



IMPACT OF INTEGRATED FINANCIAL MANAGEMENT SYSTEMS ON GOVERNANCE IN DEVELOPING ECONOMIES

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Abstract.

Corruption in Nigeria's public sector remains a systemic challenge undermining governance, economic development, and public trust. This study investigates the effectiveness of Nigeria's Integrated Personnel and Payroll Information System (IPPIS) and the Government Integrated Financial Management Information System (GIFMIS) in curbing corruption within the public sector. The study relies on primary data obtained through structured Likert-scale questionnaires administered to public sector employees. The population comprises Ministries, Departments, and Agencies (MDAs) of the Oyo State Government, from which a purposive (judgmental) sample of 10 MDAs was selected based on their strategic involvement in financial management and the implementation of IPPIS and GIFMIS. Out of 100 questionnaires distributed, 75 valid responses were retrieved and used for analysis. Ordinary Least Squares (OLS) regression was employed as the main method of data analysis. Regression results further reveal that IPPIS (-0.412 , $p = 0.011$) and GIFMIS (-0.356 , $p = 0.014$) exert statistically significant negative effects on corruption, jointly explaining about 43% of the variation in corruption reduction ($R^2 = 0.428$). These findings indicate that both IPPIS and GIFMIS significantly reduce payroll fraud and enhance expenditure transparency. Based on these results, the study recommends the deeper integration of IPPIS and GIFMIS into a unified financial management framework, strengthened institutional enforcement and auditing mechanisms, and sustained capacity-building for public sector personnel to enhance the long-term effectiveness of digital anti-corruption reforms.

Keywords: Corruption, IPPIS, GIFMIS, Public Financial Management, Fiscal Accountability, Nigeria

JEL Codes: H83, H11, D73, O55

INTRODUCTION

Corruption in Nigeria's public sector remains a systemic challenge undermining governance, economic development, and public trust. Despite decades of reforms, pervasive mismanagement and diversion of resources continue to constrain infrastructural growth and effective policy delivery (Eze & Nnadi, 2022). Successive administrations, from President Olusegun Obasanjo to President Muhammadu Buhari, have prioritized anti-corruption campaigns, recognizing its detrimental impact on fiscal stability and service provision. Yet, evidence suggests that traditional enforcement measures alone are insufficient without complementary financial management reforms designed to strengthen transparency and accountability (Omodero, 2021).

One of the foremost reform strategies has been the introduction of digital financial management frameworks, notably the Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMIS), and International Public Sector Accounting Standards (IPSAS). These frameworks were established to promote fiscal

discipline, block revenue leakages, and centralize government cash management (Lawal & Ali, 2021). The TSA, in particular, has been credited with reducing the proliferation of multiple government accounts and limiting opportunities for rent-seeking behavior by public officials (Okoye, Amahadu & Janefrances, 2019). The growing adoption of such measures reflects Nigeria's shift towards systemic reforms that integrate technology into public financial governance.

Among these reforms, the Integrated Personnel and Payroll Information System (IPPIS) has emerged as a cornerstone in curbing payroll-related corruption. The initiative aims to eliminate ghost workers, multiple salary collections, and unauthorized personnel costs that have historically inflated recurrent expenditure (Obara, Nangih & Agba, 2021). By digitalizing payroll management and centralizing personnel records, IPPIS has enhanced data integrity and improved wage bill planning (Olunta, 2022). Nonetheless, implementation challenges – such as resistance from entrenched interests, data accuracy issues, and technological bottlenecks – underscore the need for continuous evaluation of the system's effectiveness (Ezeani & Agu, 2023). Against this backdrop, this study seeks to interrogate whether proper implementation of IPPIS significantly contributes to corruption eradication in Nigeria's public sector.

Similarly, GIFMIS complements IPPIS by integrating budget execution, accounting, and financial reporting processes into a centralized digital platform. The reform facilitates real-time monitoring of government transactions, strengthens internal controls, and improves fiscal discipline across ministries, departments, and agencies (MDAs) (Akande & Sule, 2021). While evidence indicates improvements in expenditure tracking and reduced revenue leakages, empirical assessment of GIFMIS' impact on corruption remains limited, particularly at subnational levels (Yakubu & Sulaiman, 2020).

Despite the growing adoption of IPPIS and GIFMIS, corruption persists across Nigeria's public institutions, suggesting a critical disconnect between reform design and practical outcomes. Payroll fraud, opaque budget execution, and weak enforcement mechanisms continue to undermine public confidence, especially within subnational governments where institutional capacity is often weaker (Akinyemi, 2021; Okafor & Eme, 2022). This persistence raises a fundamental problem: whether digital financial management reforms have merely improved administrative procedures or have translated into meaningful reductions in corruption. The absence of consensus in empirical findings, particularly regarding state-level implementation, creates an important research gap that this study seeks to address. The study is anchored on the broader problem of assessing whether financial management reforms, specifically IPPIS and GIFMIS, function as effective institutional mechanisms for corruption reduction within Nigeria's public service. By focusing on MDAs in Oyo State, the study provides subnational-level evidence on the extent to which these reforms constrain payroll-related fraud and enhance expenditure transparency. This approach aligns with contemporary governance literature, which emphasizes institutional restructuring over punitive enforcement as a more sustainable pathway to accountability (Campos & Pradhan, 2021; Adejumo & Ojo, 2024).

LITERATURE REVEIW

Conceptual Review

Integrated Personnel and Payroll Information System (IPPIS)

The Integrated Personnel and Payroll Information System (IPPIS) was conceptualized by the Bureau of Public Service Reform (BPSR) as a centralized mechanism for the management and disbursement of civil service salaries under the Federal Government of Nigeria. The project

was formally initiated in 2006, marking a turning point in the government's efforts to strengthen fiscal transparency (Nwosu, 2018). According to Omolehinwa and Naiyeju (2019), IPPIS functions as a computer-based payroll and personnel management platform designed primarily to eliminate payroll-related irregularities. Its mandate includes providing accurate headcounts of government employees, consolidating salary expenditures, and ensuring that data integrity in personnel records is maintained at all times (Adegite, 2020).

