

Cost Control and Reduction, Management and Financial Performance of Listed Manufacturing Firms in Nigeria

Adeniyi Lateef Temitope
Department of Accounting
Faculty of Management Sciences
Ignatius Ajuru University of Education
Rumuolumeni, P.M.B. 5047
Port Harcourt

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Abstract

The purpose of this study was to investigate the relationship between cost management and the financial success of particular Nigerian manufacturing enterprises. The study focused on how these firms' earnings after taxes were impacted by selling and distribution expenses as well as administrative costs. The study used secondary data acquired from the annual financial reports of ten sample organizations between 2011 and 2020. Descriptive statistics, correlation analysis, and panel regression techniques such as pooled OLS, random effect estimation, and fixed effect estimation were used to evaluate the data. The Hausman test and post-estimation tests were also used to evaluate the models that were taken into consideration for the study. The findings revealed that while administrative costs had an insignificantly negative influence on the tested firms' earnings after tax, selling and distribution costs had an insignificantly positive impact. The study led to the conclusion that cost control has both positive and negative effects on the financial performance of manufacturing firms in Nigeria, especially when measured in terms of profit after tax. Based on the results of the study, manufacturing organizations are urged to manage administrative. Any attempt to improve a specific financial performance measure through cost control may have unfavorable effects on other measures. In order to avoid situations where one measure of financial performance may be triggered at the expense of another, manufacturing organizations should consider the organization's overall performance aim.

Keywords: *Selling and distribution costs, administrative costs, cost control, manufacturing businesses*

Introduction

Businesses must effectively control costs to survive in today's competitive economy. This involves creating and implementing a reliable performance strategy to enhance overall business efficiency while managing and reducing unnecessary expenses. According to Pandey (2009), the primary objectives of every corporation should be to maximize profits, shareholder wealth, and customer satisfaction. Non-financial goals, such as focusing on financial performance and career advancement, are also crucial. Recently, businesses in Nigeria have faced various challenges,

including significant settlements leading to revenue losses (Siyanbola, 2013). Despite increased attention and support from institutions (Adebayo, 2018), the performance of businesses in Nigeria has fallen short of expectations. This is attributed to several factors, including the unpredictable nature of the economic process, the complexity of the tax code, and the continuous changes in various tariffs.

The diverse methods and plans employed by companies to reduce costs and increase profitability fall under the umbrella of cost control and reduction management. While cost reduction involves lowering actual expenses, cost control entails monitoring and managing expenses to ensure they remain within budgetary constraints. The fundamental objective of cost control and reduction management is to optimize the utilization of existing resources, minimize waste, and still deliver high-quality products and services to customers. Effective cost control and reduction management necessitate a comprehensive understanding of all the costs associated with running a business, including variable costs like raw materials and supplies, as well as fixed costs like rent, utilities, and salaries.

Therefore, effective cost management is vital for businesses to make the most efficient use of their limited resources. To thrive, companies must adapt to the ever-changing business environment. However, due to rising operating expenses, many businesses struggle to control costs. To prosper and retain customers, companies must continually enhance the pricing, quality, and packaging of their products while consistently monitoring expenditures and exploring cost-saving measures (Lawal, 2017).

Akintoye, Onakoya, Amos, and Ifayemi (2015) argue that Nigeria's deteriorating infrastructure has led to higher costs and lower product quality, adversely affecting businesses. As a result of their inability to effectively control expenses, numerous businesses have either been acquired by larger corporations or merged with others to form a single entity (Adeleke, 2014). Additionally, some companies have relocated to neighboring countries (Abdul & Isiaka, 2015). Cost containment has become a strategic imperative for companies aiming to survive in the current economic climate (Berliner, 1998; Lasisi & Nuhu, 2015). Edom, Inah, and Adanma (2015) offer several cost-reduction suggestions, including limiting unnecessary business calls, renegotiating internet service rates, and reducing energy expenses.

