American Journal of Economics and Business Innovation (AJEBI)

ISSN: 2831-5588 (ONLINE), 2832-4862 (PRINT)

VOLUME 5 ISSUE 1 (2026)

PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

American Journal of Economics and Business Innovation (AJEBI)

Volume 5 Issue 1, Year 2026
ISSN: 2831-5588 (Online), 2832-4862 (Print)
DOI: https://doi.org/10.54536/ajebi.v5i1.7357
https://journals.e-palli.com/home/index.php/ajebi

Cost Control and Profitability: Evidence from Listed Industrial Goods Companies in Nigeria

Akinde, Mukail Aremu[1*], Ajibola, Hussein Olamilekan[2]

Article Information

Received: November 02, 2025

Accepted: March 29, 2026

Published: April 17, 2026

Keywords

Cost Control, Distribution Cost, Finance Cost, Labour Cost, Net Profit Margin, Profitability

ABSTRACT

High increase in costs associated with running a business in Nigeria have become a major concern, as this has resulted to business closures, and relocation of industrial goods firms to neighboring countries, where operational costs are comparatively lower than that of Nigeria. Therefore, implementing cost control measures in industrial goods companies is essential to monitor and reduce expenditures to levels that support profitability. This study therefore, examined the influence of cost control on profitability of listed industrial goods companies in Nigeria. The study uses an ex post facto research design and data was collected from audited annual reports and account of the Ten (10) selected industrial goods companies within the time frame of 2015 to 2024 covering a ten-year period. The collected data were examined through descriptive statistical methods and multiple regression analysis. The findings revealed that changes in distribution cost (β = -4.184, p-value = 0.3598 > 0.05) and finance cost (β = -3.3448, p-value = 0.4496 > 0.05) both have negative and insignificant effect on net profit margin, while changes in labour cost (β = 0.7692, p-value = 0.0.8297 > 0.05) showed positive but insignificant effect on net profit margin of listed industrial goods companies in Nigeria. The study concluded that since the findings revealed that distribution cost, labour cost, and finance cost individually show insignificant effects on the profitability of listed industrial goods companies in Nigeria, this implies that their effect is not strong enough to meaningfully determine company's profitability when considered independently. The study recommended that management of industrial goods companies should consider reducing reliance on expensive short-term borrowing and instead utilize long-term financing options or equity funding.

INTRODUCTION

Profitability is essential to any organization's sustainability and cannot be stressed, as it is the top priority for all stakeholders, including owners, the government, employees, and communities. Over the years, numerous Nigerian firms, especially within the industrial domain, have experienced setbacks in meeting stakeholders' expectations (Godwin *et al.*, 2019). However, only a productive company can discharge its duties toward its stakeholders, which include fulfilling tax obligations to the public sector, distributing dividends to shareholders, raising employee compensation, and funding CSR initiatives. For companies experiencing losses, the scenario will be reversed (Ajibola *et al.*, 2024).

A small number of manufacturing firms still active in the Nigerian market have adopted cost control as a key strategy to maintain their profitability. Implementing cost control measures is crucial for any profit-oriented business seeking longevity, particularly during economic downturns, as no organization can survive without effective systems to monitor and regulate expenses to prevent them from exceeding projected budgets. Failure to manage costs appropriately can negatively affect the smooth operation of a business (Oyedokun *et al.*, 2019). It is therefore essential for management to continuously compare budgeted versus actual expenditures and ensure that spending stays within planned limits. In this context, cost reduction strategies represent a deliberate effort to lower expenses (Adeniji, 2016).

The act of overseeing and regulating an organization's operational expenditures is known as cost control (Lawal, 2017). Moreover, it involves the strategy of minimizing the unnecessary consumption of scarce resources while fostering efficiency and cost-conscious practices. Cost control represents a spectrum of measures that management of a business employs to keep operational expenses continuously low. It covers both present and predicted future expenses (Adamu, 2022). Industrial goods companies in Nigeria need to effectively maintain good expense management to oversee and minimize unnecessary spending. Additionally, cost containment increases market demand, which is important in already fiercely competitive markets (Akinleye & Fajuyagbe, 2022).

Furthermore, Ajibola *et al.* (2024) stated that cost control can include lowering raw material costs by using alternative methods, controlling finance costs (by employing a less expensive source of financing), utility costs, reducing distribution costs, labour costs and service costs. This implies that manufacturing businesses must continuously reduce the aforementioned expenditures in order to preserve profitability and financial viability.

[1] Department of Taxation, Federal University of Technology, Ilaro, Ogun State, Nigeria
[2] Accountancy Department, Federal University of Technology, Ilaro, Ogun State, Nigeria
[*] Corresponding author's e-mail: jblhussein@gmail.com

The high increase in costs associated with running a business in Nigeria have become a major concern for entrepreneurs and the general population. This situation has contributed to capital flight, business closures, and relocation of industrial goods firms to neighboring countries, where operational costs are comparatively lower than that of Nigeria. Therefore, implementing cost control strategies in industrial goods companies is essential to monitor and reduce expenditures to levels that support profitability (Sule, 2018).

Distribution cost includes costs related to transportation, warehousing, packaging, handling, and logistics. Effective control of distribution costs is vital for listed industrial goods companies because it directly affect the overall profitability and competitiveness of the companies. This is because managing and minimizing these costs through efficient logistics planning, route optimization, and inventory management, industrial goods firms can reduce waste and improve cost efficiency, thereby improving the firms' profitability (Drury, 2018).

