

# International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# Bank Verification Number (BVN) and Financial Discipline in Imo State Civil Service: A Study of Selected Ministries

<sup>1</sup>Nnawuchi Chiazo C. (PhD), <sup>2</sup>Emezi Charles N. (PhD), <sup>3</sup>Eze Ogechi A., <sup>4</sup>Nwankwo Patience C., <sup>5</sup>Muruako Jonas C.

<sup>1</sup>Marketing Department, Federal Polytechnic Nekede Owerri, Imo State, Nigeria.

Correspondent Author: charlesemezi@gmail.com

#### ABSTRACT

This research focuses on "Bank verification number (BVN) and Financial Discipline in the Civil Service of Imo State: A Study of Selected Ministries." The study aims to investigate the relationship between BVN and the decrease in fraud and identity theft within the Imo State Civil Services, as well as the relationship between BVN and the decrease in the theft of overcast personnel costs in the Imo State Civil Services. The null hypotheses state that BVN has not decreased identity theft and fraud in the civil services of Imo State and that BVN has not decreased the casting of personnel costs in the state of Imo. The study used stakeholder theory. The descriptive survey research design was used for this study, which has a population of 247 employees from the Ministries of Finance, Education, and Lands. Out of this population, 152 samples were chosen using Taro Yemeni. The questionnaire was used to collect data; 152 questionnaires were distributed, and 125 were completed and returned on time for analysis. The data was processed using Software Package for Social Science (SPSS) version 23, and Pearson Product-Moment Correlation Coefficient was used as the statistical tool for the analysis. The findings indicate a positive correlation between fraud and identity theft and BVN, as well as between the overcasting of personnel costs. The research thus finds that payrolls should be audited on a regular basis and staff verification activities should be conducted sporadically, at a minimum of once a year.

Keywords: BVN, Financial Discipline, Identity Theft, Ghost Workers, Payroll

# INTRODUCTION

Reliable methods of identifying individuals who are compensated from the government account, either for contracts performed or for employment, are necessary to uphold financial discipline in the civil service. The government is facing significant revenue shortfalls to support its day-to-day operations; these shortfalls are reflected in the rise in value added tax, the elimination of fuel subsidies, and other measures. Expenses are still rising beyond the government's capacity to provide income, notwithstanding official attempts to boost revenue.

Despite the government's efforts to tackle these problems over the years, programs like the National Identification Number (NIN), Bank Verification Number (BVN), remittal, and Integrated Personnel and Payroll Information System (IPPIS) have not produced the desired results. One of the significant steps toward providing a comprehensive financial overview of a bank customer's balance—regardless of how many banks they may have—is the introduction of the BVN. The movement of government funds, particularly those disbursed to civil servants as salaries and other benefits, may be monitored using this BVN.

In Nigeria, the government personnel budget is currently at its highest level ever due to the daily increase in employees and the absence of anyone retiring. Government offices are understaffed despite the workforce size. One employee performing the responsibilities of two or more others. In a department with, for example, 50 employees, you wouldn't see fewer than 20 people working. The question is, where are the remaining employees? Are they ghosts? To answer these questions, the Imo State government implemented BVN into its payroll system on May 21, 2016, in order to encourage financial discipline. This study seeks to determine how the BVN's introduction has fostered financial discipline among the civil workforce in Imo State.

The general aim of the research is to explore the relationship between BVN and financial discipline in Imo State, with the following specific objectives:

- i. Examine the relationship between BVN and reduction in fraud and identity theft in Imo State Civil Services.
- ii. Assess the relationship between BVN and reduction of over casting of personnel cost theft in Imo State Civil Services.

The following hypotheses was formulated for the study:

<sup>&</sup>lt;sup>3</sup>Accountancy Department, Federal Polytechnic Nekede, Owerri, Imo State, Nigeria.

<sup>&</sup>lt;sup>2, 4-5</sup> Business Administration and Management, Federal Polytechnic Nekede Owerri, Imo State, Nigeria.

Hol: There is no significant relationship between BVN and reduction in fraud and identity theft in Imo State Civil Services.