The primary objective of financial and pricing management is to maximize a company's profitability, which is vital for its success (Maliki, 2011). Siyanbola and Raji (2013) assert that corporate performance has gained significance in the finance and accounting literature. Profitability plays a critical role in assessing a company's performance as it is essential for enhancing shareholder value. Businesses that do not generate profits are likely to encounter various challenges. Consequently, a company's performance hinges on its ability to increase revenue while concurrently striving to reduce costs. Without a thorough understanding of the precise costs associated with their products and how pricing impacts profit margins, firms may find it challenging to exceed expectations in Nigeria (Prempeh, 2016). Previous studies (Olalekan & Tajudeen, 2015; Abdul & Isiaka, 2015) have explored various topics related to cost management and business success. However, these studies focused more on a company's overall performance

rather than its financial performance. This research project aims to gather information from businesses regarding their financial performance to bridge this knowledge gap. The objective is to examine the link between cost control and financial success among Nigerian manufacturing companies listed on the stock market from 2012 to 2021. This study seeks to provide valuable insights into how businesses can enhance their financial performance through effective cost management.

Statement of the Problem

The manufacturing sector in Nigeria has encountered numerous challenges in recent years. These challenges include issues related to infrastructure, policy uncertainty, and unstable macroeconomic conditions. These factors have made it difficult for manufacturing companies to optimize their operations, resulting in high costs and low profitability. Additionally, foreign manufacturers pose stiff competition, leading to a decrease in market share and revenue. Consequently, cost control management has become a critical aspect of business operations in Nigerian manufacturing firms. This entails identifying and managing cost drivers, implementing cost-saving measures, and optimizing processes to minimize waste.

Effective cost control measures can result in improved financial performance, including higher revenue, reduced costs, and increased profitability. Conversely, the absence of such measures can lead to lower revenue, higher costs, and reduced profitability. Studies have also demonstrated a positive relationship between effective cost control measures and financial performance in manufacturing firms. However, challenges such as inadequate financing, poor infrastructure, a shortage of skilled labor, and unfavorable government policies hinder effective cost control management. These challenges have led to high production costs, adversely affecting the financial performance of manufacturing firms in Nigeria.

Given these challenges, cost control management is a critical aspect of business operations, particularly for manufacturing firms dealing with various cost-related factors. Policymakers, managers, and investors in the Nigerian manufacturing sector can derive valuable insights from the findings of this study as they strive to enhance financial performance and sustainability in the sector.

Objective of the study

The purpose of this study was to examine the relationship between cost control and financial performance in Nigerian manufacturing companies that were publicly traded on the stock market between 2012 and 2021.

Literature Review and Theoretical Framework

Conceptual Review

Cost Control

Cost control is an indispensable process for businesses, aimed at maintaining expenses within the intended budget or anticipated levels using robust budgetary and management systems. To achieve

effective and efficient goals, this process involves identifying unit costs, monitoring delegated performance, and making necessary adjustments (Lockey, 2002). In the cost control process, actual costs are compared to anticipated expenses to enable a comprehensive assessment (Arora, 2004). This helps ensure that expenses remain within what are commonly referred to as standard or objective costs—parameters considered to be reasonable.

Cost management, which encompasses elements of marginal costs, seeks to minimize unnecessary expenditures by implementing strategies such as acquiring new machinery or modifying production processes and procedures (Akenbor & Agwori, 2015). The ultimate objective is to meet the company's goals in a cost-efficient manner. Furthermore, cost management entails monitoring operational expenses, ensuring that productivity levels align with predetermined standards, and eliminating unnecessary costs.

Control involves assessing whether actual performance aligns with defined objectives, while planning focuses on how management expects employees to implement these objectives (Akeem, 2017). Planning and monitoring are integral aspects of the management process. The company's management establishes core corporate goals for each center of responsibility through the budgeting process and maintains financial control. They also develop standards and practices for reporting and evaluation (Siyabola & Raji, 2013). Cost control and management are essential activities for ensuring efficient and effective goal attainment while keeping expenses within planned or anticipated levels. By implementing cost control strategies and closely monitoring operational expenditures, companies can reduce unnecessary costs and enhance overall business efficiency.

Cost Management Strategies

The cost management approach provides improvements in competitive advantage and aids in decision-making, ultimately leading to more effective resource allocation (Ellram and Stanley, 2008). The ability to accurately estimate expenses before commencing a process and predicting future costs makes cost management a crucial element of overall management success for companies. Effective cost management techniques enable tasks to be completed with limited resources and add value to organizations by reducing working capital investments, lowering the cost per unit, and enhancing the quality of the production process and final product (Groth and Kinney, 1994).

