



DETERMINANTS OF PROFITABILITY AMONG MULTINATIONAL COMPANIES IN NIGERIA

DAHUNSI OLUSOLA JOSEPH

KolaDaisi University, Department of Economics. E-mail: olusoladahunsi@yahoo.com

Received: 20 November 2024; Revised: 17 December 2025;

Accepted 24 December 2025; Publication: 30 December 2025

Abstract: The activities and performance of multinational companies (MNCs) are crucial to the host economies; however, the Nigerian economy continues to witness their mass exit from the country. This study investigated the financial factors (taxation, operating expenses, cost of sales, and capital intensity) driving MNCs' operations and their effects on firm performance among MNCs in Nigeria. The study adopted modified Dickey-Fuller and Philip-Perron tests to ascertain a long-run relationship, and panel autoregressive distributed lag (P-ARDL) to analyse the determinants of MNCs' profitability in Nigeria. The study revealed that a long-run relationship exists among the variables used. The study showed a positive relationship between corporate tax and firm performance. This suggests that corporate tax increases as revenue and profitability increase, and the impact is significant in the long run. In addition, operating expenses and capital intensity coefficients are significantly negative, suggesting that the variables are detrimental to the MNCs' performance in Nigeria. The differences in the relationship (positive and negative) and statistical significance of the cost of sales variable suggest differing impacts of the cost of sales on firm performance. The study concluded that tax, operating expenses, costs of sales, and capital intensity are major determinants of MNCs' profitability.

Keywords: Cost Management, Tax Planning, Capital Investments, Profitability.

1. INTRODUCTION

Multinational companies (MNCs) are vital entities within the global economic landscape, exerting profound influence on international trade, investment

To cite this paper:

Dahunsi Olusola Joseph (2025). Determinants of Profitability among Multinational Companies in Nigeria. *Journal of Quantitative Finance and Economics*. 7(2), 219-235. <https://DOI:10.47509/JQFE.2025.v07i02.05>

patterns, and overall economic growth and development of nations. In an era characterised by increased interconnectedness and globalisation, the activities and performance of MNCs have become central to understanding the dynamics of the contemporary business environment. These activities span diverse sectors, ranging from agriculture to manufacturing and services. Nigeria, as one of the largest economies in Africa, has attracted a considerable number of multinational companies seeking to capitalize on its diverse market and abundant natural resources. The sectors where MNCs have a prominent presence in Nigeria include oil and gas, telecommunications, banking, manufacturing, and services. Their operations often bring advanced technologies, managerial expertise, and substantial investments, contributing to the growth and development of the economy.

Despite their contributions to technological advancement, integration into the global economy, and the country's overall development (Okonjo-Iweala, 2022), recent developments in Nigeria's economic landscape, including policy changes and shifts in the global market, have influenced the activities of multinational companies. Nigeria has seen a worrying trend of MNC operations, particularly in the manufacturing sector, where many fast-moving consumer goods companies have been leaving the country manufacturing sector. The manufacturing sector is failing to thrive, as seen by the high-profile withdrawals of MNCs.

For instance, the renowned consumer goods company, Unilever Nigeria Plc, declared in March 2023 that it would no longer produce skin care products, stating the high operational cost associated with infrastructure and energy as a major problem. In August 2023, GlaxoSmithKline (GSK) Plc, a pharmaceutical firm, closed its manufacturing facility in Nigeria and switched to a third-party supply arrangement. Like Unilever, GSK attributed its withdrawal decision to several factors, including regulatory challenges and policy uncertainties, which created a challenging business environment. PZ Cussons reduced its activities in Nigeria in 2023 by closing its detergent and bleach production lines due to infrastructural problems and high operational costs. Procter & Gamble (P&G) closed its \$300 million Agbara facility within a year of its inauguration in 2022, citing rising operational costs and economic pressure as significant challenges.

Before the present wave of operational changes, closures, and international relocations, the most prominent trend among large multinational consumer

goods companies was the movement of production facilities and headquarters from Lagos, the nation's economic center, to other states or regions. In 2018, Nestlé moved its Maggi seasoning manufacturing from Lagos to Ogun State, drawn by the state's tax incentives and desire for closer access to its raw material supply. Similarly, Flour Mills of Nigeria (FMN) took advantage of government grants and easy access to cassava starch to open a pasta factory in Edo State. Succinctly, the presence of MNCs in Nigeria has evolved over the years, influenced by economic policies, regulatory frameworks, and the country's vast natural resources. Their presence in the Nigerian economy spans various sectors, and their contributions, while significant, are not without challenges.

