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Determinants Of Income Increasing Accounting Choice: An Empirical Analysis of Nigeria's Manufacturing-Listed Firms

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Abstract
In an era characterized by increased globalization, financial complexity, and heightened scrutiny of corporate financial reporting, accounting choices wield profound influence over an organization's economic standing and public perception. This study sought to shed light on the intricate interplay of factors that steer accounting choices geared toward income enhancement and financial success within the Nigerian manufacturing sector. This study adopted an ex-post facto research design, while the population and sample size comprised twenty-one consumer-goods manufacturing firms listed on the Nigerian Exchange Group (NGX). The data obtained from audited financial reports of the investigated firms were analyzed using both descriptive and inferential statistics. From the outcome of the study, management compensation had a significant negative effect on income and profit generation. In contrast, market conditions had a negative insignificant effect on income and profit generation, but asset turnover had a significant positive effect on income-generating policy. The study concluded that these variables are important factors in income-generating accounting choices in listed manufacturing firms in Nigeria. For policy implementation, the study recommends that manufacturing firms should review and potentially revise their compensation structures for management to ensure that incentives are closely aligned with financial performance goals.

Keywords: Income-increasing choices, management compensation, market condition, assets turnover, profitability.

1. Introduction

In an era characterized by increased globalization, financial complexity, and heightened scrutiny of corporate financial reporting, accounting choices wield profound influence over an organisation's economic standing and public perception (Amougou & Liliane, 2023). The strategic selection of accounting methods can significantly impact a company's reported income, thereby shaping its financial health, investor attractiveness, and regulatory compliance (Costa et al., 2019). This study delves into a critical facet of accounting decision-making—namely, the determinants of income-increasing accounting choices—through an empirical analysis of Nigeria's manufacturing-listed firms. It serves as a crucial prerequisite for the long-term survival and prosperity of the company and plays a fundamental role in accomplishing various financial objectives (Gitman & Zutter, 2012).

In Nigeria's dynamic economic landscape, where manufacturing industries play a pivotal role in contributing to GDP and fostering economic growth, the accounting decisions made by manufacturing-listed firms hold immense significance (Odusanya et al., 2018). These decisions not only affect individual firms but also reverberate through the broader financial ecosystem, influencing investor confidence, capital allocation, and overall economic stability. Maximizing profit is of utmost importance for a company to sustain its operations and effectively compete with other businesses in the same industry (Rahman & Scapens, 1988). Profitability stands as a key indicator of a company's performance and forms a vital component of its financial reporting. It signifies the company's ability to generate earnings relative to its sales, asset levels, and capital stock within a specific time frame (Margaretha & Supartika, 2016). The remarkable performance of firms plays a vital role in generating income and fostering economic development (Olutunla & Obamuyi, 2008; Lazar, 2016). Consequently, researchers have been diligently working to identify the factors influencing profitability at both the firm and industry levels, employing innovative and sophisticated theoretical models (Al-Jafari & Al-Samman, 2015; Pratheepan, 2014).

There is limited research conducted on the determinants of increasing income accounting choices globally. Another notable aspect of a significant number of these studies is their limited coverage of firms, often examining only a few

companies. In contrast, the current study addresses this limitation by utilizing a larger sample size, encompassing all quoted consumer goods manufacturing in Nigerian firms. Additionally, the study explores the dynamic interactions among various determinants of profitability.

The objective of this research is to shed light on the intricate interplay of factors that steer accounting choices geared toward income enhancement and financial success within the Nigerian manufacturing sector. By investigating the determinants of income-increasing accounting choices, we aim to provide valuable insights into the decision-making processes of these firms and offer empirically grounded guidance for stakeholders, including investors, regulators, and policymakers. This empirical analysis is framed within the context of Nigeria, a nation that has witnessed a remarkable evolution in its accounting and financial reporting standards over the years. As the country continues to align its financial reporting practices with international standards, understanding the drivers behind income-increasing accounting choices becomes not only pertinent but also essential for ensuring transparency, accountability, and sustainable economic development.

