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Effective Internal Control Mechanism and Reduction of Revenue Leakages in Nigeria Public Sectors

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Abstract
This study explores how to improve and reduce revenue leakages in Nigeria's public sector by improving its internal control mechanism. The study seeks to identify effective methods such as Treasury Single Account, Revenue Mobilization, and Service Delivery that can help to minimize revenue loss. It underscores the vital role of Internal Control Mechanisms in the smooth functioning of public sectors and stresses the need to implement efficient internal controls to sustain business operations. The study involved surveying of respondents comprising managers, auditors, chartered accountants, directors in accounting firms, and parastatals in Nigeria. With population of 980, using purposive sampling techniques to select 289 as respondents which is also the sample size as at 2023. questions raised in the questionnaire were streamlined to get reliable and validly measurable data, with a 5-point Likert scale method continuum. The findings suggest that effective internal control mechanisms enhance transparency and accountability of revenue to ensure the minimizing government and agency borrowing costs by reducing wastage and generating surplus funds. And also, invest in modernizing its financial management systems and implementing robust internal control measures. The study recommends the adoption of Internal Control Mechanisms to promote economic growth and development by providing resources for investment in physical and human capital, thereby stimulating public sector activity.

Keywords: Internal Control Mechanism, Treasury Single Account, Revenue Mobilization, Service Delivery, Revenue Leakages

JEL Code: Z38, E63, H29, F60, H22

1. Introduction

Globally, Revenue leakages pose a significant problem for governments and organizations' operations, as they result in a loss of income and reduced profitability. However, revenue leakages in public sectors occur through inefficient processes, fraud, corruption, tax evasion, and other illegal activities. (Ige *et al*., 2023). According to Albrecht *et al.* (2021) [22], revenue leakages can significantly impact nations, making them wallow in inequality income distribution, which has brought many Africans to poverty and financial unhealthy, leading to reduced performers (Osaloni *et al*., 2022) [20]. Therefore, the persistent problem has hindered the country's development. It has led to a reduction in public revenue, which is vital for financing the country's budgetary needs and national development projects (Akinadewo *et al*., 2023). Moreover, it has contributed to the widening gap between the rich and poor, as only a few individuals benefit from the ill-gotten wealth Ettredge, (2019). Also, the lack of accountability and transparency in public governance has undermined citizens' trust in their leaders and institutions (Crnogorac & Lago-Peñas, 2019) [9]. Even though Nigeria is one of the world's biggest economies, a study revealed that accruable revenue is insufficient due to poor internal controls. However, the framework that can deter and detect the menace of revenue leakages has not been properly implementation.

The problem of revenue leakages is a significant concern for many organizations in the public sector, as it leads to undermining the effectiveness of internal control systems. The absence of a proper internal control system ultimately impacts the government's financial performance in meeting public expenditures Hope O. K *et al*., (2020). According to Adeyemo and Adeyemo (2020) [24], effective internal control mechanisms can help prevent revenue leakages, improve financial reporting, and enhance an organization's reputation. Kida (2016) [40] Opine explores the various types of revenue leakages, the consequences of such leakages, and the importance of implementing an effective internal control mechanism to mitigate these risks. Additionally, Malaikah and Okoye (2021) [25] noted that internal control mechanisms should be designed to ensure compliance with regulatory requirements and enhance accountability. Therefore, the implementation of effective internal control mechanisms is essential in reducing revenue leakages and promoting financial transparency in organizations.

There has been considerable research on the relationship between effective internal control mechanisms and revenue leakages. Adeyemo and Adeyemo (2020) [24] found that strong internal control mechanisms can enhance financial reporting quality and prevent revenue leakages in Nigeria. Similarly, Malaikah and Okoye (2021) [25] reported that effective internal control mechanisms can reduce revenue leakages, enhance accountability, and improve financial performance for SMEs in Nigeria. A global survey by PwC (2017) [28] also highlighted revenue leakages as a significant concern for companies, with weak internal control mechanisms being a major contributing factor. The study recommended regular risk assessments, clear policies and procedures, and strong communication and training programs as best practices for effective internal control mechanisms.

The objective of this study varies entirely from past studies, as it intends to explore the relationship between effective internal control mechanisms and the reduction of revenue leakages in Nigeria's public sectors between 2015 to 2013. Specifically, this study aims to investigate the impact of internal control mechanisms, such as Treasury Single Account, revenue mobilization, and service delivery, on revenue leakages and financial reporting quality. Adeyemo and Adeyemo (2020) [24] examined the impact of internal control mechanisms on financial reporting quality in Nigeria, while Malaikah and Okoye (2021) [25] investigated the impact of internal control mechanisms on the financial performance of SMEs in Nigeria. These studies found that effective internal control mechanisms can significantly reduce revenue leakages and enhance financial performance. Therefore, this study seeks to build on previous research and provide insights into the best practices for implementing effective internal control mechanisms to reduce revenue leakages in Nigeria's public sectors. The remainder of the research paper is structured as follows: Review of the extant literature highlighting several concepts about internal control mechanisms, Treasury Single Account, revenue mobilization, service delivery, appropriate theoretical considerations, methodology of the study, data analysis, discussion of results, and conclusions.

2. Literature Review and Hypotheses Development

2.1 Conceptual Review

2.1.1 Effective Internal Control Mechanism

Effective internal control mechanisms are the policies and procedures implemented by an organization and government to ensure that its operations are efficient, effective, and comply with applicable laws and regulations." (Waters & Waterhouse, 2021) [31]. Similarly, Effective internal control mechanisms are a set of policies, procedures, and activities designed to provide reasonable assurance that an organization's objectives are achieved with integrity, efficiency, and effectiveness." (Rittenberg, Johnstone, & Gramling, 2020) [32]. Also, Effective internal control mechanisms are the processes and procedures that help ensure that an organization's assets are safeguarded, financial reporting is accurate and reliable, and compliance with laws and regulations is maintained." (Whittington & Pany, 2021) [33].