Exploring factors driving MNCs' operations has been a subject of considerable scholarly interest, yet the existing literature reveals gaps that warrant further investigation. Scholars have explored various dimensions of MNC operations, including regulatory environments, geopolitical risks, cultural factors, and technological dynamics. One notable gap lies in the intricacies of tax structures, international tax policies, and their impact on MNCs' profitability across various regions. This gap is particularly significant given the increasing global scrutiny of corporate tax practices across different countries. In addition, this study delves into crucial financial drivers such as operating costs, cost of sales, and capital intensity to provide insights into the multifaceted nature of MNC profitability.

Taxation plays a pivotal role in shaping the financial outcomes of MNCs. Several studies have identified corporate tax as a major driver of MNCs' profitability (Desai *et al.*, 2006; Egger *et al.*, 2010; Turner & Martinez, 2017; Li & Wong, 2021). Studies by Klassen and Laplante (2012); Lohse and Riedel (2013) indicated that the effective tax rate is negatively correlated with profitability. Heckemeyer and Overesch (2017) argued that higher tax rates in host countries tend to discourage foreign direct investments by MNCs, thus negatively affecting profitability. De Simone and Olbert (2020) and Dharmapala (2020) showed that MNCs strategically allocate income to jurisdictions with lower tax rates to minimize their global tax burden and enhance profitability. While Desai *et al.* (2006) showed that lower tax rates in host countries improve the profitability of MNCs, Akintobi *et al.* (2023) studied the challenges and opportunities associated with tax compliance and profit optimization. However, the impact of tax regulatory pressure on

MNCs is significant and tends to affect their tax planning strategies and future profitability (Avi-Yonah, 2021).

Furthermore, managing the cost of sales is an important strategy for MNCs seeking to enhance their financial performance (Garcia & Kim, 2023). The study conducted by Wang and Lee (2020) revealed a direct relationship between the cost of sales and the overall profitability of MNCs. According to O'Connor and Byrne (2015), MNCs that implement rigorous cost management practices, such as zero-based budgeting and lean management techniques, reduce operating expenses and enhance profitability. Johnson and Patel (2019) maintained that MNCs with streamlined and cost-effective operations tend to exhibit higher profitability. However, Nguyen and Rugman (2015) argued that the ability to reduce per-unit costs, increase profitability, and achieve economies of scale is through global operations whereby MNCs spread fixed costs over a larger revenue base.

For multinational companies, capital investment is particularly relevant in manufacturing, mining, and utilities. However, the relationship between capital investment/intensity and profitability is complex and varies across industries. Studies by Chirinko and Mallick (2017) showed that high capital intensity can lead to lower profitability due to significant depreciation expenses and maintenance costs associated with capital equipment. Conversely, Gupta and Bansal (2016), Balsvik *et al.* (2021) argue that MNCs investing heavily in advanced technologies, such as robotics and automation, achieve superior operational efficiencies and lower production costs, which can enhance profitability in the long term. Given the recent exodus of many MNCs in Nigeria, it becomes imperative to investigate the financial factors (such as taxation, costs of sales, operating expenses and capital intensity) driving the MNCs' profitability and performance to guide the development of policies and business plans targeted at optimizing firm profitability and overall performance among MNCs in Nigeria.

2. LITERATURE REVIEW

2.1. Theoretical Review

To examine the determinants of profitability among multinational corporations (MNCs), it is essential to explore the theoretical foundations that underpin these factors. Two prominent theories in this context are the Resource-Based View (RBV) and Transaction Cost Theory (TCT). These frameworks offer

insights into how MNCs can achieve and sustain profitability by leveraging internal resources and managing external transaction costs.

