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**Internal Audit Function and Investment Efficiency in Nigerian
Manufacturing Companies**

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ABSTRACT

This study examined the relationship between internal audit function (risk management, internal control, governance) and investment efficiency in Nigerian manufacturing companies. Globally, investment efficiency is recognized as vital in the financial success and sustainability of businesses across various industries. Despite this recognized importance, there is scant research specifically examining its determinants. While internal audit is widely acknowledged as a critical function within organizations, empirical evidence linking it to investment efficiency in Nigerian manufacturing companies remains limited. This knowledge gap presents a significant challenge for manufacturing companies seeking to enhance investment decision-making processes and sustainable growth within the sector, hence this research. The study employed cross-sectional field survey research design and primary data was used. Data was collected through the administration of copies of questionnaires to staff of selected companies. The population of the study comprised 1,959 staff of the 4 manufacturing companies examined. Yamane's formula was used to determine a sample size of 332. Multiple Linear Regression was applied. Results revealed that risk management, internal control and governance significantly and positively influence investment efficiency. The study recommends that management of manufacturing companies should prioritize internal audit function, ensure its independence and establish robust internal control mechanisms to mitigate risk. This is expected to enhance investment efficiency in Nigerian manufacturing companies, which will ultimately lead to economic and sustainable growth.

Keywords: Investment Efficiency, Internal Audit Function, Risk Management, Internal Control, Governance

1. INTRODUCTION

Investment efficiency is paramount in the manufacturing sector due to its direct correlation with competitiveness and profitability. It is one of the most important goals that manufacturing companies want to achieve. Achieving investment efficiency places a company in a strategic position in the eyes of stakeholders (Hu, Kong & Wang, 2022). Investment efficiency entails the efficient allocation of resources. Efficient allocation of resources enables companies to optimize production processes, enhance product quality, and respond effectively

to market demands, thereby gaining a competitive edge (Ardianto, Anridho, Ngelo, Ekasari & Haider, 2023).

In Nigeria, manufacturing companies encounter numerous challenges in resource allocation. These challenges include limited access to capital, inadequate infrastructure, and uncertainties stemming from regulatory frameworks (Olaleye & Adeyeye, 2021). Given the significance of manufacturing to the Nigerian economy, understanding and improving investment efficiency is crucial for fostering sustainable growth and development. Investment efficiency, within the confines of this study, denotes a company's adeptness at allocating its financial resources in a manner that optimizes returns while concurrently mitigating risks (Al-Tamimi & Obeidat, 2016).

Despite the recognized importance of investment efficiency for organizational success, there is paucity of research specifically examining its determinants within the Nigerian manufacturing sector. While internal audit is widely acknowledged as a critical function within organizations, its specific role in influencing investment efficiency remains largely unexplored, particularly in the context of manufacturing companies.

Regulatory uncertainties also pose a significant challenge for manufacturing companies in Nigeria, impacting investment decisions and operational performance. In a complex regulatory environment, internal audit can play a crucial role in ensuring compliance with applicable laws and regulations, thereby mitigating legal and reputational risks. However, the effectiveness of internal audit in addressing regulatory compliance issues and enhancing investment efficiency requires further investigation.

Internal audit serves as a cornerstone function within organizations, tasked with evaluating and improving the effectiveness of internal control, governance, and risk management processes. (Sarens & De Beelde, 2015). The Institute of Internal Auditors (IIA) in 1999 defined internal audit as an independent objective, assurance, and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

From the above definition, internal auditing in an organization is anchored on three elements, they are risk management, control, and governance. These three elements are sometimes referred to as the "three pillars" of internal auditing. The three pillars encompass the policies and procedures established to ensure the achievement of the objectives and goals of a company.

Past studies have underscored the pivotal role of internal audit in enhancing investment decision-making processes and bolstering organizational performance (Arena et al., 2016).

However, empirical evidence regarding the specific impact of internal audit practices on investment efficiency within the Nigerian manufacturing context remains scant (Ogundipe & Akinleye, 2019). Consequently, this article seeks to bridge this gap by offering empirical insights into the relationship between internal audit and investment efficiency of manufacturing companies in Nigeria. This study aims to examine the relationship between internal audit functions and investment efficiency of manufacturing companies in Nigeria. To achieve this aim, the following research questions and objectives will be used to guide the study:

1. What is the relationship between Risk Management and Investment Efficiency of manufacturing Companies?
2. What is the relationship between Internal Control and Investment Efficiency of manufacturing Companies?
3. What is the relationship between Governance and Investment Efficiency of manufacturing Companies?