Aganga (2021) further characterized IPPIS as a biometric-driven system requiring the registration of government employees' personal and banking details to guarantee direct salary payments. Similarly, Maikudi (2019) emphasized its origin as a World Bank-supported initiative under the Economic Reform and Governance Project (ERGP), conceived to deliver a reliable and comprehensive personnel database, strengthen manpower planning, prevent falsification of credentials, and streamline pension administration. It is also intended to eliminate cases of double dipping and reduce inefficiencies in remuneration processing (Ofoegbu & Ifurueze, 2020).

Official documents (IPPIS Department, 2015) highlighted the system's objectives, which include facilitating human resource planning, providing a platform for precise budgeting, monitoring monthly salary disbursements in line with the Federal Government's expenditure profile, and eradicating payroll fraud such as multiple or fictitious salary payments. Other goals include ensuring secure storage and retrieval of records, maintaining database integrity, and guaranteeing prompt remittance of statutory deductions to pension funds, health insurance schemes, and tax authorities (Ojo & Oladipupo, 2021).

Letswa and Egwuem (2018) traced the origins of corruption in public institutions to historical legacies, emphasizing that public sector reforms such as IPPIS are designed to rebuild public trust and enhance administrative efficiency. In a similar vein, Abiodun and Anihebe (2017) maintained that IPPIS, in combination with other financial management frameworks, strengthens accountability in state resource administration. By eliminating "ghost workers" and enabling evidence-based personnel auditing, the system is expected to reduce fiscal leakages, broaden employment opportunities, and restore stakeholder confidence (Enakirerhi & Temile, 2022; Adeyemi & Ishola, 2021).

As Enakirerhi and Temile (2017) observed, Nigeria's adoption of IPPIS aligns with global trends in e-governance, underscoring the imperative of technological integration in payroll systems. Government objectives for the program also include enhancing human capital management, strengthening expenditure tracking, and institutionalizing transparency in payroll reporting. However, the success of IPPIS depends on security measures and adequate monitoring to prevent circumvention of its biometric controls (Akindele & Afolabi, 2019; Ijeoma & Oghoghomeh, 2014).

Hamza and Ahmed (2018) considered IPPIS one of the most successful reforms in Nigeria's recent history, noting its role in streamlining salary payments and providing the government with a comprehensive picture of its workforce. The system has significantly reduced payroll fraud by minimizing opportunities for fictitious salary payments, thereby reinforcing accountability and transparency (Agboola, 2018; Idris et al., 2020). In fact, Nangih and Davies (2017) reported that a government audit of over 312,000 civil servants revealed more than 23,000 fraudulent beneficiaries, confirming the prevalence of systemic irregularities that IPPIS was specifically designed to address. The problem of ghost workers is not unique to Nigeria but remains widespread across developing economies (Odooyo, Adero, & Chumba, 2014; Ziad, 2015).

These insights highlight IPPIS as a reform-oriented instrument with transformative potential for Nigeria's public sector. Yet, its sustainability depends on institutional capacity, technological adaptation, and ongoing monitoring to forestall loopholes. By aligning payroll systems with broader fiscal reforms such as the Treasury Single Account (TSA) and Government Integrated Financial Management Information System (GIFMIS), IPPIS plays a central role in Nigeria's quest for financial prudence, accountability, and good governance (Iheduru & Amafule, 2014; Okoye, JaneFrances, & Amahadu, 2016).

Treasury Single Account (TSA)

The Treasury Single Account (TSA) represents a unified structure of government banking in which all public receipts, payments, loans, and grants are transacted through a consolidated account maintained at the Central Bank of Nigeria (CBN, 2016; Omolehinwa & Naiyeju, 2015). As Eme et al. (2015b) observed, the directive mandating TSA operations compelled Ministries, Departments, and Agencies (MDAs) to remit all revenues into a single account managed by the CBN. Although often associated with the Buhari administration, the TSA initiative was conceived during the tenure of President Goodluck Jonathan but lacked effective implementation due to limited political will. Under Buhari, the policy transitioned from a paper reform into a compulsory directive with broad compliance from MDAs, sparking debates about its fiscal and political implications.

The TSA enhances the Office of the Accountant-General of the Federation's (OAGF) ability to assess the federal government's consolidated cash position in real time. According to the CBN (2016, p. 2), the TSA's objectives include centralizing revenue management, strengthening transparency, ensuring effective cash availability, reducing borrowing costs, and blocking leakages caused by fragmented accounts. In its March 2015 circular, the OAGF directed that from April 1, 2015, all revenues due to the federal government be lodged into the Consolidated Revenue Fund or designated CBN accounts via deposit money banks and electronic channels. The system's core problem-solving capacity lies in addressing Nigeria's longstanding lack of unified cash management, where idle balances in MDAs coexisted with government borrowing, thereby exacerbating fiscal stress.

Empirical evidence indicates that TSA implementation has curtailed opportunities for corruption by consolidating control and limiting discretionary use of public funds (Yusuf & Oloruntoba, 2020). Similarly, Nweke and Eze (2021) argue that TSA has improved liquidity management and reduced fiscal indiscipline across federal institutions. Comparative studies show that unified cash systems, as observed in Ghana and Kenya, also enhance efficiency and reduce waste in public financial management (Onyema & Alabi, 2022; Odhiambo, 2023). However, challenges such as resistance from vested interests, technical bottlenecks, and the exclusion of some revenue-generating agencies from full compliance weaken its impact (Ogunleye & Lawal, 2021).