Ho2: Implementation of BVN in Imo State Civil Services has no significant relationship with the reduction of personnel cost.

# REVIEW OF RELATED LITERATURE

#### **Conceptual Review**

Financial Discipline

According to Premchand (1999), financial discipline connects the community's goals with its resources, as well as the present with the future. It iscentral to government operations and financial strategy. The planning, organizing, acquisition, and use of government financial resources are all aspects of financial discipline. Proper public financial management is related to financial discipline in the public sector. Onuorah and Appah (2012) state that sufficient financial management entails auditing, financial and governmental reporting, accounting, payment systems, budget structures, and budget formulation.

Prior to presenting to the legislature for review and final approval, the resource allocation takes place during the budget preparation phase. In Nigeria, the budget development process includes the President articulating the government's fiscal, monetary, political, economic, social, and welfare goals. This is done in accordance with Onuorah and Appah (2012): (i) policies and guidelines are issued by the department, which serves as the foundation for circulars to ministries and departments requesting inputs and their needs for the fiscal periods being considered; (ii) accounting officers of responsibility units are required to obtain and collate the needs of their units; and (iii) accounting officers of ministries, in this case the Permanent Secretaries, are required to collate these proposals, which unit heads will defend before the supervising minister.

Financial discipline is defined as the effective use of funds in accordance with budgets and well-defined financial policies.

The Bank Verification Number (BVN) is a concept used to enhance the security and identify verification processes in the banking sector. It generally involves assigning a unique identification number to every bank customer, which is linked to their biometric data, such as fingerprints and facial recognition. The main objectives of the BVN system are to prevent fraud, improve customer identification, and streamline banking operations.

Key features of the BVN concept include:

- 1. Unique Identification: Each customer gets a unique number that acts as a digital ID for their banking activities.
- 2. Biometric Data: The BVN is frequently connected to biometric information, making it harder for impersonators to access accounts.
- 3. Fraud Prevention: By requiring customers to authenticate their identity using their BVN before performing transactions, banks may reduce the risk of fraud and identity theft.
- 4. Improved Customer Identification: The BVN helps banks identify their clients more effectively, which is essential for adhering to regulations and minimizing risk.
- 5. Streamlined Banking Processes: The use of a BVN can simplify and standardize banking processes, such as account opening and transaction verification.

Overall, the BVN system aims to create a more secure and effective banking environment for both customers and institutions.

In February 2014, the Central Bank of Nigeria and the Bankers' Committee jointly launched a centralized Bank Verification Number (BVN) System. This is in line with the broader goal of strengthening Know Your Customer (KYC) practices and advancing a payment system that is secure, dependable, and efficient. Each customer in the Nigerian banking sector is assigned a distinctive identification number through the BVN system.

The Bank Verification Number (BVN) is a program launched by the Central Bank of Nigeria (CBN) to enhance the security of banking transactions and reduce the likelihood of fraudulent activity. The BVN uses biometric technology to enrol customers in the financial system. It captures these distinctive physical characteristics of each person: the face and fingerprints. The individual would then be identified using the record. After a person's biometrics are captured and a BVN is issued. The account would be accessible by BVN.

"To put it simply, biometrics may be described as a means of identifying a person based on physiological (fingerprint, face, eye, iris/retina) or behavioural (speech or signature) traits. Because it is unique to and embodied in each individual and cannot be forgotten, lost, or stolen like other traditional forms of identification, it is an effective means of personal identification. The biometric identification system relies on devices like cameras and scanners, as well as computer hardware and software, to take and store images or measurements of a person's traits. "To aid the storage and matching procedures, features obtained during the biometric enrolment and acquisition phases are frequently converted into templates via a non-reversible process" (Nana 2016).