The objectives include:

1. To examine the relationship between Risk Management and Investment Efficiency of manufacturing companies.
2. To examine the relationship between Internal Control and Investment Efficiency of manufacturing companies
3. To examine the relationship between Governance and Investment Efficiency of manufacturing companies

2.0. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Investment Efficiency

Investment efficiency plays a crucial role in the financial success and sustainability of businesses across various industries. It encompasses the strategic allocation of financial resources to maximize returns while minimizing risks. Efficient investments are those that yield returns commensurate with the level of risk undertaken, thereby enhancing shareholder value and ensuring long-term competitiveness in the market (Koski & Pontiff, 1999). "Gaio et al. (2023) opines that, "investment efficiency relates to firms carrying out all and only projects with positive net present values. Consequently, understanding the determinants of investment efficiency is paramount for firms seeking to optimize their resource allocation strategies".

One of the key determinants of investment efficiency is the quality of managerial decision-making. Effective decision-making involves thorough analysis, robust risk assessment, and alignment with organizational objectives (Dechow, 2008). Managers must carefully evaluate

investment opportunities, considering factors such as market dynamics, competitive positioning, and regulatory environment to mitigate risks and capitalize on growth prospects (Bhattacharya & Graham, 2009). Measuring investment efficiency entails assessing the performance of investment portfolios relative to predetermined benchmarks and objectives. Key performance indicators (KPIs) such as return on investment (ROI), net present value (NPV), and internal rate of return (IRR) provide insights into the effectiveness of resource allocation decisions and value created for stakeholders (Damodaran, 2012). By evaluating investment outcomes, organizations can identify areas for improvement and refine their investment strategies over time.

2.1.2 Risk Management

Risk management is a critical component of organizational governance and decision-making, encompassing the identification, assessment, and mitigation of risks that may impact an organization's ability to achieve its objectives (Arena, 2016). As noted by Arena (2016), these risks can stem from various sources, including financial, operational, and regulatory factors, both internal and external to the organization.

Sunaryo et al. (2025) states that, “risk management practices are pivotal in ensuring corporate sustainability and resilience during economic crises. For instance, the 2008 global financial crises served as a stark reminder of the consequences of inadequate risk oversight and highlighted the need for systematic risk management strategies. More recently, the COVID 19 pandemic demonstrated the fragility of global financial systems, underscoring the importance of proactive risk management frameworks in mitigating unforeseen disruptions”.

Effective risk management practices are essential for helping organizations anticipate and respond to potential threats, thereby minimizing the likelihood of adverse events and maximizing opportunities for success. One of the key aspects of risk management is the identification of potential risks that may arise in the course of conducting business operations. This involves evaluating internal processes, external market conditions, and other factors that could pose a threat to the organization's objectives (Arena, 2016). By systematically identifying and categorizing risks, organizations can better understand their potential impact and develop appropriate strategies to address them.

Furthermore, risk management involves assessing the potential impact of identified risks on the organization's objectives and performance. This process allows organizations to prioritize risks based on their significance and allocate resources effectively to manage these risks (Arena et al., 2016). By quantifying risks and their potential consequences, organizations can make informed decisions about risk mitigation strategies and resource allocation.

2.1.3 Internal Control

Internal control is a critical aspect of organizational governance, encompassing policies, procedures, and mechanisms designed to safeguard assets, ensure the reliability of financial reporting, and promote operational efficiency (Committee of Sponsoring Organizations of the Treadway Commission [COSO], 2013).

Internal control system provide a structured framework through which organizations can monitor, assess and guide their operational activities to ensure efficiency, effectiveness and compliance with statutory and managerial requirements (Enemali & Okwoli, 2025). A well-designed internal control system can lead to more effective and efficient operations.

One of the primary objectives of internal control is to safeguard assets from theft, fraud, misuse, or loss (COSO, 2013). This involves implementing physical safeguards, such as secure storage facilities and access controls, as well as procedural controls, such as segregation of duties and authorization requirements for transactions. By safeguarding assets, internal control systems help protect the financial interests of the organization and its stakeholders, thereby promoting confidence and stability.