Effective internal control mechanisms can be very helpful in reducing revenue leakages in public sectors (Adeyemo *et al.*, 2020 [24]; Gupta & Bansal, 2019). To reduce revenue leakages, organizations can implement measures such as the segregation of duties and regular reconciliations (Adeyemo *et al.*, 2020 [24]; Gupta & Bansal, 2019). ICM often produces an accurate result as it functions based on a set of Segregation of duties to ensure that no single employee has complete control over the revenue process, while regular reconciliations help to identify any discrepancies in cash register records and revenues reports (Adeyemo *et al.*, 2020 [24]; Gupta & Bansal, 2019). By implementing these internal control mechanisms, the government can prevent revenue leakages due to errors or fraud in public sectors, thereby improving their financial performance (Adeyemo *et al.*, 2020 [24]; Gupta & Bansal, 2019).

2.1.2 Treasury Single Account

According to Chidi *et al.* (2022) [8], a Treasury Single Account is a crucial component of the economic reform programme of the Federal Republic of Nigeria, which aims to consolidate government bank accounts for all government transactions. The policy is an essential step by the government towards eliminating financial corruption in all government ministries, departments, and agencies (MDAs). Similarly, Eloho (2022) [15], the Treasury Single Account is not just a tool but a process that efficiently manages government finances. The implementation of the TSA is expected to minimize government and agency borrowing costs by reducing wastage and generating surplus funds throughout the year. The TSA is a monetary tool that prevents financial leakages and strengthens the government's financial base, enabling the government to meet its financial obligations to citizens.

The Treasury Single Account (TSA) is expected to enhance effective internal control mechanisms in government financial management (Bala *et al.*, 2021) [7]. Also, by centralizing government funds, the TSA allows for better monitoring and control of government revenues, reducing the risk of errors and fraud Olaleye & Ilo, (2021). Similarly, facilitates timely reconciliation of government transactions, better cash management, and promotes transparency in the management of public funds. Furthermore, the TSA is an effective tool for promoting accountability, efficiency, and transparency in government financial management while reducing the risks associated with traditional accounting practices that lead to revenue leakages. Bala *et al.* (2021) [7], described the Treasury Single Account (TSA) as a consolidated revenue pool from various government Ministries, Departments, and Agencies (MDAs). According to Monday (2023) [14], the implementation of TSA eliminates the idling of funds in commercial banks and facilitates the easy reconciliation of government revenue and expenditure. However, for the effective functioning of TSA, Ogbonna and Amuji (2018) emphasized the need for a daily clearing and consolidation mechanism of cash balances into the central account.

2.1.3 Revenue Mobilization

Revenue mobilization refers to the process of collecting funds for public expenditure from various sources including taxes, tariffs, fees, fines, and other levies." (Jahan, 2020) [30]. Revenue mobilization involves the deployment of a range of policies and measures designed to increase the level and efficiency of tax collection, finance public expenditure and support economic development. By (Andrews & Ahmed, 2021) [31]. In like manner Revenue mobilization refers to the process of generating government revenue through the imposition and collection of taxes, user fees, and other charges." (Ogunleye *et al.*, 2020) [32]. Also, Revenue mobilization is the process of raising government revenue through a combination of tax policy, tax administration, and enforcement measures." (Lipumba, 2021) [33].

Revenue mobilization plays a crucial role in enhancing internal control mechanisms in the public sector. According to Ahmed and Bhuiyan (2021), improving revenue collection can lead to increased transparency and accountability in the public sector. This is because an increase in revenue can provide the government with the necessary resources to invest in modernizing its financial management systems and implementing robust internal control measures. Remarkably, because of the considerable effect of revenue collection, Revenue mobilization can be used to finance public goods and services such as healthcare, education, infrastructure, and social protection programs." (Adeniji *et al.*, 2020) [34]. In addition, Revenue mobilization can support economic growth and development by providing the government with the resources needed to invest in physical and human capital, and to stimulate private sector activity." (Sadiq, 2020) [35]. Similarly, Revenue mobilization can be used to improve fiscal sustainability by reducing the budget deficit and ensuring that public debt remains manageable." (Osinubi *et al.*, 2021) [36]. Lastly, Revenue mobilization can help to address income inequality and poverty by providing the government with the resources to fund social protection programs and other poverty reduction measures." (Zhang, 2020) [37].

2.1.4 Service Delivery

Osman, (2022) [42] conceptualized Service delivery as the process of providing services to customers in a timely and effective manner, meeting their needs and expectations while minimizing costs and maximizing efficiency. Zeithaml, Bitner, and Gremler, (2021) [43] submitted that Service delivery is the act of delivering a service to a customer or client, including all the activities and processes involved in creating and delivering the service experience. Service delivery refers to the process or application of strategy in providing services to clients or customers, typically involving the delivery of a tangible or intangible product, often in the context of a service industry." (Nguyen, 2021).