Labour cost is the total expenditure sustained by a business to compensate its employees for the work they perform. This includes wages, salaries, bonuses, benefits, and other related expenses such as taxes and insurance contributions (Drury, 2018). Control of labour cost is critical because it frequently constitutes a major part of an organization's operating expenses. Effective cost control strategies involve monitoring labour efficiency, reducing idle time, optimizing workforce deployment, and minimizing overtime without compromising productivity (Horngren *et al.*, 2020).

The Central Bank of Nigeria's monetary policy committee recently increased the interest rate and as well declined the value of the Naira on the foreign exchange market, this in turn significantly affects the financing costs of Nigerian listed industrial goods companies; as a result, implementation of effective finance control measures becomes a must for the firms. If these measures are not effectively implemented, companies will pay needless interest rates, which will ultimately have an impact on the businesses' profitability (Ajibola *et al.*, 2024). Controlling finance costs helps maintain financial stability and ensures funds are available for operational and investment needs (Drury, 2018).

Previous researchers have conducted a study on cost control and profitability of manufacturing companies in Nigeria, researchers like Saka & Thalith-Sakariyah (2024), Oinkio (2023), Awotomilusi *et al.* (2022), Akinleye & Fajuyagbe (2022), Ajala (2021), Erasmus (2021), and Onuora & Kenechukwu (2019). Majority of these related studies employed the exact amount of cost of sales, administration cost, distribution cost, salaries and wages, finance cost to measure cost control, which is not representative enough and in turn does not give adequate results.

However, studies from Ben-Caleb *et al.* (2019) and Ajibola *et al.* (2024) measured cost control using annual percentage changes in the cost of sales and distribution cost. In addition, the reviewed studies did not take cognizance of the uniqueness of the sub-sectors under manufacturing industries, ignoring the fact that the sub-sectors have differences in terms of operations. Hence, this study fills the aforementioned research gaps to examine the effect of cost control on profitability of listed industrial companies in Nigeria using changes in distribution cost, changes in labour cost and changes in finance cost as the measurement for cost control, while net profit margin proxy profitability. As a result, the underlisted specific objectives were stated:

i. To examine the effect of changes in distribution cost on net profit margin of listed industrial goods companies in Nigeria.

ii. To evaluate the effect of changes in labour cost on net profit margin of listed industrial goods companies in Nigeria.

iii. To determine how changes in finance cost affects net profit margin of listed industrial goods companies in Nigeria.

LITERATURE REVIEW

Conceptual Review

Profitability

Profitability, in the context of business, refers to how far a company has advanced in its field of endeavor. It includes its scale (in terms of investment and expansion), the caliber of its workforce, its goods and services, its degree of profit, and its participation in the community and social responsibility. It represents an indicator of performance and a benchmark of operational effectiveness (Oinkio, 2023).

Owolabi (2017) asserted that profitability involves a gauge of how well a management team uses its resources and is the capacity of a business to generate earnings across all of its commercial endeavors. An organization's profit performance is the primary factor to be taken into account while assessing its profitability.

Odusanya *et al.* (2018) opined that certain words have the same meaning, including earnings, income, and margin. Thus, the capacity to generate revenue from any commercial venture, organization, or operation is referred to as profitability. This illustrates how managers may efficiently utilize every resource on the market in order to generate profit. For the purpose of this study, net profit margin was employed as measurement of profitability.

Net Profit Margin (NPM)

Net profit margin is a financial metric that showed a company's profit in relation to its total sales. It determines the extent of a company's net profit is for each Naira of sales. Net profit margin (NPM) measures the portion of a company's net earnings relative to its total sales (Palma, 2019). It shows the proportion of net profit to sales for a business unit or the overall company. NPM can be displayed in decimal form, while it is also typically reported as a percentage sometimes. It displays the proportion of every dollar made from sales that a

company makes in profit (Khrawish, 2017).

A company's net profit margin is a crucial measure of its financial health. By tracking fluctuations in this margin, a business can assess how well its current strategies are performing and estimate potential earnings relative to sales. Since net profit margin is expressed as a percentage rather than a specific currency amount, it allows for the comparison of profitability across multiple companies, irrespective of their scale (Security Exchanges Commission, 2023).

Cost Control

Fatoki and Adewale (2023) explain that cost control encompasses the actions undertaken by managers to plan and manage both short-term and long-term expenses. They further note that cost planning and control are often closely linked to revenue management and profit optimization. It involves the process of overseeing and regulating an organization's expenditures to reduce costs and enhance profitability. Ajibola *et al.* (2024) also contributed that cost control involves establishing objectives and gathering feedback to verify that actual outcomes align with the set goals, and if discrepancies occur, implementing corrective measures.

The process of cost control starts with organizations evaluating their expenses to determine whether they are reasonable and sustainable. If needed, businesses can explore strategies to lower costs, such as reducing consumption, opting for a more economical alternative, or changing suppliers (Fatoki & Adewale, 2023). The purpose of the cost management process is to oversee expenditures such as telephone, internet, and utility charges, in addition to staff wages and fees for external professionals. For instance, Akinleye and Fajuyagbe (2022) asserted that the study revealed that for an organization to achieve profitability, it is not enough to merely earn revenue; it must also regulate all costs associated with procuring goods and services.

Excessive expenses can significantly reduce profit margins, thereby hindering a company's ability to remain competitive. Cost control, therefore forms a component of marginal cost, involving the determination of unit expenses, supervision, and adjustment of employees' performance to ensure that organizational objectives and methods are accomplished efficiently and economically (Lockey, 2022).