Another key objective of internal control is to ensure the reliability of financial reporting by detecting and preventing errors, misstatements, or fraudulent activities (COSO, 2013). This entails implementing accounting policies and procedures, conducting regular reconciliations and reviews, and maintaining adequate documentation and audit trails. By providing accurate and reliable financial information, internal control systems enable informed decision-making by management, investors, and other stakeholders.

Internal control systems also play a crucial role in promoting operational efficiency and effectiveness within organizations (COSO, 2013). By optimizing processes, minimizing waste, and improving resource utilization, internal controls contribute to cost reduction, productivity enhancement, and overall performance improvement.

2.1.4 Corporate Governance

Corporate governance is a process and system by which firms are controlled and directed. Corporate governance is a fundamental aspect of organizational management, encompassing the system of rules, practices, and processes by which companies are directed and controlled (Al-Tamimi & Obeidat, 2016). According to Al-Tamimi & Obeidat (2016), it involves the relationships between a company's management, its board of directors, shareholders, and other stakeholders. Corporate governance simply entails the system of directing, controlling and guiding the affairs of company with a view to forestall the possibility or incidence of mismanagement, fraud and undue concentration of decision-making powers in the hands of few persons that may not represent the interests of all stakeholders adequately. Corporate governance

though not a modern concept gained much popularity and attention during the high corporate failure era, which saw the collapse of firms like Enron and WorldCom (Afams, Onyekachi & Ujah, 2025).

Effective corporate governance mechanisms are vital for promoting transparency, accountability, and ethical behavior within organizations, which ultimately enhances investor confidence and protects shareholder interests. One key element of corporate governance is the establishment of clear roles and responsibilities for the board of directors and senior management. The board of directors plays a crucial role in providing oversight and guidance to management, ensuring that corporate objectives are aligned with shareholder interests (Al-Tamimi & Obeidat, 2016). This includes setting strategic direction, approving major decisions, and monitoring performance to ensure accountability and compliance with laws and regulations.

2.2 Theoretical Framework

2.2.1 Agency Theory

Agency theory was first developed by Stephen Ross in 1973 but was later expanded and made widely known by Michael C. Jensen and William H. Meckling in 1976. The theory explains the relationship between a Principal (Owner) and an Agent (a person hired to act on behalf of the Principal), it focuses on the problem that agents may not always act in the best interest of principals. As long as the interests of the agents and the principal does not align, it gives rise to conflict of interest.

Agency Theory provides valuable insights into the dynamics of the principal-agent relationship within organizations, particularly the conflict of interest that arises between shareholders (principals) and management (agents) (Jensen & Meckling, 1976). This conflict stems from the misalignment of incentives, where agents may prioritize their interests over those of the principals, resulting in agency costs. According to agency theory, managers are more likely to shift towards self-aggrandizement by utilizing company's resources or engaging in actions that will be more beneficial to them than the owners. This above statement was asserted by Eisenhardt (1989).

By integrating the above theoretical framework, this research aims to develop a comprehensive understanding of the relationship between internal audit practices and investment efficiency of manufacturing companies in Nigeria.

In the context of manufacturing companies in Nigeria, shareholders entrust management with the responsibility of making investment decisions that maximize shareholders' value. However, management may pursue investment opportunities that serve their interests or diverge from the shareholders' objectives, leading to potential agency costs

Agency Theory provides a theoretical framework for understanding the role of internal audit in mitigating conflicts of interest between shareholders and management of manufacturing companies in Nigeria. By providing independent assurance and reliability of financial information, assessing effectiveness of internal control, identifying potential risks and inefficiencies, enhancing transparency, and aligning incentives, internal audit helps to ensure that investment decisions are made in the best interests of shareholders, thereby reducing agency costs and enhancing investment efficiency within the organization.

By evaluating the reliability of financial information, assessing the effectiveness of internal controls, and identifying potential risks and inefficiencies, internal audit provides shareholders with the confidence that management's investment decisions are aligned with organizational objectives and shareholder interests.