2.1.1. Resource-Based View

The Resource-Based View posits that a firm's internal resources and capabilities are critical determinants of its competitive advantage and profitability. According to RBV, resources that are valuable, rare, inimitable, and non-substitutable (VRIN) enable firms to implement strategies that improve efficiency and effectiveness, leading to superior performance (Barney, 1991). Multinational companies often possess unique resources such as advanced technologies, strong brand reputations, and extensive international experience. By effectively deploying these resources across various markets, MNCs can achieve economies of scale and scope, enhancing their profitability. For instance, an MNC with a strong brand can leverage its reputation to enter new markets more easily, command premium pricing, and achieve higher margins. A study by Ghosh (2006) found that firms with superior internal capabilities, such as efficient management practices and technological expertise, were better positioned to capitalize on financial liberalization, leading to enhanced profitability.

2.1.2. Transaction Cost Theory

Transaction Cost Theory focuses on the costs associated with economic exchanges, suggesting that firms organize their activities to minimize these costs. This theory distinguishes between market transactions and hierarchical transactions within firms, proposing that firms will internalize activities when the costs of using the market are high (Coase, 1937; Williamson, 1985). Multinational companies operate in diverse institutional environments, facing varying degrees of transaction costs. By internalizing operations, such as establishing subsidiaries rather than relying on external partners, MNCs can reduce uncertainties and protect proprietary assets. This internalization helps in mitigating risks associated with opportunistic behavior by external parties, thereby safeguarding profitability. Thus, MNCs strategically internalize operations to manage transaction costs.

2.2. Empirical Review

Recent studies have emphasized the importance of tax policies on MNC profitability. Differences in corporate tax rates, international tax treaties,

and regulatory environments across countries create complex tax planning challenges for MNCs, which have implications for MNCs' profitability. The effective tax rate faced by MNCs has a significant impact on their net income and overall profitability.

Dharmapala and Riedel (2013) analyzed financial data from multinational firms. The study confirmed that lower corporate tax rates attract higher levels of foreign direct investment (FDI) and result in greater profitability. Similarly, Heckemeyer and Overesch (2017) conducted a meta-analysis of corporate tax effects on foreign direct investment (FDI) and found that higher tax rates in host countries tend to discourage FDI by MNCs, thus negatively affecting profitability.

De Simone and Olbert (2020), in examining the real effects of private country-by-country disclosure, showed that MNCs strategically allocate income to jurisdictions with lower tax rates to minimize their global tax burden and enhance profitability. The study concluded that MNCs engage in various tax planning strategies, such as transfer pricing and the use of intellectual property holdings in low-tax jurisdictions, to reduce taxable income in high-tax countries.

Transfer pricing is also a critical issue for MNCs, especially as tax authorities around the world tighten regulations to combat tax avoidance. Desai *et al.* (2006) studied the demand for tax haven operations. It was found that MNCs strategically allocate profits across subsidiaries in low-tax jurisdictions to minimize their global tax burden. The study concluded that transfer pricing, intra-firm loans, and intellectual property rights management allows MNCs to shift profits and reduce effective tax rates.

Lohse and Riedel (2013) found that stricter transfer pricing regulations are associated with reduced profit shifting and increased tax compliance costs, impacting profitability. In addition, Klassen and Laplante (2012) showed that increased scrutiny and compliance costs associated with these regulations can reduce the profitability of MNCs by limiting aggressive tax planning opportunities. Gupta and Bansal (2016) studied cost management among multinational companies. Using multiple regression analysis, the study highlighted that MNCs that actively engage in tax planning report higher profitability, emphasizing the importance of strategic tax management in global operations.

Furthermore, capital intensity, the extent to which a company relies on capital investments such as machinery, technology, and infrastructure, rather than labor, determines MNCs' profitability. Chirinko and Mallick (2017) revealed that high capital intensity can lead to lower returns on assets due to significant depreciation expenses and maintenance costs associated with capital equipment. However, they also found that capital-intensive firms often benefit from higher production efficiency, lower per-unit costs, and improved product quality, which can enhance profitability in the long term.

Balsvik *et al.* (2021) argue that MNCs investing heavily in advanced technologies, such as robotics and automation, achieve superior operational efficiencies and lower production costs. This technological edge can enable MNCs to compete more effectively in global markets, leading to higher profitability. However, the capital-intensive nature of these investments requires careful management to ensure that the financial returns justify the upfront and ongoing costs.