Service delivery is a critical aspect of public sector management, and the quality-of-service delivery is closely linked to the effectiveness of internal control mechanisms. According to Olowu (2020), effective service delivery requires a well-functioning internal control system that ensures accountability and transparency in the use of public resources. This can be achieved through the implementation of robust financial management systems, regular audits, and strict adherence to established procedures and guidelines (Makore, 2021) [44]. Lawal and Adama (2021) also emphasizes the importance of effective service delivery in enhancing internal control mechanisms, particularly in the areas of budgeting and procurement. Dagunduro *et al.*, (2022) [10] argue that focus on service delivery can help to identify weaknesses in internal controls and enable corrective actions to be taken. Overall, improving service delivery can lead to enhanced internal control mechanisms in public sectors, ensuring more efficient and effective use of public resources. Consequently, Liu and Wang, (2020) [45] stated that efficient service delivery is crucial in combating revenue leakages in the healthcare sector. This can be achieved through process improvements, data analytics, and effective control systems that ensure accurate billing and collections (Bebiano, 2021) [46]. These recent studies suggest that efficient and effective service delivery, coupled with strong internal controls, can help prevent revenue leakages in public sectors.

Conceptual Framework

This study's conceptual framework was purposed to establish the link between the independent variable and the dependent variable. Financial reporting quality (FRQ) is the dependent variable, the independent variable is effective internal control mechanisms (EICM), proxied by Treasury Single Account (TSA), Revenue mobilization (RM), and Service Delivery (SD).

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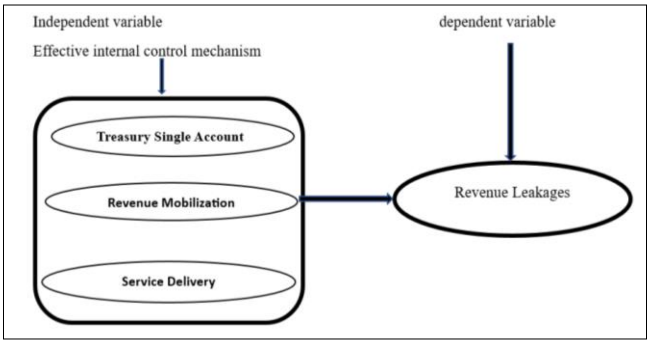

The conceptual framework shows the interaction between Treasury Single Account, revenue mobilization, services delivery, and financial reporting quality on revenue leakages.

2.2 Theoretical Review

This study is anchored on the Institutional theory, which was propounded and developed by Meyer and Rowan's "Institutionalized Organizations in 1977. Stated that organizations are shaped by institutional pressures, which can come from societal norms, values, and expectations. Organizations will therefore strive to conform to these pressures to gain legitimacy and survival. Additionally, the institutional theory assumes that there is a strong element of isomorphism, or similarity, between organizations within the same field or sector as they adopt similar structures, processes, and practices to be seen as legitimate. Scott (2014) [47] argues that institutions are created and maintained through a combination of ideas and interests and that they play a crucial role in shaping social behaviour and decision-making. Meyer and Rowan (1977) asserted that organizations become institutionalized when they adopt formal structures and procedures that are seen as legitimate and necessary, even if they are not effective. DiMaggio and Powell (1983) [48] submitted that organizations in the same field tend to adopt similar structures and practices, not because they are the most efficient or effective, but because they are seen as legitimate and expected by external stakeholders in combating revenue leakages.

Apparently, in the reflection on this theory, Olufemi Olayemi and Emmanuel Onifade (2021) [49] apply institutional theory to the problem of revenue leakage in Nigeria. They argue that revenue leakage occurs in Nigeria because of institutional weaknesses and malpractices, including corruption, lack of transparency, and weak accountability mechanisms. They use institutional analysis to identify the factors that contribute to these weaknesses, including the historical legacy of colonialism, the fragmented nature of Nigeria's fiscal system, and the influence of powerful elites on policy-making and implementation. Olayemi and Onifade's analysis suggests that addressing revenue leakage in Nigeria requires not just technical solutions, but also institutional reforms that address the underlying norms, values, and practices that allow revenue leakage to occur. Also, Alhassan Yakubu, Joseph Luguterah, and Chinenyeze Enyinnaya (2020) [50] argue that revenue leakages in Ghana are driven by institutional factors such as weak legal and regulatory frameworks, inadequate monitoring and enforcement mechanisms, and low levels of public trust in government institutions. They use institutional theory to analyze these factors and recommend a range of policy interventions, including strengthening legal and regulatory frameworks, improving monitoring and enforcement mechanisms, and enhancing public participation in the policy-making process.

While institutional theory has been influential in organizational studies and has helped to explain how organizations are shaped by broader social and cultural forces, it has also been subject to several criticisms. One criticism is that the theory tends to overemphasize the stability and coherence of institutional norms and practices, and may overlook how institutions are contested and subject to change. Another criticism is that institutional theory may prioritize the interests of powerful actors and elites, rather than examining how institutions affect different groups and individuals. Finally, some scholars have argued that institutional theory may be limited in its ability to explain how organizations respond to environmental shocks or crises, as it tends to focus on incremental and path-dependent change rather than more radical forms of innovation or transformation.

DiMaggio and Powell (1991) [51] have been influential proponents of institutional theory, but have also been criticized for their emphasis on institutional isomorphism and their tendency to downplay organizational agency and resistance. Similarly, Lawrence and Suddaby (2006) [52] argue that institutional theory may be too focused on explaining stability and continuity, and may overlook how institutions are challenged and transformed. Finally, Pache and Santos (2013) [53] suggest that institutional theory may need to be complemented with other approaches, such as critical theory or feminist theory, to better understand how institutions, affect different groups and address power imbalances within organizations.

2.3 Empirical Review

How precisely does the effective internal control mechanism reduce revenue leakages?