The BVN, which employs biometric technology to enrol users in the financial system, is a crucial step in enhancing banking transaction security and reducing—if not entirely removing—fraudulent operations. The primary goals of the program were to safeguard bank customers, minimize fraud, and reinforce the Nigerian banking sector. The BVN has assisted in mitigating instances where loan defaulters, for example, switch banks and receive new credit without the bank being aware of their background. Banks may now more easily monitor transactions across all Nigerian banks. Undoubtedly, the BVN has improved national financial intelligence gathering and decreased unlawful banking operations. With the BVN as a leveller, it is now possible

to automate and limit weekly withdrawals of N500,000 from personal accounts and N5 million from business accounts. Any account that has watch-list financial transactions may be closely observed. Additionally, it provides numerous chances to safeguard the entire financial system, banks, and customers.

The system may also be used to verify that the payroll only receives and records one account linked to a BVN. The system should not disburse payments to any individual whose BVN is associated with numerous accounts, even if several accounts of the same person are recorded in the payroll, as all of these accounts will be connected to a single BVN (Njoku, 2024).

#### Identity Theft and Fraud

Fraud is defined as a purposeful deception done to obtain something by unfairly exploiting others, according to Taiwo and Akintola (2017). This can be accomplished through dishonest cheating, duplication, or imposition. Fraud is described as a deliberate and intentional act committed by an individual or a group of individuals to gain selfish financial benefit by Benjamin (2018). It entails using deception and trickery to create or alter documents and signatures for the purpose of stealing. Criminal acts, unlawful acts, tortious acts, deceptive acts, and concealed acts are typical characteristics that provide a clear understanding of what fraud is. In the routine management of the civil service, these are the most concerning fraudulent activities discovered (Adeleke, 1996). Government officials have categorized fraud in a variety of ways based on their viewpoints and the standards applied. Fraud can be classified as internal (committed by members of the organization), external (committed entirely by individuals or organizations outside the organization), managerial (committed by employees at the highest levels of management with the intention of deceiving shareholders), and employee fraud (committed by employees who are below management level).

Identity theft is a somewhat recent occurrence for which a globally agreed-upon definition has yet to be found. Nonetheless, the research literature for business and information systems reveals some consistency in the definition. The term "identity theft" is most frequently defined as "the use of another individual's personal identifying information without that individual's permission for purposes of committing a crime" (Collins, 2006). Additionally, according to Wang, Yuan, and Archer (2006), "An identity thief is an individual or organization that tries to steal and use identity illegally for financial fraud or other purposes. An identity thief could be an individual criminal, a terrorist, or a crime ring." Identity theft is defined by the UK Home Office as an act that "occurs when sufficient information about an identity is obtained to facilitate identity fraud, irrespective of whether, in the case of an individual, the victim is alive or dead." The United States Congress defines an identity thief as "someone knowingly transferring or using, without lawful authority, a means of identification of another person with the intent to commit, or to aid or abet, any unlawful activity that constitutes a violation of Federal law, or constitutes a felony under any applicable state or local law."

Identity Theft Driver's license numbers, government ID numbers, alien registration numbers, email addresses, taxpayer ID numbers, financial records, credit card numbers, passport numbers, employer ID numbers, electronic ID numbers, and criminal history are all examples of personal identifiable information (PII). It also contains medical records, patient identification numbers, and distinctive biometric information such as fingerprints, retina scans, facial geometry, iris photos, and other unique physical representations.

Njoku (2024) demonstrated that using BVN in payroll systems helps stop identity theft and the fraudulent use of several alien accounts against the government.

### **Employee Expenses**

Consequently, personnel costs are defined as the total remuneration, whether monetary or non-monetary, that an employer must pay an employee for the work performed during the reference period. The term "personnel cost" refers to the expenses related to employee compensation and fringe benefits for all employees engaged in a particular process, including those categorized as both full-time and hourly or salaried. All of the following expenses should be included in personnel costs: employee compensation, salaries and wages, bonuses, overtime, and benefits. Contributions to the government's retirement fund for employees, workers' compensation, insurance policies, savings plans, pension funds/retirement plans, stock purchase plans, and fringe benefits are additional expenses. This should also cover unique allowances, like vehicle allowances and moving costs. However, excessive cost overruns are the result of a collective conspiracy among several officials who will benefit from their dishonest behaviour.