This study embarked on a comprehensive exploration of the multifaceted determinants that influence the adoption of income-increasing accounting methods by manufacturing-listed firms in Nigeria. It also drew on an array of financial, economic, and organizational variables, employing rigorous empirical techniques to discern patterns, associations, and causality. In doing so, this study contributes to the existing body of knowledge in accounting research by advancing our understanding of the complex decision-making processes involved in financial reporting. It is expected also that the findings will equip stakeholders with a deeper understanding of the factors that motivate and shape income-increasing accounting choices in Nigeria's manufacturing sector, thereby promoting informed decision-making and bolstering financial stability.

This study unfolds in several sections, beginning with a review of relevant literature and theoretical underpinnings. Subsequently, we present our research methodology, data sources, and analytical techniques. The results of the empirical analysis are detailed in the subsequent sections, followed by a discussion of implications, limitations, and avenues for future research. Ultimately, this article endeavours to provide valuable insights into the intricate world of accounting choice determinants and their impact on income reporting practices in Nigeria's vibrant manufacturing sector.

2. Literature Review

This reviewed the relevant variables of this study.

2.1 Determinants of Income Increasing Accounting Choice

Determinants of Income Increasing Accounting Choice refers to the various factors, conditions, or variables that influence an organization's or individual's decisions regarding the accounting methods and practices they employ with the intent of increasing their reported income (Muhammad, 2014). These determinants can encompass a wide range of financial, economic, regulatory, and organizational considerations that affect how income is recognized, measured, and presented in financial statements. Understanding these determinants is crucial in the field of accounting research and practice, as they shed light on the motivations and drivers behind specific accounting choices that can impact financial performance, tax liabilities, investor perception, and compliance with accounting standards (Quagli & Avallone, 2010).

Researchers and practitioners analyze these determinants to gain insights into why certain accounting methods are selected over others, how they align with financial objectives, and what implications they have for financial reporting and decision-making (Waweru et al., 2011). Determinants of income-increasing accounting choices might include changes in tax laws that incentivize specific income recognition methods, management's compensation structure tied to reported income levels, competitive pressures within an industry, regulatory requirements, and the desire to attract investors by presenting a more favorable financial picture. Identifying and studying these determinants can help stakeholders better understand the dynamics of financial reporting and its impact on an entity's financial position and performance (Zhang & Andrew, 2010).

2.1.1.1 Management Compensation

Management compensation, in relation to increasing accounting choices, refers to the way in which executives and senior managers within an organization are rewarded based on the financial results and reported income of the company (Olutunla & Obamuyi, 2018). It involves the design and structure of executive compensation packages, including salaries, bonuses, stock options, and other incentives, that can be influenced by the accounting choices made by management. Many executive compensation packages include performance-based bonuses. These bonuses may be tied to specific financial metrics, such as earnings per share (EPS) or net income. When managers have the opportunity to earn significant bonuses based on reported income, they may be motivated to choose accounting methods that boost reported earnings to

maximize their own compensation (Fields et al., 2001).

2.1.1.2 Market Condition

Market conditions, in the context of increasing accounting choices, refer to the external economic and financial circumstances that influence an organization's or individual's decisions regarding accounting methods and practices with the goal of boosting reported income (Martinez et al., 2011). These market conditions can significantly impact an entity's financial performance and may shape its financial reporting strategies. The overall economic climate, including factors like GDP growth, inflation rates, and interest rates, can affect an entity's financial performance. During favorable economic conditions, entities may be more inclined to adopt income-increasing accounting methods to present a more positive financial picture to investors and stakeholders (Herwiyanti et al., 2023).

Market conditions within a specific industry can play a significant role in accounting choices. In industries with intense competition or high investor expectations, companies may be more likely to use income-increasing accounting methods to remain competitive and attract capital (Lazar, 2016). It is essential to emphasize that while market conditions can influence accounting choices, ethical considerations, and compliance with accounting standards and regulations must guide those choices. Manipulative or aggressive accounting practices, driven solely by market conditions, can lead to legal and reputational risks for organizations and individuals (Astami & Tower, 2006).