Akuro, (2019) [3] investigated social internal control mechanisms and revenue generation in rivers state internal revenue service (RIRS) in Nigeria. The study was meant to examine the effects of internal control mechanisms on revenue generation. The study adopts Primary sources of data, Results revealed that a significant relationship exists between internal control and revenue generation in RIRS. And also, revealed that these mechanisms are periodically reviewed to ensure their continued relevance according to the dynamic nature of the agency and that internal control mechanisms are not a replacement for good management but vital tools for managerial efficiency. This also justified the results of the study by Mbasiti *et al*. (2021) [12] conducted in Nigeria in the assessment of forensic accounting techniques in the prevention of revenue leakages. The purpose of the research was to examine the extent to which Forensic Accounting Techniques serve as a panacea for preventing Revenue leakage. The study adopts Primary data collected with the aid of a research questionnaire, and the sample size of 238 respondents was determined from a census of targeted EFCC, internal audit staff selected, the result shows that Forensic accounting has positive effects on revenue leakages. It also implies that a forensic data analysis technique can help in uncovering leakages of revenue in Nigerian Federal Universities.

Opiyo, (2018) [19] examined the effects of controls on revenue collection at the port of Mombasa. This study adopted a descriptive research design because of the need to develop theories that assist in explaining the research. findings show that fast-tracking the rollout of the Integrated Customs Management System ensures the adequacy of the ongoing monitoring to curb issues of risks identified during the ongoing monitoring since monitoring is an essential process in revenue.

Sadat Zibrim (2020) examined the perceived impact and the strategies adopted by the internal audit to battle corruption in the public sector: a case study in the Asokoro municipal area in Ghana. The objective of the study aimed to assess the perceived nature of internal and some of the strategies that can be used through this internal auditing to address the issue of corruption. The study used mixed methods using a descriptive research design. A purposive sampling method was adopted to select samples which consisted of all the staff working within the Municipal Assembly making a total of 152 participants. A semi-structured questionnaire to gather essential information for the study. The study finds that challenges affecting the internal audit in discharging their duties were; insufficient resources, lack of well-defined strategy, lack of budget and fiscal autonomy, lack of independence, and inappropriate staffing. The result of their study buttressed the findings of Yemer (2017) [21], and Amare, (2021) [5] The study found that not all internal control components have a positive significant effect on increasing hotel revenue. However, the study found that control activity, information and communication, and monitoring of internal control were predictors of hotel revenue.

The finding of a study conducted in Nigeria’s Public Sector by Olaoye *et al.* (2012) analyzes the effects of financial control practices on accountability in Nigeria. The cross-sectional survey research design was employed, and the data were primarily sourced using a questionnaire. The study showed that financial control has a significant influence on the accountability of the public sector (Adj. $R2= 0.468$, $F (4, 349) = 77.692$, $P< 0.05$). The result of their study buttressed the findings of Ahmed and Ng’anga (2019) [1], that analyzed the internal control practices and financial performance of county governments in the coastal region of Kenya. The study found a positive and significant effect between risk assessment, monitoring, control environment, information, and communication on financial performance.

Mbasiti *et al*. (2021) [12], assessed forensic accounting techniques in the prevention of revenue leakages in Nigeria. The objective of the study was to examine the extent to which Forensic Accounting Techniques serve as a panacea for preventing Revenue leakage in Federal Universities in Nigeria. Primary data were collected with the aid of a research questionnaire, and a sample size of 238 respondents was determined from a census of targeted EFCC, internal audit staff selected. The result shows that Forensic accounting techniques have positive effects on revenue leakages this implies that a forensic data analysis technique can help in uncovering leakages of revenue and a drastic reduction in revenue leakages. The result of their study buttressed the findings of Olaniyan *et al.* (2021) [17], which investigate forensic accounting as an instrument for detection and prevention in the public sector; moderating on ministries, departments, and agencies in Nigeria. Primary sources of data were employed which covered the period of ten (10) years spanning from 2010 to 2020. The result showed that forensic accounting has a positive and significant influence on fraud prevention, but the foreign account has no total control over fraud detection. It was also revealed that forensic litigation has no significant positive influence on the recovery of funds lost to fraud.

Muhunyo and Jagongo, (2018) [16], determine the effect of internal control systems on the financial performance of public institutions of higher learning in Nairobi city county, Kenya. The main objective of the study was to establish the effect of internal control systems on financial performance and determine the effect of control activities, risk assessment, control environment, information and communication, and monitoring on the financial performance of institutions of higher learning. The study used primary data. The study finds that the control environment, risk assessment, control activities, and information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Nairobi City County, Kenya. The variables explained 99.1% of the changes in the financial performance of the institutions.

Appolinaire, (2017) [6] conducted a study on internal control and tax collection in Rwanda a case study of Rwanda's revenue authority. The objective was to investigate the effectiveness of internal control on revenue collections and specifically, identified the types of internal controls adopted by RRA; assess revenue collection at RRA from 2013- 2015 and evaluate the effectiveness of internal controls on revenue collection at RRA. The study adopted secondary data with A semi-structured questionnaire to collect primary data. The target population of 120 staff working at the Rwanda Revenue Authority headquarters offices in Kigali, out of which 35 were derived as a sample. The findings revealed a significant positive relationship between Internal Control Systems and Revenue Collection (r=0.489, P>0.01). This means that when internal controls improve it may result in improvement in the collection. The study further revealed that good Internal Control Systems only contribute 48.9% to the collection.

