

Internal Control Effectiveness and Business Survival of Listed Firms in Nigeria: The Moderating Role of Leadership Consistency and Quality

Ebimobowei Appah (PhD, FCA) & Doubara Aganaba

¹ & ² Isaac Jasper Boro College of Education, Sagbama, Bayelsa State, Nigeria

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Abstract: *Internal control structure describes the capability of a firm's risk management structure and is an indispensable element in modern governance structure. Therefore, this study explores internal control effectiveness on business survival of listed firms in Nigeria and the moderating influence of leadership consistency and quality. The study used cross sectional research design and data were collected from primary and secondary sources. The primary data consisted of structured questionnaires from a sample of 546 respondents of listed firms in Nigeria. Data collected from the respective respondents were analysed by applying structural equation model. The study shows that there is a positive and significant relationship between internal control effectiveness (control environment, risk assessment, control activities, information and communication and monitoring) on business survival, measured by productivity improvement. The finding also shows that leadership consistency and quality moderates positive and significant association between internal control effectiveness and business survival of listed firms in Nigeria. From the findings of this study, we concluded that leadership consistency and quality positively and significantly influence the relationship between internal control effectiveness and business survival of firms in Nigeria. We recommended amongst others that firms listed on the Nigeria Exchange Group (NGX) should improve on internal control practices by optimizing internal structure and improve the communication between various departments through the cultivation of corporate culture and the institutionalization of realistic incentive schemes that contributes to the advancement of productivity improvement, corporate development and constantly increasing the value of the firm.*

Keywords: internal control effectiveness, business survival, leadership quality and consistency

INTRODUCTION

The survival of any entity largely depends on the effective and efficient use of financial and non-financial resources at the disposal of the entity for the attainment of corporate goals and objectives. According to Eniola and Akinselure (2016), the optimization of resource utilisation by staff in an entity depends on the level of controls such as internal control established by management of the organization. Okheradia et al (2023) suggested that internal control is an integrative accounting structure with an extensive perspective of corporate governance and decision making process in order to attain long term entity survival and success. In a similar vein, Zhu and Song (2021) argued that internal control system reveals the capability of a firm's risk management structure and is an indispensable element of contemporary governance system. According to Li (2020), internal control is a control activity conducted by managers and staff to attain control objectives. Similarly, Eniola and Akinselure (2016) described internal control as all the strategies and measures approved by the managers of an organization in attaining the basic goals of management by ensuring that business activities are carried out in the most well organized manner and as well making stringent obedience to management policies, protection of asset, prevention and detection of fraud and timely preparation of reliable financial statements. Also, Zhu and Song (2021) argued that contemporary internal control theory based on COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework after SOX404. The committee described internal control as the actions put into operation by the management and other stakeholders of the organisation to make available reasonable assurance to achieve the the performance and efficiency of operation, the reliability of financial reporting and compliance with applicable laws and regulations. Li (2020) stated that internal control system consists of control environment, risk assessment, control activities, information and communication, and internal supervision. The author further noted that, internal control aims at practically ensuring the legal operation and compliance, safety of assets, and reliability of financial reports, enhancing the efficiency and effectiveness of operations, and consequently supporting the realization of the development strategy of entity and long-term survival.

Interestingly, internal control effectiveness is the major motivator of improved performance and long-term survival. According to Phorlaphachacorn and kalasindhu (2020), internal control effectiveness (ICE) is the ability of organisation to assure compliance objectives, reporting objectives, and business objectives. COSO (2013) described internal control effectiveness as the realisation of the organisation's goals and objectives of honest and reasonable financial reporting; effective and efficient operation; and compliance with applicable laws and regulations. Wang et al (2021) described internal control effectiveness as the degree to which the recognized and implemented internal control effectively achieves organisations's internal control objectives of the establishment of the internal control structure to consistently align with the internal control objectives and internal control structure are operated through the elements of control environment, risk assessment, information and communication, and monitoring management activities, and eventually the effective performance of internal control role to realize the internal

control objectives while providing good protection for stakeholders (Yu & Feng, 2020). Phorlaphachacorn and kalasindhu (2020) described internal control as a beneficial strategic system in supporting firms advance their operational effectiveness, make their organizational values and support their growth and survival in future and long-term point of view. The authors further noted the effectiveness of internal control system is imperative for succeeding, surviving and sustaining in uncertain environments. Consequently, it plays a significant function in influencing productivity improvement, value creation, and business survival (Phorlaphachacorn & kalasindhu, 2020).

Okheradia et al (2023) noted that leadership is essential for an effective and efficient internal control system. Hoai and Nguyen (2022) described leadership as the competence to express convincing visions and goals based on the firm's values and it based on leadership consistency and quality. Hence, leadership consistency and quality make possible for firms to achieve their internal control objectives more effectively and efficiently. While current studies on the relationship between leadership and internal control system is extensive (e.g., Abdo & Feghali, 2017; Khelif et al., 2019; Shen et al., 2021; Yin et al., 2020; Zhang et al., 2022; Hoai & Nguyen, 2022), researches on the relationship between leadership factors such as leadership consistency and quality and the internal control system are still lacking. There are few evidence about the means through which the internal control system and leadership factors can be integrated to promote internal control effectiveness and increase productivity improvement. The significance of leadership in internal control practices and the present state of corporate governance (Puni & Anlesinya, 2020), the influence of leadership consistency and quality in improving the internal control effectiveness is not well defined. If the impact were obviously defined, organizations could integrate leadership attributes, which would promote to interact effectively with the internal control systems and enhance firm productivity. The prior arguments emphasize the significance of determining the moderating influence of leadership consistency and quality in promoting firms' internal control effectiveness in attaining firm productivity. Integrating leadership consistency and quality and the internal control system enables researchers to explore and apply a mechanism to optimize internal control practices. In this study, expectancy theory was adopted to explain the moderating role of leadership consistency and quality on the relationship between internal control effectiveness on productivity improvement of listed firms in Nigeria. In doing so, this paper contributes to the internal control and leadership literature by providing a broader view of how internal control effectiveness affects productivity improvement through the intervening role of leadership quality and consistency of listed firms in Nigeria. The following are the specific objectives of the study:

1. To investigate the relationship between control environment and productivity improvement of listed firms in Nigeria;
2. To evaluate the relationship between risk assessment and productivity improvement of listed firms in Nigeria;
3. To determine the relationship between control activities and productivity improvement of listed firms in Nigeria;

4. To examine the relationship between information and communication on productivity improvement of listed firms in Nigeria;
5. To investigate the relationship between monitoring and productivity improvement of listed firms in Nigeria;
6. To investigate the moderating influence of leadership consistency on the relationship between internal control effectiveness and productivity improvement of listed companies in Nigeria.
7. To investigate the moderating influence of leadership quality on the relationship between internal control effectiveness and productivity improvement of listed companies in Nigeria.