2.1.1.3 Assets Turnover

Asset turnover, in the context of increasing income accounting choices, refers to a financial metric that measures the efficiency with which a company utilizes its assets to generate revenue and increase its income (Al-Jafar & Al-Samman, 2015). It assesses how effectively a company converts its investments in assets, such as inventory, equipment, and accounts receivable, into sales and income (Gitman & Zutter, 2012). A higher asset turnover ratio indicates that the company is generating more revenue per unit of assets, which can lead to increased income. It implies efficient asset utilization and suggests that the company is effectively leveraging its investments to boost its top-line growth. Efficient inventory management can reduce carrying costs and lead to quicker turnover, which increases revenue and income. This may include optimizing ordering and production processes to reduce excess inventory (Costa et al., 2019).

Asset turnover, in the context of increasing income accounting choices, is about using financial strategies and operational improvements to make more effective use of a company's assets, ultimately resulting in higher revenue and income (Kullab & Yan, 2018). It highlights the importance of managing assets efficiently to achieve better financial performance. Accelerating the collection of accounts receivable can free up cash flow and boost asset turnover (Margaretha & Supartika, 2016). Companies can achieve this through stricter credit policies and more efficient collection procedures. Identifying underutilized or non-essential assets and reallocating or divesting them can improve asset turnover. This can involve selling off unproductive assets or investing in assets that directly contribute to revenue generation. Enhancing operational efficiency can lead to faster sales cycles and increased asset turnover (Nobes, 2013; Tawfik, 2006). This might involve process automation, reducing waste, or improving supply chain management. Entering new markets or expanding the customer base can increase sales and revenue without significantly increasing asset investments, thereby improving asset turnover (Quagli & Avallone, 2010).

2.1.2 Income Increasing Accounting Choices

Income-increasing accounting choice refers to the strategic selection and application of accounting methods, principles, or practices within an organization's financial reporting processes with the aim of increasing or maximizing the reported income or profit for a specific accounting period (Waweru et al., 2011). This choice involves the use of accounting rules and techniques that have the potential to enhance the bottom-line financial figures presented in the income statement or other financial statements. Choosing accounting methods that recognize revenue earlier or more aggressively can result in higher reported income. For example, recognizing revenue before goods or services are fully delivered or deferring the recognition of certain costs can boost profit figures. Managing expenses through techniques like capitalizing costs rather than expensing them immediately or delaying the recognition of certain costs can lead to higher reported income (Muhammad, 2014).

2.1.2.1 Profitability

Profitability, in relation to income-increasing accounting choice, refers to the financial performance of an organization as measured by the amount of profit it generates during a specific accounting period (Pratheepan, 2014). It is a key metric that assesses an entity's ability to generate earnings in relation to its expenses and other costs. When considering the concept of profitability in the context of income-increasing accounting choices, it is important to understand how these choices can impact an organization's reported profitability. Income-increasing accounting choices, such as recognizing revenue earlier or delaying the recognition of expenses, can lead to higher reported

income, which, in turn, boosts profitability figures in the income statement (Al-Jafar & Al-Samman, 2015).

By increasing reported income without a corresponding increase in expenses, an organization can enhance its profit margins (e.g., gross profit margin, operating profit margin). This can make the organization appear more financially attractive to investors and stakeholders (Holthausen, 1990). For publicly traded companies, higher reported income resulting from income-increasing choices can lead to an increase in earnings per share (EPS). A higher EPS figure is often associated with greater profitability, which can positively influence stock prices and investor perception. The perception of increased profitability resulting from income-increasing choices may lead to higher shareholder value, as investors tend to favor companies with strong earnings potential (Al-Jafar & Al-Samman, 2015).

A track record of profitability can enhance an organization's ability to attract capital from investors and lenders. Income-increasing choices may make the company more appealing to potential financiers (Lazar, 2016). It is important to note that while income-increasing accounting choices can temporarily enhance reported profitability, they must comply with accounting standards and regulations. Aggressive or manipulative accounting practices that artificially inflate profitability can lead to ethical and legal issues, erode trust among stakeholders, and damage a company's long-term financial health (Margaretha & Supartika, 2016).

2.3 Theoretical Review

This study reviewed Agency Theory and it was hinged on the theory. Agency theory, as posited by Jensen and Meckling (1976), underscores the conflicts that arise between shareholders and creditors within organizations. It also delves into the mechanisms creditors employ to safeguard themselves from potential wealth transfers resulting from opportunistic decisions made by managers. Essentially, this theory examines organizations through the lens of conflicts of interest between principals (shareholders) and agents (managers), with the core premise being that implementing profit-sharing systems for managers can help mitigate the inherent agency costs arising from these conflicts.