Ibrahim *et al.* (2022) examined the impact of technological dynamics on the profitability of MNCs in Nigeria. The researchers found that companies embracing technological advancements and innovation tended to exhibit higher levels of profitability. This study underscores the growing significance of technology in shaping the competitive landscape and financial outcomes of MNCs in Nigeria, emphasizing the need for these companies to invest strategically in technological capabilities.

Jorgenson and Vu (2005) examined technology-intensive MNCs and found that automation and digital transformation significantly reduce operating expenses while improving overall efficiency and profitability. In the same vein, Ghosh (2006) studied the cost structures of global firms and concluded that MNCs with lean operational strategies tend to achieve higher profit margins. Firms that effectively control overhead costs, optimize supply chains, and reduce bureaucratic inefficiencies outperform their peers.

Martinez *et al.* (2021) investigated the impact of operating expenses on profit margins in global firms. It was found that excessive operating costs can significantly erode profit margins in multinational firms. Smith and Wang (2022) emphasize that effective management of operating expenses is crucial for enhancing profitability in global enterprises. These studies collectively underscore the importance of efficient cost management in maintaining and

improving profitability within MNCs. Antras and Chor (2013) studied the effective management of the cost of sales on profitability. The study found that MNCs that optimize their supply chains by sourcing inputs from the most cost-effective locations globally can significantly reduce their cost of sales.

Adeoye and Otekunrin (2018) studied the impact of regulatory environments on the profitability of MNCs in Nigeria. The researchers found that variations in regulatory frameworks significantly influenced the financial performance of these companies. In a rapidly evolving economic landscape, changes in policies and regulations, particularly those related to trade and investment, played a pivotal role in shaping the bottom line of MNCs. This study underscores the importance of understanding and navigating the regulatory landscape as a critical determinant of profitability for MNCs in Nigeria.

3. MODEL SPECIFICATION

As its estimation techniques, this study adopted modified Dickey-Fuller and modified Philip-Perron Tests to ascertain the existence of a long-run relationship among the variables employed. Furthermore, panel autoregressive distributed lag (P-ARDL) is employed to explore the determinants of MNC profitability in Nigeria. Panel ARDL involves a combination of cross-section and time-series observations and is considered superior to traditional cointegration approaches. The ARDL approach permits the estimation of both short-run and long-run parameters simultaneously. In addition, this approach examines the long-run relationship among variables regardless of their order of integration. Thus, ARDL models are suitable for both the I(0) and I(1) variables because they yield reliable estimates in the face of endogeneity, and the concurrent estimation of the short-run, as well as the long-run effects, is possible (Pesaran *et al.*, 2001). This study explored the determinants of profitability using 20 MNCs operating in the Nigerian manufacturing sector between 2001 and 2022. The empirical specification of the PARDL model can be written as follows:

$$\Delta ROA_{i,t} = \sum_{j=1}^{p-1} \lambda_j \Delta ROA_{i,t-j} + \sum_{j=0}^{q-1} \delta_j \Delta CIN_{i,t-j} + \sum_{j=0}^{q-1} \varphi_j \Delta COS_{i,t-j} + \sum_{j=0}^{q-1} \gamma_j \Delta OPX_{i,t-j} + \sum_{j=0}^{q-1} \sigma_j \Delta TAX_{i,t-j}$$

$$\phi_i (ROA_{i,t-1} - (\beta_0 + \beta_1 CIN_{i,t-1} + \beta_2 COS_{i,t-1} + \beta_3 OPX_{i,t-1} + \beta_4 TAX_{i,t-1})) + \varepsilon_{i,t}$$

(1)

Where $ROA_{i,t}$ represents firm performance, $CIN_{i,t}$, $CIN_{i,t}$, $OPX_{i,t}$ and $TAX_{i,t}$ represents the cost of sales, capital intensity, operating expenses, and tax, respectively. λ_j and δ_j are the short-run coefficients of dependent and independent variables, ϕ_i represent the long-run coefficients, and ϕ_i indicates the speed of the adjustment coefficient. The i and t are firm and time indexes.