The following hypotheses were tested in this study:

1. **H₀₁**: Control environment positively and significantly affect productivity improvement of listed firms in Nigeria.
2. **H₀₂**: Risk assessment positively and significantly affect productivity improvement of listed firms in Nigeria.
3. **H₀₃**: Control activities positively and significantly affect productivity improvement of listed firms in Nigeria.
4. **H₀₄**: Information and communication positively and significantly affect productivity improvement of listed firms in Nigeria.
5. **H₀₅**: Monitoring positively and significantly affect productivity improvement of listed firms in Nigeria.
6. **H₀₆**: Leadership consistency positively and significantly moderates on the relationship between internal control effectiveness and firm productivity of listed companies in Nigeria.
7. **H₀₇**: Leadership quality positively and significantly moderates on the relationship between internal control effectiveness and productivity improvement of listed companies in Nigeria.

Literature Review

Concept of Internal Control Effectiveness: Internal Control is an essential condition for the effective and efficient management of organisations. It is, thus, the primary responsibility of management of any organisation to establish and maintain an adequate system of internal control appropriate to the size and nature of the business. According to Appah (2020a), internal control are those policies, processes, tasks, behaviours and other features of an organisation that taken together facilitates its effectiveness and efficient operations by enabling it to respond appropriately to significant business, operational, financial, compliance and other risks to

achieving the organisation's objectives. This includes safeguarding of assets from inappropriate use or from loss and fraud and ensuring that liabilities are identified and managed; helps ensure the quality of internal and external reporting and help ensure compliance with applicable laws and regulations, and also with internal policies with respect to the conduct of business. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), described internal control as a process that is carried out by an organisation's board of directors, management, and other staff that is designed to provide reasonable assurance regarding the achievement of objectives in terms of operational effectiveness and efficiency, financial reporting reliability, and compliance with legal and regulatory requirements (Committee of Sponsoring Organization [COSO], 2013). Internal control has become an important strategic instrument of organisations' responsiveness of corporate social responsibility and business ethics (Chen et al, 2020; Husnaini & Basuki, 2020; Tran et al, 2020). It can improve operational efficiency and effectiveness, reliability, transparency and integrity of financial reports, information usefulness and value, and compliance with laws, regulations, rules, and other related issues. Consequently, effective internal control is important for organisations' survival. Accordingly, internal control effectiveness is the major motivator of improved performance and long-term survival. According to Phorlaphachacorn and kalasindhu (2020), internal control effectiveness (ICE) is the ability of organisation to assure compliance objectives, reporting objectives, and business objectives. COSO (2013) described internal control effectiveness as the realisation of the organisation's goals and objectives of honest and reasonable financial reporting; effective and efficient operation; and compliance with applicable laws and regulations. Wang et al (2021) described internal control effectiveness as the degree to which the recognized and implemented internal control effectively achieves organisations's internal control objectives of the establishment of the internal control structure to consistently align with the internal control objectives and internal control structure are operated through the elements of control environment, risk assessment, information and communication, and monitoring management activities, and eventually the effective performance of internal control role to realize the internal control objectives while providing good protection for stakeholders (Yu & Feng, 2020). ICE is now vital subject in corporate governance and Phorlaphachacorn and kalasindhu (2020) described it as the ability of an organization to present realistic assertion regarding attainment of effectiveness and efficiency of operations, reliability of financial reporting and compliance with regulations. It assures that organisation's carry out their operational efficiency and in accordance with their mission statements, their management data and financial reporting are reliable. It supports compliance with relevant laws and regulations. Anh et al (2020) argued that organizations are required to identify operational risks through a process of risk assessment, communicate information about threats and changes by producing operational, financial and compliance-related reports and monitor functions of internal controls and ensure meeting their objectives. Furthermore, realizing internal control effectiveness, organisations have to focus on control environment, risk assessment, control activities, information and communication, and monitoring.

Control Environment: These are set of standards, processes, and structures that provide the basis for achieving internal control in an organization. According to Mom and Kazimoto (2021),

control environment symbolizes the overall board of directors and management efforts to provide the required discipline and effective method to guarantee satisfactory internal control of a organisation's activities. Several studies (Tenbele, 2019; GamageLow & Keving, 2018; Thao, 2018; Mom & Kazimoto, 2021) have revealed the relevance of control environment in the attainment of effective internal control. Anh et al (2020) observed that control environment provides huge influence on a properly designed internal control structure. The authors further argued that internal control structure is properly or improperly carried out depends largely on control environment; consequently, this is the major element for providing a strong base for the design and operation of an organisation's internal control structure. **Risk Assessment:** This is the component of internal control effectiveness that board of directors and management adopt to evaluate and investigate risk that cause threats to the realization of organization's goals and objectives. Several studies (GamageLow & Keving, 2018; Thao, 2018; Mom & Kazimoto, 2021) have suggested the significance of risk assessment as a vital component of internal control structure. Anh et al (2020) argued that the proper implementation of risk assessment measures will influence the level of internal control effectiveness. **Control Activities:** These are the policies and procedures designed by the board of directors and management that assists in the implementation and attainment of directives. These policies and procedures promote actions that address the risk that face the organization (Appah, 2020a). According to Mom and Kazimoto (2021), control activities are carried out at all stages within the organization. Anh et al (2020) suggested that control activities involve a sequence of activities such as authorizations, approvals, verifications, reconciliations and reviews of operating performance. The investigation of GamageLow and Keving, (2018); Thao, (2018); Mom and Kazimoto (2021) suggested that control activities is one of components that influences internal control effectiveness. **Information and Communication (IC):** Information and communication is needed at all levels of an organisation to assist management in meeting corporate goals and objectives. Appah (2020a) noted that IC provides the means of information flow to all aspects of the organization for staff to understand management directives and policies. **Monitoring:** It is the process that evaluates the quality of internal control over time. It is important to monitor internal control to determine whether it is operating as intended and whether any modifications are necessary. Appah (2020a) explained that Monitoring can be achieved by performing ongoing activities or by separate examinations. The studies conducted by GamageLow and Keving, (2018); Thao, (2018); Mom and Kazimoto, (2021) explained that monitoring influences the internal control effectiveness in an organization.

Concept of Business Survival: The concept of business survival refers to the ability of an organization to maintain its existence and operations over time, despite challenges and uncertainties. It involves maintaining financial stability and profitability, adapt to changing market conditions and customer needs, overcome obstacles and crises, retain customers and attract new ones, innovate and stay competitive, manage risks and uncertainties, maintain a positive reputation and brand image, attract and retain talented staff, adapt to technological and regulatory changes and achieve long term sustainability. Additionally, Phorlaphachacorn and

kalasindhu (2020) noted that firm survival is crucial because it enables firms to achieve theory corporate goals and objectives, create value for shareholders and stakeholders, provide employment and contribute to economic growth, innovate and improve products and services and build long term relationships with customers and parties. It is defined as an expression of firms' abilities to successfully react to rapidly changing environmental conditions and situations (Korunka, et al, 2010). It reflects a long-term performance, growth, success, and stability. It is considered as a constitutive indicator and a fundamental pointer of sustainable business success in future and long-term perspectives (Dao, 2019). Hence, business survival can be attained through productivity improvement and value creation.