However, it's important to note that the presence of a profit-sharing scheme can influence the accounting choices made by managers, given that their compensation hinges on performance indicators tied to accounting. In this context, organizations are viewed as intricate contractual arrangements in which individuals are bound by agency relationships. Consequently, when both managers and shareholders act with the goal of maximizing their own utility, there is a risk that managers might engage in behaviors that go against the interests of shareholders. This risk is associated with the incomplete nature of these contracts, which results in an information asymmetry that favors managers. The owner-shareholder, who occupies a central role in management, possesses all the company's information.

To address this opportunistic scenario, Bimeme and Ongogo (2021) suggest that owner-shareholders can implement specific governance mechanisms aimed at reducing or even preventing managers from adopting opportunistic behaviors. The agency costs stemming from these mechanisms can be categorized into three groups. The first pertains to monitoring costs, such as auditor fees, and incentive costs, like performance-based compensation systems, which are incurred by the owner-shareholder in an effort to oversee and control manager behavior. According to Bimeme and Ongogo (2021), these incentive costs represent expenses incurred by the manager to demonstrate to the principal that their actions align with the shareholder's interests, for instance, by voluntarily sharing information. The third and final aspect highlights the enduring costs associated with ongoing conflicts of interest between shareholders and executives, despite attempts to mitigate these conflicts.

2.4 Empirical Review

In their study, Amougou and Liliane (2023) delved into the factors influencing accounting choices, going beyond a mere financial policy perspective. They conducted a literature review to explore the elements impacting a company's performance, shedding light on stewardship and governance theories to elucidate the multifaceted nature of accounting decisions. Their aim was to enhance comprehension of the connections between financial performance and determinants within companies. By comparing two sets of businesses—small and medium enterprises currently operational versus those that have ceased operations—they sought to identify disparities in characteristics related to accounting choices. Their empirical research focused on two categories of SMEs, involving a sample of 189 entities spanning from 2016 to 2018. Their findings underscored a correlation between accounting choices and the size of the SME, highlighting this as a factor that encourages specific financial policies.

In a separate investigation conducted by Herwiyanti et al. (2023), they examined the factors behind the increased income in the batik industry in Pekalongan. Their study lent support to the idea that entrepreneurial skills, the utility of accounting information, and e-commerce-based marketing strategies significantly contributed to the income growth observed in the Pekalongan batik industry.

However, the assumption that an individual's level of financial literacy played a substantial role in boosting income was not substantiated by their research. Their findings indicated that the income surge experienced by the Pekalongan batik industry during the pandemic was primarily attributed to the industry's adept understanding of the usefulness of accounting information and their effective utilization of e-commerce platforms.

Costa et al. (2019) conducted a research study aimed at assessing the degree of comparability in the accounting choices made in the Statements of Cash Flows (SCF) of Brazilian public companies. They also sought to identify factors that could account for these choices. The study scrutinized accounting choices related to the disclosure of various SCF items, including interest expense, interest income, income tax, and social contribution on net profits, dividends, interest on own capital received, dividends, and interest on own capital paid. To gauge comparability, they employed the Herfindahl index (H index) and utilized logistic regression to pinpoint variables influencing the classification of SCF items. The findings revealed that there were high levels of comparability in the classification of interest income, moderate levels for dividends and interest on own capital paid, and low levels for interest expense, income tax, and social contribution, dividends, and interest on own capital received. Over time, the H index exhibited a gradual increase from a low point in 2010, indicating enhancements in the quality of accounting information. Additionally, the study provided evidence that the size of Brazilian public companies, their level of indebtedness, profitability, book-to-market ratio, and negative operating cash flows all played a role in determining the classification of SCF items.

In a separate investigation by Odusanya et al. (2018), they examined the factors influencing the profitability of 114 firms listed on the Nigerian Stock Exchange from 1998 to 2012. They employed the system Generalized Method of Moments (GMM) for their analysis. The results indicated that past profitability had a significant positive impact on current firm profitability. Conversely, short-term leverage, inflation rate, interest rate, and financial risk were found to exert significant negative effects on firm profitability.