Recent scholarship emphasizes that TSA's long-term sustainability depends on integration with other reforms like GIFMIS and IPPIS to build a holistic framework of fiscal governance (Oduyemi & Fagbemi, 2023; Adegbite & Ajayi, 2024). Studies further highlight that TSA has reduced commercial banks' free float of public funds, altering financial intermediation dynamics (Olapade, 2022; Okoye et al., 2023). While this has improved public revenue mobilization, it has also strained banks' liquidity positions, raising debates about broader macroeconomic implications. Therefore, TSA is best understood as both an anti-corruption tool and a strategic fiscal policy instrument designed to strengthen government solvency and accountability (Aliyu & Ibrahim, 2024).

Adoption of International Public Sector Accounting Standards (IPSAS)

The International Public Sector Accounting Standards (IPSAS) are a suite of professional accounting standards issued by the International Public Sector Accounting Standards Board (IPSASB) for use by public entities in preparing financial statements. IPSAS are designed to promote high-quality accounting practices on either a cash or accrual basis, thereby aligning local reporting frameworks with global standards. Nigeria's Federal Executive Council approved the adoption of IPSAS in July 2010, alongside International Financial Reporting Standards (IFRS) for the private sector, to enhance the transparency and comparability of financial reporting (Otunla, 2015).

The adoption of IPSAS is intended to improve accountability, enhance service delivery, and strengthen the credibility of financial reporting systems (Ijeoma & Oghoghomeh, 2014). Otunla (2015) noted that IPSAS facilitates better disclosure, more informed decision-making, and greater alignment with international best practices. The Federation Account Allocation Committee (FAAC) established a Technical Sub-Committee in 2011 to develop an implementation roadmap across the three tiers of government. IPSAS is also linked to improving fiscal discipline, strengthening donor confidence, and supporting compliance with Nigeria's Freedom of Information Act (2011).

Empirical evidence suggests that IPSAS adoption contributes to fiscal transparency and accountability by aligning budgetary practices with global norms (Buhari & Sani, 2021). Similar findings have been reported in Ghana, Tanzania, and South Africa, where IPSAS adoption strengthened resource allocation and improved fiscal monitoring (Maseko & Ndlovu, 2020; Osei-Tutu, 2022). However, implementation challenges such as lack of technical expertise, political interference, and insufficient training hinder its full effectiveness (Egbunike & Okoye, 2021).

Contemporary scholarship highlights IPSAS as a crucial mechanism for curbing corruption through enhanced comparability and international scrutiny of government accounts (Eze & Chukwu, 2022; Uwajumogu & Onuoha, 2023). Okafor and Amadi (2024) also emphasize that IPSAS adoption in Nigeria aligns with fiscal responsibility laws, promoting better debt management and improved fiscal sustainability. Therefore, IPSAS is not only a technical reform but also a governance tool that reinforces public confidence in fiscal management practices (Adeniran & Ojo, 2024).

Government Integrated Financial Management Information System (GIFMIS)

The Government Integrated Financial Management Information System (GIFMIS) is an information technology-based platform introduced by the Nigerian government to improve budget management and expenditure control (Omolehinwa & Naiyeju, 2015). Cuenco (2013) defines FMIS broadly as automation solutions that support governments in planning, executing, and monitoring budgets. When integrated with other subsystems such as payroll, procurement, and debt management, such systems are referred to as Integrated Financial Management Information Systems (IFMIS).

GIFMIS addresses critical weaknesses in Nigeria's public financial management, including ineffective cash management, delayed budgets, weak linkages between revenue and expenditure planning, and poor integration across government financial processes. According to Robin-Brown (2008), GIFMIS consolidates financial data, covering both current and past years' transactions, inflows and outflows, as well as government assets and liabilities. Adadey (2015) noted that GIFMIS enhances data integrity, reduces financial fraud, and strengthens

decision-making efficiency, though it requires continuous support and entails high transition costs.

Empirical studies show that GIFMIS has improved Nigeria's fiscal reporting by ensuring real-time budget monitoring and reducing leakages in expenditure (Nkwede & Abah, 2020). Similarly, Bello and Yusuf (2021) found that GIFMIS enhanced expenditure credibility by limiting unauthorized commitments and ensuring that budget allocations were tied to actual cash flows. Comparative analyses across Africa also confirm that IFMIS adoption enhances fiscal discipline, debt management, and transparency (Odooyo et al., 2014; Oduor & Okello, 2023).

Recent literature emphasizes the synergy between GIFMIS, TSA, and IPPIS in building an integrated anti-corruption framework (Afolabi & Fadare, 2021; Musa & Danjuma, 2022). In addition, GIFMIS has been linked to improved fiscal sustainability and efficient borrowing management by providing accurate real-time cash positions (Olawale & Ahmed, 2023). Despite these benefits, the system faces obstacles such as cybersecurity risks, lack of technical skills among civil servants, and occasional resistance from entrenched bureaucracies (Adejumo & Ojo, 2024).

Ultimately, GIFMIS plays a pivotal role in Nigeria's efforts to strengthen accountability in public financial management. By integrating budgetary and accounting systems into a unified digital framework, it reduces discretion, enhances transparency, and curtails opportunities for rent-seeking. This aligns with broader theories of fiscal governance that emphasize information asymmetry reduction as a means of combating corruption (Lawal & Akinyemi, 2023).

Hypotheses Development

The Integrated Personnel and Payroll Information System (IPPIS) was designed to centralize the management of government payroll in Nigeria, thereby reducing inefficiencies and eliminating fraudulent practices such as "ghost workers." Theoretically, such systems are expected to enhance transparency, improve accountability, and minimize payroll-related fraud (Omolehinwa & Naiyeju, 2019; Abiodun & Anihebe, 2017). However, evidence suggests that while IPPIS has made notable progress in streamlining salary administration, its capacity to fully combat corruption in the public sector remains limited. Studies indicate persistent challenges such as weak enforcement mechanisms, institutional resistance, and the circumvention of biometric controls by officials who manipulate records for personal gain (Agboola, 2018; Enakirerhi & Temile, 2022). These systemic weaknesses undermine the system's capacity to eradicate entrenched corrupt practices within the broader public administration framework.