Productivity Improvement: Productivity improvement is the enhancement of efficiency by converting inputs into outputs to produce the required products. According to Phorlaphachacorn and kalasindhu (2020), productivity improvement reveals the growth rate of outputs to inputs through utilization, efficiency, effectiveness, and quality of useful resources, including materials, labors, machines, and financing to produce quality goods and services. Jacobs et al (2016) argued that productivity improvement entails the efficient and effective conversion of inputs into realising maximized firm outputs. Organization with productivity improvement can increase outputs with minimizing inputs or holding constant inputs, provide the most efficient use of inputs assuming constant outputs and enhance using existing assets more efficiently and their abilities to substitute resources and capabilities for one another (Dave & Sohani, 2019). It enables organisations to produce more outputs without increasing their inputs. Consequently, productivity improvement is necessary for growing firm value, encouraging current profitability and promoting future performance and long-term survival. Therefore, organisations with productivity improvement can enhance their sustainable competitive advantage, superior performance and long term survived success.

Leadership Consistency: This is the ability of a leader to consistently demonstrate their values, principles and behaviours over time across different situations and with various stakeholders. It involves consistently following through on commitments and maintaining a high level of dependability (Wang & Hsieh, 2013); demonstrating a consistent approach, making it easier for others to understand and follow (Youn & Suh, 2019); taking ownership of actions, decisions and outcomes and being answerable for them (Hoai & Nguyen, 2022); consistently demonstrating the behaviours and values expected of others (Gawnoski & Strack, 2012); consistently communicating a clear and compelling vision, goals and expectations, applying consistent decision making criteria and processes; managing emotions and maintaining a consistent demeanour, even in challenges; consistently bouncing back from setbacks, failures and challenges; demonstrating a consistent understanding of one's strengths, weaknesses and emotions and consistently seeking feedbacks, learning from mistakes, and improving leadership skills (Gawnoski & Strack, 2012; Wang & Hsieh, 2013; Youn & Suh, 2019; Hoai & Nguyen, 2022). According to Hoai & Nguyen (2022), leadership consistency is a requirement for improving corporate value by supporting internal control system effectiveness. Youn and Suh (2019) argued that effective leadership that uphold reliable view and activities enable the elements of internal control to support their function further, as a result, reinforcing internal

control effectiveness. The authors further noted that leadership consistency assist the direct guidelines and decisions in internal control activities.

Leadership Quality: This is the combination of characteristics, traits and skills that enable a leader to effectively guide motivate and inspire others to achieve a shared vision or goal. It involves ability to develop and communicate a clear compelling vision (Youn & Suh, 2019); self – awareness, empathy and social skills to effectively manage relationship; strong moral principles, ethics and values that guide decision making; effective listening, speaking and writing to convey ideas and inspire others (Tetteh et al., 2022); ability to analyse situations, identify patterns and develop creative solutions; fostering a culture of inclusivity, empowerment, and collective ownership; ability to navigate change, uncertainty and adversity (Akisik & Gal, 2017); prioritizing self care, mental health and emotional intelligence; fostering a culture of belonging, equity and inclusivity and embracing lifelong learning, self-reflection and improvement (Youn & Suh, 2019). The level of leadership quality in an organisation, the more the leaders prioritize their skills and competences in advancing and sustaining internal control practices. According to Tetteh et al., (2022), effective internal control is fundamental resource that enable leaders to exercise effective control over their day to day activities that contributes to positive business results (Tetteh et al., 2022), and drives organisations in the direction of prosperity and sustainable development (Akisik & Gal, 2017).

Theoretical Review

This study is grounded on a expectancy theory in the explanation between internal control effectiveness and firm survival in Nigeria. This has been advocated by several scholars and researchers in the field of management and organizational behaviour. Some of the notable advocates of expectancy theory include Vroom (1964), Porter and Lawler (1968). This theory is a motivational theory that suggests that individuals are motivated to act in certain ways based on their expectations of the outcomes of those actions. The theory proposes that people are motivated by their belief that their efforts will lead to desired outcomes, satisfaction from achieving those outcomes. According to Vroom et al. (2005), individual's actions and enthusiasm for work are not at all times determined by present events but by their opinion of their expectations and the anticipated future. Hoai and Nguyen (2022) suggested that people behave differently in reaction to their expectations for a precise outcome. The authors argued that consistent leadership expect the leader's ability to deliver the most excellent outcome for the organisation in various scenarios. They further suggested that quality leaders are relentlessly refining themselves to become quality leaders who can put into practice suitable organizational policies and promote internal control effectiveness strategy. Zhang et al., (2022) noted that experienced leadership is developed through learning and experience which notably improves the organisation's internal control strategy. Expectation theory assists in the understanding of employee needs and expectations; the design of effective motivators and rewards and consider people expectations and motivations. However, the theory has faced several criticism and limitations, including oversimplification of complex human behaviour and motivation; the theory assumes a linear relationship between expectancy, instrumentality and valence which may not

always hold true and emphasizes of extrinsic rewards, neglecting intrinsic motivation. Expectation theory as applied to the study to provide clear expectations for internal control performance and control; establishing specific, measurable and achievable performance goals for internal control and offering rewards and incentives for meeting or exceeding internal control goals. Hoai and Nguyen (2022) suggested expectancy theory elucidate the influence of leadership quality on the moderating role of leadership consistency to determine how the internal control structure promotes internal control effectiveness. The authors also assert that when consistent and high-quality leaders govern organization, additional attention is placed on the organization of a well-developed internal control system by the leaders.

Empirical Review

Eniola and Akinselure (2016) carried out a study of internal control and financial performance of firms in Nigeria. The study used survey research design and the population consisted of all listed firms while purposive sampling technique was used to arrive at a sample of five (5) were chosen with a total of 150 questionnaires administered to the staff of the sampled firms. The study used internal control as independent variable while financial performance was the dependent variable. The questionnaire responses were analysed using multiple regression analysis and the findings suggested that internal control reduces fraud perpetration and the assist firms to achieve corporate goals and objectives. Hence, the study concluded that internal control system influences the financial performance of listed firms in Nigeria. Also, the study recommended that management should design new methods of improving corporate internal control structure to prevent fraud perpetration and attainment of goals and objectives.

Okharedia et al (2023) investigated internal control system and financial performance of constructions firms in Nigeria. The study adopted survey research design and the population consisted of 1472 staff with a sample size of 305 was arrived at using Cochran sample size determination. The study used primary source of data collection using questionnaire after appropriate validity and reliability tests. The study used internal control as the independent variable measured using control activity, control environment, risk assessment, monitoring and information and communication while financial performance as dependent variable . The questionnaires were administered to respondents' and the responses obtained were analysed using relevant statistical tests of unit root test, diagnostic tests, and multiple regression analysis. The result from the multiple regression suggested a positive and statistically insignificant relationship between control environment and financial performance; positive and statistically insignificant relationship between risk assessment and financial performance; positive and statistically significant relationship between control activities and financial performance; positive and statistically significant relationship between information and communication and monitoring on financial performance of construction firms in Nigeria.

Hoai and Nguyen (2022) studied internal control and performance using leadership consistency and quality as moderators. The study employed survey research design and population consisted of Vietnamese firms with purposive sampling used to arrive at a sample size of 206. The study used primary source of data collection using questionnaire after proper validity and reality tests.