Distribution Costs

Castenhol (2017) viewed distribution costs as all out-of-pocket expenses, which can be direct or indirect, required to guarantee the effective distribution of goods. Distribution costs cover both the direct cost of activities like product promotion, order fulfillment, and shipping as well as the costs of more general management tasks like developing marketing strategies, supervising sales managers, and offering financial factor control. In accounting, distribution costs are sometimes known as sales and distribution expenses or marketing and distribution expenses. This is because, when it comes to cost categorization, marketing and distribution expenditures are typically included together in the same class (Adebawojo *et al.*, 2022).

Oladele and Adebayo (2020) asserted that distribution cost, also known as selling and distribution expense, involves all expenditures incurred to move finished goods from the point of production to the final consumer. These include transportation, warehousing, packaging, advertising, and logistics management. In Nigeria, the high cost of distribution significantly affects the profitability of manufacturing firms due to poor infrastructure, fluctuating fuel prices, and inefficient supply chains.

Furthermore, distribution costs can account for a substantial portion of total operating expenses, thereby reducing net margins if not efficiently managed. In an environment where operational costs are already high, excessive distribution expenses can erode competitive pricing and profitability (Oladele & Adebayo (2020). Conversely, logistics outsourcing tends to maintain stronger profitability (Okoro & Okechukwu, 2019). Thus, the effective control of distribution costs is essential for sustaining profitability in Nigeria's industrial goods sector, where market access and delivery efficiency are critical to competitive advantage.

Labour Cost

Young and Shields (2016), the term labor costs refers to the aggregate expenditure incurred by an organization to hire or employ people and provide services in exchange with the realization of its objectives. Labor costs are one of the long-term controllable expenditures of an organization because they can be increased or decreased at the will of the organization. Strategic cost management practices are practiced by many companies in the name of competitive strategy in reduction of labor costs.

Labor costs are incurred during job execution or as field overhead to assist with the task. Labor delay costs are often incurred in the form of prolonged field overhead labor as delays typically result in longer performance times rather than larger workloads (Abbas & Abu, 2019). Usually, this labor is related to general assistance, supervision, and project management. Nonetheless, even in cases when the volume of work has not changed, labor costs may rise. This typically happens when more workers are required to complete a given task more quickly, or when more workers are required to complete the same level of work, which arises as a result of inefficiency or productivity, thereby resulting to travel expenses, overtime additional fees, or shift work (Ebben *et al.*, 2021).

Akinyomi & Tasie (2021), controlling labor expenses necessitates regulating worker behavior. In order to reduce labor costs, management should thus thoroughly research labor performance, human behavior, time and motion studies, labor turnover, and labor approach. Labor cannot be preserved for later use. It is similar to how materials are perishable in most cases. It's possible for some materials to degrade and stop being useful for manufacturing (Ebben *et al.*, 2021).

Finance Cost

Onakeke (2022) viewed finance cost as the expenses, interest, and other expenses of financing the money to be used to purchase or develop assets. Businesses fund their operations either through equity or by obtaining loans and borrowings. Such funds are not provided without compensation. Equity investors expect returns in the form of dividends and capital appreciation, while lenders require interest payments. The cost of interest represents the price of acquiring borrowed capital.

As expressed by Adebawojo *et al.* (2022), finance costs are defined by International Accounting Standard (IAS) 23 as the interest and other associated costs incurred by a firm as a result of borrowing. A company's operations might be financed by a number of different sources. For instance, loans may be the source of funding; lenders seek interest payments on their capital, while equity fund providers seek dividends and capital gains as payment for assuming the risk of releasing their capital.

Innocent (2017) asserts that reducing finance costs and effectively cutting lending rates will positively affects a firm's financial sustainability. This shows how relevant finance costs are. For instance, an organization's ability to maintain its financial stability might be compromises if the firm fails to effectively manage finance costs. Excessive use of borrowed funds to finance the day-to-day running of a firm endangers the wealth of the firm's shareholders, which may also give rise to high financial leverage (Ashmarina *et al.*, 2016).

Finance costs are often evaluated through solvency ratios, as these indicate an enterprise's capacity to fulfill long-term debt obligations and are frequently considered by potential lenders. Specific measures include the interest coverage ratio and financial coverage ratio (Ajibola *et al.*, 2024).

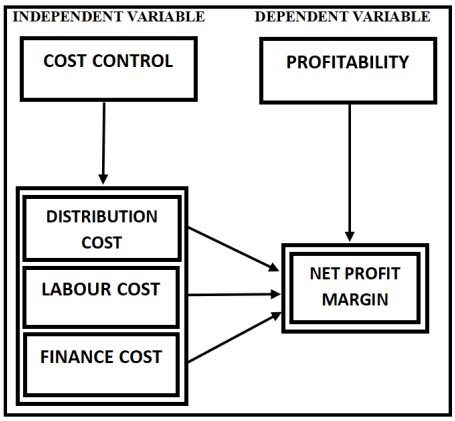

Figure 1: Conceptual Model

Conceptual Model

Underpinning Theory

Contingency Theory

Contingency Theory was introduced by Donaldson in 2001. The theory assumes that organizational traits and the external environment must align for management strategies, especially cost management procedures, to be effective (Ajibola *et al.* 2024). Nonetheless, the contingency theory suggests that the unique features of the listed manufacturing enterprises should determine how cost management is used in this context. Depending on a number of variables, including consumer preferences, industry dynamics, competitive pressures, and firm size, cost control may or may not be beneficial in enhancing profitability. Larger manufacturing organizations, for example, could gain from cost control by using a uniform method for cost estimate, management, and analysis across several divisions or products. However, because of the uniqueness and variety of their offers, smaller businesses with more specialized goods could find it difficult to set up appropriate cost management procedures (Ochigbo & Emeti, 2019).