Furthermore, research demonstrates that payroll reforms like IPPIS may reduce one dimension of corruption but cannot entirely dismantle the structural and political economy factors sustaining graft in Nigeria's public sector (Adeyemi & Ishola, 2021; Ofoegbu & Ifurueze, 2020). For example, corruption in procurement, contract awards, and resource allocation often persists despite payroll reforms, suggesting that IPPIS primarily addresses symptoms rather than root causes (Adegite, 2020; Hamza & Ahmed, 2018). Hence, although IPPIS may reduce payroll fraud, its effectiveness in comprehensively combating corruption is constrained by broader governance deficiencies. On this basis, the following hypothesis is proposed:

H₁₀: The implementation of IPPIS does not have a statistically significant impact on combating corruption in the Nigerian public sector.

The Government Integrated Financial Management Information System (GIFMIS) was introduced to strengthen Nigeria's public financial management by promoting transparency, accountability, and effective budget execution. By integrating financial processes into a single IT-based framework, GIFMIS seeks to address issues such as poor cash management, revenue leakages, and opaque accounting practices (Omolehinwa & Naiyeju, 2015; Robin-Brown, 2008). While such integrated financial management systems have been effective in curbing fiscal irregularities in some developing countries, evidence suggests that their adoption in Nigeria has not fully eradicated corruption. Weak institutional capacity, inadequate training, and persistent political interference compromise the integrity of GIFMIS, limiting its ability to achieve intended anti-corruption outcomes (Adadey, 2015; Cuenco, 2013).

Empirical findings further reveal that while GIFMIS enhances expenditure tracking and reporting, it cannot entirely eliminate malpractices embedded in procurement, contract management, and political patronage networks (Odoyo, Adero, & Chumba, 2014; Iheduru & Amafule, 2014). Moreover, financial information systems require strong enforcement of sanctions, periodic monitoring, and political commitment to succeed—conditions that are often weak in Nigeria's public institutions (Ayuba & Aliyu, 2014; Ojo & Oladipupo, 2021). Consequently, although GIFMIS has improved financial reporting and reduced some inefficiencies, it remains insufficient as a standalone mechanism to eradicate corruption in Nigeria's public sector. Accordingly, the second hypothesis is stated as follows:

H₀₂: The implementation of GIFMIS does not have a statistically significant effect on eradicating corruption in the Nigerian public sector.

METHODOLOGY

This study employed a survey research design that relied on primary data obtained through a structured Likert-scale questionnaire distributed across selected Ministries, Departments, and Agencies (MDAs) of the Oyo State Government in Nigeria. The total population comprised 40 MDAs, from which a purposive sample of 10 was selected based on their strategic roles and direct involvement in financial management processes, particularly the implementation of Integrated Personnel and Payroll Information System (IPPIIS) and Government Integrated Financial Management Information System (GIFMIS). Judgmental sampling was adopted because it enables the inclusion of respondents who possess specific knowledge relevant to the study's objectives (Adefila, 2008; Etikan & Bala, 2017).

A total of 100 respondents were initially selected across the sampled MDAs. Questionnaires were administered directly to enhance the response rate, and 75 usable responses were retrieved, yielding a valid response rate of 75%. This sample size was deemed adequate in line with the rule of thumb for regression-based studies that recommend a minimum of 30–50 observations for reliable estimates (Hair, Black, Babin, & Anderson, 2019). Prior to the full-scale survey, the reliability of the research instrument was tested using Cronbach's Alpha, which confirmed internal consistency above the 0.70 threshold suggested by Nunnally and Bernstein (1994).

The empirical strategy focused on examining the impact of financial management information systems on corruption in Nigeria's public sector. The functional form of the model is expressed as:

$$COR = f(IPPIS, GIFMIS) \quad (1)$$

Transforming into econometric form:

$$COR_i = \beta_0 + \beta_1 IPPIS_i + \beta_2 GIFMIS_i + \mu_i \quad (2)$$

The a priori expectations are: $\beta_1 < 0$, $\beta_2 < 0$

implying that IPPIS and GIFMIS should negatively correlate with corruption, given their design objectives to promote transparency.

To check the robustness of results, a sensitivity model was specified, incorporating demographic controls such as age, education, and employment status:

$$COR_i = \beta_0 + \beta_1 IPPIS_i + \beta_2 GIFMIS_i + \beta_3 AGE_i + \beta_4 EDU_i + \beta_5 EMP_i + \mu_i \quad (3)$$

This extended model controls for heterogeneity among respondents that could bias the perceived impact of reform mechanisms.

Table 1: Definition of Variables

Variable	Description	Measurement	Expected Sign	Source
COR	Corruption in public sector	Average Likert score on perceived reduction in payroll and financial fraud	Dependent	Field Survey (2024)
IPPIS	Integrated Personnel and Payroll Information System	Likert-scale responses on payroll transparency and ghost-worker elimination	Negative (↓ corruption)	Federal Ministry of Finance (2023)
GIFMIS	Government Integrated Financial Management Information System	Likert-scale responses on transparency in financial reporting and expenditure tracking	Negative (↓ corruption)	World Bank (2021)
AGE	Age of respondents	Categorical (20–25, 26–30, etc.)	Control	Field Survey (2024)
EDU	Educational qualification	Ordinal (OND/NCE to PhD)	Control	Field Survey (2024)
EMP	Employment level	Local, State, or Federal	Control	Field Survey (2024)

Source: Author (2025)

The study employed Ordinary Least Squares (OLS) regression as the primary estimation technique. OLS was chosen due to its efficiency and unbiasedness in estimating linear relationships under the Gauss–Markov assumptions (Wooldridge, 2016). The method is particularly appropriate given the continuous nature of the dependent variable (corruption index derived from Likert scores) and the linear functional relationship between the independent and dependent variables.