The study used internal control as independent variable and performance as dependent variable while leadership consistency and quality as moderator variables. The questionnaire was administered to respondents of the 206 firms used as sample. The responses obtained from the questionnaire administered were analysed using descriptive analysis and partial least square structural equation model. The results from the PL – SEM revealed that internal control effectiveness intervene the influence of the internal control system on performance; leadership consistency positively moderates the effects of internal control system on internal control effectiveness; and the moderating influence of leadership consistency is improved with a higher level of leadership quality of listed firms in Vietnam.

Phorlaphachacorn and kalasindhu (2020) investigated internal control effectiveness and business survival in Thailand. The study employed survey research design and a population of 797 food processing firms with 770 surveys while 159 responses were received and a sample 155 was used. Primary data from questionnaire were used for the collection of data with validity and reliability tests conducted. The responses obtained from the 155 respondents were analysed using descriptive statistics, correlation matrix, ordinary least square and structural equation model (SEM). The results from the findings indicated that internal control effectiveness positively influence productivity improvement; internal control effectiveness positively influence value creation; internal control effectiveness positively influence business survival; productivity improvement positively influence value creation; productivity improvement positively influence business survival; productivity improvement mediates the association between internal control effectiveness and business survival; value creation positively influence business survival and value creation mediates the association between internal control effectiveness and business survival of food processing firms in Thailand. The study concluded that internal control effectiveness does improve firms' sustainable advantage, better performance and long-term survival.

Li (2020) carried out a study of internal control effectiveness and innovation performance with intermediary impact of corporate social responsibility. The study used ex post facto research design and the population consisted of listed firms in Shanghai and Shenzhen stock markets were selected as sample from 2012–2017. The study employed secondary data collected from China Stock Exchange database, Wind database and DIB internal control and risk management database. This study used effectiveness of internal control as independent variable, innovation performance and CSR performance as dependent variables while the intensity of R and D, return on assets, equity ratio, sales growth rate, ownership concentration, size of board supervisor, double duty, executive compensation, comprehensive leverage, asset size, audit opinion, property attribute, year and industry as control variable. The data collected from the secondary sources were analysed using descriptive statistics, correlation matrix and regression analysis. The findings suggested that enhancing internal control effectiveness positively and significantly impact innovation performance and advance firms to reinforce CSR performance. Meanwhile, CSR activities significantly moderate the process of improving innovation performance using internal control.

Anh et al (2020) investigated factors influencing internal control effectiveness of cement manufacturing firms in Vietnam. The study employed survey research design and a population of 250 managers and staff of the cement firms with stratified random sampling technique while primary data was used for data collection after reliability test using Cronbach Alpha. The 210 responses obtained from the questionnaires administered were analysed using descriptive statistics, EFA discovery factor Analysis, KMO coefficient analysis and regression analysis. The results from the regression analysis suggested a positive and significant relationship between control environment and effectiveness of internal control; positive and significant relationship between risk assessment and effectiveness of internal control; positive and significant relationship between information and communication and effectiveness of internal control; and positive and significant relationship between monitoring and effectiveness of internal control of cement manufacturing firms in Vietnam.

Zhu and Song (2021) conducted a study of internal control effectiveness on coping with COVID – 19 pandemic in China. The study used ex post facto research design and a population of listed firms with a sample of Chinese listed firms from the first quarter of 2019 to the third quarter of 2020. The data of relevant financial indicators and control variables were collected from the China Stock Market and Accounting Research Database (CSMAR), and the data of internal control quality from the DIB database. The study used firm performance as dependent variable and internal control quality as independent variable with several control variables. The data collected were analysed using descriptive statistics, regression analysis and difference of difference. The results from the quantitative analysis indicated that firms with high quality of internal control attain improved financial performance during the pandemic period; the more serious the pandemic is, the more noticeable effect internal control reveals.

Aksoy and Mohammed (2020) carried out a study of internal control effectiveness of listed banks in Ghana. This study used survey research design using questionnaires as the primary source of data collection. A total of 60 questionnaires, were distributed to the banks and 37 copies of questionnaires were received representing a 61.7% response rate. The study used Statistic Package for Social Sciences (SPSS) v25 to analyze data by running among other reliability tests, tests of normality, and descriptive statistics. The results of means and standard deviations ascertained that; strong controls existed in the control environment, risk assessment, and monitoring activities of internal control of the Ghanaian listed banks. Risk assessment had a low average mean compared to the control environment and monitoring activities.

Wang et al (2021) studied the CSR moderator influence on internal control mechanism and technological innovation in China. The study employed ex post facto research design and a population of listed firms in China and a sample of Chinese A-share listed firms between 2014 and 2019 with a sample 13,685 valid studies from 31 provinces in China. The secondary sources of variable indicators include China Stock Market and Accounting Research (CSMAR), DIB Internal Control database, and Hexun CSR score. The study used technological innovation as dependent variable and effective internal control as independent variable while asset liability ratio, profitability, operating income, growth rate, company market value, cash flow sufficiency,

fixed asset ratio, concentration of shareholding, year, industry and ratio of independent directors as control variables. The data obtained from the secondary sources were analysed using descriptive statistics, correlation analysis, and regression analysis. The result from the regression analysis suggested that internal control effectiveness positively and significantly impact on technological innovation; internal control effectiveness positively and significantly influence the fulfillment of corporate social responsibility and corporate social responsibility partially mediates the relationship between internal control effectiveness on technological innovation.

Mom and Kazimoto (2021) carried out a study of effectiveness of internal control systems and employee work performance. The study used survey research design and a population of staff of Asia-Pacific International University in Thailand with a sample of 39 permanent staff. Primary data was used as the major instrument of data collection and the questionnaire was tested using validity and reliability tests. The independent variable of effectiveness of internal control was measured using control environment, risk assessment, control activities, information and communication and monitoring while employee work performance was the dependent variable. The responses obtained from the questionnaire were analysed using descriptive statistics, and correlation. The findings revealed that internal control was effective in the regulation of the activities of Asia-Pacific International University in Thailand.

Research Design: This study adopted cross sectional survey research design. According to Appah (2020), survey research is any developmental field investigation that systematically collects, analyses and synthesizes quantitative data on a large representative sample of a given population to cross-sectionally describe and explain the relative incidence, distribution and interrelations of variables as well as other characteristics about sample through data collected from personal interview, self-administered inquiry, and computer assisted inquiry for accurate generalization to cover the total population. This design was chosen because of its ability to provide relevant responses to the study objectives, research questions and hypotheses.

Population and Sample: In this study, the population consisted of all employees of the internal Audit and Accounting Departments of the sixty one (61) listed manufacturing firms in Nigeria. To determine the sample of this study, census sampling technique was used and the designed questionnaires were emailed to all the sampled manufacturing firms.

Data Types and Sources: This study used primary data obtained from respondents' answers to the questionnaire sent. Meanwhile, the data source was obtained from the responses received from the questionnaires sent to the Internal Audit Units of listed manufacturing firms in Nigeria. Appah (2020) argued that primary data are those that are obtained by the researcher or his trained assistants. It is the data which the researcher produces subject to the need for such data in research.

