

FINANCIAL SECTOR REFORM AND PAYROLL FRAUD IN NIGERIA: ISSUES AND CHALLENGES

BY

**Prof. Mahmoud Umar: Department of Public Administration, Gombe State University, Gombe, Nigeria;
E-mail: umar_mahmoud@gsu.edu.ng**

&

**Usman Bappi: Department of Public Administration, Gombe State University, Gombe, Nigeria;
E-mail: ubappi0013@gsu.edu.ng**

Abstract

Various reforms have been brought to bear on the financial system in Nigeria ostensibly to improve the country's macroeconomic variables and public financial management of the country. Among these reform packages were for example public procurement policies, Government integrated financial management system, or GIFMIS, Integrated Payroll Personnel Information System or IPPIS. The present study centre more on IPPIS having been implemented and public servants in Nigeria view it with mixed reactions and apprehensions. Using content analysis, the study examined IPPIS monitoring of monthly payment of staff emolument and its role on eradicating payroll fraud such as numerous payments of emoluments to single worker or payment to fictitious employees. Findings from the study revealed that the introduction of Integrated Payroll Personnel Information System has reduced incidence of payroll fraud in Nigeria. The study also found out that incidence of ghost worker fraud has been drastically reduced with the implementation of IPPIS. However, the study observed that the system does not enhance accuracy in payment of salaries and promotions. The study recommends among others conducting regular and thorough audits of payroll data to identify inconsistencies, duplicate entries, and discrepancies, implement a robust biometric verification system for employee enrollment and attendance tracking and strengthen data security protocols to safeguard payroll information. This includes encryption, access controls, and regular security assessments to prevent unauthorized access and potential data breaches.

Keywords: Financial Sector, Payroll, Fraud reform and Financial management

Introduction

In recent years, the Nigerian financial sector has withstood a series of transformative reforms aimed at modernizing its operations, fostering transparency, enhancement of institutional efficiency, attraction of foreign investment, establishment of a resilient financial system and bolstering overall economic growth (Okafor & Adegbite, 2020). The Financial Sector reform aims to overhaul regulatory frameworks, enhance technological infrastructure, and streamline financial processes. Central to this reform, the IPPIS was introduced to address the long-standing issue of payroll fraud - a practice that has drained public resources and eroded the credibility of the public sector. The IPPIS exemplifies the government's ambition to implement an efficient, automated, and tamper-proof payroll management system, ensuring that employees receive their rightful compensation and eliminating the siphoning of funds by unscrupulous actors (Adigun & Lawal, 2020). The Integrated Personnel and Payroll Information System (IPPIS) stands as a pivotal case study, representing both the reform efforts and the persisting challenges related to payroll fraud within Nigeria's public administration. Payroll fraud, a persistent challenge within Nigeria's public sector, encompasses various fraudulent activities that lead to the misappropriation of funds designated for employee salaries. Despite past attempts at reform, the issue continues to hinder the country's economic progress. Recent estimates suggest that payroll fraud accounts for a substantial portion of Nigeria's financial losses (Arowolo et al., 2021).

The introduction of the IPPIS was intended to curb this menace by employing biometric verification and digital record-keeping to ensure the accuracy and legitimacy of payroll entries (Omodero, 2021). This study focuses on the intersection of financial sector reform, exemplified by the IPPIS, and the challenges posed by payroll fraud within Nigeria's public sector. By delving into the underlying causes, manifestations, and consequences of this complex issue, we aim to shed light into the dynamics of financial sector reform, the unique features of the

IPPIS, the persistent issue of payroll fraud, and the interplay of these factors to illuminate the overarching issues and challenges faced by Nigeria in its pursuit of a robust public sector payroll system.