4. RESULTS AND DISCUSSION OF FINDINGS

4.1. Descriptive Statistics

Table 1 analyses the financial strength of MNCs in Nigeria. The results indicate the variability in asset profitability, with some entities or periods experiencing losses (negative minimum value) in asset profitability. The large values and wide ranges of COS and OPX variables reflect the scale and variability of operations of multinational companies operating within diverse markets and production scales. Furthermore, the negative minimum of the TAX variable suggests possible tax credits or benefits in some regions, while the maximum indicates substantial tax obligations in others. The results further show a wide range of CIN values, suggesting significant differences in investment or income across different parts of the company.

Table 1: Descriptive Statistics

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
ROA	0.168794	0.204168	-0.20869	2.192403
CIN	27117.24	250121.3	3.108883	4980784
COS	3.20E+07	7.55E+07	3511	7.69E+08
OPX	1.03E+07	2.31E+07	-7.94E+07	1.96E+08
TAX	1813471	3787712	-2264	2.54E+07

Source: Author's computation.

4.2. Correlation Matrix

The correlation matrix quantitatively measures the relationships between different financial variables. The study showed a very weak negative correlation between ROA and CIN (-0.0278), suggesting that increases in capital investment have a negative, though negligible correlation with profitability. Similarly, the correlation between ROA and COS (-0.0555) is negative, indicating that a higher cost of sales slightly decreases the firm's profitability. A very weak negative correlation was also observed between ROA and OPX (-0.0309),

implying that operating expenses have a minimal negative relationship with firm profitability. Conversely, ROA and TAX (0.1615) show a weak positive correlation, indicating that higher profitability is somewhat associated with higher taxes, which could suggest that better asset utilisation is linked to higher profitability and thus higher taxes.

The correlation coefficients provide insights into a company's financial and operational activities. The moderate correlations among COS, OPX, and TAX suggest that these variables are closely linked to the company's revenue-generating activities. In contrast, the weak correlations involving ROA and CIN indicate that these variables are less directly connected to profitability and firm performance.

Table 2: Correlation Matrix

Variable	ROA	CIN	COS	OPX	TAX
ROA	1.0000				
CIN	-0.0278	1.0000			
COS	-0.0555	0.0849	1.0000		
OPX	-0.0309	0.1109	0.5974	1.0000	
TAX	0.1615	0.1009	0.5507	0.6069	1.0000

Source: Author's computation.

4.3. Unit Root Test

Table 3 compares the results of the Breitung and IPS stationarity tests for each variable at the level and their first difference, along with their respective statuses in terms of stationarity (I(0) or I(1)). The Breitung test shows that ROA and TAX variables are stationary at a level while CIN, COS, and OPX variables are stationary at first difference. Similarly, the IPS tests revealed that the ROA variable is stationary at a level while CIN, COS, OPX, and TAX variables are

Table 3: Unit Root Test

Variables	Breitung			IPS		
	Level	First Difference	Status	Level	First Difference	Status
ROA	-1.7463**		I(0)	-3.7307***		I(0)
CIN	-0.9227	-11.1203***	I(1)	3.9597	-4.7834***	I(1)
COS	6.4600	-5.7344***	I(1)	10.5905	-2.8375***	I(1)
OPX	1.4243	-12.6613***	I(1)	-0.0552	-9.3542***	I(1)
TAX	-1.9390**	-	I(0)	-0.4439	-9.8786***	I(1)

Source: Author's computation.

stationary at first difference. Thus, the study's variables comprise I(0) and I(1), which implies that they are integrated in different orders, necessitating the adoption of the ARDL model.

4.4. Long-run Relationship: A Cointegration Test

Table 4 shows the calculated test statistic value for each cointegration test. These values are crucial as they are used to determine the p-value and ultimately, the outcome of the hypothesis test. The statistics value (-4.1159; $p > 0.0000$) for the Kao (1991) test, which uses a modified Dickey-Fuller t-test, indicates a strong rejection of the null hypothesis of no cointegration. Similarly, the statistics (1.81; $p > 0.0351$) for the Pedroni (1991) test also suggest rejection of the null hypothesis at the 5% significance level. In the context of cointegration tests, a low p-value (typically less than 0.05) suggests statistically significant evidence of cointegration. The results of both cointegration tests suggest a rejection of the null hypothesis of no cointegration and the acceptance of the alternative hypothesis of the existence of cointegration among the variables employed by the study. Thus, the study showed that corporate tax, cost of sales, operating expenses, capital intensity, and firm profitability have a long-run relationship.