Instrument for Data Collection: The major instrument for data collection in this study was a survey questionnaire titled "Internal Control Effectiveness and Business Survival Questionnaire (INCOEBUSQ). A total of twenty (20) questionnaires were sent to the Internal Audit and Accounting Units of the sixty (61) listed manufacturing firms listed on the Nigeria Exchange

Group (NGX) making a total observation of one thousand, two hundred and twenty (1,220). A total of six hundred and seventy four (674) questionnaires were received and used for analysis representing 55.25%. As a result, 546 respondents failed to return the questionnaires. The constructs were measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The sources of measurements for these constructs are self-developed from existing literatures as shown in Table 1. Measurements of these constructs are self-developed from existing literature of internal control effectiveness, productivity improvement, value creation, leadership consistency and leadership quality.

Validity and Reliability of Instrument: The study used content validity to validate items in the questionnaire in which the instrument will be given to internal auditors and professional accountants (members of ICAN and ANAN) in Bayelsa State who read through and make necessary corrections. The second process was to validate the instrument where the questionnaire was pre-tested and the responses from the respondents was used to improve on the items. The study questionnaire used the test-retest reliability. The instrument was administered to twenty-five (25) of the target subjects who were not part of the respondents and after a period of two weeks, the same instrument again was given to the same twenty five (25) respondents to ascertain the reliability. Consequently, Cronbach Alpha coefficient was used to determine the statistical reliability of the research instrument.

Operational Definition and Variable Measurement: This study used internal control effectiveness as the explanatory variable with dimension of control environment, risk assessment, control activities, information and communication and monitoring. The study also used business survival as the explained variable with productivity improvement and value creation as the dimension. Additionally, the study used leadership consistency and leadership quality as moderator variable. The table below gives a summary of the operational definition and measurement of variables.

Table 1: Operational Definition and Measurement of Variable

Variable Name	Variable Symbol	Variable Nature	Measurement Scale	Source
Productivity Improvement	PDI	Dependent	Literature	Phorlaphachacorn & kalasindhu (2020), Dave & Sohani (2019)
Control Environment	COE	Independent	Literature	Ho (2016), Anh et al (2020), Negash (2019), Aksoy & Mohammed (2020),

				Taufik (2019), Musyoki (2023), Mom & Kazimoto (2021)
Risk Assessment	RIA	Independent	Literature	Ho (2016), Anh et al (2020), Negash (2019), Aksoy & Mohammed (2020), Taufik (2019), Musyoki (2023), Mom & Kazimoto (2021)
Control Activities	COA	Independent	Literature	Ho (2016), Anh et al (2020), Negash (2019), Aksoy & Mohammed (2020), Taufik (2019), Musyoki (2023), Mom & Kazimoto (2021)
Information and Communication	INC	Independent	Literature	Ho (2016), Anh et al (2020), Negash (2019), Aksoy & Mohammed (2020), Taufik (2019), Mom & Kazimoto (2021)
Monitoring	MON	Independent	Literature	Ho (2016), Anh et al (2020), Negash (2019), Aksoy & Mohammed (2020), Taufik (2019), Musyoki (2023), Mom & Kazimoto (2021)

Leadership Consistency	LEC	Moderator	Literature	Hoai & Nguyen (2022), (Tetteh et al., 2022)
Leadership Quality	LEQ	Moderator	Literature	Hoai & Nguyen (2022), (Tetteh et al., 2022)

Source: Authors Compilation (2024)

Results and Discussions

Table 2: R-Square Adj.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Productivity Improvement	0.464	0.478	0.030	15.506	0.000

Source: Authors' Computation (2024)

The study investigated the relationship between internal control effectiveness and productivity improvement of listed firms in Nigeria, with leadership consistency acting as a moderating variable. The adjusted R² of 0.464 indicates that the model explains 46.4% of the variance in sustainable business performance.

Table 3: Internal Control & Productivity Improvement & Leadership Consistency

	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Remarks
Control Environment -> Productivity Improvement	0.552	0.140	0.271	2.037	0.012	H1 Supported
Risk Assessment -> Productivity Improvement	0.503	0.519	0.184	2.737	0.006	H2 Supported
Control Activities -> Productivity Improvement	0.653	0.597	0.249	2.622	0.010	H3 Supported
Information Comm -> Productivity Improvement	0.753	0.478	0.326	2.310	0.021	H4 Supported
Monitoring ->	0.508	0.508	0.194	2.618	0.009	H5

Productivity Improvement						Supported
Leadership Consistency - > Productivity Improvement	0.884	0.415	0.358	2.469	0.017	H6 Supported
Leadership Consistency x Control Activities -> Productivity Improvement	0.371	0.156	0.148	2.507	0.014	H7 Supported
Leadership Consistency x Risk Assessment -> Productivity Improvement	0.154	0.058	0.068	2.265	0.024	H8 Supported
Leadership Consistency x Control Environment - > Productivity Improvement	0.181	0.077	0.083	2.181	0.027	H9 Supported
Leadership Consistency x Information Comm -> Productivity Improvement	0.128	0.112	0.096	2.271	0.023	H10 Supported
Leadership Consistency x Monitoring -> Productivity Improvement	0.167	0.066	0.074	2.257	0.026	H11 Supported

Source: Authors' Computation (2024)

On table 3 the first hypothesis (**H₁**), which proposed that control environment positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.552$, $t = 2.037$, $p = .012$), leading to the support of **H₁**. For **H₂**, concerning risk assessment positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.508$, $t = 2.737$, $p = .006$), thus **H₂** was supported either. For **H₃**, which proposed that Control activities positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.053$, $t = 2.622$, $p = .010$), meaning **H₃** was supported. For **H₄**, relating to information and communication positively and significantly affect firm productivity of listed firms in Nigeria, the finding was significant ($\beta = 0.753$, $t = 2.310$, $p = .021$), leading to the support of **H₄**. For **H₅**, pertaining to monitoring positively and significantly affect firm productivity of listed firms in Nigeria, the finding was significant ($\beta = 0.508$, $t = 2.618$, $p = .009$), thus **H₅** was supported.

The moderation analysis showed that **H₆**, which posited that leadership consistency positively and significantly affect firm productivity of listed firms in Nigeria, the finding was also significant ($\beta = 0.884$, $t = 2.469$, $p = .017$), thus **H₆** was supported. For **H₇**, concerning leadership consistency moderates the relationship between control activities and productivity improvement of listed firms in Nigeria, the result was significant ($\beta = 0.371$, $t = 2.507$, $p = .014$), leading to the support of **H₇**. For **H₈**, concerning leadership consistency moderates the relationship between risk assessment and productivity improvement of listed firms in Nigeria, the finding was significant ($\beta = 0.154$, $t = 2.265$, $p = .024$), meaning **H₈** was supported. For **H₉**, pertaining to leadership consistency moderates the relationship between risk assessment and productivity improvement of listed firms in Nigeria, the result was also significant ($\beta = 0.181$, $t = 2.181$, $p = .027$), leading to the support of **H₉**. For **H₁₀**, concerning leadership consistency moderates the relationship between information and communication and productivity improvement of listed firms in Nigeria, the outcome was significant ($\beta = 0.281$, $t = 2.271$, $p = .023$), thus **H₁₀** was supported. Finally, for **H₁₁**, which proposed leadership consistency moderates the relationship between monitoring and productivity improvement of listed firms in Nigeria, the result was significant ($\beta = 0.167$, $t = 2.257$, $p = .024$), meaning that **H₁₁** was supported.