# Theoretical Framework

# Stakeholder Theory

This research is based on stakeholder theory. Richard Edward Freeman popularized the stakeholder theory in 1970. The primary goal of Freeman's Stakeholder Approach was to create a framework that would address the issues of managers facing unparalleled levels of environmental instability and change. According to the theory, a company's objectives are to either act as a means of aligning stakeholder interests or to generate value or wealth for its stakeholders by transforming their investments into goods and services. The term "stakeholder" was derived from the traditional "stockholder," which only considers the financial perspective. Stakeholders are described as any group of people who can impact or be impacted by an organization's goals (Freeman, 1984). Furthermore, Freeman (1984) argues that the stakeholder paradigm implies that the government must create and carry out procedures that cater exclusively to those groups who have a vested interest in it. The stakeholder approach is highly focused on actively managing the business environment, fostering relationships, and promoting common interests in order to create plans. The hypothesis presumed that the Imo State Government's decision to adopt BVN was influenced by citizen/stakeholder opposition to corruption. It indicated that the government will address the issues and expectations of influential citizens and stakeholders, some of which will take the form of strategic viewpoints. The theory of stakeholders offers valuable insights into the motivations behind government action concerning the adoption and implementation of BVN (Ekubiat & Ime, 2016).

#### **Empirical Review**

In their study, Idris, Adaja, and Audu (2021) investigated the impact of the ghost worker syndrome and the role that an integrated personnel payroll and information system (IPPIS) might play in solving the problem in public services. The researchers gathered data from both primary and secondary sources and analyzed it using mean scores, frequency tables, simple percentages, and the Spearman rank order correlation technique. The study's findings indicate that ghost worker syndrome is very prevalent in the public sector. As a result, it suggests that the integrated personnel payroll and information system (IPPIS) be used in the public sector to boost productivity and support a robust economy.

The development consequences of ghost worker fraud in Bayelsa State's primary and secondary education sectors were the main focus of Okodudu, Sofiri, and Oguzierem (2017). The study, from which data was gathered from a sample of 622 public employees engaged in administering the primary and secondary education sectors through purposive and simple random sampling methods, employed the chi-square statistic to test the research hypotheses. The study's findings revealed that the high rate of ghost worker fraud in Bayelsa State's primary and secondary education sector has led to outcomes such as irregular salary and allowance payments for employees, insufficient funding for facilities, and poor service delivery. To eliminate the issue of ghost workers and payroll-related fraud and to conserve public funds for infrastructural development, particularly in the primary and secondary education sectors, the research thus advised the employment of forensic accountants for routine visits to each school and regular audits.

Adongoi and Eyo (2016) conducted a study on payroll fraud in various ministries, departments, and agencies (MDAs) in Bayelsa State, Nigeria, as part of their research on corruption in the civil service. The study, which aimed to identify the causes of payroll fraud in the state, used an ex-post-facto research design and primarily collected data from secondary sources. It discovered that, despite government efforts to reduce the crime, payroll fraud continues to exist in the civil service of Bayelsa State. It also demonstrated that the ineffective prosecution of offenders is caused by issues like insufficient funding and corruption within the Economic and Financial Crime Commission (EFCC). The study therefore suggested that the Bayelsa State Government take the proactive step of educating forensic accountants to manage all of its ministries, departments, and agencies (MDAs) in order to prevent fraud.

Enakirerhi and Temile (2017) conducted a comprehensive analysis of the Integrated Personnel and Payroll Information System (IPPIS) in Nigeria, examining the obstacles to its implementation, the advantages of full implementation, and future prospects. The descriptive study highlighted that the primary advantages of IPPIS are the provision of precise and trustworthy personnel data, the reduction or eradication of corrupt and sharp practices, and the support for contemporary, scientific, and accurate forecasting and budgeting. However, the skills transfer issue, inadequate supporting infrastructure, technological hurdles to inferring MDAs transfer, stakeholder resistance, and a lack of desire for rapid implementation all endanger these advantages.