2.2.2 Stakeholder Theory

A stakeholder in an organisation is someone who has a stake in the company and an interest in what the company does (Enemali & Okwoli 2025). Stakeholder Theory, as articulated by Freeman (1984), posits that, “organizations should consider the interests of all stakeholders, including shareholders, employees, customers, and the community. According to this theory, organizations have a responsibility to balance the needs and expectations of various stakeholders, rather than solely focusing on maximizing shareholder value. In the context of internal audit and investment efficiency, Stakeholder Theory emphasizes the importance of internal audit practices in promoting transparency, accountability, and ethical behavior within organizations. It highlights the broader societal implications of investment decisions and the role of internal audit in promoting stakeholder interests.

Stakeholder Theory emphasizes the importance of the interests of all stakeholders in organizational decision-making processes and implementation. Through reviews, assessments, and recommendations, internal audit helps enhance overall organizational performance and sustainability, in line with the principles of Stakeholder Theory. According to Freeman (1984) the message of the theory is that organisations that care about the wellbeing of stakeholders will continue to be in business and perform better than organizations who do not. Taking care of the wellbeing of stakeholders' centers mainly on a company's performance which largely depends on making the right investment decisions.

2.3 Empirical Review

A study by Ekwe, Isaac, and Okezie (2014) on the relationship between internal audit efficiency and the profitability of quoted manufacturing firms in Nigeria. The research utilized data from the financial reports and annual accounts of quoted manufacturing firms obtained from

the Nigerian Stock Exchange (NSE) and analyzed it using multiple regressions at a significance level of 0.05. The findings from the univariate analysis suggest that quoted manufacturing firms in Nigeria prioritize internal audits and are driven by efficiency. However, the study concludes that internal audit should be considered a tool for good management rather than a substitute for corporate operations. As a result, the study recommends that top executives of manufacturing firms in Nigeria proactively chart the course of action to ensure effective management processes. Additionally, the top management team should demonstrate high moral integrity to prevent theft, embezzlement, and fraud within the organization.

Beekue, and Paago (2016), who examined the relationship between internal audit practices and financial performance of quoted manufacturing firms in Nigeria. The specific objectives of the study are to determine the extent of the relationship between personnel audit and profitability, as well as the relationship between personnel audit and return on investment in these firms. The sample size consists of eighty staff members from selected quoted manufacturing firms in Nigeria. Primary data on internal audit practices and financial performance were collected through personal interviews and questionnaire instruments, which were tested for reliability using the Cronbach Alpha coefficient ($\alpha = 0.70$). Data analysis was conducted using descriptive statistics and the Pearson correlation coefficient, with the aid of a statistical package for social sciences (SPSS). Based on the findings, the study concludes that internal audit practices significantly impact financial performance in the selected quoted manufacturing firms in Nigeria. Consequently, the study recommends certain actions to be taken, although specific recommendations are not provided.

In a related study, Kolawole, Dairo, Jacob, and Aregbesola (2018) examined the effect of internal audit on the financial performance of selected manufacturing industries in the consumer-goods sector listed on the Nigerian Stock Exchange. The research aims to investigate how indicators such as the independence and professional competency of internal auditors, along with the internal control system, influence the financial performance of these industries. Employing a descriptive research approach, the study randomly selects ten industries in the consumer-goods sector and utilizes secondary data from their published financial statements for the period 2008-2017. Panel data analysis is adopted, with descriptive statistics such as mean, median, and standard deviation used for descriptive analysis, while inferential analysis is conducted using multiple regression analysis. The findings indicate that internal audit significantly influences the financial performance of quoted manufacturing industries in Nigeria. Specifically, the professional competency of internal auditors and the internal control system exhibit positive and significant influences, while the independence of internal auditors has a significant but negative influence on financial performance.

Jacob and Akinselure (2021) investigated the effect of internal control on the financial performance of selected firms in Nigeria, focusing on manufacturing firms. The research methodology employs a survey research approach, with data collected through the distribution of 150 questionnaires among selected employees from five organizations. Based on the results, the study recommends that management should develop more effective strategies to ensure that internal control is both effective and efficient. This would ultimately lead to a significant reduction in fraud perpetration within the organization. The findings highlight the importance of robust internal control mechanisms in safeguarding the financial performance and integrity of firms in Nigeria, particularly within the manufacturing sector.