The finding of a study conducted in Kenya by Mbevi, (2022) [13] analyzes the effect of information management systems on revenue collection at Kenya wildlife service. The specific objectives of the study were to establish the effect of a customer relationship management system, human resource management system, internal control system, and electronic payment system on revenue collection at Kenya wildlife service. A descriptive research design was adopted and the target population was 245 Kenya wildlife service staff members. A sample of 71 was selected using a stratified sampling technique and primary data were collected using a structured questionnaire. The study established that the customer relationship management system, internal control system, and electronic payment system had a positive and significant effect on revenue collection at Kenya wildlife service. However, the human resource management system had no significant effect on revenue collection at Kenya's wildlife service.

3. Methodology

To collect data for this study, a survey research approach was used. A well-structured questionnaire was given to managers, auditors, chartered accountants, and directors of accounting firms and parastatals in Ekiti State Nigeria. With population of 980, using purposive sampling techniques to select 289 as respondents which is also the sample size as at 2023. questions raised in the questionnaire were streamlined to get reliable and validly measurable data, with a 5-point Likert scale method continuum of 1 to 5 with the following options: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). The questionnaires were analyzed with descriptive and inferential statistics. This study's conceptual framework was purposed to establish the link between the independent variable and the dependent variable. The independent variable is Effective Internal Control Mechanism (EICM), proxied by Treasury Single Account (TSA), Revenue Mobilization (RM), and Service Delivery (SD). The reduction of Revenue leakage (RRL) is the dependent variable.

3.1 Model Specification

The model for the study was developed in line with the study done in Malaysia by *Al-Maghrebi et al.* (2016) [4] on the problems and challenges with tax evasion based on the approach of institutional factors. However, this study deviated by modifying problem detection as an internal audit, role as revenue mobilization, and simple as service delivery.

However, this particular study adapted the above model by including Treasury Single Account (TSA), Revenue Mobilization (RM), and Service Delivery (SD). Revenue Leakages (RL) as a function of the dependent variable. Thus, below is the model:

$$RLt = = \beta0+\beta1TSA+\beta2RM+\beta3SD+\mu_i \qquad (1)$$

Where:

RL= Revenue Leakages
TSA = Treasury Single Account
RM = Revenue Mobilization
SD = Service Delivery
β0 = constant of the equation.
β1, β2, β3, = unknown coefficient of the variable.
μ= error term.
A-priori expectation = β1, β2, β3, > 0

4. Data Analysis and Discussion of Findings

4.1 Descriptive Statistics

The table presented below, Table 2, displays the study's descriptive statistics. The purpose of the study was to determine the extent to which the sample data distribution corresponds to a normal distribution and assess the variable characteristics. The mean value for Revenue Leakages was 4.1488, with a low standard deviation of 0.43697 indicating that revenue Leakages deviates from the mean very little and is positively skewed with a value of 0.093. On the other hand, the kurtosis value of 0.523 indicates that the variable follows a normal distribution. For Treasury Single Account, the average value was 4.1750 while the standard deviation was low at 0.45475. Its skewness of -0.330 suggests that the variable is negatively skewed with a kurtosis value of 0.142. Furthermore, in terms of revenue mobilization and service delivery, the mean values were recorded as 4.1343 and 4.2232 respectively, with low deviation rates from their means. The standard deviation for revenue mobilization was 0.40770, indicating a relatively stable trend. However, it had a positive skewness value of 0.327, indicating that the data distribution was skewed towards higher revenue figures. Similarly, service delivery had a standard deviation of 0.42649, also reflecting a low variability from its mean value. Its positive skewness value of 0.325 indicated that the data distribution was skewed towards better service delivery. In contrast, the kurtosis value of -0.561 for service delivery suggested a leptokurtic distribution, meaning that the dataset had fewer extreme values than a normal distribution would have.

Table 2: Descriptive Statistics

Variable	RL	TA	RM	SD
Mean	4.1488	4.1750	4.1343	4.42232
Maximum	5.0000	5.0000	5.0000	5.0000
Minimum	2.67	3.14	3.30	3.17
Std. Dev.	0.43697	0.45475	0.40770	0.42659
Skewness	0.093	-0.330	0.327	0.325
Kurtosis	0.093	-0.330	0.327	0.325
Observations	289	289	289	289

Source: Reseacher's Computation, (2023)

4.2 Test of Variables

4.2.1 Normality Test

To investigate the connection between the revenue leakage and various independent variables, such as the Treasury Single Account, Revenue mobilization and service delivery, a linear relationship was analyzed. This examination determined that the residual variable was consistent across different levels of predicted values, as demonstrated by the Normal P-P plot in Figure 2.

4.2.2 Linearity Test

According to the data presented in Table 3, there is a positive correlation between Revenue leakage and Treasury Single Account with a correlation coefficient of 0.536. This suggests that if internal control mechanisms, such as the use of Treasury single accounts, are increased, it may help reduce revenue leakages in Nigeria. Additionally, the correlation between revenue mobilization and revenue leakages is also positive and significant with a coefficient of 0.644 and a p-value of 0.000. This indicates that if internal control mechanisms, such as revenue mobilization, are implemented effectively, it can further reduce revenue leakages in Nigeria. Furthermore, service delivery has a strong positive correlation of 0.695 and a p-value of 0.000 with revenue leakages in Nigeria. This implies that improving service delivery through effective internal control mechanisms can significantly reduce revenue leakages in Nigeria by 69.5%.