Businesses can enhance their control over production costs by implementing standard costing, budget systems, monitoring cost information, focusing on value-added activities, eliminating non-value-added activities through supplier coordination, and scrutinizing cost structures to identify opportunities for cost reduction in the pre-production phase. This becomes especially relevant in the context of limited resources and persistent competition. By adopting a cost management approach, businesses can forecast future expenditures based on current and upcoming cost data. Consequently, managers can make more informed decisions, ultimately enhancing the financial performance of industrial organizations.

Traditional cost management techniques focused on cost control and quality while emphasizing internal efficiency. In contrast, cost management is a proactive process that involves cost reduction and quality planning to manage costs before they manifest. A well-thought-out cost management system can lead to improvements in product utility, price competitiveness, and product quality. Manufacturing companies in particular incorporate contemporary cost management techniques into their daily operations, significantly impacting their financial performance.

The strategies for three-dimensional cost management include:

Cost Control: Implementing measures to manage and control costs effectively.

Quality Planning: Integrating quality considerations into cost management to enhance the quality of products or services.

Price Competitiveness: Ensuring competitive pricing while maintaining profitability.

These strategies, when applied effectively, contribute to the overall success of a company's cost management approach, ultimately leading to improved financial performance and competitiveness.

1. Managing stock costs;
2. Managing labor costs; and
3. Managing sales and distribution costs.

Financial Performance

Financial performance holds a pivotal position in the realms of business and strategic management, as it exerts a direct influence on an organization's well-being and its prospects for survival. Consequently, managers spanning various fields are compelled to accord it paramount significance. The market value of a firm, a factor that significantly impacts the interests of both present and prospective shareholders, can only burgeon through earnings growth. This dynamic serves as an incentive for stakeholders to invest greater effort in the enterprise, thereby necessitating that managers uphold the financial robustness of the organization. One indispensable yardstick for appraising a company's performance is its ability to promptly dispense dividends (Valentin, 2013).

As articulated by Banafa, Muturi, and Ngugi (2015), a company's competence in fulfilling its core objective, namely engaging in commercial activities, stands as the litmus test for its financial performance and profitability. Financial performance can also be employed to delineate a snapshot of a company's financial well-being at a specific juncture. Comparative analyses of financial outcomes become feasible when scrutinizing companies within the same industry or across different sectors. The foremost aim of businesses, particularly those aspiring to maximize earnings, resides in securing financial success (Yahaya & Lamidi, 2015). In sum, experts in the domains of business and strategic management underscore the pivotal role of financial performance.

Consequently, managers are duty-bound to accord the primacy of financial health its due diligence to augment the market value of a firm and align with the expectations of shareholders.

Theoretical Review

Kaizen Costing theory

Kaizen costing is a cost management approach that was initially introduced by Professor Yasuhiro Monden in 1961 and further developed by Professor Hajime Yamashina in the 1980s. Originating in Japan, it has found widespread adoption in organizations worldwide. The primary objective of this approach is to continually enhance the production process by identifying and eliminating waste, thereby reducing costs and increasing efficiency.

According to Kaplan and Cooper (1998), Kaizen costing is a strategy of continuous improvement that concentrates on making small incremental enhancements to reduce costs and enhance quality. To achieve the desired outcomes, this process involves identifying areas for improvement, assessing the current situation, and making necessary adjustments. This approach underscores the importance of involving employees in the improvement process, fostering continuous learning, and promoting development. Kaizen costing can be applied across all facets of an organization, spanning production, engineering, marketing, and administration. It involves scrutinizing each step in a process to pinpoint opportunities for reducing waste and inefficiencies, with the ultimate goal being the optimization of processes and the achievement of desired outcomes using minimal resources.

A hallmark of Kaizen costing is its strong emphasis on cost reduction by eliminating waste. This entails identifying and eradicating activities that do not contribute value to the process. For instance, superfluous steps in a production process or excess inventory can be eliminated to trim costs and enhance efficiency. Another crucial aspect of Kaizen costing is the utilization of cross-functional teams to identify and implement improvements. These teams comprise individuals from various organizational areas who collaborate to unearth opportunities for enhancement and devise solutions. This approach promotes collaboration and communication among team members and aids in dismantling organizational silos.