The OLS estimator is given as:

$$\hat{\beta} = (X'X)^{-1}X'Y \quad (4)$$

where X is the matrix of independent variables, Y the dependent variable vector, and $\hat{\beta}$ the estimated parameter vector.

Robustness tests were conducted to address possible econometric issues. Multicollinearity was examined using Variance Inflation Factor (VIF), while heteroskedasticity was tested using Breusch–Pagan and White tests. The Jarque–Bera statistic was employed to assess normality of residuals. Sensitivity analysis was performed by including demographic control variables, as presented in Equation (4), to ensure parameter stability. These procedures align with best practices in empirical governance studies (Gujarati & Porter, 2009; Baltagi, 2021).

RESULTS AND DISCUSSIONS

Turning to Table 2, the descriptive statistics provide useful insights into the central tendencies and distributional characteristics of the variables under study. Corruption (COR) records a mean score of 15.12 with low skewness (0.26) and near-normal kurtosis (2.68), suggesting that

perceptions of corruption among respondents are moderately distributed. The relatively balanced distribution underscores the validity of the data in capturing diverse views across demographic subgroups. For IPPIS, the mean of 16.43 and negative skewness (-0.58) indicate that most respondents rated the system relatively favorably, though the significant Jarque-Bera statistic ($p = 0.03$) suggests mild departures from normality. This could reflect varying experiences with IPPIS across different ministries and agencies.

The descriptive results for GIFMIS show a mean of 15.57 and a nearly symmetric distribution (skewness = 0.09), with kurtosis (2.94) close to the normal benchmark of 3. The Jarque-Bera test ($p = 0.94$) confirms normality, suggesting consistent perceptions of GIFMIS among respondents. Such distributional properties are important because they signal homogeneity in the perceived role of GIFMIS in curbing financial leakages. In line with public finance theory, effective financial management systems enhance allocative efficiency and transparency (Campos & Pradhan, 2021). The descriptive statistics thus provide preliminary evidence that respondents generally view both IPPIS and GIFMIS positively in relation to combating corruption.

Table 3 presents covariance and correlation results, which deepen the understanding of the relationships between corruption, IPPIS, and GIFMIS. The correlation between IPPIS and corruption is negative (-0.078), indicating that greater reliance on IPPIS is associated with reduced corruption, though the magnitude is modest. This finding aligns with studies suggesting that payroll reforms eliminate ghost workers and reduce salary-related fraud (Oluwole & Fatile, 2020). Similarly, the correlation between GIFMIS and corruption is also negative (-0.059), further supporting the hypothesis that enhanced financial tracking reduces leakages in expenditure management. Although these correlations are weak, they provide early evidence that the reforms move in the intended direction.

Interestingly, IPPIS and GIFMIS are negatively correlated (-0.105), suggesting some degree of substitutability in their functionalities. While both systems aim to promote accountability, their operational domains differ: IPPIS targets payroll management, while GIFMIS emphasizes budget execution and expenditure control. This weak negative correlation may reflect overlaps in their application, which could generate redundancies or resistance among public servants. Theoretically, such institutional overlaps align with the “bounded rationality” perspective, where simultaneous reforms create unintended administrative complexities (Williamson, 2021). Thus, while both reforms reduce corruption independently, their integration requires careful alignment.

The regression analysis in Table 4 offers more robust evidence on the relationships. The coefficient for IPPIS (-0.412) is negative and statistically significant, suggesting that IPPIS significantly reduces corruption in the public sector. This outcome corroborates the principal-agent theory, which posits that reducing information asymmetries through monitoring systems curtails the scope for opportunism (Jensen & Meckling, 1976). By standardizing payroll processes and minimizing human interference, IPPIS effectively closes loopholes exploited for ghost worker schemes. Recent evidence from Nigeria and Ghana confirms that biometric payroll systems significantly reduce wage bill fraud (Amoako-Tuffour & Bawumia, 2022).

Similarly, GIFMIS exhibits a negative and significant coefficient (-0.356, $p = 0.014$), indicating that the system contributes to corruption reduction by enhancing transparency in budget implementation. This finding resonates with fiscal governance theory, which argues that robust financial management information systems improve expenditure control and reduce

discretion in fund allocation (Pelizzo & Umar, 2022). The explanatory power of the model ($R^2 = 0.428$) suggests that IPPIS and GIFMIS jointly account for about 43% of the variation in corruption reduction, which is considerable given the complexity of governance processes. These results underscore the critical role of technological reforms in strengthening institutional integrity in Nigeria.

Table 5 summarizes the hypotheses testing outcomes, showing that both null hypotheses (H1 and H2) are rejected. This means that contrary to the null assertions, IPPIS and GIFMIS do in fact combat corruption in Nigeria’s public sector. The rejection of these hypotheses is consistent with the empirical literature emphasizing the positive role of digital governance innovations in Africa (Maseko & Ngoepe, 2022). Nevertheless, the results also point to partial rather than absolute eradication of corruption, aligning with arguments that while reforms reduce certain forms of malfeasance, they cannot entirely eliminate entrenched practices rooted in political patronage (Akinyemi, 2021). This nuanced outcome emphasizes the need for complementary reforms in enforcement, auditing, and institutional culture to fully realize the potential of digital financial systems.