Kullab and Yan (2018) explored the influence of institutional ownership on management's selection of income strategy within Bahrain's non-financial listed companies, while also considering conventional factors based on positive accounting theory. Their study encompassed a comprehensive assessment of income accounting strategy and employed the ordinary least squares technique. They analyzed panel data spanning 49 company-years of Bahraini non-financial listed firms, representing 96% of such entities. The outcomes demonstrated that, alongside the influence of conventional factors, institutional ownership played a role in shaping management's income strategy choices. Specifically, an income-increasing strategy exhibited positive associations with institutional ownership levels and directors' bonuses, while displaying negative associations with workforce size, leverage, and concentration ratio. These results collectively suggested that institutional ownership contributed to agency conflicts concerning income strategy choices.

Waweru et al. (2011) conducted a study focused on understanding the factors influencing the selection of various accounting methods in Tanzania. Their research took a positive accounting theory perspective, examining managerial decisions regarding accounting methods. They gathered panel data spanning 60 years from 15 companies listed on the Dar es Salaam Stock Exchange, drawing information from these companies' annual reports. The study identified potential determinants of accounting method choices in line with positive accounting theory principles. These determinants included firm size, leverage, internal financing, the proportion of non-executive directors, ownership dilution, and labor force intensity. To analyze the significant factors impacting managers' accounting method choices, the study employed multiple regression analysis. The findings of the study revealed that company size, internal financing, the proportion of non-executive directors, and the labor force were the significant factors influencing the choice of accounting methods. Interestingly, contrary to previous research, the authors observed a positive relationship between company size and internal financing with income strategy. The study statistically established a strong association between the selection of accounting methods and income strategy.

In a separate investigation, Astami and Tower (2006) examined four critical accounting policy disclosures in the 2000/2001 annual reports of 442 listed companies across the Asia-Pacific region. Their results indicated that companies adopting income-increasing accounting techniques in their overall accounting policies tended to have lower financial leverage, lower ownership concentration, and more substantial investment opportunity sets. They also found empirical evidence suggesting that variations in management's choice of accounting policies could be explained by both the country in which the reporting occurred and specific firm-related variables.

Meanwhile, Tawfik (2006) delved into the factors influencing the selection of accounting choices, encompassing both single policy and portfolio strategies, in Saudi Arabia. The study uncovered strong evidence indicating that accounting choices in Saudi Arabia were not significantly affected by firm-specific factors like size, leverage, or ownership concentration. Finally, Rahman and Scapens (1988) questioned the idea that political

costs, represented by a firm's size, were consistently a major factor in accounting policy choice. In their study conducted in Bangladesh, they presented evidence suggesting that multinational corporations did not uniformly employ income-reducing policies, challenging the notion of universality in this regard.
The reviewed studies discussed primarily analyze accounting choices at specific points in time or over relatively short time spans. However, accounting standards, regulations, and economic conditions evolve over time. There is a gap in understanding how accounting choices are geared toward income enhancement and financial success within the Nigerian manufacturing sector.

3. Methodology

This study adopted an *ex-post facto* research design and the population of this work comprised twenty-one consumer goods manufacturing firms listed on the Nigerian Exchange Group (NGX). The sample size was twenty-one firms selected using a census sampling technique, which denotes 100% of the total population. The data for this study was obtained from audited financial reports of the investigated firms and data gathered were analyzed using both descriptive and inferential statistics.

3.1 Model Specification

In this work, the model for analyzing the influence of accounting choices on the profitability of consumer goods manufacturing firms listed on the Nigerian Exchange Group is given by the following relationship:

$$\mathbf{PROF= \beta 0 +\beta_1 MCO +\beta_2 MAC +\beta_3 AST + \varepsilon i.}$$

Where:
PROF = Profitability
MCO = Management Compensation
MAC = Market Condition
AST = Assets Turnover
Ei = Error Term

Table 1: Definition and Measurement of Variables

Variables	Definition and Measurement
Profitability:	Dependent Variable
Gross Profit Margin (GPM)	gross profit divided revenue, times 100
Net Profit Margin (NPM)	net profit divided revenue, times 100
Management Compensation (MCO)	measured as labour cost to revenue ratio
Market Condition (MAC)	measured as interest rate impact peculiar to a particular firm = interest cost/loan times 100
Assets Turnover (AST)	Asset Turnover Ratio = Net Sales / Average Total Assets

Source: Authors' Compilation (2023)

Table 1 shows at a glance, the respective variables of this study and the mode of measurement.