Ikechukwu and Chikwe (2015) examined the electronic human resource management and ghost worker syndrome in local government districts of Imo State. Using a five-point Likert scale questionnaire administered to senior human resource management personnel in sixteen chosen local government areas of Imo State, the study employed a descriptive survey method to collect data from 164 completed and returned surveys. The Mann Whitney test (U) was used to analyze the data, and the findings showed that the diseases plaguing the Nigerian local government system may be treated by successfully implementing electronic human resources management tools. This will lower labor expenses and aid in preparing the LGAs for efficient and effective grassroots service delivery.

According to Oguzierem and Sofiri [2017], the diverse nature and scope of public service in Nigeria have allowed ghost workers and associated payroll fraud to continue. As a result, their study looked at illegal employment as a new aspect of payroll fraud and ghost workers, as well as its impact on the wage budgets of Rural Development Areas (RDAs) and Local Government Areas (LGAs) in Bayelsa State. The study used an ex post-facto research design and gathered data from secondary sources. The research findings showed that for financial and other motives, public officials in LGAs and RDAs in Bayelsa State engaged in ongoing illegal employment, which increased the wage bill and diverted resources intended for local development. Among other recommendations, the study found that employment issues should be managed by the Local Government Service Commission rather than decentralized, and that the Governor should issue stringent guidelines for this.

In a separate study, Nyaledzigbor (2015) examined Payroll Fraud: Effects of Ghost Names on the Government Wage Bill in Ghana. The purpose of the study was to test the viability of Reinikka and Svenson's graft estimation model by augmenting Cressy's conceptualization of the fraud triangle theory. To do this, 85 heads of public organizations were selected to participate in the survey using a non-probability quota sampling approach. The results, which were analyzed using correlation and multiple regressions, showed a statistically significant positive relationship between the number of ghost workers and the number of opportunities for ghost workers. However, the larger the government agency, the fewer opportunities there were for ghost workers and the fewer ghost workers there were. The suggestions for revising Ghana's Financial Administration Act by implementing additional controls in the payroll administration at the Controller and Accountant General's office have social change ramifications.

Mohammad (2016) states that the primary benefit of a biometric system is that it identifies a person by their identity rather than by their possessions, in contrast to most conventional authentication methods like passwords, personal identification numbers (PINs), or identification cards. Biometric credentials like fingerprints, finger veins, palm veins, and iris images, which cannot be lost, forgotten, guessed, or easily cloned, are different from these solutions that are based on "what you have." He additionally stated that by using a biometric identification system to get rid of ghost workers, governments and business organizations can uniquely identify their employees, nearly completely eliminate duplicate registration in any form, and help foster accountability and punctuality among employees. This approach would also help eliminate ghost worker payroll fraud. He stated that several advantages of biometric technology include: the elimination of fraudulent employee registrations in the payroll system through biometric identification; a significant reduction in the likelihood of buddy punching or fake time sheets if biometric attendance is used; the assurance of accurate disbursement to the appropriate employee during salary and benefit distribution through biometric identification; the creation of concrete audit trails for employee punctuality, which in

turn enhances service quality; and the beginning of higher return on investments (ROI) for governments and organizations due to the elimination of ghost workers.

#### RESEARCH METHODOLOGY

The survey research design was used because the study's focus is on gathering data from a large population. The design was chosen because it would provide the researcher with data pertinent to the study's objectives. Imo State is the study area's focus, but the research will concentrate on three ministries: Finance, Education, and Lands. The study's population comprises 247 employees working in the Accounts and Payroll Units of the three ministries (Finance, Education, and Lands) in Imo State, who were randomly chosen from the ministries. The sample size was calculated as 153 using Taro Yamane, and the researcher employed the sample proportionate formula/method to guarantee equal representations of the respondents according to Ministries (Finance 72, Education 60, and Lands 20). The researcher used simple random sampling to choose the samples from the population. Balloting was used to conduct simple random sampling. Pieces of paper were used to record the staff numbers in accordance with the nominal roll's serial numbers. The researcher blindly selects sample respondents from a basket where the pieces of paper have been rolled into a paper ball and mixed.