Finally, the study conducted by Enekwe, Nwoha, and Udeh (2020) focused on examining the effect of audit quality on the financial performance of listed manufacturing firms in Nigeria from 2006 to 2016. The research specifically investigates the effects of auditor's independence, audit committee, and audit fee on the return on assets of listed manufacturing firms. Using an ex-post facto research design, the study employs a stratified purposive sampling technique to select 24 firms from the 80 listed manufacturing firms in Nigeria. Secondary data are gathered from the published annual financial statements of the companies. The Ordinary Least Square method of regression is utilized in the analysis of data. The findings of the study reveal that auditor independence has a positive and significant effect on the financial performance of listed manufacturing firms, among other factors. The study concludes that attributes of audit quality influence the financial performance of manufacturing firms in Nigeria.

The literature review dwelt mainly on improving audit quality of manufacturing companies for improved financial performance. Looking at the existing literature, there is scant research on how internal audit practices affect investment efficiency of manufacturing companies. Given the significance and importance of manufacturing activities to the Nigerian economy, understanding and improving investment efficiency of manufacturing companies becomes crucial for economic growth and development.

3. METHODOLOGY

3.1 Research Design

The study employed a cross-sectional field survey research design. The cross-sectional field survey involves seeking response from staff, and the independent and dependent variables are measured at the same point in time using a single questionnaire (Jones, 2018). The choice of field surveys, as opposed to other research designs, was motivated by the following reasons: first, field survey provide a suitable instrument for collecting large quantity of data; secondly, it

provides a practical framework for collecting a large sample of the composing group; thirdly, since data is collected in field settings external validity is allowed; fourthly, it is a tool for measuring unobserved variables such as people preferences, attitudes, beliefs, behaviours etc., and finally, field survey have strong data reliability (Smith & Johnson, 2020).

3.2 Validity of Instrument

Every research must pass the test of validity before it can be taken seriously. Validity refers to the extent to which an instrument adequately represented underlying construction and can measure what it is designed to measure (Smith, 1991). According to Hair (2007), validity is the extent to which questions in an instrument accurately measure the variable therein. For this study Amin's (2005) content validity index was adopted. The content validity was tested using this formula:

$$CVI = \frac{NIDV}{TNIQ}$$

Where:

CVI = Content Validity Index

NIDV = Number of items declared valid

TNIQ = Total number of items in the questionnaire for construction

The minimum CVI recommended in the survey studies is 0.7 (Amin, 2005)

3.3 Source of Data

Primary data was used in the research. The use of primary data is crucial as it allowed the researchers to gather accurate, relevant, and timely information that is tailored to achieve the study objective. Thus, the primary data was collected through the use of questionnaires. The questions were divided into two sections; section A contains questions on the demography of respondents; Section B questions are on investment efficiency of the selected companies, internal audit functions broken down into questions on Risk Management, Internal Control and Governance of these companies.

3.4 Population of the Study

In line with the objectives of the study, the target population comprises all the staff in the NASCO Group, Grand Cereals Limited, Cadbury Nigeria Plc. and Vitafoam Nigeria Plc., manufacturing companies based in Northern and Southern Nigeria. Selecting two manufacturing companies from both the North and South of Nigeria for a study centred on the under listed reasons; the North and South of Nigeria have different economic landscapes, with varying

resources, labour markets, and industrial capacities. Secondly, the selected companies are producers of food and household products that are widely used in the country.

3.5 Sample Size

Considering a population of 1959 staff of the four manufacturing companies, the sample size of 332 was determined using Yamane's formula, the sample frame selected was broad as the target population, as no preference towards gender was made. All staffs' population were randomly selected.

3.6 Method of Data Analysis

To effectively analyse the descriptive statistics – of the personal characteristics of the respondents – and the inferential statistics, Statistical package for social science (SPSS) 27.0 was used to analyse the survey data set. Since the dependent variable investment efficiency, is modelled using the ordinary least squares (OLS) method.

Model Specification

Therefore, for this study, the Linear Regression Model (LRM) was employed. The statistical regression model is given as: $Y = \beta_0 + \beta_1 X_i + \mu_i$

Where:

Y = Response variable (dependent variable)

X_i = Vector of explanatory variables (Independent Variables)

β_0 = Intercept of the equation

β_1 = Vector of parameters to be estimated

μ_i = Error term

By substituting the dependent and independent variables into equation 4, the model becomes

$$IE_i = \beta_0 + \beta_1 RM_i + \beta_2 IC_i + \beta_3 GOV_i + \mu_i$$

IE = Investment Efficiency (dependent variable)

RM = Risk Management (independent variable)

IC = Internal Control (independent variable)

GOV = Governance (independent variable)

β_0 = Intercept of the equation

β_1 = coefficient of Risk Management

β_2 = coefficient of Internal Control

β_3 = coefficient of Governance

μ_i = Error term

Assumptions:

1. Normality
2. Multicollinearity
3. and No autocorrelation

4.0 RESULTS AND DISCUSSION

4.1 Results

The data were inspected to make sure there are no missing values, that the data is normal, and that there are no multi-collinearity. The information was examined and Multiple Linear Regression was used.