4. Data Analysis and Discussion of Findings

This section discusses the descriptive and inferential results of the study.

4.1 Descriptive Statistics

Table 2 shows the descriptive features of dataset used in the regression analysis. The dependent variables include gross profit margin (GRM) and net profit margin (NPM) respectively. The independent variables comprise Market conditions as represented by interest expenses' impact on revenue (IRI), Assets turnover proxied by asset turnover ratio (AST), and management compensation measured by labour cost to revenue ratio (LRR) respectively. The efficiency, with which firms' generate profits, across manufacturing firms, is 0.1954515 on average. This denotes that manufacturing firms in Nigeria, on average, generate more than 19.54515% of revenue more than its direct cost. This distribution ranges from -0.6093 to 0.5090022, indicating manufacturing firms make the maximum of 50.90022% gross revenue above their direct cost. Although, this subjected to a low dispersion of 0.1786524, the distribution is left-skewed (-0.782542) with a kurtosis of 4.6958.

In terms of income generation above all expenses incurred, the mean is -0.0372475. This shows, on average, 3.72475% losses incurred among manufacturing firms in Nigeria. The deviation from the mean is 0.5826439, while the manufacturing firms making the least loss of -6.49507. This indicates the minimum loss incurred among manufacturing firms in Nigeria. The highest profit made during this period is 0.42092. Data for this distribution is negatively skewed (-9.000922) and with a kurtosis value of 91.1255 higher than normal distribution. However, the average value of impact of interest payment on revenue is 0.0310773. This implies that 3.10773% of the revenue is used to pay interest on loans. The standard deviation is 0.0654683, indicating 6.54683% variation from the mean. Both the skewness and kurtosis are 4.351851 and 26.0487. This indicates high disparity from the mean.
Also, the average usage of firms' asset in generating revenue is 0.739537. This means less sufficient revenue is generated among manufacturing firms examined relative to the assets owned. The revenue is 0.739537 times the total asset. The dataset ranges from 0 to 4.344196, while the skewness and kurtosis are 1.573757 and 9.500383 respectively. The shape of the distribution, in this regard, shows a

rightly skewed and leptokurtic datasets. In relation to labour cost incurred, the mean value is 0.0789188. This implies that 7.89188% of the revenue generated was used to pay labour cost. This is relatively low. The standard deviation, though high, is 0.1008908 with a range of 0 to 1.136155. This variable distribution is high and right-skewed (5.684003) with an excess kurtosis of 55.40223.

Table 2: Descriptive Statistics

Variable	GPM	NPM	MAC	AST	MCO
Obs	231	231	231	231	231
Mean	0.19545	-0.0372	0.03108	0.73954	0.07892
Std. Dev.	0.17865	0.58264	0.06547	0.61331	0.10089
Variance	0.03192	0.33947	0.00429	0.37615	0.01018
Min	-0.6093	-6.4951	0	0	0
Max	0.509	0.42092	0.5313	4.3442	1.13616
Skewness	-0.7825	-9.0009	4.35185	1.57376	5.684
Kurtosis	4.6958	91.1255	26.0487	9.50038	55.4022
Shapiro-wilk	4.884	11.286	10.02	6.909	9.605
P-value	0.0000	0.0000	0.0000	0.0000	0.0000

Source: Researchers' Computation (2023)

4.2 Determinants Factors of Income-Increasing Accounting Choices and Profitability

4.2.1 Determinants Factors of Income-Increasing Accounting Choices and Gross Profit Margin

Table 3 shows the result of the regression analysis between determining factors and income-increasing accounting choices in manufacturing firms. The Wooldridge test for autocorrelation is 3.779 with a p-value of 0.0661. This implies the absence of autocorrelation. The study therefore assumes the independence of each observation in the dataset. Again, Breusch-Pagan/Cook-Weisberg tests for heteroskedasticity or otherwise is 2732.73 with a p-value of 0.0000. This is less than the 0.05 threshold, indicating the presence of heteroskedasticity. This means the residuals did not show constant variance at every point in the model. For all independent variables, the variance inflation factor is 1.01. This also is well below the threshold of 10 indicating the absence of multicollinearity among independent variables. The robust standard error regression analysis was used to correct heteroskedasticity.