Statement of the Problem

Payroll fraud remains a critical and persistent issue within Nigeria's public sector, casting a shadow on the country's quest for transparent governance and efficient financial management. This challenge is particularly pronounced within the Financial Sector, where the Integrated Personnel and Payroll Information System (IPPIS) were introduced as a technological solution to modernize payroll processes and eradicate fraudulent activities. However, despite the implementation of the IPPIS, instances of payroll fraud continue to arise, necessitating a comprehensive exploration of the underlying issues and challenges that sustain its prevalence and hinder the intended effectiveness of the system (Azeez, & Taiwo, 2020). Payroll fraud, involving intentional manipulation of payroll systems to unlawfully divert funds designated for employee salaries, presents a multifaceted challenge that undermines the integrity of Nigeria's financial sector and the equitable distribution of public resources. Ghost workers who are inserted into the payroll through collusion are usually difficult to expose due to the fact that those who ought to stop the ghost names from entering the payroll are part of the crime. There is collaboration within the system that enhances the operation of payroll fraud. Those employees that have been retired, dead or on transfer may be kept on the payroll if payroll managers delay in removing the names of individuals who are no longer in service (Oseni, 2017). This means that the workers are paid salary irrespective of not being present in the office as a staff and did not work and the salaries redirected by the fraudster. This, if not checked will further create loopholes in the payroll system and in the collection of salaries. The IPPIS was conceived as a means to tackle this issue, striving to ensure accuracy, enhance transparency, and prevent unauthorized financial transactions within the financial sector. Nonetheless, the persistence of payroll fraud within the IPPIS underscores a complex set of challenges that extend beyond technological implementation.

At the heart of this issue lies the intricate interplay between the IPPIS as a technological innovation, the broader context of the financial sector, and the underlying impediments that perpetuate payroll fraud. Factors such as suboptimal implementation strategies, technological limitations, insufficient oversight mechanisms, and the adaptability of fraudulent actors collectively impede the IPPIS's ability to fully eradicate payroll fraud. Consequently, the effectiveness of Nigeria's efforts to achieve transparent governance within the financial sector is compromised.

Objectives of the Study

- i. To assess the extent to which IPPIS have contributed to enhancing transparency, efficiency, and accountability in Nigeria's public sector payroll management.
- ii. To investigate and understand the underlying challenges, systemic issues that facilitate the continuation of payroll fraud within the IPPIS.
- iii. To provide recommendations and strategies for enhancing the effectiveness of the IPPIS in preventing and detecting payroll fraud, including suggestions for strengthening.

Research Questions

- i. How does the implementation IPPIS, impact the transparency and efficiency of Nigeria's public sector payroll management?
- ii. What are the key underlying challenges and systemic issues that contribute to the continuation of payroll fraud within the IPPIS?
- iii. How can the IPPIS be optimized to better prevent, detect, and address payroll fraud, considering factors such as implementation strategies, monitoring mechanisms, and the integration of advanced technologies?

Methodology

A research design offers the outline for data collection and analysis. The choice of a research design reveals decisions about priorities involving variety of dimensions of the research process. In the field of social sciences, there are different methods of conducting a research work, depending on the method and type of research. A research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems (Kumar, 2014). For the purpose of this study, the survey design was adopted. According to Brandford University, Survey involves selecting a representative and unbiased sample of subjects drawn from the group you wish to study. Survey method identifies a population of study and from this population a representative or sample was drawn for investigation and collection of data. This was done through questionnaire, interview and observation.

The methodology adopted was the use of secondary data with the aid of content analysis approach. To carry out this study documentary research method was adopted basically from Secondary data. Secondary sources of data consist of all information recorded by someone else or event by observers which is published or unpublished. Keeping this in mind, The researcher massively and largely explores and employs the secondary sources of data collection which aid this work immensely in generating data from facts which are previously discovered by other investigators such as reports (monthly, Quarterly, bi-annually, annually), official documents (i.e. of World Bank, Federal Government of Nigeria, States' Government, Ministries, Departments and Agencies, books, journals, pamphlets, magazines, newspapers, conference papers, articles, etc. that relate to the study.