In summary, Kaizen costing is a continuous improvement methodology that focuses on gradual, incremental adjustments to cut costs and enhance quality. It underscores employee involvement, waste reduction, the role of cross-functional teams, and process optimization. Originating in Japan, it has gained broad acceptance in organizations worldwide, aiding them in becoming more efficient, effective, and competitive.

Empirical Review

A study by Nelson, George, Muriithi, and Isaac (2014) looked at how cost-cutting measures affected the operation of tea manufacturers in Embu, Kenya. In order to gather information from the target population's 225 tea producers, 40 employees, and 18 supervisors, the researchers used structured questionnaires. Frequencies and percentages were used to assess the data that had been obtained. According to the study, cost-cutting strategies were used in the tea factories. Some of the strategies that were determined to be wholly relevant included staff development, technology,

and energy sources. The study's findings revealed that there was no link between the amount of processed tea and the use of cost-cutting measures. This was shown by the fact that the amount of tea processed fell from 191.258.695kg to 189.880.652kg between the same time periods before and after 2006, when cost-saving measures were put in place. However, the study did discover a connection between cost-cutting actions and enhanced financial performance. The yearly farmer return rate increased from an average of 67.47% to 72.6%, demonstrating that cost savings were associated with greater financial performance.

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In order to ascertain the effect of input costs on the profitability of businesses, specifically in Nigeria's brewing industry, Okwo and Ugwunta (2012) conducted a study. To examine profitability metrics in connection to input costs, the researchers examined cross-sectional data from the annual reports of a sample of brewers from 1999 to 2010. However, the study also discovered that these organizations do not frequently employ a number of other cost-reduction strategies, including manufacturing design and simultaneous engineering, lean production on demand, order building, part standardization, and just-in-time production. The data were analyzed using a multivariate regression model called Ordinary Least Squares (OLS). The impact of operational expenses on profitability was captured using the focus variable Rsgae. The study's findings revealed that Rsgae significantly increased the profitability of Nigerian breweries on a statistical basis. According to the report, sales expenses have a big impact on how profitable Nigerian brewers are. For Nigerian breweries looking to increase their profitability, this result is crucial.

The focus of Akeem's (2017) study was on the role that cost management plays in establishing organizational success by analyzing how cost control and cost reduction affect overall performance. The study recognized the value of cost overheads as a tool for controlling and reducing costs. In order to collect primary data, the methodology used a descriptive inquiry using questionnaires. The idea was tested using regression analysis. According to the results, cost minimization improves organizational effectiveness (Akeem, 2017).

Godwin, Amos, and Sunday (2019) looked at the effect of cost management on the profitability of Nigerian manufacturing enterprises in their study. As of December 31st, 2017, there were 78 manufacturers registered on the Nigeria Stock Exchange, and 23 companies in the consumer products sector made up the sample frame. Five of the 23 companies were examined throughout a ten-year period, from 2005 to 2017. The study used a judgemental sampling technique, and regulatory agencies obtained and confirmed the data from the audited financial statements. To examine the data gathered, the researchers employed descriptive and inferential statistics, particularly regression analysis. According to the study, there is a significant inverse link between manufacturers' profit before taxes in Nigeria and their cost of raw materials (CoRM). The study

also showed that cost control significantly increased the profitability of Nigerian manufacturing firms over the reporting period. The findings showed that the chosen manufacturing companies had a very beneficial impact. The researchers did point out that cross-sectional study rather than panel data analysis would have produced superior results. In conclusion, the study compared the financial performance of Nigeria's listed manufacturing companies and firm cost control techniques. Data from the public financial statements of manufacturing companies listed on the Nigerian Exchange Group (NGX) from 2012 to 2021 was analyzed by the researchers.

Methodology

Model Specification

Panel data analysis was found to be the best statistical method for evaluating how independent variables affected the dependent variable, according to the study by Godwin, Amos, and Sunday (2019). Regression on panel data was employed in this. The inquiry employed the Godwin, Amos, and Sunday (2019) model to examine the effects of the independent variables on the dependent variable.

$$PRT=f(CORM, DEXP, SWEXP, RDC, TRC) \dots\dots\dots 3.1$$

Where;

PRT= Profitability (measured by profit before tax)

CoRM = Cost of raw material

SWexp = Salaries and wages

SDexp = Selling and Distribution expenses

RDC= Research and Development costs

TRC= Training cost

For industrial firms in Nigeria, the study has developed a novel model that combines cost-control with performance-monitoring. The improved model was stated in operational terms after some essential revisions.