Table 4: Cointegration Test Results

<i>Tests</i>		<i>Statistic</i>	<i>p-value</i>
Kao (1991)	Modified Dickey-Fuller t	-4.1159	0.0000
Pedroni (1991)	Modified Phillips-Perron t	1.81E+00	0.0351

Source: Author's computation.

4.5. Determinants of Profitability of MNCs

Table 5 compares the statistical estimates derived from two statistical methods: the Mean Group and the Pooled Mean Group. The positive coefficient of LTAX (0.048) in the pooled mean group is significant in the long run, implying that tax is an important driving factor in MNCs' performance. The results also show that the coefficients of LTAX (0.274 and 0.053) are positive in the mean group but are not statistically significant in either time horizon. The positive coefficient of LTAX suggests that taxes directly affect profitability. The positive mean of LTAX indicates that higher taxes are directly associated with higher profitability, possibly due to increased revenues. Hence, effective tax planning is essential for MNCs to maintain high profitability.

The results of the pooled mean group revealed that the coefficient of LCOS is negative (-0.0833) in the long run but positive (0.0968) in the short run at a 5% significance level. In the mean group, the coefficient of LCOS (0.346) is positive in the long run, although its significance is at a 10% level. The results of the study indicated that the coefficient of costs of sales is significant, implying it is a major determinant of MNCs' profitability. The differences in direction (positive and negative) of impact suggest that effective management of the costs of sales is crucial for MNCs' profitability. This finding aligns with Smith and Wang (2022), who opined that for MNCs to maintain and improve profitability, they must engage in effective cost management.

In the long run, the coefficients of LOPX (-0.403 and -0.035) are significantly negative at a 5% level in the mean and pooled mean groups, respectively. The significant values indicate that operating expenses are major determinants of MNCs' profitability, and as such, higher operating expenses affect profitability. A negative coefficient suggests that higher operating expenses reduce profitability; by implication, lowering operating expenses by MNCs is essential in the long run to improve profitability and firm performance.

The results further showed that the coefficient values of LCIN (-0.006 and -0.042) in the pool mean group at both time horizons are significantly negative at 5% and 10%. Similarly, the coefficients of LCIN in the mean group in both time horizons (-0.123 and -0.0002) are negative but insignificant at the 5% level. This conforms to the a priori expectation, suggesting that increased capital investments of MNCs might not immediately translate to higher profitability due to the time lag between investments and returns. Thus, the capital intensity variable is considered a crucial determinant of MNC profitability given its significance level. Moreover, the significance of the negative values of the error correction term (ECT (-1)) indicates that 83% and 38% of the prior period deviations from long-term profitability are corrected over time in the previous period under the mean and pooled mean groups, respectively.

Table 5: Mean Group and Pooled Mean Group Estimates

<i>Variables</i>	<i>Mean Group</i>	<i>Pooled Mean Group</i>
ECT (-1)	-0.839*** (0.0887)	-0.386*** (0.0397)
D.LCIN	-0.0002 (0.2626)	-0.0425* (0.0252)

<i>Variables</i>	<i>Mean Group</i>	<i>Pooled Mean Group</i>
D.LCOS	-0.1393 (0.0923)	0.0968*** (0.0259)
D.LTAX	0.053 (0.0335)	0.0432 (0.0323)
D.LOPX	0.154* (0.0862)	-0.0546* (0.0324)
LCIN	-0.123 (0.0849)	-0.00641** (0.00267)
LCOS	0.346* (0.1942)	-0.0833*** (0.0115)
LTAX	0.274 (0.0168)	0.0484*** (0.00864)
LOPX	-0.403** (0.1901)	-0.0350*** (0.00825)
C	0.733 (0.7432)	0.525*** (0.0519)
Observations	354	354

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

4.6. Hausman Test

The Chi-square coefficient of the Hausman test results (21.47) presented in Table 6 assesses whether the observed differences between the MG and PMG estimates are statistically significant across the variables. Given the Chi-square probability of 0.003, the test is significant, suggesting that the MG approach is more appropriate for this data set than the PMG. The substantial variations in the coefficients between the MG and PMG models show that the MG model offers a more accurate and well-fitting estimate. In the situation where the outcomes of MG and PMG are similar or have similar performance, the selection criteria thus become sacrosanct.