Findings

Financial Sector Reforms

Financial sector reform in Nigeria refers to the deliberate changes and adjustments made by the Nigerian government and relevant authorities to improve the functioning, stability, efficiency, and inclusivity of the financial system in the country. The Nigerian financial sector comprises various institutions, such as banks, insurance companies, capital markets, and regulatory bodies. Scholars' views on financial sector reform in Nigeria might include the following perspectives:

Chete, L. (2005): Chete discusses the need for financial sector reform in Nigeria to enhance its contribution to economic growth and poverty reduction. He emphasizes the importance of improving the efficiency, stability, and effectiveness of the financial system through measures such as regulatory reforms, improved corporate governance, and increased access to financial services. Akinlo, (2006) highlights the role of financial sector reforms in enhancing economic stability and reducing vulnerabilities. He suggests that reforms should address issues related to banking sector soundness, monetary policy effectiveness, and the development of financial markets to attract investment and promote economic growth. Aigbokhan, (2007) discusses the importance of financial sector reform in Nigeria to achieve sustainable economic development. He emphasizes the need to address issues like credit availability, interest rate liberalization, and the expansion of microfinance institutions to promote financial inclusion and reduce poverty.

Ojo, (2011) explores the challenges and prospects of financial sector reforms in Nigeria. He discusses the necessity of addressing issues related to bank distress, weak regulatory frameworks, and inadequate risk management practices. He also highlights the role of technology in driving financial innovation. Oseni & Asaolu, (2015) discuss the impact of financial sector reforms on economic growth in Nigeria. They argue that well-implemented reforms can lead to increased financial intermediation, capital mobilization, and investment, thereby fostering economic development. Ogbonna, & Ebimobowei, (2017) emphasize the need for financial sector reforms to enhance financial inclusion and promote sustainable economic growth. They highlight the role of digital financial services, such as mobile banking, in expanding access to financial services among underserved populations. Iyoha, & Oriakhi, (2018) discuss the impact of financial sector reforms on the Nigerian banking industry. They address issues such as recapitalization, consolidation, and regulatory changes that have affected the stability and performance of banks in the country.

Issues and Challenges related to Financial Sector Reform in Nigeria

One of the most central issues and challenges of Financial Sector reform is weak Regulatory Framework and Lack of Financial Inclusion: Scholars have pointed out the challenges stemming from weak regulatory frameworks, including gaps in supervision and enforcement that can lead to fraud, misconduct, and instability in the financial sector (Oseni, 2017). And the issue of financial exclusion, particularly in rural areas and among vulnerable populations, has been a concern. Scholars highlight the importance of extending financial services to the unbanked and underbanked to foster inclusive economic growth (Olokoyo et al., 2020). Secondly, Non-Performing Loans (NPLs): High levels of non-performing loans in Nigerian banks have been a recurring challenge. Scholars stress that addressing NPLs is crucial for maintaining the health and stability of the financial system (Omodero, 2021). Also inadequate financial infrastructure, including payment systems and credit bureaus, can hinder the efficiency of financial transactions. Scholars argue that improving infrastructure is vital for enhancing overall financial sector performance (Ojo, 2011). Thirdly, Corruption and Governance Issues and Macroeconomic Instability: Scholars have noted the presence of corruption and weak governance practices in the financial sector. These issues can undermine investor confidence and the integrity of financial institutions (Ojo, 2011). Macroeconomic Instability Factors such as inflation, exchange rate volatility, and economic uncertainties can impact the financial sector. Scholars emphasize the need for coordinated monetary and fiscal policies to ensure stability (Obadan, 2016).

Fourthly, Limited Access to Long-Term Financing, technological and Innovation Gaps: A lack of access to long-term financing options has been identified as a challenge for businesses and economic growth. Scholars highlight the importance of developing robust capital markets to address this issue (Adegaju et al., 2018). While technological advancements offer opportunities, there are challenges related to the adoption of FinTech and digital financial services. Scholars discuss the need for regulations that balance innovation and risk (Oseni, 2017). Lastly, Skill and Capacity Gaps, Political and Policy Instability, The financial sector requires skilled professionals to drive reform effectively. Scholars have highlighted the need for capacity building and training programs to develop a qualified workforce (Olokoyo et al., 2020). Changes in political leadership and policy inconsistencies can also impact financial sector reform efforts. Scholars stress the importance of sustained commitment to reform agendas (Obadan, 2016).