The refined model provides a comprehensive approach to managing costs and monitoring performance for listed manufacturing companies in Nigeria. It incorporates various factors such as production processes, labour costs, and raw materials expenses. Furthermore, it utilizes a variety of metrics to monitor performance, including quality control, customer satisfaction, and profitability. The model is tailored to the unique needs of the Nigerian market and can help companies remain competitive while maintaining profitability.

$$PAT= f(ADC, SDC, FZE) \dots\dots\dots 3.2$$

Using indicators like profit after tax (PAT), cost control factors like administrative costs (ADC), selling/distribution expenditures, and firm size (FZ) is one method of assessing financial

performance. To find trends and patterns in these variables, researchers frequently combine findings from different companies and historical periods. However, it's crucial to take into account the distinct traits and heterogeneity that may exist among businesses during this time (2011–2020). To address this issue, one could use more sophisticated statistical methods that account for differences among firms. For example, instead of assuming that all firms have the same relationship between PAT, ADC, selling/distribution expenses, and FZ, one could allow for variation in these relationships across firms. This could be done by including firm-specific random effects in the model, which would capture the unobserved heterogeneity among firms. Overall, it is important to consider the limitations of simple linear models when evaluating financial performance, and to use more advanced statistical techniques that account for the unique characteristics of each firm.

PATit ADC SDC FZE3.3

The following definition of the variable is provided:

Where;

I = is the mistaken term.

Profit after Tax (PAT)

Administrative Costs = ADC

Sell-Distribution Costs = SDC

Firm Size is FZE.

Ao = Constanta1a2a3 = Independent Variables' Vector

It is a cross-sectional study of the observation and time periods.

a1a2a3 = The independent variable's vector

it is a cross-sectional study of the observation and time periods.

Data Sources and Analysis Techniques

In this study, the annual reports of ten randomly selected publicly traded industrial companies were used. These particular companies were picked because of anomalies in their financial records. Nevertheless, during the course of the investigation, Vitafoam Nig. Plc. (VF), Nascon (NC), and Unilever Nig. Plc. (UN) were implicated and subsequently excluded from the analysis. The remaining companies were Berger Paint (B.P.), Beta Glass (B.G.), Cutix (C.U.), First Aluminum (F.A.), Lafarge (L.G.), Meyer Plc (M.E.), and Paints & Coatings (P.C.). The nine-year time span of the study spanned from 2012 to 2021.

Several analytical techniques were used, including descriptive statistics, panel least squares, and post-estimation diagnostic tests, to ensure the reliability and accuracy of the estimates. These techniques were utilized to assess the data and present a thorough examination of the industrial

sector. By employing these methods, the study was able to generate trustworthy and valid results that may be utilized to guide future industry research and decision-making.

Results and Discussion

Descriptive Analysis

Table 4.1. Descriptive Statistics for the Variables

Variables	Obs	Mean	Std. Dev.	Min	Max
PAT	100	18.59113	61.74941	-102.4004	481.456
ADC	100	8.006264	16.44777	.0049716	103.131
SDC	100	8.717299	18.03293	0.0033144	109.188
FZ	100	17.02119	2.053894	12.93095	21.32429

Source: SPSS Analysis, (2023)

We may see several descriptive statistics for the variables employed in the study based on the data shown in Table 4. For each variable, the statistics include the mean, standard deviation, and range (minimum and maximum values). The average profit after taxes, which ranged from -102.4004 billion to 481.456 billion naira, was found to be 18.59113. The administrative cost ranged from 0.0049716 billion to 103.1131 billion, with an average of 8.006264 billion. The selling and distribution costs ranged from 0.0033144 billion to 103.9188 billion, with an average of 8.71729 billion. The firm's size ranged from 12.93095 to 21.32429, with an average of 17.02119.