However, the Shapiro-Wilk test for normality for GRM, NPM, MAC, AST, and MCO show t-statistics of 4.884, 11.286, 10.02, 6.909, and 9.605 respectively. While the p-values of these variables show 0.000, 0.000, 0.000, and 0.000 respectively. This indicates that GRM, NPM, MAC, AST, and MCO are not normally distributed. All these variables were transformed to make them normally distributed while improving their functional form. Due to the presence of heteroskedasticity, both the fixed and random effect model was not interpreted. Robust standard error regression was interpreted as the basis of judgment used for decision-making. The Wald chi-square test is 25.11 with a p-value of 0.0000. This implies that 25.11% contributions and influence of independent variables to the model, dependent variable implying efficient model at a p-value of 0.0000.

The remaining percentage represents other factors not included in the model.

However, a positive coefficient indicates an increase in independent variables entail an increase in the dependent variable. While a negative coefficient suggests a decrease in the dependent variable by the coefficient of the independent variable. The coefficient of interest expense, though insignificant, is 0.0337948. This indicates that a 3.37948% increase in gross profit margin is a result of a unit increase in finance cost. While being significant, the asset turnover ratio's coefficient is 0.1253809. This denotes that a 3.40918% increase in the value of gross profit margin is a result of a unit increase in asset turnover ratio. For the effect of labour cost on revenue, the coefficient is 0.4052077 and significant in terms of statistics. This denotes that a unit increase in payment of staff leads to a 40.52077% increase in gross profit.

Table 3: Estimate on effect of determining factors on gross profit margin.

Variables	Coefficient	t-value	p-value
MAC	0.0337948	0.21	0.830
AST	0.1253809	7.46	0.000
MCO	0.4052077	3.96	0.000
Constant	0.069699	3.80	0.000
Modified Wald test	2732.73		

Probability	0.0000
Wooldridge test	3.779(0.0661)
Hausman fixed random (p-value)	8.08(0.0444)
Lagrange Multiplier test (p-value)	253.69(0.0000)
VIF (mean)	1.01

Source: Authors' Computation (2023)

4.2.2 Determinants Factors of Income-Increasing Accounting Choices and Net Profit Margin

This section in Table 4 shows the effect of increasing income and underlining determining factors. For a statistically efficient model, the Breusch-Pagan/Cook-Weisberg test was conducted to determine if the residual has constant variance or otherwise. The outcome of this test in Table 4 was 10496.78 with a p-value of 0.000. This implies the data points are heteroskedastic. Also, the degree of autocorrelation was examined through the use of the Wooldridge test for autocorrelation in panel data. The test result shows a value of 5.692 and a p-value of 0.0270. This shows autocorrelation among the independent variables. The variance inflation factor determines the presence of multicollinearity in the dataset. The average VIF is 1.01 indicating the absence of correlation among independent variables.

However, a Generalised Least Square was used to account for both heteroskedasticity and autocorrelation in the model. Wald Chi-Square statistic, which tests the collective significance of independent variables in a model specification, is 116.05 with a p-value of 0.0000. This indicates all independent variables are significant in adding value to model's efficiency and predicting regression estimates. The coefficient of IPR is -0.2919753 with an insignificant p-value of 0.155. This connotes that a unit increase in finance cost related to loans will decrease net profit margin by 29.19753%. For asset turnover ratio, the beta factor is 0.0459078 with a significant p-value of 0.0000. This implies that a unit increase in asset usage efficiency has a 4.59078% increase in net profit margin. Also, the beta factor of labour cost to revenue ratio is -2.771906 while the p-value is 0.0000. This portrays a unit increase in labour cost will decrease net profit margin by 277.1906 %. This is roughly 3 times reduction in net profit margin.