A total of 332 questionnaires were distributed, 258 were returned, yielding a valid response rate of 77.7%. According to Sekaran (2003), a 30% response rate was appropriate for statistical data analysis, the 77.7% response rate is sufficient for further analysis in this study.

Normality

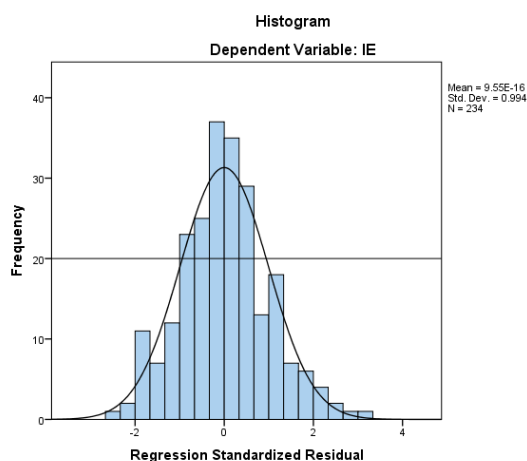


Figure 1: Test of normality for IE

Figure 1 shows the histogram test of normality. The histogram provides useful graphical representation of the data. From the diagram, the histogram shows that the data is normally distributed given that bell shaped curve is symmetric. The reliability test indicated that since the overall Cronbach Alpha value is 0.924 and is higher than the benchmark value of 0.7, it can be indicated that the instrument for data collection is reliable.

Table 1

Regression Result

Variable	Coefficient	Standard Devia	T-test	P-value
Constant	0.628	0.162	3.886	0.000**
Risk Management (RM)	0.392	0.061	6.414	0.000**
Internal Control (IC)	0.241	0.065	3.701	0.000**
Governance (GOV)	0.229	0.061	3.775	0.000**
R ²	0.598			
F-Test	113.985			0.000**

Dependent variable: Investment Efficiency (IE) * ** *** 1%, 5% and 10%

Source: SPSS version 27.0

The coefficient of determination, $R^2 = 0.598$, indicates that 59.8% of the variation in investment efficiency (IE) in NASCO Group, Grand Cereals Plc, Cadbury and Vitafoam Plc can be attributed to changes in Risk Management (RM), Internal Control (IC), and Governance (GOV). The regression model was found to be of good-fit, given that the F-statistic's p-value of 0.000.

As shown, the standardized regression result for Risk Management (RM) on investment efficiency (IE) is 0.392. This means that Risk Management (RM) has a positive and significant influence on investment efficiency (IE). It implies that increase in Risk Management (RM), will lead to increases in the level of investment efficiency (IE) by 39.2% when Risk Management (RM) is increased by 1%.

Again, the regression result for Internal Control (IC) on investment efficiency (IE) is 0.241. This implies that Internal Control (IC) has a positive and significant influence on investment efficiency (IE). The result revealed that increase in Internal Control (IC), will lead to increase in the level of investment efficiency (IE) by 24.1% when Internal Control (IC) is increased by 1%.

In a similar fashion, the standardized regression result of the coefficient for Governance (GOV) and Investment Efficiency (IE) is 0.229. This means that governance (GOV) has a positive and significant influence on Investment Efficiency (IE). Therefore, increase in governance (GOV), will lead to increases in the level of Investment Efficiency (IE). A 1% increase in the level of governance (GOV) will bring about a 22.9% increase in Investment Efficiency (IE).

4.2 Discussion of Findings

For objective one, there is significant relationship between risk management and investment efficiency of manufacturing companies in Nigeria. Efficient risk management involves striking a balance between risk avoidance, risk mitigation, and risk acceptance to optimize the risk-return trade-off. By proactively managing risks, organizations can minimize the likelihood and impact of negative events while maximizing opportunities for value creation and growth. Effective risk management enables organizations to allocate resources more efficiently by prioritizing investments based on their risk-adjusted returns.