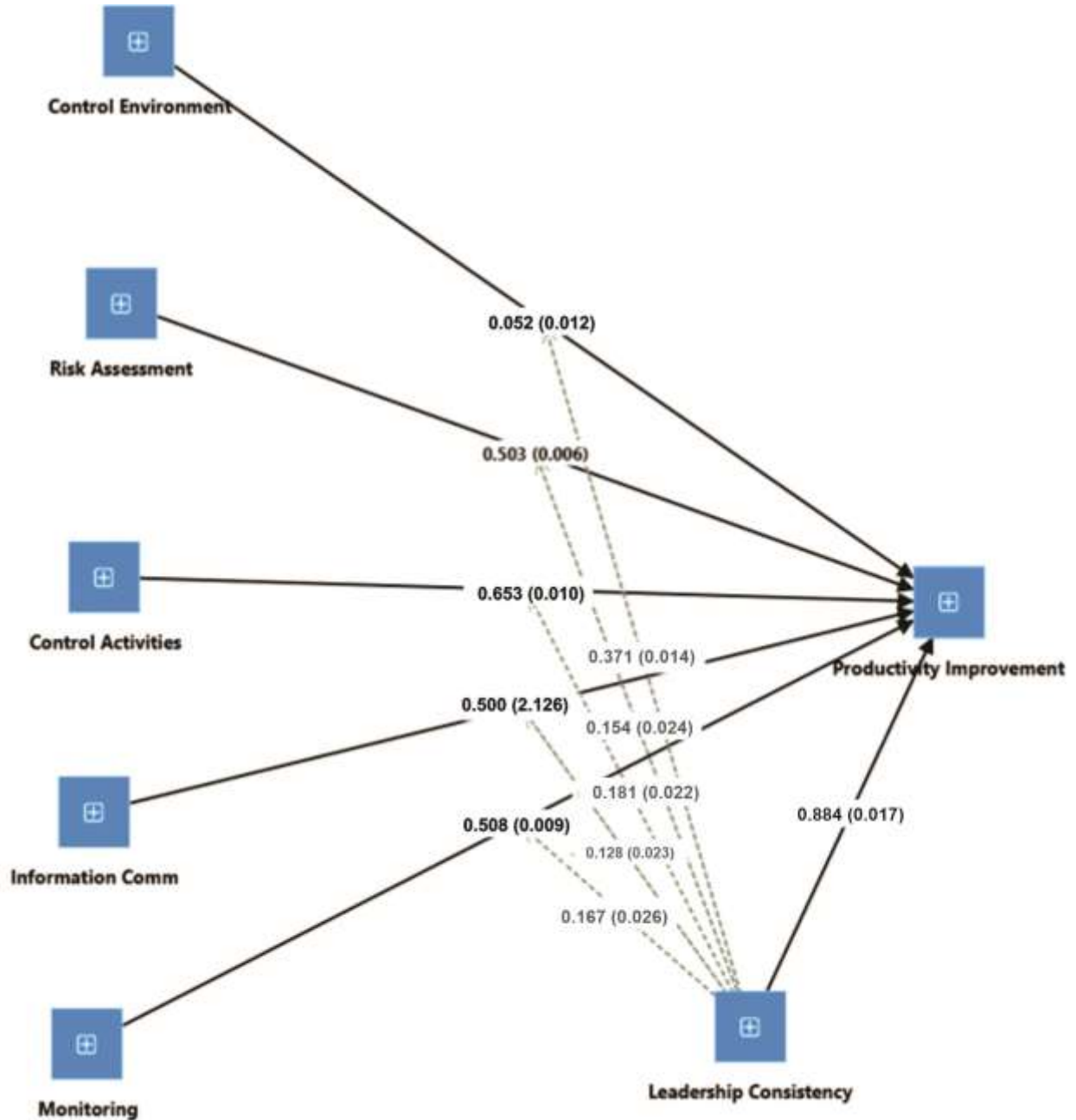


Figure 1: Process-Based Approach of Smart PLS

Table 4: R-Square Adj.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV)	P values
Productivity Improvement	0.569	0.588	0.039	19.556	0.000

Source: Authors' Computation (2024)

Table 4 shows the relationship between internal control effectiveness and productivity improvement of listed firms in Nigeria, with leadership and quality acting as a moderating variable. The adjusted R² of 0.569 indicates that the model explains 56.9% of the variance in business survival (productivity improvement).

Table 5: Internal Control & Productivity Improvement & Leadership Quality

	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Remarks
Control Environment -> Productivity Improvement	0.708	0.292	0.320	2.213	0.011	H1 Supported
Risk Assessment -> Productivity Improvement	0.715	0.743	0.309	2.317	0.021	H2 Supported
Control Activities -> Productivity Improvement	0.843	0.217	0.375	2.248	0.019	H3 Supported
Information Comm -> Productivity Improvement	0.746	0.237	0.302	2.470	0.014	H4 Supported
Monitoring -> Productivity Improvement	0.829	0.041	0.325	2.551	0.003	H5 Supported
Leadership Quality -> Productivity Improvement	0.711	0.100	0.323	2.073	0.024	H6 Supported
Leadership Quality x Control Environment -> Productivity Improvement	0.793	0.087	0.327	2.425	0.004	H7 Supported
Leadership Quality x Risk Assessment -> Productivity Improvement	0.829	0.137	0.363	2.284	0.026	H8 Supported

Improvement							
Leadership Quality x Control Activities -> Productivity Improvement	0.801	0.090	0.339	2.363	0.008	H9 Supported	
Leadership Quality x Information Comm -> Productivity Improvement	0.844	0.080	0.429	2.061	0.032	H10 Supported	
Leadership Quality x Monitoring -> Productivity Improvement	0.840	0.037	0.394	2.132	0.027	H11 Supported	

Source: Authors' Computation (2024)

On table 5, the first hypothesis (**H₁**), which proposed that control environment positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.843$, $t = 2.248$, $p = .011$), leading to the support of **H₁**. For **H₂**, concerning risk assessment positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.715$, $t = 2.317$, $p = .021$), thus **H₂** was supported either. For **H₃**, which proposed that Control activities positively and significantly affect firm productivity of listed firms in Nigeria, the result was significant ($\beta = 0.8433$, $t = 2.248$, $p = .010$), meaning **H₃** was supported. For **H₄**, relating to information and communication positively and significantly affect firm productivity of listed firms in Nigeria, the finding was significant ($\beta = 0.746$, $t = 2.470$, $p = .006$), leading to the support of **H₄**. For **H₅**, pertaining to monitoring positively and significantly affect firm productivity of listed firms in Nigeria, the finding was significant ($\beta = 0.829$, $t = 2.551$, $p = .003$), thus **H₅** was supported.