Concept of Payroll Fraud

The term payroll can be seen from both a narrow and broad perspectives. In the narrow view, it is referred to as a list of employees who get paid from particular company usually showing individual employee pay information. Payroll in the broad perspective refers to the totality of compensation a business pays its employees in a given period of time. Payroll expenses are labour costs which include salaries and wages of employees which he/she takes home and other payments that the employer makes on behalf of the employee such as health, insurance and similar benefits Accounting Tools (2019). The term fraud is defined by different authors in different but related ways. The root meaning of the Latin word, from which fraud is taken, carries a variety of meaning. These could be summed up in the way fraud is perceived in the law. "In law, fraud is intentional deception to secure unfair or unlawful gain or to deprive a victim of a legal right" Wikipedia (2019). Some others as cited by Gbalam (2015), perceived fraud as deliberate falsification, concealment or omission of facts with the intention of deceiving a person or organization which would result to financial detriment to the victim.

Pay rolling is the process which an organization passes through to pay its employees. It deals with records relating to the employees' salaries, deductions bonuses and income (Murray, 2017). Rietsema (2018), described payroll as a means or process by which an employee is paid by the organization for the services rendered. Payroll fraud is considered as any arrangement by which an employee causes the organization to pay money vide false claims (Marasco, 2007). Lomer (2018) argued that payroll fraud involves the stealing of organizations money using the organizations payroll system; and can be carried out by both management and regular employees. Payroll fraud is a global problem especially in the less developed countries of the world where people see their

official position as opportunities to make excess moneys. Payroll fraud can be seen as means or technicality employed to divert money unlawfully either for the benefit of the perpetrator or any other person.

Forms/Types of Payroll Fraud/Schemes

While there are various types of payroll fraud, the following have been identified as the common kinds of payroll fraud namely: Ghost Staff Fraud, Timesheet Fraud, Wage Falsification fraud, Fraud in commissions and bonuses, Expense repayment fraud, misclassification of members of Staff (Lomer, 2018).

- i. Ghost Worker/ Staff Fraud: This occurs where employ meet record is opened or created in respect of anon-existent employee and wages paid to the fake employee, which is later withdrawn and used by the perpetrator. A ghost employee can also be an individual who is recorded on the payroll system but who does not work for the organization. The ghost can be a real person who knowingly or unknowingly is placed on the payroll or a fictitious person invented by the fraudster.
- ii. Time Sheet Fraud: this is committed when an employee's bloats the number of hours he/she has worked in his/her time sheet and/is where an employee clocks in time for another employee which was not earned. Time sheet fraud occurs when the record of hours worked is falsified, and if this is not detected, it results in the workers being paid for more hours than they have worked. The risk of fraudulent time sheets being processed by the organization increases if the necessary controls and oversight are lacking.
- iii. Wage Falsification Fraud: This is a form of payroll fraud where an employee's salaries are cooked (usually increased) with the intention of later utilizing the excess. This scheme is often times perpetuated by collusion of the employee and those responsible for paying salaries or wages. This form of fraud is common in the contemporary local government system in Nigeria. the introduction of biometric and incessant verifications have ameliorated the existence of fictitious names in the payment vouchers with this, the payroll officers resort to escalation of salaries of workers while they make the necessary deductions before the actual payment of salaries.
- iv. Fraud in commissions and Bonuses: This occurs when an employee inflates his/her sales records just for the purpose of claiming higher bonuses or commission on sales. This form of fraud is mostly prevalent in private organizations where profit maximization is the highest priority. In order to maximize profit, the commission or bones is dependent on the sales the employee makes in a day, week, month or annually. It depends on the agreement between the business owner and the employee. The employees do inflate the sale record in order to earn more commissions and bonuses and this amount to fraud.
- v. Expense Reimbursement Fraud: This fraud occurs when an employee claims expenses which he/she never incurred. For instance, Making claims for fraud cost which were cancelled or presenting more than one claim for the same expense, submitting fake receipts for payment and attending receipts in order to increase re-imburements.