For objective two, it was established that there is significant relationship between internal control and investment efficiency of manufacturing companies in Nigeria. This implies that

internal control systems play a crucial role in promoting operational efficiency and effectiveness within organizations. It is optimizing processes, minimizing waste, and improving resource utilization, internal controls contribute to cost reduction, productivity enhancement, and overall performance improvement. This includes streamlining workflows, automating routine tasks, and identifying opportunities for process optimization and innovation. This result was found to be consistent with the study of Beekue and Paago who examined the relationship between internal audit practices and financial performance of quoted manufacturing firms in Nigeria. Based on the findings, the study concludes that internal audit practices significantly impact financial performance in the selected manufacturing firms in Nigeria.

The third objective asserted that there is a significant relationship between governance and investment efficiency of manufacturing companies in Nigeria. Good corporate governance impacts investment efficiency in an organization through the establishment of clear roles, responsibilities, and decision-making processes. Well defined duties of management, the board of directors, and other stakeholders, governance frameworks ensure alignment of interests and promote effective communication and collaboration, facilitating informed investment decisions and strategic initiatives. Additionally, governance mechanisms such as board committees, independent directors, and shareholder oversight help monitor management performance, mitigate risks, and enhance accountability, thereby reducing agency costs and improving investment efficiency.

5. CONCLUSION AND RECOMMENDATIONS

The main objective of this study is to examine the relationship between internal audit functions and investment efficiency in Nigerian manufacturing companies. Specifically, the study examined the effect of risk management (RM), internal control (IC) and governance (GOV) on investment efficiency of manufacturing companies in Nigeria. From the findings and discussions, the following conclusions were derived.

First in the relationship between the effect of risk management and investment efficiency, it was proven that risk management was statistically significant in enhancing the investment efficiency. This indicated that increase in Risk Management (RM), will lead to increases in the level of investment efficiency (IE) by 39.2% when Risk Management (RM) is increased by 1%. The conclusion is that the selected firms were effective in managing their risks in terms of waste and fraud. Secondly, it can be concluded that the selected firms in this study have effective internal control systems. Thirdly, based on the governance structure, it can be concluded that corporate governance is closely linked to performance management and incentive structures within organizations. By aligning executive compensation with performance metrics and long-

term strategic objectives, companies can motivate management to act in the best interests of shareholders and pursue sustainable value creation.

Based on the results, the study recommends that management should prioritize policies that guarantee the independence of internal audit functions, establish robust internal control mechanisms to mitigate risk and ensure the recruitment of experienced and professional staff in the audit department. The internal audit department should be enhanced through updated training and increased remunerations.

There should be strict compliance to the independence of internal auditors of companies so as to overcome challenges and improve performance. This would ultimately lead to decision makings which will translate into investment efficiency. The findings highlight the importance of robust internal control mechanisms in promoting investment efficiency, financial performance and integrity of firms in Nigeria, particularly within the manufacturing sector.

6. LIMITATIONS OF THE STUDY

This study is limited to the selected manufacturing firms in Lagos and Plateau states. This means that the conclusions and recommendations are limited to firms within the category. The outcomes are not applicable to banking, insurance and other unrelated industry. This study is also limited to the application of primary data because the measurement of some variables like risk management requires some technicalities to be measured by secondary data. The primary data was used to measure the risk management by conceptualizing the variable through the likert scale questionnaire.

7. CONTRIBUTION TO KNOWLEDGE

Having examined the relationship between internal audit function and investment efficiency in Nigerian manufacturing companies, the result reveals that internal audit function (risk management, internal control, and governance) positively and significantly impact on investment efficiency of the selected manufacturing firms in Nigeria.

The study contributes to the growing discourse on internal audit effectiveness and investment decisions making within manufacturing organisations. Another area of contribution is in the theories adopted for the study; agency and stakeholders' theories. They prove to be very relevant today in studies relating to manufacturing, investment, and shareholding of manufacturing firms.

8. SUGGESTIONS FOR FURTHER STUDY

Further studies should be conducted in the following areas:

1. The relationship between internal audit function and investment efficiency in deposit money banks in Nigeria
2. A panel analysis on the relationship between internal audit function and investment efficiency in Nigerian manufacturing sector. In this case, the application of secondary data using the technical measure of the risk management variable.

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