The moderation analysis showed that **H₆**, which posited that leadership quality positively and significantly affect firm productivity of listed firms in Nigeria, the finding was also significant ($\beta = 0.771$, $t = 2.073$, $p = .014$), thus **H₆** was supported. For **H₇**, concerning leadership quality moderates the relationship between control activities and productivity improvement of listed firms in Nigeria, the result was significant ($\beta = 0.793$, $t = 2.425$, $p = .005$), leading to the support of **H₇**. For **H₈**, concerning leadership quality moderates the relationship between risk assessment and productivity improvement of listed firms in Nigeria, the finding was significant ($\beta = 0.829$, $t = 2.284$, $p = .017$), meaning **H₈** was supported. For **H₉**, pertaining to leadership quality moderates the relationship between risk assessment and productivity improvement of listed firms in Nigeria, the result was also significant ($\beta = 0.801$, $t = 2.363$, $p = .027$), leading to the support of **H₉**. For **H₁₀**, concerning leadership quality moderates the relationship between information and communication and productivity improvement of listed firms in Nigeria, the outcome was significant ($\beta = 0.884$, $t = 2.061$, $p = .012$), thus **H₁₀** was supported. Finally, for **H₁₁**, which proposed leadership consistency moderates the relationship between monitoring and productivity improvement of listed firms in Nigeria, the result was significant ($\beta = 0.840$, $t = 2.312$, $p = .008$), meaning that **H₁₁** was supported.

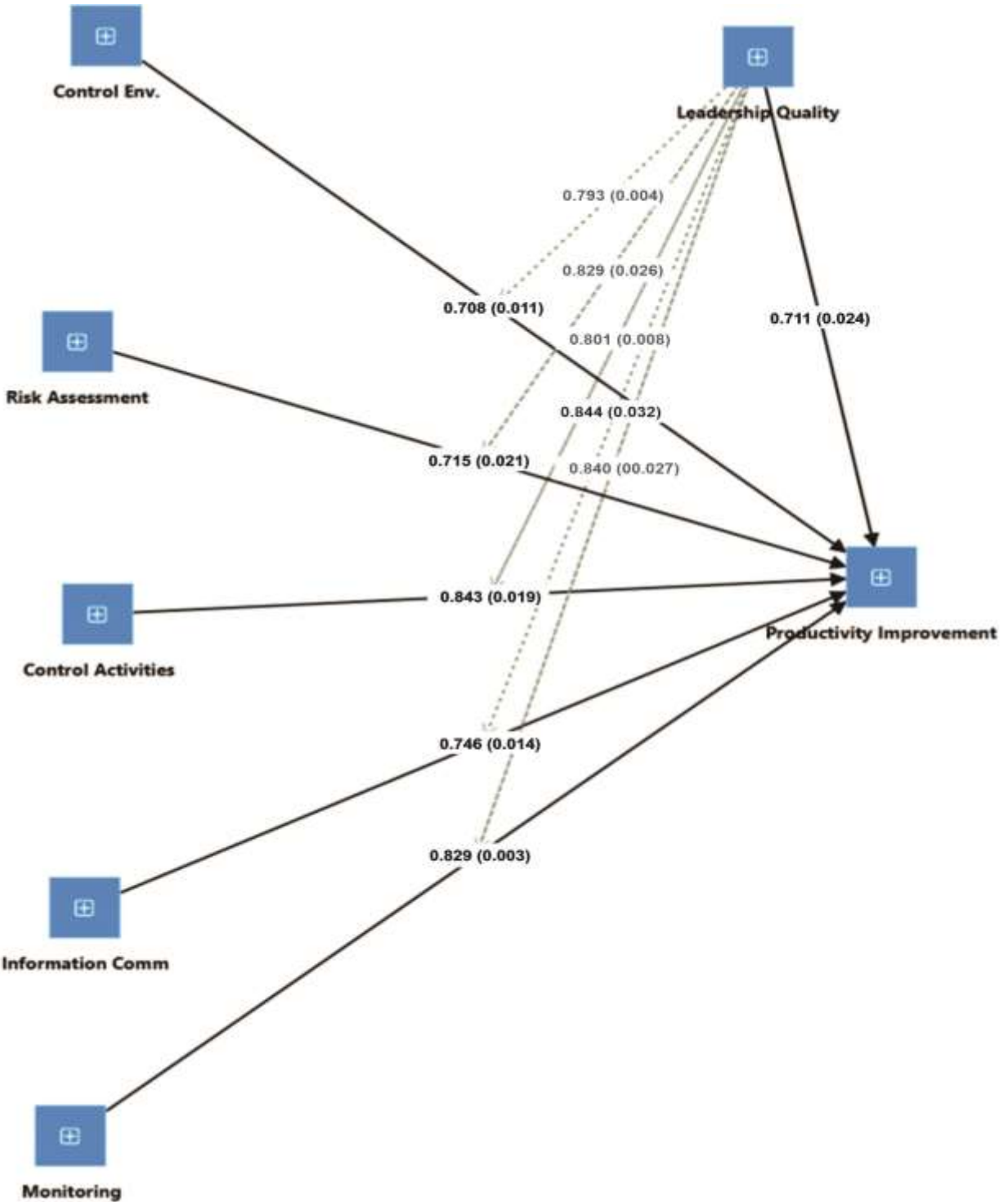


Figure 2: Pathway Analysis

DISCUSSION OF FINDINGS

The paper explores the nexus between internal control effectiveness on business survival of listed firms in Nigeria: the moderating influence of leadership consistency and quality. The findings of the study indicated that internal control effectiveness (control environment) has positive and significant effect on business survival (productivity improvement) of listed firms in Nigeria. This research outcome is corroborated by the empirical evidence of prior studies of Phorlaphachacorn and kalasindhu (2020) who demonstrated that internal control effectiveness (control environment) culminated to productivity improvement in Thailand. In the context of other empirical studies Chen et al (2020), Husnaini & Basuki, (2020), Tran et al, (2020) showed that internal control effectiveness (control environment) has positive and significant effect on business survival (productivity improvement). Also the study carried out by Teteth et al (2022) demonstrated that control environment positively and significantly impact on business performance in Ghana. Similarly, in the context Nigeria, Okharedia et al (2023) in their investigation demonstrate that control environment influences the financial performance of constructions firms in Nigeria. To further support the finding of the current study, the outcome of the previous studies implies that internal control effectiveness impact on business survival (productivity improvement) of listed firms in Nigeria.

Assessing on empirical evidence of internal control effectiveness (risk assessment) on productivity improvement of listed firms in Nigeria, the findings indicated that there was a positive and significant association between risk assessment and productivity improvement of listed firms in Nigeria. In view of prior studies, Phorlaphachacorn and kalasindhu (2020) found that there was a positive and significant link between risk assessment and productivity improvement. Okharedia et al (2023) in their investigation establish that risk assessment impact on the financial performance of construction firms in Nigeria. Similarly, some studies (e.g. Chen et al, 2020; Husnaini & Basuki, 2020; Tran et al, 2020) also indicated that risk assessment improves the financial performance of organisations. Accordingly, our finding that there was a positive significant association between risk assessment and productivity improvement of organisation is supported by the existing empirical scholarship.