Akinleye and Fajuyagbe (2022) opined that the necessity of adaptability and flexibility in cost management techniques is another point made by the contingency theory. Businesses in dynamic markets like Nigeria would need to periodically assess and adapt their cost management strategies to account for shifts in input costs, currency rates, or legal requirements. Businesses may sustain cost competitiveness and boost profitability by consistently coordinating cost control with the changing market conditions. This theory was chosen because, in the context of cost control, it suggests that its application should be dependent on the unique features of Nigerian manufacturing firms.

Empirical Review

Adesina and Tiamiyu (2025) investigated cost management and profitability in Nigerian manufacturing enterprises, with a particular emphasis on industrial and consumer products sectors. The study's data were gathered from annual reports of firms listed on the Nigerian Exchange Group (NGX) between 2014 and 2023. The findings demonstrate that administrative expenses, marketing and distribution charges, and excessive manufacturing costs all had a substantial impact on the profitability of the selected firms.

With reference to 10 listed manufacturing companies in Nigeria, Ajibola *et al.* (2024) examine the profitability and cost control of these enterprises. The research design used in the study was ex post facto. This study used secondary data from the financial statements of the selected companies for a ten-year period (2014-2023). Regression analysis, correlations, and descriptive statistics were used to examine the data. The study discovered that the cost of sales and distribution has a substantial impact on the net profit margin of the chosen companies.

Robinson and Umo (2023) investigated the profitability and cost control strategies of Nigerian cement manufacturing companies. The study's population consisted of three cement manufacturing businesses that were quoted between 2013 and 2022, and it employed an ex-post facto research approach. The content analysis study method was applied. The study's findings demonstrated a favorable correlation between

throughput costing, lifecycle costing, target costing, and activity-based costing methods and the return on asset of publicly traded cement manufacturing businesses.

The influence of cost structure on the financial performance of mentioned manufacturing businesses in Nigeria was evaluated by Awotomilusi, *et al.* (2022). The different cost structure elements were extensively evaluated as independent variables and their impact on the chosen manufacturing enterprises' financial performance. Seven industrial products manufacturing businesses listed by the Nigerian Exchanges Group were chosen for the study, and financial statements covering the years 2011–2020 were used for analysis. Descriptive analysis using regression and correlation analysis was employed, along with an ex post facto study approach. The study's conclusions support the notion that cost structure has a major impact on the financial performance of certain industrial firms that are listed on the Nigerian Exchanges Group.

Akinleye and Fajuyagbe (2022) investigated how a variety of factors, such as the cost of raw materials, the cost of administration, the cost of sales turnover ratio, and the expenses of marketing and distribution, impact the performance of listed non-financial enterprises in Nigeria. The information gathered for this study came from secondary sources. The data was compiled from a sample of 20 annual reports from companies in four different sectors (agricultural, oil and gas, industrial goods and consumer goods sectors) out of the 112 non-financial entities that were cited. The company's worth was used to evaluate the performance. The research's conclusions demonstrated that administrative costs positively impacted business value whilst distribution, sales, and raw material costs had little bearing on the chosen firms' value.

Omah (2022) assesses Nigerian manufacturing businesses' performance and cost-cutting tactics, focusing on a few industrial enterprises in Rivers state. Return on assets and profit before taxes were employed to measure performance, while value engineering and value analysis were used to examine cost-cutting strategies. The study employed a survey research design, which entailed distributing questionnaires. Using the Spearman Rank Order, the relationship between the variables was determined. Value engineering and profit before tax of selected manufacturing companies in Nigeria; value engineering and return on asset of selected manufacturing companies in Nigeria; and a significant correlation between value analysis and profit before tax of selected manufacturing companies in Nigeria were the conclusions drawn from the analysis.

The relationship between cost control and the financial success of particular Nigerian manufacturing companies was investigated by Oluwayemisi *et al.* (2022). The study specifically looked at how selling, distribution, and administrative costs affected Nigerian manufacturing companies' profit after taxes. Ten (10) chosen firms' annual financial reports from 2011 to 2020 provided the secondary source data used in the study. Panel regression, correlation analysis, and descriptive statistics were employed to assess the data. According to the study's findings, selling and distribution costs have a negligible positive impact on the selected enterprises' profit after taxes, while administrative costs have a negligible negative impact.

Fadare and Adegbie (2020) examined how cost control influences the financial performance of consumer goods companies listed in Nigeria. The study focused on a ten-year span from 2009 to 2018, selecting a sample of ten firms. Purposive sampling was employed to identify the businesses included in the research. Data were sourced from audited financial statements, which had been previously verified by relevant regulatory authorities. The analysis incorporated both descriptive and inferential statistical techniques. The results indicated that overall cost management had an insignificant combined effect on net profit margin.

Onuora and Kenechukwu (2019) examined the impact of cost control systems on business profitability through an analysis of a few Nigerian industrial goods. The data was analyzed using the Ordinary Least Squares (OLS) technique. Data from secondary sources were used; the variables of interest were extracted from the cited companies' annual reports. The results indicate inventory costs were shown to be positively correlated and statistically significant with business success. Additionally, it was noted that labor costs are positively correlated with audit quality and statistically insignificant.

The effect of cost control on the profitability of a subset of Nigerian manufacturing firms was investigated by Oyedokun *et al.* (2019). The population of the research consisted of 78 manufacturing companies that were listed on Nigerian stock markets as of December 31, 2017. Over the course of ten years (2005–2017), five firms from a sample frame of twenty-three enterprises registered in the consumer goods industry were considered. In this study, a judgmental sampling approach was employed. The study included both inferential and descriptive statistics. It was shown that there was a substantial negative correlation between the cost of raw materials and profit before taxes for Nigerian manufacturing companies.