Both primary and secondary data were gathered for this study, and questionnaires were used to gather the primary data. Other research studies, journals, books, newspapers, and the internet were the primary sources of the secondary data. The researcher distributed a questionnaire to the sample population of the businesses. The data acquired was analyzed using the Pearson Product-Moment Correlation Coefficient statistical tool in the Software Package for Social Science (SPSS).

# DATA PRESENTATION AND ANALYSIS

#### **Test of Hypotheses**

#### **Hypothesis One**

Hol: There is no significant relationship between BVN and reduction in fraud and identity theft in Imo State Civil Services.

H<sub>A1</sub>: There is significant relationship between BVN and reduction in fraud and identity theft in Imo State Civil Services.

# Table 9 Correlation Result on BVN and Fraud and Identity Theft in Imo State civil service

**Correlation is	Correlations				
significant at (2-tailed)			BVN	Fraud and Identity Theft	0.05level
Source:	BVN	Pearson Correlation	1	.539**	
Researcher computation		Sig. (2-tailed)		.000	using
SPSS 23		N	125	125	
Table 9 showed correlation	Fraud and Identity Theft	Pearson Correlation	.539**	1	the
coefficient for		Sig. (2-tailed)	.000		BVN on
Fraud and Theft in Imo		N	125	125	Identity State
civil service,					the result

generated indicated that there is positive correlation between the variables with a correlation coefficient of 0.539.

#### Hypothesis Two

Ho2: Implementation of BVN in Imo State Civil Services has no significant relationship with the reduction of personnel cost.

Ha2: Implementation of BVN in Imo State Civil Services has significant relationship with the reduction of personnel cost.

Table 10 Correlation Result on BVN and Over Casting of Personnel Cost

		BVN	Over Casting of Personnel Cost
Cashless Policy	Pearson Correlation	1	.235**
	Sig. (2-tailed)		.000
	N	125	125

	č	.235**	1	
**Correlation is	Cost Sig. (2-tailed)	.000		0.05level
significant at (2-tailed)	N	125	125	

Source: Researcher computation using SPSS 23

Table 10 showed the correlation coefficient for BVN and over casting of personnel cost, the result generated indicated that there is positive correlation between the variables with a correlation coefficient of 0.235.

#### Discussion of Findings

Our first finding revealed that the implementation of BVN has to a large extent reduced payroll fraud in Imo State civil service and led to the uncover of most of the payroll fraud using biometric data capture machine. BVN reduced fraudulent financial practices in Ministries; and that the massive financial losses occasioned by fraud and identity theft) are gradually being discovered and eliminated by reason of the introduction of BVN in Imo State civil service.

The second finding discovered that BVN have enhanced the accurate payment of salaries and BVN enhanced the accurate payment of salaries and remittance of payroll deductions of employees of the Ministries to third parties, by reducing over casting in of personnel cost; BVN is effective in detecting and deterring financial fraud linking payment of salaries.

# SUMMARY, CONCLUSION, AND RECOMMENDATIONS

The major findings of the study are:

- The result of hypothesis one shows that, BVN has contributed significantly to reduction in fraud and identity theft in Imo State civil service with a correlation coefficient of 0.539.
- The result of hypothesis two shows that, BVN implementation is significantly related to reduction in personnel cost Imo State civil service with a correlation coefficient of 0.235.

It is no gainsaying that States no longer have the luxury of losing scarce government resources to sharp practices like payroll fraud. Current revenue mobilisation challenges prompt state governments to plug apparent leakages through which much-needed revenues are lost, to create fiscal space for spending in critical sectors of the economy. The integration of biometric registration and Bank Verification Number (BVN) in the payroll management system of states has not only translated into savings for the states but has also earned the States good reputations from investors. In addition, it might be a signal that fraud and corruption are having fewer places to fester. Though, it should be noted that the persistence of such fraud must be seen within a meta context of poor accountability (specifically, 'internal' or managerial accountability) in general.