Correlation Analysis

Table 4.2. Statistics on correlation

	PAT	ADC	SDC	FZ
PAT	1.0000			
ADC	0.0910	1.0000		
SDC	0.6091	0.6275	1.0000	
FZ	0.4810	0.4834	0.566	1.0000

Source: SPSS Analysis, (2023)

The correlation coefficients in Table 4.2 show the degree and direction of the association between the variables included in the study's models. With coefficients ranging from 0.0910 to 0.6091, the study specifically found substantial relationships between net profit after taxes, administrative costs, sales and distribution costs, and the firm itself. Importantly, the low magnitudes of the correlation coefficients suggest that there is minimal risk of multicollinearity, meaning that the explanatory factors are unlikely to interact excessively with each other. In essence, this analysis underscores the interrelatedness of key variables in the study while also affirming the soundness of the model employed to evaluate them.

Analysis of the impact of selling and distribution costs as well as administrative costs on the profit after tax of a sample of Nigerian manufacturing enterprises.

In this part, we present the findings of an investigation into the effects of administrative, sales, and distribution costs on the profit after tax (PAT) of a sample of manufacturing businesses with stock market listings. We analyzed the data using a number of statistical methods, such as pooled OLS estimates, fixed and random effects estimations, restricted f-tests, and Hausman post-estimation tests. To confirm the model's validity, we also ran other tests.

Overall, our data indicates that administrative, sales, and distribution costs have a considerable impact on PAT. The results of our various tests were consistent and efficient, indicating that our model is a good fit for the data. These findings have important implications for manufacturing companies looking to improve their profitability, as they highlight the need to carefully manage administrative and sales and distribution expenses in order to maximize profits.

Estimation Results, Table 4.3

Coefficient	Pool	Probability	Fixed	Prob	Random	Probability
C	-12.34563	0.000	-3422422	0.9332	- 10.45356	0.0000
AD C	-1386646	0.0453	.000000	0.0453	- 0.040257	0.7676
SD C	.3232456	0.0032	-.094833	1.3242	0.046645 4	0.5646
FZ	-2145567	0.0000	.4358394	0.0000	0.575678 *	0.0000
	R.Square Adj.R.Square F.statistic=47.86 Prob(F-stat)=0.0000		R-square=0.8567 Adj R-square=0.8391 F-statistics=48.58 Prob(F-stat)=0.0000		R.Square Wald Chi Prob> chi2 = 0.000 Prob >chi2+ 0.000	
	Restricted F-Test 23.55(p=0.000>0.05)					
				Hausman Test=2.77(p=0.59876>0.05)		

Note: Since the variables used for the model estimation were converted to natural log form along with those in percentage, parameter estimates are expressed as changes in percentage.

Source: SPSS Analysis, (2023)

Table 4.3 displays the results of a number of estimation methods, including the pooled OLS, fixed effect, and random effect estimates, as well as the restricted F-test and Hausman test. The null

hypothesis that all differential intercepts for each business are equal to zero is rejected in light of the results in Table 4.3, but not for the period-specific intercepts. Due to the significant cross-sectional variability in the data from industrial enterprises, pooled OLS estimation is inappropriate; a cross-sectional fixed effect estimate is proposed instead.

The probability was calculated using the Hausman test, and the result was 0.5975, suggesting that there is insufficient evidence to refute the null hypothesis that there were no significant differences between estimates of fixed effects and estimates of random effects. Therefore, the most accurate and useful method for determining the study's results is random effect estimation. The random effect estimates in Table 4.3 indicate that administrative costs have a negative and insignificant impact on profit after tax, suggesting that a 1% increase in administrative costs results in a 0.04% decrease in profit after tax after heterogeneity and period effects are taken into account in the model through the error term.

The random effect result also shows that selling and distribution costs have a positive but negligible impact on profit after tax, with an estimated coefficient of 0.006885 ($p=0.995$ 0.05) showing that a 1% increase in selling and distribution costs results in a 0.006% increase in profit after tax, respectively. When the heterogeneity effect was taken into account, the reported R-square for the random term was 0.5616, demonstrating that the firm size and cost control variables together account for nearly 56% of the systematic variance in profit after tax.