Issues and challenges of Payroll Fraud in Nigeria

- a. Ghost Workers and Padding Payrolls: Ghost workers are fictitious employees added to the payroll to divert funds. They can be the result of collusion between employees and officials. "Ghost workers in the public service account for over 60% of the workforce," says [Onuoha, 2018].
- b. Weak Internal Controls: Lack of stringent internal controls and oversight can contribute to payroll fraud. "Inadequate internal controls facilitate fraudulent activities," suggests [Olaniyan & Odunsi, 2019].
- c. Manual Processes and Lack of Automation: Reliance on manual processes can make it easier to manipulate payroll data. "Manual systems are susceptible to errors and fraud," highlights [Ilo, 2015].
- d. Inaccurate Data Entry: Errors in data entry, intentional or not, can lead to overpayments or incorrect salary calculations. "Data entry mistakes are often exploited for financial gain," notes [Uzomah & Ogochukwu, 2020].
- e. Poor Record Keeping: Lack of proper record-keeping can make it difficult to trace irregularities. "Inadequate record keeping hinders effective audit trails," indicates [Okafor, 2017].

- f. Technology Vulnerabilities: Outdated technology or lack of cybersecurity measures can lead to unauthorized access or data breaches. "Inadequate technological safeguards expose payroll data to risks," states [Okoye & Oluwunmi, 2016].
- g. Lack of Stringent Penalties: Weak legal consequences for payroll fraud may not act as effective deterrents. "Lack of severe penalties contributes to recurring incidents," observes [Adelakun, 2014].

The Integrated Personnel and Payroll Information System (IPPIS) in Nigeria

The integrated personnel and payroll information system (IPPIS) is one of the strategic implementation of the federal government of Nigeria to digitalize the manual based and files system marred with corruption, inefficiency and inaccuracy of number of personnel on the civil service of Nigeria. The Federal Government deployed IPPIS to improve efficacy and efficiency in the public service by centralizing payroll and streamlining public finance management. Consolidated revenue funded federal departments, agencies, and ministries are required to enroll in the IPPIS platform in the expectation alleviating problems of inefficient use of resources, lack of central supervision, and a dearth of accurate numbers (Aganga, 2011). Although the objectives of IPPIS are broad and encompasses, payroll fraud otherwise known as the syndrome of "Ghost Workers" seems to overshadow other objectives. However, the syndrome of ghost workers cannot be overemphasized as it has cost huge money which should have been channeled into meaningful areas of development. The monumental amount of ghost workers in the past years is alarming. Little wonder it appears that IPPIS only objective is the removal of ghost workers from the payroll system.

Transparency, Efficiency and Accountability vs IPPIS

The Integrated Personnel and Payroll Information System (IPPIS) in Nigeria have indeed played a crucial role in enhancing transparency, efficiency, and accountability in the public sector payroll management. According to the Office of the Accountant General of the Federation (OAGF), IPPIS has significantly reduced the incidence of ghost workers, which were previously a major source of financial leakage and corruption in the system (OAGF, 2020). By automating the payroll process and linking it directly to the employees' bank accounts, IPPIS has minimized the opportunities for fraudulent activities such as salary padding and multiple salary payments. The automation has also led to a more accurate and timely disbursement of salaries, contributing to increased efficiency in the public sector payroll system (World Bank, 2018).

Furthermore, IPPIS has provided a centralized database that enables easy monitoring and tracking of personnel and payroll information. This centralized approach has facilitated better coordination between different government agencies, ensuring consistency and accuracy in employee records (OAGF, 2020). In terms of accountability, IPPIS has made it easier to conduct audits and investigations into payroll-related issues. The system generates comprehensive reports that can be used for financial reviews and performance assessments, thereby promoting greater accountability in the public sector (World Bank, 2018). In conclusion, IPPIS has been instrumental in transforming Nigeria's public sector payroll management by addressing issues of transparency, efficiency, and accountability. The system's success is evident in the reduction of ghost workers, improved payroll accuracy, and enhanced overall financial management in the public sector.