Table 6: Hausman Test

	<i>MG</i>	<i>PMG</i>	<i>Difference</i>	<i>S.E</i>
LCIN	-0.12306	-0.00641	-0.1166541	0.084875
LCOS	0.346144	-0.08332	0.4294678	0.19392
LTAX	0.027385	0.048427	-0.0210412	0.014446
LOPX	-0.40393	-0.03503	-0.3688997	0.189948
Chi ²	21.47			
Prob.	0.003			

Source: Author's computation.

5. CONCLUSION

In examining the driving factors of profitability among MNCs in Nigeria, this study concluded that a long-run relationship exists among corporate tax, cost of sales, operating expenses, capital intensity, and firm profitability variables employed in the study. The study further showed that tax's significance and positive coefficients in the long run imply that tax is a determinant of MNCs' profitability and has a direct relationship with firm profitability, suggesting that tax increases with profitability and firm performance. Thus, MNCs should employ strategies to maintain high profitability through effective tax planning. In addition, the significance and negative values of operating expenses and capital intensity coefficients suggest that operating expenses and capital intensity are major determinants, but with deleterious effects on the profitability and firm performance of MNCs in Nigeria. Moreover, the differences in signs (positive and negative) and statistical significance of the cost of sales variable suggest differing impacts of the cost of sales on firm profitability depending on cost management. The study concluded that MNCs should minimize operating expenses, effectively manage costs of sales and capital investments, and employ strategies for effective tax planning.

6. RECOMMENDATION

Based on the findings, this study recommended that MNCs should engage in effective planning and management of tax, given their potential for high profitability in the future. In addition, since higher operating expenses negatively impact profitability, MNCs should minimize operating expenses for higher firm performance. Moreover, firms should devise strategies to effectively manage the costs of sales since higher costs negatively impact profitability. Given that higher capital investment might not immediately lead to higher profitability, management should focus on long-term capital investments to achieve sustained profitability and firm performance.

References

- Adeoye, A. O., & Otekunrin, O. A. (2018). Regulatory environments and their influence on the profitability of multinational corporations in Nigeria. *African Journal of Economic Studies*, 6(2), 45–62.
- Akintobi, A. O., Okeke, I. C., & Ajani, O. B. (2023). Strategic tax planning for multinational corporations: Developing holistic approaches to achieve compliance

- and profit optimization. *International Journal of Multidisciplinary Research Updates*, 6(1), 25–32.
- Antras, P., & Chor, D. (2013). Organizing the global value chain. *Econometrica*, 81(6), 2127–2204. <https://doi.org/10.3982/ECTA10813>
- Avi-Yonah, R. S. (2021). International taxation in a post-BEPS world. *Journal of International Taxation*, 32(4), 211–225.
- Balsvik, R., Jensen, B., Moxnes, A., & Ulltveit-Moe, K. H. (2021). Capital, labor, and productivity: The evolution of the factor income share distribution in Norwegian manufacturing. *Journal of International Economics*, 133, 103525. <https://doi.org/10.1016/j.jinteco.2021.103525>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Chirinko, R. S., & Mallick, D. (2017). The substitution elasticity, factor shares, long-run growth, and the low-frequency panel model. *American Economic Journal: Macroeconomics*, 9(4), 225–253. <https://doi.org/10.1257/mac.20150294>
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386–405. <https://doi.org/10.1111/j.1468-0335.1937.tb00002.x>
- De Simone, L., & Olbert, M. (2020). Real effects of private country-by-country disclosure. *Journal of Accounting Research*, 58(3), 665–718. <https://doi.org/10.1111/1475-679X.12308>
- Desai, M. A., Foley, C. F., & Hines, J. R. (2006). The demand for tax haven operations. *Journal of Public Economics*, 90(3), 513–531. <https://doi.org/10.1016/j.jpubeco.2005.09.004>
- Dharmapala, D. (2020). The economics of tax avoidance and evasion. *National Tax Journal*, 73(3), 745–764. <https://doi.org/10.17310/ntj.2020.3.05>
- Dharmapala, D., & Riedel, N. (2013). Earnings shocks and tax-motivated income-shifting: Evidence from European multinationals. *Journal of Public Economics*, 97(1), 95–107. <https://doi.org/10.1016/j.jpubeco.2012.08.009>
- Egger, P., Eggert, W., & Winner, H. (2010). Saving taxes through foreign plant ownership. *Journal of International Economics*, 81(1), 99–108. <https://doi.org/10.1016/j.jinteco.2010.01.005>
- Garcia, M., & Kim, J. (2023). Strategic cost management for multinational corporations: Enhancing financial performance. *Global Business Review*, 28(1), 15–32.