This study adds to the body of literature by testing the following null hypotheses after it was discovered that prior research on cost control and profitability of listed industrial goods companies in Nigeria had produced conflicting results:

Ho1: Changes in distribution cost has no significant effect on net profit margin of listed industrial goods companies in Nigeria.

Ho2: Changes in labour cost has no significant effect on net profit margin of listed industrial companies in Nigeria.

Ho3: Changes in finance cost has no significant effect on net profit margin of listed industrial companies in Nigeria.

MATERIALS AND METHODS

For this particular study, an ex post facto research design was employed. This choice is due to the fact that the investigation was conducted after the events had already taken place, without any manipulation by the study, and because the required data was already available. It was observed from the Nigerian Exchange Group that there are twelve (12) listed industrial goods company in Nigeria as at 31st December, 2024. Thus, the sample size is restricted to ten (10) companies comprising of Beta Glass Plc, Berger Paint Plc, CAP Plc, Lafarge Africa Plc, Meyer Plc, Cutix Plc, Grief Nigeria Plc, Tripple Gee & Co. Plc., Austin LAZ & Co. Plc., as well as Dangote Cement Plc which were selected based on purposively sampling technique from which generalizations were made and data were collected between the periods of 2015 to 2024 (ten years). The companies were selected as they comprise of the top ten (10) leading industrial goods companies in Nigeria as at 2024 as prescribed by Manufacturer Association of Nigeria (2024). The secondary data used in this study were gathered from the audited annual report and accounts of the chosen firms. This research employed a combination of descriptive, correlation and regression analysis.

The dependent variable is profitability proxied by net profit margin while the independent variable is cost control measured by the changes in distribution cost, changes in labour cost, as well as changes in finance cost. The functional relationships were identified using multiple regression as revealed as follows:

$Y = f(X)$……(i)

$NPM = f(DC, LC, FC)$…..……(ii)

The model for the study is specified thus:

$NPM = \alpha + \beta_1 DC + \beta_2 LC + \beta_3 FC + \mu$……(iii)

Where:

Dependent Variable:

NPM = Net Profit Margin

Dependent Variables:

DC = Changes in Distribution Cost

LC = Changes in Labour Cost.

FC = Changes in Finance Cost

β = Regression coefficient

α = Intercept

μ = error term

RESULTS AND DISCUSSION

Given the study's time frame (2015–2024), this section provided the empirical findings of the analysis about the effect of cost control on the profitability of Nigerian listed industrial goods businesses.

Presentation of Results

The descriptive statistics were summarized in Table 1. Essentially, the results indicated that the average net profit margin for the years under investigation was

Table 1: Correlation Results

	NPM	DC	LC	FC
Mean	**8.124941**	**5.110914**	**5.451893**	**4.445382**
Median	8.666150	5.339450	5.585050	4.627450
Maximum	135.0903	8.791500	8.388300	8.845300
Minimum	-344.9429	0.000000	0.000000	0.000000
Std. Dev.	42.43366	2.097243	1.724152	2.411722
Skewness	-5.547870	-1.033952	-1.604853	-0.576048
Kurtosis	50.08418	4.308648	6.661062	2.717895
Jarque-Bera	9750.148	24.95329	98.77327	5.862117
Probability	0.000000	0.000004	0.000000	0.053341
Sum	812.4941	511.0914	545.1893	444.5382
Sum Sq. Dev.	178260.9	435.4445	294.2975	575.8241
Observations	100	100	100	100

8.124941, the distribution cost was 5.110914, the labor cost was 5.451893, and the financing cost was 4.445382. The Jarque-Bera statistic, skew, kurtosis, and sample distribution were all displayed in the table along with the median, minimum, and maximum values. Since the series' mean and median values fall between the greatest and lowest values, it shows that all of the series do, in fact, have a high degree of consistency. Additionally, the analysis was strengthened by using the skewness and kurtosis values of all the variables that were solved in the models. However, the skewness data show that the net profit margin, labor cost, distribution cost, and financing cost all have lengthy left tails due to negative skewness (-5.547870, -1.033952, -1.604853, and -0.576048). Kurtosis is categorized as mesokurtic when it is three, platykurtic when it is less than three, and leptokurtic when it is greater than three. This indicates that while the financing cost (2.717895) is platykurtic, the net profit margin, distribution cost, and labor cost (50.08418, 4.308648, and 6.661062) are leptokurtic. However, according to Jarque-Bera statistical probability, the results showed that finance costs are not normally distributed with p-values larger than 0.05,

whereas net profit margin, labor cost, and distribution cost are all normally distributed with p-values less than 0.05. Because of their normal distribution, the variables may thus be predicted with more accuracy.

The table above Displays the matrix of correlations and the corresponding significance values between the variables: NPM, DC, LC and FC based on 100

Table 2: Correlation Results

Correlation				
Probability	**NPM**	**DC**	**LC**	**FC**
NPM	1.000000			
DC	0.310205	1.000000		
	0.0017	-----		
LC	0.237103	0.693342	1.000000	
	0.0175	0.0000	-----	
FC	0.332306	0.825630	0.574905	1.000000
	0.0007	0.0000	0.0000	-----

observations from 2015–2024. Net profit margin is positively correlated with distribution cost (0.0017), meaning that as distribution cost increases, net profit margin demonstrates a small upward trend, and this relationship is statistically significant. Net profit margin also shows a strong positive and significant correlation with labour cost (0.0175), suggesting that labour cost strongly drives net profit margin outcomes. However, net profit margin has a strong positive correlation with finance cost (0.0007), which is statistically significant, implying there is a meaningful relationship between net profit margin and finance cost. Distribution cost is strongly and significantly correlated with labour cost (0.0000), showing no relationship between them. However, distribution cost has a strong positive and significant correlation with finance cost (0.0000), indicating that higher distribution cost values are associated with higher finance cost. Labour cost is strongly and positively significantly correlated with finance cost (0.0000), showing that increases in labour cost are linked to increase in finance cost. Overall, distribution cost emerges as a critical factor influencing both labour cost and finance cost positively.