However, it is disheartening that there have been next to no punishments or arrests following the Conclusion and Recommendations 'discovery' of these workers and the syndicates said to be in control of these criminal enterprises. What this means is that the use of Biometric verifications and BVNs must be accompanied by effective governance to actually punish offenders and send signals to the polity that such will not be tolerated.

The following recommendations where made:

- Errant officers-who, considering the nature of how payroll is structured-would be many, should be identified, summarily dismissed and legal
  action should follow.
- 2. There should be regular audit of payrolls and intermittent staff verification exercises, at least once a year.
- The study also suggested that Government of Imo State should ensure that every employee receiving salary obtain a BVN in order to track financial transaction in the employee's salary account. And any employee without BVN should not be verify for payment.

#### REFERENCES

Abdullahi, R., & Mansor, N. (2015). Concomitant debacle of fraud incidences in the Nigeria public sector: Understanding the power of fraud triangle theory. *International Journal of Academic Research in Business and Social Sciences*, 5(5), 312-326.

Adedeji, A. O. (2004). The professionalization of public administration. In A. A. Ryemanu, (ed), Public administration in African. Nairobi: Kenya Literature Bureau.

Adeleke, I. (1996). The impact of forensic accounting on fraud detection. Bayero University

Adekanya, F. (1986). Fraud in banking transactions. The Nigerian Banker, 1(6).

Adewole, A. & Osabiohien, T. (2016). Analysis of the cost of governance and options for its reduction in Nigeria. Nigerian Journal of Economic and Social Studies, 49(1):137 – 159.

Adongoi, T. & Victor, E. A. (2016). Corruption in the civil service: A study of payroll fraud in selected ministries, departments and agencies (MDAs) in Bayelsa State, Nigeria. *Research on Humanities and Social Sciences*, 6(3), 53-63.

Agboola, T. O. (2018). Effectiveness of integrated personnel and payroll information system in addressing ghost worker syndrome in Nigerian public sector. *Global Journal of Human-Social Science: H Interdisciplinary*, 18(2), 56-62.

Aganga, O. (2011). Nigeria government saves N12billing from salaries. Retrieved from, http://www.enownow.com/news/story, 12 June, 2024.

Babalobi, S. (2008). Forensic accounting technique: A means of successful eradication of corruption through fraud prevention, bribery prevention and embezzlement prevention in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 4(1).

Benjamin, A. (2018). Biometrics and the challenges of privacy in Akwa Ibom State. Journal of Public Economics, 90(5): 853-870.

Collins, J. M. (2006). Investigating identity theft: A guide for businesses, law enforcement, and victims. Wiley

Ekubiat, J., & Ime, E. (2016). Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges and Prospects. *Journal of Finance and Accounting*, 4(3), 126-130.

Enakirerhi, L. I. & Temile, S. O. (2017). IPPIS in Nigeria: Challenges, Benefits and Prospects. *International Journal of Social Science and Economic Research*, 02(05), 3490.

Freeman, E. (1984). Strategic Management: A Stakeholder Approach. Boston: Pitman Press.

Idris, H., Adaja, J. & 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).

Ikechukwu, D. & Chikwe, G. C. (2015). Electronic Human Resource Management and Ghost Workers Syndrome in Nigeria: A Study of Selected LGAs in Imo State, *Advance Research Journal of Multi-Disciplinary Discoveries*, 2456-1045.

IPPIS. (2018). About Integrated Payroll Personnel and Information System (IPPIS); Retrieved from https://www.ippis.gov.ng/what-is-3/ DOR: June 19, 2024.

Izedonmi, F, & Ibadin, P.O. (2012). Forensic accounting and financial crimes: adopting the inference, relevance and logic solution approach. *African Research Review*. 6(4):125-39.

Larson, A. (2016). Fraud, Silent Fraud, and Innocent Misrepresentation. Expert Law. Retrieved 29th May 2023.