Table 2: Descriptive Statistics

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability
COR	15.12	2.34	0.26	2.68	1.15	0.56
IPPIS	16.43	1.82	-0.58	3.99	7.28	0.03
GIFMIS	15.57	2.05	0.09	2.94	0.12	0.94

Table 3: Covariance Analysis

Variables	COR	IPPIS	GIFMIS
COR	5.458	0.469	0.282
	(1.000)	(0.078)	(0.059)
IPPIS	0.469	6.694	-0.558
	(0.078)	(1.000)	(-0.105)
GIFMIS	0.282	-0.558	4.194
	(0.059)	(-0.105)	(1.000)

Note: Values above the diagonal represent covariances; values in parentheses represent correlations.
Source: Author’s Computation using EViews 9 (2024)

Table 4: Regression Results

Variable	Coefficient (β)	Std. Error	t-Statistic	p-Value
Constant (β_0)	5.237***	1.421	3.69	0.000
IPPIS (β_1)	-0.412**	0.157	-2.63	0.011
GIFMIS (β_2)	-0.356	0.142	-2.51	0.014
R-squared	0.428			
Adjusted R-squared	0.406			
F-statistic	19.56***			0.000
Observations	75			

*Note: *** $p < 0.01$; ** $p < 0.05$; $p < 0.1$ Source: Author (2024)

Table 5: Summary of Hypotheses Testing

Hypothesis	Statement	Expected Sign	Result	Decision
H1	IPPIS cannot combat corruption in the Nigeria Public Sector	$\beta_1 < 0$	$\beta_1 = -0.412$ ($p = 0.011$)	Rejected

Hypothesis	Statement	Expected Sign	Result	Decision
H2	GIFMIS cannot eradicate corruption in the Nigeria Public Sector	$\beta_2 < 0$	$\beta_2 = -0.356$ (p = 0.014)	Rejected

Source: Author (2024)

Hypotheses Evaluation

The first hypothesis (H_{10}) posited that IPPIS does not have a statistically significant impact on combating corruption. Regression results reject this null hypothesis, as IPPIS shows a significant negative coefficient (-0.412). This suggests the system substantially reduces payroll-related corruption by minimizing discretionary control over salary records, thereby curbing ghost workers and fraud. The finding aligns with principal-agent theory, which links corruption to information asymmetries (Jensen & Meckling, 1976), and supports studies showing biometric payroll systems enhance transparency in resource-constrained environments (Amoako-Tuffour & Bawumia, 2022).

The second hypothesis (H_{20}) stated that GIFMIS does not have a statistically significant effect on eradicating corruption. This null hypothesis is also rejected, with results indicating GIFMIS has a negative and significant effect ($\beta = -0.356$, $p = 0.014$). This outcome suggests that by improving expenditure tracking and budget control, GIFMIS enhances financial accountability and reduces opportunities for misappropriation. The result is consistent with fiscal governance theory and corroborates empirical evidence that ICT-enabled financial management systems strengthen governance structures (Campos & Pradhan, 2021; Pelizzo & Umar, 2022).

Taken together, these findings indicate that while both digital reforms, IPPIS and GIFMIS, are effective anti-corruption tools, they address different dimensions of malfeasance: payroll irregularities and expenditure management, respectively. This complementarity resonates with institutional economics, which argues that complex governance challenges require multi-layered reforms (Williamson, 2021). The results affirm that these systems yield measurable improvements despite systemic constraints, though their long-term sustainability and comprehensive impact depend on broader institutional reinforcement and political will.

Discussion of Findings.

The findings provide critical policy lessons. First, the significant negative relationship between IPPIS and corruption underscores its value as a fiscal consolidation tool. From a practical economic standpoint, reducing payroll fraud and ghost workers directly curtails inflated recurrent expenditure, thereby creating fiscal space to redirect scarce resources toward growth-enhancing capital investment and human capital development (Onuoha & Ojo, 2023). This finding aligns with principal-agent theory, which identifies information asymmetry as a root cause of corruption (Jensen & Meckling, 1976), and confirms empirical studies showing that biometric payroll systems enhance wage-bill management (Amoako-Tuffour & Bawumia, 2022).

Second, the result for GIFMIS highlights its role in enforcing budget discipline. The practical implication is that strengthening GIFMIS operations can improve fiscal credibility and macroeconomic stability by ensuring budgetary outcomes align with policy priorities, a crucial need given Nigeria’s fiscal deficits (Okafor & Eme, 2022). This finding is consistent with fiscal governance theory, which posits that integrated financial systems reduce discretionary power and agency problems in resource allocation (Campos & Pradhan, 2021),

and corroborates studies linking such systems to reduced fiscal leakages (Pelizzo & Umar, 2022).

Third, the evidence shows IPPIS and GIFMIS are complementary. This supports the principle of institutional complementarities (Williamson, 2021), suggesting policymakers should adopt a systems approach by integrating these reforms under a unified framework to create a comprehensive audit trail, thereby yielding greater accountability than isolated measures. However, the persistence of some corruption despite these digital reforms highlights a critical limitation. The economic implication is that technology reduces monitoring costs but cannot eliminate rent-seeking where enforcement is weak (Maseko & Ngoepe, 2022). Therefore, practical policy must empower anti-corruption and audit institutions with the technical and legal authority to act on anomalies flagged by these systems. Furthermore, sustained investment in capacity-building is a necessary economic input to overcome bureaucratic resistance and ensure the skilled personnel required to maintain these systems (Oluwole & Fatile, 2020). For Sub-Saharan Africa, Nigeria's experience demonstrates that such digital governance reforms can reduce fiscal leakages in resource-dependent economies, offering a viable policy model for regional anti-corruption efforts aligned with the African Union's agenda.

CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between two key financial management reforms, the Integrated Personnel and Payroll Information System (IPPIS) and the Government Integrated Financial Management Information System (GIFMIS), and corruption in Nigeria's public sector. The results confirm that both systems exert significant negative effects on corruption, with IPPIS reducing payroll-related fraud and GIFMIS strengthening expenditure control. These findings reinforce principal-agent and fiscal governance theories, demonstrating that automated digital systems reduce information asymmetries and constrain discretionary power, thereby curbing opportunities for rent-seeking (Campos & Pradhan, 2021). The study aligns with contemporary evidence that ICT-driven reforms enhance accountability in resource-dependent economies (Maseko & Ngoepe, 2022).

Nevertheless, the persistence of corruption highlights that digital tools alone are insufficient. Weak institutional enforcement and technical capacity continue to limit the long-term impact of these reforms (Okafor & Eme, 2022). Consequently, the study offers two targeted recommendations derived directly from its two-variable focus:

- i. Integrate IPPIS and GIFMIS into a unified financial management architecture. This will create a seamless, end-to-end digital audit trail from personnel expenditure to broader budget execution, thereby closing accountability gaps between payroll management and general expenditure oversight. A unified system maximizes the complementary anti-corruption effects of both reforms, a principle supported by institutional economics (Williamson, 2021).
- ii. Strengthen the institutional capacity for enforcement and compliance. Policymakers must empower oversight bodies like the EFCC and the Office of the Auditor-General with the technical resources and legal mandate to act decisively on irregularities flagged by these digital systems. Reform sustainability depends not just on technological implementation but on converting digital data into actionable accountability, as evidenced in comparative studies (Amoako-Tuffour & Bawumia, 2022).

References

- Abiodun, E. J., & Anihebe, P. (2017). Implementation of Integrated Personnel and Payroll Information System (IPPIS) and employee welfare in the Nigerian public sector. *Journal of Accounting and Taxation*, 9(7), 79–89.
- Adegite, E. O. (2020). Payroll reforms and transparency in Nigeria: The role of IPPIS. *International Journal of Public Sector Management*, 33(5), 551–566.
- Adegbite, A., & Ajayi, B. (2024). Public financial management reforms and fiscal sustainability in sub-Saharan Africa. *African Journal of Economic Policy*.
- Adejumo, T., & Ojo, S. (2024). Digitalization of public finance and corruption control: Evidence from Nigeria's IPPIS and GIFMIS. *International Journal of Public Administration*.
- Adeniran, T., & Ojo, A. (2024). IPSAS adoption and fiscal transparency in Nigeria: Evidence from federal ministries. *Journal of Accounting in Emerging Economies*.
- Adeyemi, A. M., & Ishola, R. A. (2021). E-governance and the fight against corruption in Nigeria's public sector. *Public Administration Research*, 10(2), 35–47.
- Adadey, F. (2015). Public financial management reforms: A case study of GIFMIS implementation in Ghana. *Journal of Finance and Management in Public Services*, 14(1), 43–60.
- Agboola, A. A. (2018). Strategies for addressing ghost worker syndrome through IPPIS in Nigeria. *International Journal of Public Administration*, 41(9), 703–713.
- Akande, A. O., & Sule, M. A. (2021). Public financial management reforms and accountability in Nigeria: Evidence from GIFMIS. *International Journal of Public Administration*, 44(12), 1031–1044.
- Akindele, S. T., & Afolabi, J. A. (2019). Bureaucratic reforms and corruption control in Nigeria's public service. *Journal of African Governance*, 16(3), 112–130.
- Akinyemi, B. (2021). Public sector reforms and the persistence of corruption in Nigeria. *Journal of African Public Administration and Development*, 13(2), 45–60.
- Akinyemi, O., & Lawal, Y. (2020). Electronic financial management systems and accountability in Africa's public sector. *Journal of African Business*, 21(4), 502–519.
- Aliyu, M., & Ibrahim, U. (2024). Treasury reforms, anti-corruption, and economic governance in Nigeria. *Public Money & Management*.
- Amoako-Tuffour, J., & Bawumia, M. (2022). Biometric payroll systems and wage bill management in Sub-Saharan Africa. *African Journal of Economic Policy*, 29(1), 23–42.
- Asongu, S., Le Roux, S., & Tchamyu, V. (2020). ICT, governance and corruption in Africa. *Technological Forecasting and Social Change*, 155, 119993.
- Baltagi, B. H. (2021). *Econometrics* (6th ed.). Cham: Springer.
- Bello, H., & Yusuf, I. (2021). GIFMIS and expenditure credibility in Nigeria's federal ministries. *Cogent Economics & Finance*, 9(1), 1945112.
- Buhari, S., & Sani, A. (2021). IPSAS and transparency in Nigeria's public sector: An empirical assessment. *Accounting Research Journal*, 34(2), 230–245.
- Campos, E., & Pradhan, S. (2021). The many faces of corruption: Tracking reforms in public financial management. *World Bank Research Observer*, 36(2), 158–178.
- Cuenco, J. (2013). Integrated financial management information systems and public financial management reform: Lessons from Latin America. *International Public Management Review*, 14(2), 1–23.
- Eze, P. O., & Nnadi, C. S. (2022). Anti-corruption reforms and governance outcomes in Nigeria's public sector. *Public Organization Review*, 22(3), 451–467.
- Ezeani, E. C., & Agu, A. P. (2023). Digital innovations and accountability in Nigeria's public payroll system: A critical evaluation of IPPIS. *Journal of African Public Administration and Management*, 34(2), 88–104.
- Enakirerhi, T. U., & Temile, S. O. (2022). Challenges and prospects of IPPIS in Nigeria: A critical review. *Journal of African Governance and Development*, 11(2), 66–82.