Table 3: Correlation Analysis of Study Variables

	RL	TSA	RM	SD
RL	1.0000			
TSA	0.536 (0.000)	1.0000		
RM	0.644** (0.000)	0.608** (0.000)	1.0000	
SD	0.695** (0.000)	0.413** (0.002)	0.621* (0.000)	1.0000

Source: Researcher's Computation, (2023)

4.2.3 Multicollinearity Test of Variables

Table 4 displays the results of the Multicollinearity test for the variables. The statistics indicate that there is no multicollinearity present in the model, as determined by both the Tolerance and Variance inflation factors (VIF). Specifically, the Tolerance level for the Treasury single account is 0.629, for Revenue mobilization, it is 0.465, and for service delivery, it is 0.612. Moreover, the VIF values are also indicative of the absence of multicollinearity, with a value of 1.590 for the Treasury single account, 2.149 for Revenue Mobilization, and 1.634 for Service delivery. These values fall within the acceptable range, where the tolerance level is between 0 and 1 and the VIF values are less than 10 and greater than 0. Additionally, the autocorrelation test using Durbin Watson was conducted and showed values within the acceptable range of 1.5-2.5 for the models.

Table 4a: Tolerance and VIF Value

Variable	Tolerance	VIF	1/VIF
TSA	0.629	1.590	0.629
RM	0.465	2.149	0.465
SD	0.612	1.634	0.612
Mean VIF		1.791	

Source: Researcher's Computation, (2023)

Table 4b: Post Estimation Test Result

Durbin Watson	
Null Hypothesis	**Probability**
There is no serial Correlation (P>0.05)	1.869
Tolerance and VIF Value	
Null Hypothesis VIF	**1/VIF**
Absence of multicollinearity among the variable (1/VIF >0.10)	1.791

Source: Researcher's Computation, (2023)

4.3 Evaluation of Internal Control Mechanism and Reduction of Revenue Leakages in Nigeria

Table 5 presented below displays the outcomes of an ordinary least square analysis conducted on the internal control mechanism for revenue leakages in Nigeria. The coefficient of determination is 0.582 and the adjusted value is 0.578, indicating that approximately 58.2% of the fluctuation of the dependent variable can be accounted for by the independent variable, while the remaining 47.8% is attributed to the error terms that are not included in the model. Additionally, the F-statistics of the model is 132.220 with a probability of 0.000, signifying that all variables are effectively fitted in the model as the p-value is significant at 5%.

In the model, the coefficients of individual parameters indicate important relationships with revenue leakages in Nigeria. Specifically, the use of a Treasury Single Account has a significant positive coefficient of 0.195 unit at P=0.000<0.05, meaning that a one-unit increase in its usage leads to a decrease of 19.5% in revenue leakages. Similarly, revenue mobilization has a significant positive coefficient of 0.247 units at P=0.000<0.05, indicating that a one-unit increase in its application leads to a decrease of 24.7% in revenue leakages. Conversely, service delivery has a significant positive relationship with revenue leakages, as a one-unit increase in service delivery will decrease revenue leakages by 47.9%.

Table 5: OLS Regression Analysis on the internal control mechanism and reduction of revenue leakages in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.291	0.196	1.485	0.139
TSA	0.195	0.046	4.201	0.000
RM	0.247	0.060	4.097	0.000
SD	0.479	0.050	9.557	0.000
R-squared Adjusted	0.582			
R-squared	0.587			
F-statistic	132.220			
Prob (F-statistic)	0.000			

Source: Researcher's Computation, (2023)

4.4 Discussion of Findings

The result indicates that Treasury Single Account has a considerably significant positive relationship with revenue leakages in Nigeria due to the fact that its usage in revenue generation will assist in decreasing revenue leakages in Nigeria by 19.5% which will enable the government to gain more revenue for the infrastructural development. This aligns with the findings of Appolinaire, (2017) [6] and Mbevi, (2022) [13], which examined the impact of internal control and tax collection in Rwanda's revenue authority and discovered a significant positive relationship between Internal Control Systems and Revenue Collection (r=0.489, P>0.01). in like manner, the study of Mbasiti *et al*. (2021) [12] who analysed the assessment of forensic accounting techniques in the prevention of revenue leakages in Nigeria also find shows that Forensic accounting has positive effects on revenue leakages. Similarly, the findings of Ahmed and Ng'anga (2019) [1], who analyzed the internal control practices and financial performance of county governments in the coastal region of Kenya found a positive and significant effect between risk assessment, monitoring, control environment, information, and communication on financial performance. However, it contradicts the findings of Yemer (2017) [21], and Amare, (2021) [5] That found that not all internal control components have a positive significant effect on increasing hotel revenue. However, the study found that control activity, information and communication, and monitoring of internal control were predictors of hotel revenue.

5. Conclusion and Recommendations

The study empirically established the effect of internal control mechanism on revenue leakages in Nigeria. However, the study provided new empirical statistical evidence that Treasury Single Account, Revenue Mobilization, and Service Delivery positively affects revenue leakages in Nigeria. These variables were regressed on revenue leakages in Nigeria. Similarly, Correlation and regression were employed to that the explanatory variable were positive and significant in explaining the explained variable. Based on the findings of the study, it is mainly concluded that internal control mechanism enhance the level of increase on revenue and productivity. In respect of the research finding, the study recommended that:

1. The study recommended that it is important for government to encourage TSA for better monitoring and control of government revenues, reducing the risk of errors
2. The study promoted transparency and accountability of revenue to enhances the minimizing government and agency borrowing costs by reducing wastage and generating surplus funds
3. It also recommended that government should invest in modernizing its financial management systems and implementing robust internal control measures.