Other Post-Estimation Tests, Table 4.4

<i>Wald test</i>		
Null hypothesis	Statistics	Probability
<i>Panel homoscedasticity</i>	1.9116	0.3534
<i>Pesaran test</i>		
Null hypothesis	Statistics	Probability
<i>No cross-sectional dependence</i>	-1.465	0.1428
<i>Wooldridge test</i>		
Null hypothesis	Statistics	Probability
<i>No AR(1) panel autocorrelation</i>	1.8194	0.3538

Source: SPSS Analysis, (2023)

Based on the statistical likelihood provided in Table 4.4, it is impossible to rule out the null hypotheses of panel homoscedasticity, lack of cross-sectional dependency, and absence of AR (1)

panel autocorrelation. The hypothesis of cross-sectional independence and equal variance of residual terms can be supported by more study. This implies that serial autocorrelation is not supported by the data. The results support the hypothesis that the basic assumptions of the panel regression model have not changed considerably.

Discussion of Findings

Recent studies have demonstrated that lowering expenses, such as administrative and sales and distribution costs, can improve the profitability of manufacturing businesses as indicated by their profit after tax (PAT). The assumption that reducing expenses to the absolute minimum might result in improved financial performance is supported by studies that have discovered a substantial association between SDC and ADC (Nelson, George, Muriithi, & Isaac, 2014).

Additionally, Akeem's (2017) study on publicly traded US manufacturing companies showed that better cost management results in better financial performance. This demonstrates how crucial cost control is to raising enterprises' financial performance. Additionally, Lasisi and Nuhu (2015) found that improving business performance was aided by cutting operating costs.

The research by Godwin, Amos, and Sunday (2019) adds to the body of evidence that better cost control can boost profitability. Their analysis showed a substantial inverse link between administrative costs and earnings before taxes. Accordingly, businesses like Lafarge, Meyers, Berger, Unilever, and Beta Glass might gain from cutting their administrative expenses.

Additionally, by lowering their selling and distribution costs, Nascon and Vitafoam can perform financially better. These results underline how crucial cost control is to raising financial performance in the manufacturing industry. Sales and distribution costs had a negligible impact on profit after taxes for the company that was the subject of the analysis, whereas administrative costs had no impact at all. The results of this study indicate that cost-control measures, such as administrative cost reduction, are not anticipated to have a substantial impact on the financial performance of Nigerian manufacturing companies. The study's results served as the foundation for this forecast. Cost-cutting measures, as determined by profit after tax, may have both positive and bad effects on the financial performance of Nigerian manufacturing companies.

Conclusion

Cost control management plays a pivotal role in attaining strong financial performance for manufacturing firms operating in Nigeria. Efficiently managing costs empowers companies to streamline their operations, bolster profitability, and remain competitive in the market. To effectively implement cost control management, firms must possess a comprehensive understanding of their cost structure and employ strategies that minimize expenditures while upholding product or service quality. It becomes imperative for manufacturing firms in Nigeria to embrace best practices in cost control management to enhance their financial performance, ensure sustainability, and meet the expectations of their shareholders.

These best practices encompass the implementation of cost-reduction strategies through various avenues. This includes negotiating more favorable terms with suppliers, optimizing production processes, and harnessing efficient technologies. Ultimately, effective cost control management stands as a linchpin for the enduring success of manufacturing firms in Nigeria. By giving precedence to cost control, firms can achieve sustained profitability, foster growth, and maintain a competitive edge in the market. Therefore, it is of utmost importance that Nigerian manufacturing firms prioritize cost control management to secure these enduring benefits.

Recommendations

1. To enhance profitability, manufacturing firms operating in Nigeria should adopt effective cost control measures. This can be achieved through consistent monitoring of expenses, the implementation of efficient production processes, reduction of overhead costs, and optimization of supply chain management to minimize waste.
2. To remain competitive and improve financial performance, manufacturing firms in Nigeria must invest in research and development (R&D). By dedicating resources to R&D, firms can improve their products, reduce production costs, and gain a competitive edge. This will translate into improved market share, increased profitability, and sustained growth.
3. Listed manufacturing firms in Nigeria should prioritize the implementation of robust financial reporting systems. These systems will ensure the accuracy of financial statements, compliance with accounting standards, and transparency in financial reporting. This will attract investor confidence, increase access to funding, and improve the overall financial performance of the firm.

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