Issues and Challenges of IPPIS implementation in Nigeria

As noted by Mede (2016), obvious challenges marred the effectiveness of IPPIS implementation till date. However, some of these challenges were either as a results of the nation under development in terms of technological infrastructure and expertise or simply the unwillingness of the authority to fully carry out the implementation. Some of the challenges enumerated by Idris, Adaja and Audu (2015) and Mede (2016) are:

- I. Extent of Transparency: Challenges like resistance from stakeholders, poor infrastructure, and a lack of commitment impact the transparency goals of IPPIS.
- II. Efficiency: Issues such as a poor state of supporting infrastructure and technological barriers directly affect the efficiency objectives of IPPIS.

- III. Accountability: Lack of sufficient skills transfer and commitment from the government undermine the accountability goals of IPPIS.

The issues and challenges identified in the implementation of IPPIS in Nigeria, as discussed by Mede (2016) and Idris, Adaja, and Audu (2015), align with the stated objectives of the study. Addressing these challenges is crucial for achieving the transparency, efficiency, and accountability goals set for IPPIS. Recommendations and strategies should focus on overcoming the identified obstacles, such as improving skills transfer, addressing infrastructure challenges, and garnering greater commitment from the government for successful IPPIS implementation.

Conclusion

The financial sector reform in Nigeria, particularly the Integrated Payroll and Personnel Information System (IPPIS), has encountered various challenges and issues. One prominent issue is the prevalence of payroll fraud, which undermines the effectiveness of the reform efforts. This case study sheds light on the complexities of implementing reforms in a sector plagued by fraud and inefficiencies. The challenges encompass technological limitations, resistance to change, inadequate data management, and governance concerns. Addressing these issues is crucial for successful financial sector reform and effective payroll management. Moreover, addressing payroll fraud in IPPIS requires a comprehensive approach that integrates technological solutions, process enhancements, and proactive governance. By implementing the recommendations, Nigeria can significantly reduce payroll fraud, enhance financial accountability, and ensure that public resources are optimally allocated for development and service delivery. Payroll fraud continues to be a significant challenge in Nigeria's public sector, posing a threat to financial resources and the efficiency of service delivery. Addressing this issue is crucial to ensure transparent and accountable governance. The implementation of the Integrated Payroll and Personnel Information System (IPPIS) offers an opportunity to mitigate payroll fraud effectively.

Recommendations

Based on an analysis of existing literature and best practices, the following recommendations are put forward:

1. Conduct regular and thorough audits of payroll data to identify inconsistencies, duplicate entries, and discrepancies. Regular reconciliation of payroll data with other relevant databases, such as personnel records and tax records, can help identify and rectify irregularities promptly.
2. Implement a robust biometric verification system for employee enrollment and attendance tracking. This system should be integrated with IPPIS to ensure that only legitimate employees are included in the payroll. Biometric data, such as fingerprints, can provide an accurate means of identification and prevent the inclusion of ghost workers.
3. Strengthen employee verification processes during recruitment and enrollment. Implement strict due diligence measures to verify the legitimacy of employees and prevent the inclusion of unauthorized individuals in the payroll.
4. Establish confidential whistleblower mechanisms that allow employees and stakeholders to report suspected cases of payroll fraud without fear of reprisals. Implement clear procedures for investigating and addressing reported cases.
5. Enforce stringent penalties for individuals involved in payroll fraud, both at the operational and managerial levels. Clear consequences for fraudulent activities will act as a deterrent.

References

- Accounting Tools. (2019). *Types of Payroll Fraud*. Retrieved from: <https://www.accountingtools.com>
- Adaja, J. and Audu, J. S. (2015) 'Integrated Personnel Payroll and Information System (IPPIS) Panacea for Ghost Workers Syndrome in Nigerian Public Service. *International Journal of Public Administration and Management Research (IJPAMR)*, 2 (5), 55-64