6. References

1. Ahmed SO, Ng'anga P. Internal control practices and financial performance of county governments in the coastal region of Kenya. International Journal of Current Aspects. 2019; 3:28-41.
2. Akinadewo IS, Akpan JU, Awotomilusi NS. Forensic Accounting and the Enhancement of the Quality of Financial Statement: Moderating MDA's in the Public Sector in South-West States of Nigeria, n.d.
3. Akuro P. Social Internal Control Mechanisms and Revenue Generation in Rivers State Internal Revenue Service (RIRS). Arts and Social Sciences Journal. 2019; 10(1):1-8.
4. Al-Maghrebi MS, Ahmad R, Palil MR. Budget transparency and tax awareness towards tax compliance: A conceptual approach. South East Asia Journal of Contemporary Business, Economics and Law. 2016; 10(1):95-101.
5. Amare T. The Assessment of Internal Audit Practice in the Hotel Industry in Addis Ababa Ethiopia: The Case of Five Star Hotels. St. Mary's University, 2021.
6. Appolinaire M. Internal Control and Tax Collection in Rwanda a Case Study of Rwanda Revenue Authority. Mount Kenya University, 2017.
7. Bala A, Enoch EY, Yakubu S. The problems of personal income tax on revenue generation in Gombe state. ArXiv Preprint ArXiv: 2105.10995, 2021.
8. Chidi E, Nwokike C, Okonkwo E, Okwuchukwu A.

The Effectiveness of the Treasury Single Account Policy in Curbing Revenue Leakages in Public Sector Organizations (An Assessment of the Corporate Affairs Commission (CAC), Nigeria). 2022; 6:87-93.
9. Crnogorac M, Lago-Peñas S. Tax evasion in the countries of Former Yugoslavia. Zbornik Radova Ekonomskog Fakulteta u Rijeci: Časopis Za Ekonomsku Teoriju i Praksu. 2019; 37(2):823-851.
10. Dagunduro ME, Igbekoyi OE, Ogungbade OI, Aluko AF, Osaloni BO. Corporate social responsibility and financial performance of macro, small, and medium-scale enterprises (MSMEs) in Ekiti State, Nigeria. Research Journal of Finance and Accounting. 2022; 13(22):61-75.
11. Ige AG, Igbekoyi OEP, Dagunduro ME. Good Governance and Tax Compliance among SMEs in Nigeria: A Moderating Role of Socio-economic Factors, n.d.
12. Mbasiti TH, Gyang JY, Fransis O. An Assessment of Forensic Accounting Techniques in the Prevention of Revenue Leakages in Nigerian Federal Universities. Journal of Accounting. 2021; 4(1):1-21.
13. Mbevi HK. Effect of Information Management Systems on Revenue Collection at Kenya Wildlife Service. KCA University, 2022.
14. Monday O. Taxpayers' Perception of Public Sector Fiscal Responsibility and Voluntary Tax Compliance Behaviour in Rivers State, Nigeria. Journal of Accounting and Taxation. 2023; 3. Doi: https://doi.org/10.47747/jat.v3i1.1065
15. Mr O, Eloho OO. The Treasury Single Account as a Tool for Curbing Financial Irregularities in Nigeria Public Sector. 2022; 9.
16. Muhunyo BM, Jagongo AO. Effect of internal control systems on financial performance of public institutions of higher learning in Nairobi City County, Kenya. International Academic Journal of Human Resource and Business Administration. 2018; 3(2):273-287.
17. Olaniyan NO, Ekundayo AT, Oluwadare OE, Bamisaye TO. Forensic accounting as an instrument for fraud detection and prevention in the public sector: Moderating on ministries, departments and agencies in Nigeria. Acta Scientiarum Polonorum. Oeconomia. 2021; 20(1):49-59.
18. Olaoye SA, Ogbebor PI, Elelu FS. Financial Control Practices and Accountability in the Public Sector in Nigeria, n.d.
19. Opiyo EO. Effects of internal controls on Customs revenue collection at the Port of Mombasa, 2018.
20. Osaloni BO, Igbekoyi OE, Ogungbade OI, Akpan JU. Information Technology and Tax Evasion Practice in Nigeria. Information Technology. 2022; 8(11).
21. Yemer M. The Effect of Internal Controls Systems on Hotels Revenue. A Case of Hotels in Bahir Dar and Gondar Cities. Arabian Journal of Business and Management Review (Oman Chapter). 2017; 6(6):p19.
22. Albrecht WS, Albrecht CC, Albrecht CO, Zimbelman MF. Fraud Examination. Cengage Learning, 2021.
23. Fakayode OD. The Effect of Internal Control Mechanism on Fraud Prevention in Public Sector Organizations: A Study of Oyo State Ministry of Finance, Nigeria. Journal of Accounting and Finance. 2021; 21(5):68-82.
24. Adeyemo SS, Adeyemo EO. Internal control mechanisms and financial reporting quality in Nigeria. Journal of Accounting and Financial Management. 2020; 6(1):49-62.
25. Malaikah FS, Okoye KO. The impact of internal control mechanisms on the financial performance of small and medium-sized enterprises in Nigeria. Journal of Financial Reporting and Accounting. 2021; 19(1):80-95.
26. PwC. State of the internal audit profession study: Making internal audit smarter. PwC, 2017. Retrieved from: https://www.pwc.com/us/en/services/consulting/risk-regulatory/library/state-of-internal-audit-profession.html.
27. Waters R, Waterhouse J. Internal Controls: Principles, Procedures, and Best Practices. Hoboken, NJ: John Wiley & Sons, 2021.
28. Rittenberg LE, Johnstone KM, Gramling AA. Auditing: A Business Risk Approach (10th ed.). Boston, MA: Cengage Learning, 2020.
29. Whittington OR, Pany K. Principles of Auditing & Other Assurance Services (23rd ed.). New York, NY: McGraw-Hill, 2021.
30. Jahan S. Revenue mobilization in Bangladesh: Challenges and opportunities. International Journal of Business and Economics Research. 2020; 9(1):42-48.
31. Andrews M, Ahmed M. Revenue mobilization in Bangladesh: Lessons from international experience. World Bank Policy Research Working Paper No. 9617, 2021.
32. Ogunleye E, Adejumo O, Oyekale A. Fiscal sustainability and revenue mobilization in Nigeria: The roles of tax and non-tax revenue sources. Journal of Economics and Behavioral Studies. 2020; 12(4):1-11.
33. Lipumba N. The role of revenue mobilization in enhancing public service delivery in Tanzania. Journal of Public Administration and Governance. 2021; 11(2):47-58.
34. Adeniji OA, Ogunjirin OA, Badejo OJ. Taxation and revenue mobilization in Nigeria: The role of effective tax policy and administration. Journal of Accounting and Taxation. 2020; 12(4):65-75.
35. Sadiq MS. Revenue mobilization in Pakistan: Issues and challenges. International Journal of Management and Business Research. 2020; 10(2):43-51.
36. Osinubi TS, Olufemi OA, Oshinloye MO. Revenue mobilization and fiscal sustainability in Nigeria: An empirical analysis. International Journal of Economics, Commerce and Management. 2021; 9(2):1-11.
37. Zhang Z. Revenue mobilization and poverty reduction in China: Evidence from the Great Western Development Strategy. Journal of Public Budgeting, Accounting & Financial Management. 2020; 32(1):31-42.
38. Institute of Internal Auditors. Definition of Internal Auditing, 2021. Retrieved from: https://na.theiia.org/about/about-internal-auditing/Pages/Definition-of-Internal- Auditing.aspx
39. Kabir MH, Ismail S. Internal audit effectiveness and financial performance of Nigerian deposit money banks. International Journal of Managerial and Financial Accounting. 2020; 12(2):173-189.