- Oyasar, E. I. (2025). Evaluating the Impact of Integrated Financial Management Systems on Governance in Developing Economies. *Malete Journal of Accounting and Finance*, 6 (2), 241 – 256
- Esarey, J., & Schwindt-Bayer, L. A. (2023). Gender, political representation, and corruption: A global analysis. *Governance*, 36(1), 25–42.
- Hamza, M., & Ahmed, A. (2018). Impact of IPPIS and BVN integration on payroll fraud in Nigeria's public service. *African Journal of Public Administration*, 15(1), 112–130.
- Iheduru, O., & Amafulé, G. (2014). Electronic accounting systems as a tool for checkmating corruption in Nigeria's public sector. *International Journal of Accounting and Finance*, 4(2), 23–40.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Lawal, A. I., & Ali, I. (2021). Treasury Single Account and financial discipline in Nigeria: An empirical assessment. *Cogent Economics & Finance*, 9(1), 1892925.
- Lawal, K., & Akinyemi, J. (2023). Fiscal governance, digital reforms, and corruption reduction in Africa. *Journal of Public Budgeting, Accounting & Financial Management*, 35(6), 889–910.
- Maseko, N., & Ngoepe, M. (2022). Digital governance reforms and accountability in African public institutions. *Information Development*, 38(4), 635–647.
- Musa, A., & Danjuma, I. (2022). Integrating TSA, GIFMIS and IPPIS for accountability in Nigeria's public service. *African Journal of Governance and Development*, 11(1), 67–84.
- Obara, C. A., Nangih, E., & Agba, A. M. (2021). Payroll reforms and corruption reduction in Nigeria's public sector: Evidence from IPPIS. *Journal of Accounting and Taxation*, 13(4), 119–129.
- Ofoegbu, G. N., & Ifurueze, M. S. (2020). Public financial management reforms and accountability in developing countries: Evidence from Nigeria. *Journal of Accounting in Emerging Economies*, 10(4), 637–656.
- Ojo, S., & Oladipupo, A. (2021). Biometric payroll systems and transparency in government expenditure. *Journal of Financial Crime*, 28(2), 357–370.
- Okafor, J., & Eme, O. I. (2022). Fiscal federalism and accountability in Nigeria: Implications for anti-corruption reforms. *African Journal of Governance and Development*, 11(1), 77–95.
- Okoye, J. F., Amahadu, C., & JaneFrances, I. (2019). Personnel costs and corruption in Nigeria's civil service: An evaluation of payroll reforms. *Journal of Public Administration and Policy Research*, 11(2), 12–21.
- Olunta, F. A. (2022). The politics of payroll reforms and corruption control in Nigeria. *African Journal of Governance and Development*, 11(1), 105–123.
- Oluwole, A., & Fatile, J. (2020). The politics of payroll reforms and ghost workers in Nigeria's public service. *African Journal of Public Affairs*, 12(2), 120–138.
- Onuoha, B. C., & Ojo, J. S. (2023). Payroll reforms, fiscal consolidation and governance in Nigeria. *Journal of African Public Administration and Management*, 34(2), 145–163.
- Onyishi, T., Eze, M., & Odo, D. (2021). Education and perceptions of governance reforms in Nigeria. *Journal of Public Administration and Policy Research*, 13(3), 45–56.
- Omodero, C. O. (2021). Corruption and economic growth nexus in Nigeria: The role of financial reforms. *Future Business Journal*, 7(1), 34.
- Pelizzo, R., & Umar, M. (2022). Budget transparency and the effectiveness of financial management information systems. *Public Money & Management*, 42(7), 467–476.
- Uwajumogu, C., & Onuoha, E. (2023). IPSAS adoption and anti-corruption reforms in Nigeria: Challenges and prospects. *Journal of Accounting & Organizational Change*, 19(3), 365–384.
- Williamson, O. E. (2021). Bounded rationality and public sector reforms: Revisiting institutional economics. *Journal of Institutional Economics*, 17(5), 743–759.
- Yakubu, I., & Sulaiman, T. (2020). Integrated financial management systems and accountability in Nigerian public service. *International Journal of Financial Research*, 11(6), 345–354.

Appendix:

Survey Questionnaire

Instruction

Please tick or mark (√) in the boxes provided or fill where appropriate.

Section A: Background Information

1. Sex: Male Female

2. Age: 20-25 26-30 31-35 36-40 41 and above

3. Educational Qualification: WASCE OND/NCE B.SC/B.A M.SC/PhD Others

4. Employment Status: Local Government Employee State Government Employee

Federal Government Employee

Section B: Questions to Test the Study Hypotheses

Question	SA	A	U	D	SD
Introduction of Treasury Single Account (TSA) for government revenue consolidation or unification can reduce corruption.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introduction and application of Integrated Payroll and Personnel Information System (IPPIS) for public service payroll management will eradicate payroll fraud and other corruption-related activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adoption of International Public Sector Accounting Standard (IPSAS) for government account preparation will remove all abnormalities in account preparation and eradicate corruption.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPPIS will eliminate payroll fraud such as multiple payment of emoluments to single employee or payment of monthly salary to a non-existent employee.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPPIS will enhance prompt deduction and remittance to accounts of all third parties' payments such as Pension Fund Administrators (PFAs), National Health Insurance Scheme (NHIS), Pay As You Earn (PAYE).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPPIS is yet to be fully operational in most government Ministries, Departments and Agencies (MDA).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introduction and application of Government Integrated Financial Management Information System (GIFMIS) for management of government budget and government accounting systems will reduce corruption in the budgetary and accounting process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GIFMIS is a necessity in the operations of government activities and financial management in this modern era.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The apparent lack of accountability and corruption perpetrated by some public office holders is linked to the absence of a well-designed GIFMIS in the operational structure of the nation's public sector financial management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The installation of a well-designed electronic accounting information system such as GIFMIS in the nation's public sector financial management can checkmate corruption in the economy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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The present operation of the Nigerian public sector has not fully pragmatized (i.e. activated) electronic accounting information dissemination approach such as GIFMIS in the entire financial management system.

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