- Adegbaju, A., & Lawal, I. O. (2018). *The Impact of Financial Sector Reforms on Economic Growth in Nigeria*. In Proceedings of the International Conference on Information Management and Processing (ICIMP 2020).
- Adelakun, J. A. (2014). Challenges of financial sector reforms in Nigeria. *International Journal of Economic Development Research and Investment*, 5(1), 78-89.
- Adigun, L. A., & Lawal, I. A. (2020). The role of integrated personnel and payroll information system (IPPIS) in achieving good governance in the Nigerian civil service. *Journal of Public Administration and Governance*, 10(1), 153-171.
- Aganga, O. (2011). Nigeria: FG's Vision 2020 - Govt's Holistic Approach to Economic Transformation. Vanguard.
- Aigbodion, I. S., & Ezejiolor, R. A. (2019). Financial Sector Reforms in Nigeria: Achievements, Challenges, and Prospects. *International Journal of Finance and Economic Studies*, 7(2), 45-62.
- Akinlo, A. E. (2006). Financial sector development and poverty reduction in Nigeria. African Economic Research Consortium Research Paper, 158.
- Arowolo, D. A., Dahunsi, O. O., & Ojeka, S. A. (2021). *Integrated Personnel and Payroll Information System (IPPIS) in Nigeria: A Critical Appraisal*. SAGE Open, 11(1), 2158244021990494
- Azeez, B. A., & Taiwo, J. N. (2020). Financial Sector Reforms and Economic Growth in Nigeria. *International Journal of Economics, Commerce and Management*, 8(2), 172-186.
- Chete, L. (2005). *Financial Sector Reforms in Nigeria: Overview and Evaluation*. AERC Research Paper, 148.
- Gbalam, E. (2015). *Corporate Fraud: Forensic Accounting*. Port Harcourt: Vinson's Publishers.
- Ilo, C. O. (2015). An assessment of the impact of payroll fraud on organizational performance. *International Journal of Accounting and Taxation*, 3(2), 1-11.
- Kumar, R. (2014). *Research Methodology: A Step-by-Step Guide for Beginners*. Sage Publications.
- Lomer, S. (2018). *Payroll Fraud Prevention: Tips and Best Practices*. Sage.
- Marasco, A. (2007). *Payroll Fraud: Prevention and Detection*. John Wiley & Sons.
- Mede, T. R. (2016). 'Nigeria's Experience with Identity Systems for Civil Service Reform' A Paper Presented at the Id 4 Africa Annual Meeting – Rwanda, 2016, 1-13
- Murray, M. (2017). *Payroll Management Guide*. Entrepreneur Press.
- Ojo, A. F., & Animashaun, J. O. (2018). Payroll Fraud in Public Sector Institutions: A Threat to Financial Sector Reform in Nigeria. *Journal of Economic Crime Management*, 16(2), 23-39.
- Okafor, M. O., & Adegbite, E. (2020). Modernizing the Nigerian Financial Sector: A Critical Appraisal of Recent Reforms. *Journal of Financial Transformation*, 45, 67-82.
- Okafor, S. C. (2017). An appraisal of the impact of financial sector reforms on the Nigerian banking sector. *International Journal of Finance and Accounting*, 6(2), 83-90.
- Okoye, E., & Oluwunmi, A. O. (2016). Information Technology, Internal Control System, and Payroll Fraud Prevention in Nigerian Organizations. *Journal of Business and Retail Management Research*, 11(3), 105-116.
- Olokoyo, F. O., Ogunleye, E. R., Atoyebi, K. A., & Akinlana, T. E. (2020). Financial sector reforms and financial inclusion in Nigeria. *CBN Journal of Applied Statistics*, 11(2), 25-47.
- Omodero, C. O. (2021). The role of IPPIS and GIFMIS in curbing payroll fraud in Nigerian civil service. *Journal of Public Administration and Governance*, 11(1), 288-301
- Onuoha, B. (2018). *Ghost workers in public service account for over 60% of the workforce*. Retrieved from <https://www.vanguardngr.com/2018/04/ghost-workers-public-service-account-60-workforce/>
- Uzomah, F., & Ogochukwu, U. S. (2020). The impact of payroll fraud on organizational performance: a study of selected banks in Nigeria. *International Journal of Financial Management*, 10(2), 126-138.
- Wikipedia. (2019). *Fraud*. Retrieved from <https://en.wikipedia.org/wiki/Fraud>
- World Bank. (2018). *Nigeria Public Sector Governance Reform and Development Project (P097026)* Document of the world bank