Table 4:
GLS Estimate on Effect of Determining factors on Net Profit Margin

Variables	GLS Coefficient	t-value	p-value
MAC	-0.2919753	-1.42	0.155
AST	0.0459078	3.70	0.000
MCO	-2.771906	-10.47	0.000
Constant	0.1895162	6.47	0.000
Wald Chi2(3) test statistic	116.05(0.0000)		
Wald Chi2(3)(heteroskedasticity)	10496.78		
Probability	0.0000		
Wooldridge test(autocorrelation)	5.692(0.0270)		
Hausman fixed random (p-value)	159.64 (0.00)		
Lagrange Multiplier (p-value)	72.78 (0.000)		
VIF (mean)	1.01		

Source: Author's computation (2023)

4.3 Discussion of Findings

The outcome of this study revealed that management compensation had a significant negative effect on income and profit generation. This might indicate that the compensation structure for management was not effectively aligned with the company's financial goals. If management's incentives were not tied to improving income and profitability, they might not have had the motivation to make decisions that would benefit the company financially. Contrary, market conditions had a negative insignificant effect on income and profit generation. This suggests that external economic and market factors have had a minor and unimportant impact on a company's ability to generate income and profit. It indicates that while market conditions may have been unfavorable or challenging, their impact on the company's financial performance was not substantial. This could mean that the company's operations are relatively stable and not highly sensitive to changes in the broader economy. Lastly, asset turnover had a significant positive relationship with both gross profit and net profit margin. This indicates that there is a strong and positive correlation between the asset turnover ratio and both gross profit margin and net profit margin. This relationship suggests that the company is effectively using its assets to generate revenue while maintaining healthy profit margins. Efficient asset utilization contributes positively to the company's overall profitability. This was highly

expected as efficient usage of assets contributes positively to income generation. This is in agreement with the work of Kullab and Yan (2018), Costa et al. (2019), and Odusanya et al. (2018). However, the studies of Astami and Tower (2006), Tawfik (2006), and Rahman and Scapens (1988) negate this assertion. This result also supports the a priori expectations that an increase in some specific cost will improve gross profit margin while having a negative impact on net profit.

5 Conclusion and Recommendations

The study conducted an analysis of various factors affecting income-increasing choices in Nigerian manufacturing sectors. The research revealed that management compensation had a significant negative effect on income and profit generation. This suggests that the compensation structure for management might not have been effectively aligned with the company's financial goals. The lack of proper alignment between management incentives and financial performance may have led to decisions that did not benefit the company financially. In contrast, the study found that market conditions had a negative but insignificant effect on income and profit generation. This implies that external economic and market factors had a minor and unimportant impact on the company's ability to generate income and profit. It suggests that the company's operations remained relatively stable and were not highly sensitive to changes in the broader economy. The research identified a significant positive relationship between asset turnover and both gross profit and net profit margin. This positive correlation indicates that the company effectively utilized its assets to generate revenue while maintaining healthy profit margins. Efficient asset utilization contributed positively to the company's overall profitability. In conclusion, the study's findings highlight the critical role of effective management compensation and asset turnover in influencing income and profit generation in a company. The negative impact of misaligned management compensation underscores the importance of linking incentives to financial performance goals. On the other hand, the insignificant effect of market conditions suggests that a company's stability and resilience can mitigate external economic challenges. The positive relationship between asset turnover and profit margins underscores the importance of efficient asset utilization as a driver of profitability.

Based on the study's findings, the following recommendations can be made: firstly, manufacturing firms should review and potentially revise their compensation structures for management to ensure that incentives are closely aligned with financial performance goals. This alignment can motivate management to make decisions that positively impact income and profit generation. Secondly, manufacturing firms should focus on optimizing asset utilization to improve revenue generation and profitability. Effective asset management strategies can include inventory control, faster sales cycles, and improved resource allocation. Thirdly, it is essential for manufacturing firms to continuously monitor external economic factors and adapt their strategies as needed. Being prepared for market fluctuations can help maintain stability and profitability. Lastly, future research could explore additional factors that may influence income and profit generation, considering industry-specific dynamics and a more extensive dataset. This could provide a more comprehensive understanding of the drivers of financial performance.

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