40. Kida T. Internal control: A study on manufacturing companies in Indonesia. Journal of Applied Accounting Research. 2016; 17(1):27-42.
41. Louwers TJ, Ramsay RJ, Sinason DH, Strawser JR, Thibodeau JC. Auditing and assurance services. McGraw-Hill Education, 2017.
42. Osman I. The impact of service delivery on customer satisfaction in the banking industry: A case study of XYZ Bank. Journal of Business and Economics. 2022; 13(2):234-251.
43. Zeithaml VA, Bitner MJ, Gremler DD. Services marketing: Integrating customer focus across the firm. McGraw Hill Education, 2021.
44. Makore S. The role of service delivery in preventing revenue leakages in the public sector: A case study of the Zimbabwe Revenue Authority. Journal of Public Administration and Governance. 2021; 11(1):235-246.
45. Liu Y, Wang S. Preventing revenue leakage in the telecom industry: The role of service delivery. Journal of Telecommunications and Information Technology. 2020; 4:38-45.
46. Bebiano J. The role of service delivery in combating revenue leakages in the healthcare sector: A case study of a hospital in Portugal. International Journal of Healthcare Management. 2021; 14(3):243-254.
47. Scott WR. Institutions and organizations: Ideas and interests (4th ed.). Sage Publications, 2014.
48. DiMaggio PJ, Powell WW. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review. 1983; 48(2):147-160.
49. Olayemi O, Onifade E. Institutional Analysis of Revenue Leakage in a Developing Country: Evidence from Nigeria. Journal of International Development. 2021; 33(1):57-74.
50. Yakubu A, Luguterah J, Enyinnaya C. Institutional Drivers of Revenue Leakages in Ghana: A Critical Perspective. Journal of Public Administration and Governance. 2020; 10(3):337-353.
51. DiMaggio PJ, Powell WW. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American sociological review. 1991; 48(2):147-160.
52. Lawrence TB, Suddaby R. Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), The SAGE Handbook of Organization Studies. SAGE Publications, 2006, 215-254.
53. Pache AC, Santos F. Inside the hybrid organization: Selective coupling as a response to competing institutional logics. Academy of Management Journal. 2013; 56(4):972-1001.
54. Okeke CC, Uzonwanne GC. Internal control mechanisms and revenue leakages in the oil and gas sector of Nigeria. Journal of Accounting, Auditing & Finance Research. 2020; 8(4):1-14.
55. Ige TA, Ogbari ME. Internal control mechanisms and the reduction of revenue leakages in the public sector of Nigeria. Journal of Public Affairs. 2021; 21(1):e2186.
56. Ahmed A, Kyei EM. Internal control mechanisms and revenue leakages in the public sector: Evidence from Ghana. Journal of Accounting in Emerging Economies. 2020; 10(4):483-503.
57. Kinyua J, Wanjohi LW, Orwa GO. Internal control mechanisms and revenue leakages in the public sector: A case of Kenya. Journal of Accounting and Financial Management. 2020; 6(2):1-17.
58. Othman NA, Sulong Z. Internal control mechanisms and revenue leakages in the construction industry of Malaysia. International Journal of Business and Society. 2020; 21(S2):423-435.
59. Munyai TR, Van Wyk R. Internal control mechanisms and revenue leakages in the hospitality industry of South Africa. Journal of Hospitality and Tourism Insights. 2021; 4(2):131-146.
60. Appiah KO, Boateng R, Amankwah E. Internal control mechanisms and revenue leakages in the banking sector: Evidence from Ghana. International Journal of Finance and Accounting Studies. 2021; 9(2):27-40.