The result of the pre-estimation test as observed from the above table revealed that there is no presence of heteroscedasticity. This can be explained by the Breusch-

Table 3: Heteroscedasticity Test (Pre-Estimation Test)

Test	**Statistic**	**d.f.**	**Prob.**
Breusch-Pagan LM	84.89885	45	0.0003
Pesaran scaled LM	3.151616		0.0016
Pesaran CD	0.455028		0.6491

Pagan LM 's p-value revealed as 0.0003, which falls below 0.05 criterion of significance. This implies that the result may be interpreted with high reliability and policy consequences and also shows that the model of the study adheres to econometric properties.

The Hausman Test, which is commonly used in panel data research to ascertain whether a Fixed Effects or Random Effects model is more appropriate, produced the results

Table 4: Hausman Test

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	10.759423	3	0.0131

that are displayed in Table 4 above. The test summary displays a p-value of 0.0131 and a Chi-square statistic of 10.759423 with three degrees of freedom based on the findings. Because the p-value is less than 0.05, the null hypothesis is rejected by the study. This indicates that the fixed effects model should be used instead of the random effects model as it offers objective and reliable estimations. In conclusion, fixed effects should be employed, as shown by the Hausman test.

In the regression results presented above, the intercept (Constant) value of 40.18525 represents the baseline profitability of listed industrial goods firms in Nigeria

Table 5: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	40.18525	25.67743	1.565003	0.1212
DC	-4.184227	4.545417	-0.920538	0.3598
LC	0.769253	3.565496	0.215749	0.8297
FC	-3.344812	4.403962	-0.759501	0.4496
Cross-section fixed (dummy variables)				
R-squared	0.230173	Mean dependent var	8.124941	
Adjusted R-squared	0.123990	S.D. dependent var	42.43366	
S.E. of regression	39.71596	Akaike info criterion	10.32212	
Sum squared resid	137230.1	Schwarz criterion	10.66079	
Log likelihood	-503.1061	Hannan-Quinn criter.	10.45919	
F-statistic	2.167696	Durbin-Watson stat	2.128938	
Prob(F-statistic)	0.020207			

when all independent variables are held constant. This indicates that, in the absence of the predictor variables, the selected firms would still experience a positive profitability level.

Furthermore, if other independent variables stay the same, a one-unit rise in distribution costs results in a 4.184227 decrease in the profitability of Nigerian listed industrial products businesses. This coefficient has a standard error of 4.545417, a t-statistic of -0.920538, and a p-value of 0.3598, all of which are greater than the 5% significance level. This implies that distribution costs have a statistically insignificant effect on these companies' profitability.

In a similar vein, profitability increases by 0.769253 with a standard error of 3.565496 for every unit rise in labour costs. The p-value of 0.8297 and the corresponding t-statistic of 0.215749 are both higher than the 0.05 significance threshold. This suggests that labor costs affect profitability (NPM) in a positive manner but statistically insignificant.

Profitability decreases by 3.344812 for every unit increase in finance costs, with a standard error of 4.403962. The p-value of 0.4496 is higher than the 0.05 significance level and the t-statistic is -0.759501, indicating that financing costs have a negative but insignificant effect on profitability (NPM) as well. Finance costs thus have little effect on profitability.

According to the fixed-effects R-squared, distribution, financing, and labor costs together accounted for around 23% of the variance in listed industrial products businesses' profitability throughout the research period. The remaining 77% of the variation is explained by variables that the model does not account for. The reliability of the multiple coefficients of determination is confirmed by the modified R-squared, which indicates that around 12% of the variance in profitability can be explained when additional factors are taken into account.

The regression model is statistically significant, as indicated by the overall F-statistic of 2.167696 with a p-value of 0.0202 (< 0.05). This suggests that the three predictor variables—labour cost, finance cost, and distribution cost—jointly affect the profitability of listed industrial goods companies in Nigeria. Consequently, the alternative hypothesis is accepted and the null hypothesis is rejected, leading to the conclusion that cost control has a significant impact on the profitability of these businesses.

Interpretation of Results

Test of Hypotheses

Ho1: Changes in distribution cost has no significant effect on net profit margin of selected industrial companies in Nigeria.

According to the regression result table, distribution cost has no discernible effect on net profit margin of Nigerian listed industrial products businesses, as indicated by the t-statistic of -0.920538 (< 2) with a probability value of 0.3598 that is higher than the 0.05 significance level. Therefore, the first null hypothesis was not rejected.

Ho2: Changes in labour cost has no significant effect on net profit margin of selected industrial companies in Nigeria.

According to the regression result table, labor costs have no discernible effect on net profit margin of listed industrial products businesses in Nigeria, as indicated by the t-statistic of 0.215749 (< 2) and p-value of 0.8297, which is higher than the 0.05 significance threshold. As a result, null hypothesis two was also not rejected.

Ho3: Changes in finance cost has no significant effect on net profit margin of selected industrial companies in Nigeria.