Evaluating the empirical evidence of internal control effectiveness (control activities) on productivity improvement of listed firms in Nigeria, prior research findings supported the current study that control activities has a positive significant effect on productivity improvement of listed firms in Nigeria. Phorlaphachacorn and kalasindhu (2020) study found that control activity positively and significantly impact on productivity improvement of food businesses in Thailand. This implies that internal control effectiveness improves the productivity improvement of organisations. In a recent study carried out by Okharedia et al (2023) in Nigeria, control activities have a positive and significant association with financial performance of construction firms in Nigeria. Furthermore, the study of Chen et al, (2020); Husnaini & Basuki, (2020); Tran et al, (2020) revealed that internal control effectiveness impact on productivity improvement. Also the study carried out by Teteth et al (2022) demonstrated that control activities positively and significantly impact on business performance in Ghana. Consequently, the study of

Phorlaphachacorn and kalasindhu (2020) affirmed the findings of the current study that internal control effectiveness influences productivity improvement.

Considering internal control effectiveness (information and communication) on productivity improvement of listed firms in Nigeria, our study demonstrated a positive and significant association between information and communication on productivity improvement of listed firms in Nigeria. This finding concurs with Phorlaphachacorn and kalasindhu (2020) that internal control effectiveness improves productivity of food businesses in Thailand. Similarly, Okharedia et al (2023) in Nigeria demonstrated that information and communication impact on the financial performance of construction firms in Nigeria. Also the study carried out by Teteth et al (2022) demonstrated that information and communication positively and significantly impact on business performance in Ghana. To further support the finding of the current study, the outcome of the previous studies implies that internal control effectiveness (information and communication) impact on business survival (productivity improvement) of listed firms in Nigeria.

For the nexus between internal control effectiveness (monitoring) and business survival (productivity improvement) of listed firms in Nigeria, the outcome of the current study demonstrated there was a positive and significant association between internal control effectiveness (monitoring) and productivity of listed firm in Nigeria. The empirical evidence of previous studies of Chen et al, (2020); Husnaini & Basuki, (2020); Tran et al, (2020) underpinned the findings of our current study. This finding concurs with Phorlaphachacorn and kalasindhu (2020) that internal control effectiveness (monitoring) improves productivity of food businesses in Thailand.

Evaluating the moderating role of leadership consistency and quality on internal control effectiveness and business survival (productivity improvement) of listed firms in Nigeria, prior studies supported the current study that leadership consistency and quality positively and significantly moderates the link between internal control effectiveness and productivity improvement. The finding is corroborated by the empirical evidence of previous studies of Hoai and Nguyen (2022) who demonstrated that leadership consistency positively moderates the effects of the internal control system on internal control effectiveness; and the moderating influence of leadership consistency is improved with a higher level of leadership quality of listed firms in Vietnam. This implies that the consistency and quality of leadership, the more leaders prioritize their competence and consistency in advancing and preserving internal control practices (Hoai & Nguyen, 2022). Accordingly, effective internal control system is a significant resource that enables leaders to implement effective control over every day activities (Hoai & Nguyen, 2022), contributes to positive business outcomes (Tetteh et al., 2022), and drives businesses in the direction of success and sustainable improvement (Akisik & Gal, 2017). To further support the finding of the current study, the outcome of the prior study implies that consistency and quality of leadership positively and significantly moderates the association between internal control effectiveness and productivity improvement of listed firms in Nigeria.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study investigated the moderating influence of the consistency and quality of leadership on the association between internal control effectiveness and productivity improvement of listed firms in Nigeria. The results from the structural equation model established a positive and significant relationship between internal control effectiveness (control environment, risk assessment, control activities, information and communication and monitoring) on productivity improvement listed firms in Nigeria. The study further indicated that consistency and quality of leadership positively and significantly moderates the link between internal control effectiveness and productivity improvement of listed firms in Nigeria. The study concluded that leadership consistency and quality moderates positively and significantly on the relationship between internal control effectiveness and productivity improvement of listed firms in Nigeria. Therefore, the following recommendations were reached:

1. Companies listed on the Nigeria Exchange Group (NGX) should focus full attention to internal control structure and how effectively internal control system improves the business performance of firms. Therefore, managers of businesses should understand that internal control structure should not only start from the design, but also monitor whether the internal control system has played its proper role in the enterprise and guarantee the effective attainment of corporate goals and objectives for business survival.
2. Companies listed on the Nigeria Exchange Group (NGX) should improve on internal control practices by optimizing internal structure and improve the communication between various departments through the cultivation of corporate culture and the institutionalization of realistic incentive schemes that contributes to the advancement of productivity improvement, corporate development and constantly increasing the value of the firm.
3. The regulators should intensely guide firms to fortify and improve on the internal control effectiveness and optimize the quality of internal control system impact in corporate governance so as promote firms core value creation processes and information disclosure for the long term sustainability and business survival of firms.
4. Companies listed on the Nigeria Exchange Group (NGX) should vigorously balance the link between institutional control and flexibility of each component of internal control effectiveness (control environment, risk assessment, control activity, information and communication and monitoring) in the implementation of internal control system with management strictness be avoided for internal control effectiveness to achieve business and strategic objectives.
5. Companies listed on the Nigeria Exchange Group (NGX) should integrate leadership characteristics (consistency, quality etc) as integral component for internal control system to effectively achieve both business and strategic objectives. This is because the study demonstrates empirical evidence on the link between internal control effectiveness and

leadership into value added for companies through a moderated model of internal control in the context of Nigeria.

Implication of the Study and Area of Further Study

The findings of this study are expected to have vital implications for policy makers and practitioners. Stakeholders of businesses such as managers, shareholders, institutional investors, regulators and so on, can use the outcome of this investigation to better understand the connection and interconnections between internal control effectiveness and business survival with the moderating role of consistency and quality of leadership of listed firms. This study has several theoretical and managerial implications. First, it adds to the body of literature on leadership and internal control by analyzing the performance implications of the interaction between leadership characteristics such as consistency and quality on internal control effectiveness (control environment, risk assessment, control activities, information and communication and monitoring) and business survival (productivity improvement). The outcome of this study has contributed to internal control literature by empirically confirming theoretical argument that consistency and quality of leadership moderates the internal control effectiveness and business survival. This finding adds to our knowledge of the frontier circumstances that influence the performance impact on internal control system and productivity improvement of firms. The outcome of this study provides several managerial implications. The outcome provides evidence into firms assigning insufficient financial resources properly to human resource management activities and optimizing the internal control practices for business activities. In the current context, the link between the consistency and quality of the leadership and the internal control structure can result in beneficial outcomes, such as improving compliance with government regulations, increasing better business results, value addition, and improving business reputation. Also, this study has implications for business leaders concerning the approach and development of internal control system to accomplish the top results for management requirements and business outcomes.

This study provided vital and insightful findings, but with limitations. The study applied self-reports only due to difficulty in obtaining record-based data. Therefore, longitudinal design can be employed with waves of data collection through an appropriate instrument. Further studies can also investigate the connection between consistency and quality of leadership on internal control effectiveness and business survival of listed firms in Nigeria by including other variables. Further studies should be carried out to investigate other leadership attributes, such as experience; trustworthiness; and building confidence etc. These features can impact on interact or impact on internal control structure, consequently influencing firm performance. This investigation studied listed firms in Nigeria. As a result, the research outcomes are constrained concerning their generalizability, and extrapolation to other nations should be done with vigilance. As a result, further exploration into our proposed model in other countries is encouraged.

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Declaration of Potential Conflict

We declare that there is no potential conflict to the publication of this paper and that the authors make equal contribution to this investigation.

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