for PAT models are shown below.

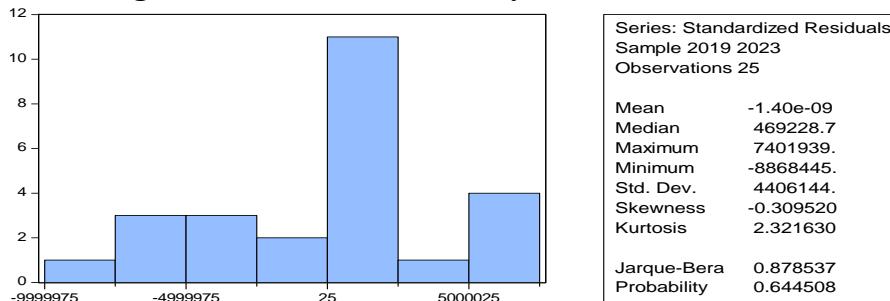
>

Cross-Sectional Dependence Test

| Test | Statistic | d.f. | Prob. |
|-------------------|-----------|------|--------|
| Breusch-Pagan LM | 11.57425 | 10 | 0.3146 |
| Pesaran scaled LM | 0.352013 | | 0.7248 |
| Pesaran CD | 0.954103 | | 0.3400 |

Usually, where N is very large with a finite time T or where T is greater than N , we use the Breusch-Pagan LM test Statistic. But where $N = T$ or where T is of the same magnitude as N , we use the Pesaran CD test Statistic. The results above show that there is no cross-sectional dependence in the residuals or that the residuals are cross-sectionally independent since the Pesaran CD test Statistic is 0.3400 is greater than 0.05, allowing us to reject the null hypothesis of no cross-sectional dependence.

Figure 4.1. Residual Normality Tests



4.4 DISCUSSION OF FINDINGS

The study on operational cost control and financial performance of conglomerate firms in Nigeria presents interesting findings that align with and diverge from previous research in the field. The study found that production cost has a positive but insignificant effect on the financial performance (profit after tax) of conglomerate firms in Nigeria, with a coefficient of 0.020629 and a p-value of 0.9243, leading to the rejection of the null hypothesis. This result contrasts with findings from studies such as those by Al-Matari et al. (2014) and Adeniyi and Ogundipe (2020), which emphasized that production cost management is a crucial determinant of firm financial performance. Their research suggested that effective control of production costs directly enhances financial performance by reducing waste and improving efficiency. The divergence may be due to industry-specific factors, as conglomerate firms often have diverse production lines where cost variations might be absorbed differently than in more focused industries.

The study discovered that administration cost has a positive and significant relationship with firm performance, with a coefficient of 1.695127 and a p-value of 0.0268. This suggests that higher administration costs are associated with improved financial performance in conglomerate firms. This finding aligns with the work of Nwanyanwu (2015), who argued that strategic administrative investments, such as in technology, human resources, and management practices, often lead to better organizational performance. However, it contrasts with studies like Chenhall and Langfield-Smith (2007), which posited that high administrative costs could lead to inefficiencies and reduced financial performance, particularly in less diversified firms. The positive impact observed in this study may be attributed to the effective allocation of administrative resources that enhance operational efficiency and decision-making in conglomerate firms.

The study revealed a negative relationship between selling and distribution costs and financial performance, with a coefficient of -2.581031 and a p-value of 0.2861, indicating a significant but negative effect on financial performance. This result supports the findings of Ikpefan and Agwu (2015), who observed that excessive selling and distribution costs could erode financial performance, particularly if these costs do not translate into proportionate revenue growth. However, it contrasts with research by Kotler and Keller (2012), which emphasized that well-managed selling and distribution strategies, although costly, often result in increased market reach and sales volume, leading to higher profitability. The negative impact observed in this study could be due to inefficiencies or over-expenditures in selling and distribution channels that do not yield adequate returns for conglomerate firms.

5.0 CONCLUSION AND RECOMMENDATION

The study on operational cost control and financial performance in Nigerian conglomerate firms provides valuable insights into the complex relationship between different types of costs and profitability. The findings indicate that while administrative costs positively and significantly influence firm performance, the effects of production costs and selling and distribution costs are less straightforward, with the latter showing a negative impact on profitability. These results underscore the importance of a nuanced approach to cost management, where each type of cost is carefully analysed and managed according to its specific impact on the firm's financial outcomes. The study suggests that while reducing costs is important, firms must also ensure that their cost control strategies are aligned with broader business goals, such as improving efficiency, enhancing competitiveness, and driving sustainable growth. Overall, this study contributes to the existing literature by highlighting the need for tailored cost management strategies that consider the unique characteristics of conglomerate firms in Nigeria. It also emphasizes the importance of continuous financial review and strategic investment in areas that can enhance long-term profitability. By adopting a balanced approach to cost control, firms can optimize their operational efficiency and achieve better financial performance in a competitive market environment.

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