Furthermore, the regression result table shows that the t-statistic is -0.759501 and the p-value is 0.4496, which is greater than the 0.05 significance level, implying that

finance costs have no significant influence on the net profit margin of Nigerian listed industrial products businesses. Thus, third null hypothesis was not rejected.

Discussion

The finding of this study shows that changes in distribution cost has a negative and insignificant effect on the net profit margin of listed industrial goods companies in Nigeria. This aligns with the work of Fadare & Adegbie (2020), Oluwayemisi *et al.* (2022) and Akinleye & Fajuyagbe (2022) who found that distribution costs do not significantly affect industrial goods firms' profitability in Nigeria, arguing that market reach and production scale play stronger roles and that distribution costs are often absorbed by revenues from increased sales volumes, reducing their direct impact on profitability. Contrarily, some studies like Ajibola *et al.* (2024) as well as Adesina & Tiamiyu (2025) reported significant effects. In addition, the findings also reveal that changes in labour cost shows a positive but insignificant effect on net profit margin of listed industrial goods companies in Nigeria. This finding is consistent with the findings of the studies conducted by Onuora & Kenechukwu (2019), Fadare & Adegbie (2020) who found that labour costs did not significantly affect profitability due to inefficiencies in labour utilization; and that the lack of direct alignment between employee expenses and output growth reduces the measurable impact of labour costs on firm profits. In contrast, other scholars such as Awotomilusi, *et al.* (2022) and Adesina & Tiamiyu (2025) disagree and reported that labour costs significantly improve profitability, arguing that higher wages improve employee motivation and productivity, which translate into better financial results, and as well human capital investments (such as labour cost) are key drivers of firm performance.

Lastly, the findings indicate that changes in finance cost have negative and insignificant effect on net profit margin of listed industrial goods companies in Nigeria, suggesting that debt servicing reduces profitability, but not strongly enough to determine overall profitability. Akinleye and Fajuyagbe (2022) supported this by noting that many industrial firms can absorb finance costs through revenue growth or capital restructuring, making the effect statistically weak.

CONCLUSION

The underlisted conclusions were reached in line with the study's findings

The study concludes that distribution cost has a negative and insignificant impact on the net profit margin of listed industrial goods companies in Nigeria. This suggests that while higher distribution costs may slightly reduce profit margins, their effect is not strong enough to meaningfully determine company's profitability when considered independently. Labour cost shows a positive but insignificant effect on net profit margin of listed industrial goods companies in Nigeria. This implies that although higher labour spending could contribute to productivity and growth, the relationship is not statistically strong enough to establish labour cost as a major independent determinant of profitability within the industrial sector. Finance cost exerts a negative and insignificant effect on net profit margin of listed industrial goods companies in Nigeria. This indicates that rising finance costs may reduce profit levels, but the statistical evidence suggests that finance cost alone does not significantly explain variations in profitability among industrial goods companies in Nigeria.

Recommendations

Management of industrial goods companies should focus on improving distribution efficiency rather than merely cutting costs. The firms can invest in digital logistics systems, efficient supply chain management, and collaborations with reliable distributors to minimize unnecessary expenses. Policymakers should also improve road and transport infrastructure to reduce the burden of logistics costs on firms. By ensuring efficient distribution channels, industrial companies can prevent cost overruns while sustaining market penetration and customer reach.

While labour costs may not independently guarantee profitability, a motivated and skilled workforce enhances efficiency, innovation, and customer service, which are indirect but crucial drivers of financial performance.

Management of industrial goods companies should adopt optimal financing strategies to minimize the burden of debt servicing. They should consider reducing reliance on expensive short-term borrowing and instead utilize long-term financing options or equity funding. The firms should also strengthen internal revenue generation and retain earnings to reduce debt exposure. At the policy level, government and regulators should ensure lower interest rates and create financing schemes that support the industrial goods sector, thereby reducing the adverse effect of financial costs on firm's profitability.

REFERENCES

Abbas, T., & Abu, G. M. (2019). The impact of cost control on manufacturing industries' profitability. *International Journal of Management and Social Science Research, 2*(3), 319-421.

Adamu, D. K. (2022). The effect cost on profitability of an organization. *African Scholars Journal of Business Development and Management Research, 27*(7), 1-10.

Adebawojo, E., Adegbie, A. E., & Adebawo, O. T. (2022). Capital structure and the performance of quoted companies in Nigeria. *International Journal of Management Sciences & Business Research, 6*(8), 24-45.

Adeniji, A. (2016). Cost accounting: A managerial approach. Lagos: Value Analysis Consult.

Adesina, O. D., and Tiamiyu, T. A. (2025). Empirical analysis of cost management and profitability of manufacturing companies in Nigeria. *Journal of Economics, Finance and Management Studies, 8*(2), 1415 -9713.

Ajala, T. (2021). Cost reduction and profitability of

manufacturing firms in Nigeria. *Journal of Accounting and Management, 15*(1), 33–49.

Ajibola, H. O., Nurudeen, A. O., & Balogun, S. B. (2024). Cost control and profitability of listed manufacturing companies in Nigeria. *FUOYE Journal of Management Sciences, 2*(1), 89–109.

Ajibola, O., Tomomewo, A., & Owolabi, A. (2019). Cost control mechanisms and performance of listed manufacturing firms in Nigeria. *Journal of Business Administration and Research, 7*(3), 44–61.

Akinleye, G. T., & Fajuyagbe, S. B. (2022). Costs control and financial performance of listed non-financial firms in Nigeria. *Fuoye Journal of Accounting and Management, 5*(1), 1-22.

Akinyomi, R. & Tasie, R. S. (2021) The design of cost management system. 2nd ed. Upper Saddle River, NJ: Prentice Hall.