- Ghosh, S. (2006). Did financial liberalization ease financing constraints? Evidence from Indian firm-level data. *Emerging Markets Review*, 7(2), 176–190. <https://doi.org/10.1016/j.ememar.2006.02.002>
- Gupta, R., & Bansal, S. (2016). Cost of sales management in multinational companies: A framework. *Journal of International Business Studies*, 47(4), 455–470. <https://doi.org/10.1057/jibs.2016.3>
- Heckemeyer, J. H., & Overesch, M. (2017). Multinationals' profit response to tax differentials: Effect size and shifting channels. *Canadian Journal of Economics/Revue canadienne d'économique*, 50*(4), 965–994. <https://doi.org/10.1111/caje.12283>
- Ibrahim, X., Adeola, O., Musa, A., & Usman, T. (2022). The impact of technological dynamics on the profitability of multinational corporations in Nigeria. *Journal of International Business Studies*, 53(4), 720–735. <https://doi.org/10.1057/s41267-021-00475-6>
- Johnson, R., & Patel, A. (2019). Streamlined operations and profitability in multinational corporations: A comparative analysis. *International Journal of Business Studies*, 34(3), 215–230.
- Jorgenson, D. W., & Vu, K. (2005). Information technology and the world economy. *Scandinavian Journal of Economics*, 107(4), 631–650. <https://doi.org/10.1111/j.1467-9442.2005.00431.x>
- Klassen, K., & Laplante, S. (2012). Are U.S. multinational corporations becoming more aggressive income shifters? *Journal of Accounting Research*, 50(5), 1245–1285. <https://doi.org/10.1111/j.1475-679X.2012.00462.x>
- Li, H., & Wong, C. (2021). Tax policy and multinational corporations: Implications for profitability in emerging markets. *Journal of World Business*, 56(2), 101–115. <https://doi.org/10.1016/j.jwb.2020.101115>
- Lohse, T., & Riedel, N. (2013). Do transfer pricing laws limit international income shifting? Evidence from European multinationals. *CESifo Economic Studies*, 59(3), 604–631. <https://doi.org/10.1093/cesifo/ifs043>
- Martinez, R., Gupta, S., & Kim, H. (2021). The impact of operating expenses on profit margins in global firms. *Global Finance Journal*, 48, 100519. <https://doi.org/10.1016/j.gfj.2020.100519>
- Nguyen, Q. T. K., & Rugman, A. M. (2015). Multinational enterprises and economic geography: Location-specific advantages or liability of foreignness? *Multinational Business Review*, 23(4), 264–278. <https://doi.org/10.1108/MBR-06-2015-0026>

- O'Connor, J., & Byrne, P. J. (2015). Zero-based budgeting: A powerful tool for management. *Journal of Corporate Accounting & Finance*, 26(6), 19–27. <https://doi.org/10.1002/jcaf.22076>
- Okonjo-Iweala, N. (2022). Economic reforms and foreign direct investment in Nigeria. *Journal of African Economics*, 30(1), 45–62.
- Smith, J., & Wang, L. (2022). Cost management strategies in multinational corporations. *Journal of International Business Studies*, 53(4), 567–589. <https://doi.org/10.1057/s41267-021-00477-4>
- Turner, L., & Martinez, E. (2017). Corporate taxation and its impact on multinational profitability: Evidence from Europe. *European Accounting Review*, 26(3), 417–438. <https://doi.org/10.1080/09638180.2016.1234001>
- Wang, Y., & Lee, S. (2020). Cost of sales and profitability: Evidence from multinational corporations. *Journal of International Finance*, 45(2), 289–308.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.