Kassem, R. & Higson, A. (2012). The New Fraud Triangle Model. Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 3(3): 191-195

Kauji, M., & Mustapha, B. (2019). Assessment of the Efficacy of Benford's Law in Detecting Payroll Fraud in Borno State, Nigeria, at p. 18. *International Journal of Economics, Finance and Entrepreneurship* (NIRA, IJEFE) 6(1), 14-27.

Mohammad, S. (2016). The importance of using biometrics to eliminate ghost workers fraud.

Nana, F. M. (2016). Nigeria's experience with identity systems for civil service reform. A paper at the ID 4 Africa Annual Meeting-Rwanda.

Nangih, E., & Davies, D. S. (2017). Biometrics and bank verification number (bvn) technology and ghost workers' identification in Rivers State local government areas. Journal of Harmonized Research in Management, 3(1).

Njoku, D. (2024). Element of public finance administration in Nigeria. Bonchris Publishers, Owerri.

Nyaledzigbor, G. (2015). Payroll fraud: Effects of ghost names on the government wage bill in Ghana.

Oguzierem, U. A., & Sofiri, J. (2017). Ghost workers and related payroll fraud: the impact of unauthorized employment on local government areas (LGAS) & Rural Development Areas (RDAS) In Bayelsa State, *International Journal of Economics and Business Management*.3(8), 12-23.

Oguzierem, U. A., Sofiri, J. & Okodudu, A. S. (2017). Ghost Workers Fraud in Primary and Secondary Education Sector in Bayelsa State: Beyond Financial Loss, *Journal of Public Administration and Social Welfare Research*, 2(2).

Olaseni, D. (2016). Breaking the ghost worker rackets. Retrieved from http: www.thisdaylive.com/index.php. DOR: June 15, 2023.

Olken, B. A. & Pande, R. (2012). Corruption in developing countries. Annual Review of Economics. 4(1), 479-509.

Okoye, E. I., & Gbegi, D. O. (2013). Forensic accounting: A tool for fraud detection and prevention in the Nigerian public sector: A study of selected ministries in Kogi State. *International Journal of Academic Research in Business and Social Science*, 3(3), p.1-19.

Omoyefa, P. (2017). The politics of public sector reforms in African. Lesotho: National University of Lesotho.

Osisioma, B. C. (2013). Combating fraud and white-collar crimes: Lessons from Nigeria. Lagos: Nigerian Institutes of Management.

Osisioma, B. C., Akembor, C. & Okaro, F. (2016). Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria. Awka: SCOA HERITAGE NIG. LTD.

Premchand, A. (1999). Budgetary Management in the United States and in Australia, New Zealand and the United Kingdom. San Francisco: Jossey-Bass Publishers.

Shimawua, D. (2020). Appraisal of Factors Responsible for "Ghost Workers" Syndrome in Public Service and its Impact on the Performance of the Sector in Nigeria, at p. 73. International Journal of Scientific Research in Technology, Applied Sciences & Health Studies 4(1).

Sydney, I. F. (1986). Management control system and the prevention and detection of fraud in Banks. Lagos: CBN & Landmark Publication Ltd.

Taiwo, F. & Akintola, P. (2017). The description of biometric objects. MIT Press.

Tanzi, V. (2013). Corruption and the Economy. Filozofija i drustvo. 24(1), 33-59.

Thales (2022). "Biometrics: Definition, Use cases, Latest news"; Digital Identity and Security: Identity and Biometric Solutions, on 27th January, 2022, Available at: <a href="https://www.thalesgroup.com/en/markets/digital-identity-and">https://www.thalesgroup.com/en/markets/digital-identity-and</a> security/government/inspired/biometrics. Date accessed-13/05/2024.

Wang, W.J., Yuan, Y. & Archer, N. (2006). A contextual framework for combating identity theft. Security & Privacy, IEEE, 4(2): p. 30-38

Wells, J. T. (2002). Keep ghosts off the payroll, Journal of accountancy-New York; 194(6), 77-85.

Ziad, A (2015). The extent of applying the international public sector accounting standards by the Jordanian public sector. The European Proceedings of Social & Behavioural Sciences eISSN: 2357-1330. Retrieved from www.FutureAcademy.org.uk.