Ashmarina, S., Zotova, A., & Smolina, E. (2016). Implementation of financial sustainability in organizations through valuation of financial leverage effect in Russian practice of financial management. *International journal of environmental &science education, 11*(10), 3775-3782.

Awotomilusi, O., Adeyemi, S., & Olayemi, T. (2022). The effect of cost structure on financial performance of quoted manufacturing companies in Nigeria. *Nigerian Journal of Economic Studies, 14*(3), 76-89.

Ben-Caleb, E, Olubukunola, U., & Uwuigbe, U. (2019). Cost reduction strategies and the growth of manufacturing companies in Nigeria. *Journal of Business and Management, 9*(1), 13-21.

Castenhol, H. O. (2017). Reducing operating costs and profitability of manufacturing firms in the South-East, Nigeria. *Academic Journal of Current Research, 7*(9), 208-226.

Donaldson, H. E. (2001). Contingency Theory. NewYork: John Wiley and sons.

Drury, C. (2018). Management and cost accounting (10th ed.). Andover, UK: Cengage Learning.

Ebben, P. J., Johnson, D. M., & Gamble, S. (2021). Assessment of the role of materials management on financial performs of firms. *Economics and International Finance, 1*(4), 99-105.

Erasmus, A. (2021). Cost structure and profitability of selected firms in developing economies. *International Journal of Business Finance, 12*(4), 144–162.

Fadare, T. V., & Adegbie, F. F. (2020). Cost management and financial performance of consumer goods companies quoted in Nigeria. *International Journal of Scientific & Research, 10*(8), 82-90.

Fatoki, J. O., & Adewale, T. (2023). Effect of cost control techniques on the survival of manufacturing companies in Nigeria. *International Journal of Scientific and Management Research, 6*(9), 63-80.

Godwin, G. K., Amos, E. O. & Sunday, A. A. (2019). The Haystack Syndrome: Sifting information out of the data ocean. New York: New York: North River Press

Horngren, C. T., Datar, S. M., Rajan, M. V., Wynder, M., Maguire, W & Tan, R. (2020). Management accounting: a managerial emphasis. French forest, n.s.w: Pearson Australia.

Innocent, B. (2017). Financing structure and financial sustainability: Evidence from selected Southern African Development Community Microfinance Institutions. Doctoral Degree Dissertation, University of Stellenbosch.

Khrawish, N. M. (2017). Determinants of financial performance of firms. *Journal of Accounting and Financial Management, 9*(6), 15-26.

Lawal, T. (2017). Cost control and its impact on financial sustainability. *Nigerian Journal of Financial Studies, 13*(2), 45-60.

Lockey, P. (2022). Cost control and marginal cost management in organizations. *Journal of Accounting and Business Studies, 9*(3), 65–80.

Ochigbo, P. A., & Emeti, C. I. (2019). Impact of standard costing on the profitability of Nigerian manufacturing firms. *International Journal of Accounting Research, 12*(1), 1-22.

Odusanya, A., Adegbite, O., & Omole, S. (2018). Profitability and resource utilization in Nigerian firms. *Journal of Business Studies, 10*(2), 55–72.

Oinkio, M. (2023). Cost reduction strategies and financial performance of industrial firms in Nigeria. *Journal of Finance and Economic Policy, 14*(1), 55–72.

Okoro, P., & Okechukwu, L. (2019). Distribution cost efficiency and profitability of Nigerian manufacturing firms. *African Journal of Business and Logistics, 8*(3), 88–105.

Oladele, T., & Adebayo, R. (2020). Distribution costs and firm profitability: Evidence from Nigeria. *Journal of Management Sciences, 11*(2), 44–63.

Oluwayemisi, A. B., Elkanah, E., Ademola, O., Mathew, O. O., & Mamidu, A. I. (2022). Cost control and financial performance: An empirical investigation of selected quoted manufacturing firms in Nigeria. *Journal of Accounting and Management, 2*(2), 165-176.

Omah, P. C. (2022). Cost reduction strategies and performance of manufacturing companies in Nigeria. *Accounting and Management Research Journal, 9*(1), 88-105.

Onakeke, M. (2022). Finance cost and corporate financial performance in Nigeria. *Journal of Economics and Finance, 13*(2), 70–84.

Onuora, H. I., & Kenechukwu, S. O. (2019). Cost control and profitability of selected manufacturing companies in Nigeria. *Journal of Accounting & Strategic Finance, 2*(1), 14-33.

Owolabi, A. (2017). Profitability and efficient resource utilization in Nigerian companies. *Journal of Management and Accounting Studies, 12*(1), 55–70.

Oyedokun, G. E., Tomomewo, A. O., & Owolabi, S. A. (2019). Cost control and profitability of selected manufacturing companies in Nigeria. *Journal of Accounting & Strategic Finance, 6*(2), 21-33.

Palma, K. O. (2019). Determinants of financial performance. *Journal of Accounting & Strategic Finance,*

2(1), 14-33.

Saka, K. A., & Thalith-Sakariyah, M. (2024). Cost control techniques and organisational performance of quoted manufacturing firms in Nigeria. *Ilaro Journal of Humanities and Management, 3,* 1–7.

Securities and Exchanges Commission (2023). Financial performance of firms. Abuja: SEC Nigeria.

Sule, H. (2018). Rising cost of doing business and sustainability challenges in Nigeria. *Journal of African Development and Policy Studies, 9*(3), 133–150.

Young, S., & Shields, J. (2016). Labour cost management and productivity. *Journal of Human Resources and Accounting, 15*(2), 122–136.