



## Financial Control Best Practices and Payroll Fraud in State-Owned Tertiary Institutions in Cross River State, Nigeria

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### Abstract

The Cross River State government's effort at utilizing her limited resources to education has been jeopardized by payroll fraud. The crux of this study was to find out the influence of financial control best practices on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Ex-post-facto design was adopted for this study. The population of the study was 89 staff in the bursary departments of state-owned tertiary institutions in Cross River State of Nigeria. Census approach was used to sample the 89 respondents. The instrument for the study was Financial Control Best Practices and Payroll Fraud Questionnaire (FCBPPFQ). The instrument contained 17 items. The instrument after being developed by the researcher, was presented to the two experts in the departments of Educational Management and Educational Measurement of University of Calabar for face and content validation. Cronbach Alpha Reliability Estimates was used to determine the reliability coefficient which ranged from .85 to .88, ascertaining that the instrument was reliable. Simple linear regression was used for testing the null hypothesis at .05 level of significance. The results showed that payroll audit does not significantly influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria; there is significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Based on the findings, it was recommended among others that biometric registration of employees should be automated by the Cross River State Government and the management of the state-owned tertiary as this will enable the government whose limited resources to education are being sapped through payroll fraud to put an end to this economic evil.

**Keywords:** *Cross River State, Financial Control Best Practices, Payroll Fraud, State-Owned Tertiary Institutions, Nigeria*

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### **Background to the Study**

The prevalence and increase in white-collar crimes in our organizations and societies is no longer a fiction but has become a recurrent challenge which requires quick attention and solution. This must be done if integrity, sanctity and financial security must be achieved in our organizations and societies at large. White-collar crimes (corruption) exist in different forms and shapes and is believed to be on the increase. One of such crimes that is common with most organizations is the payroll fraud or scheme. Payroll fraud is any arrangement by which an employee causes the organization to pay money to the employee vide false claims. Payroll fraud is a problem for many countries around the world, especially the less developed ones. Salary leakages in the public services have become a major concern for most developing nations (Hossain, 2013).

Fraud in payroll has a long history. One of the complaints about Nigerian public sector is that it is over-bloated and large, as many workers are performing duties that should have been done by few people. In correcting this, Obasanjo's regime began down-sizing of staff across all Ministries, Departments and Agencies following the review of three critical questions: how many people do we need to do the job? What skills are required? What is the best way to get this work done? (Eme & Ugwu, 2011:48). During the down-sizing process, it was discovered that 20% of the public service employees were not-existing while their names appeared on the payroll which goes to staff of personnel and accounts departments (El-Rufai, 2011). In rectifying this anomaly, the Executive Council of the Federation in Nigeria approved the implementation of Integrated Payroll and Personnel Information System (IPPIS) to all MDAs in February 2006. The purpose of IPPIS is to ensure the elimination of wastages noticed in the administration of payroll in public service (Emanghe & Amoramo, 2020).

The following have however been identified as the common kinds of payroll fraud namely: Timesheet fraud, wage falsification, fraud in commissions and bonuses, expense repayment fraud, ghost staff schemes, misclassification of members of staff: Time sheet fraud is committed when an employee bloats the number of hours he/she has worked in his/her time sheet and/or where an employee clocks in time for another employee which was not earned. On the other hand, an expense reimbursement fraud would occur where an employee claims expenses which he/she never incurred. For instance, making claims for travel cost which were cancelled or presenting more than one claim for the same expense, submitting fake receipts for payment and altering receipts in order to increase re-imburements. Misclassification of members of staff also occurs where an employee is wrongly classified for the purpose of avoiding tax payments. For instance, a management staff could be deliberately classified as a junior staff just to reduce the organization's tax liability. In the case of a commission or bonus fraud, an employee inflates his/her sales records just for the purpose of claiming higher bonuses or commission on sales. Wage falsification as a form of payroll fraud occurs 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 (Atake, Omoaka & Orlu, n.d.).

The common factor contributing to the problem of ghost workers in developing countries is poor records management systems in the public services (International Records Management Trust, 2008). Most countries particularly the underdeveloped ones lacked good personnel information systems to accurately record and regularly update the payroll databases (Fink & Hussmann, 2013). Weak personnel database results in lack of control over staff due to the inability of government officials to effectively monitor the activities of employees. The problems of weak personnel database are prevalent in the education and health sectors in Africa because of the large numbers of employees in those sectors, coupled with ineffective supervision of staff by heads of government agencies (Dovlo as cited in Akande, 2019). The poor record management systems create discrepancies between the number of public servants on the government payroll and the actual number of employees recorded on the staff rolls in the various agencies. Several reasons may account for the differences between employee records and those listed on the government payroll (Lewis & Pettersson, 2009). One of such reasons was that the lists of public servants were sometimes kept by multiple agencies that were not updated concurrently (Lewis & Pettersson, 2009).

Leyira and Temple (2018) asserted that ghost workers and payroll fraud refer to all processes of employee impersonations that have salary cost implication on the concerned government. Ghost employees maybe either real or fictional individuals who are falsely paid through a company's payroll, after information- often relating to former or dead staff- is entered into the system in order to siphon money away. In some instances, former worker's details remain on the system once they have left the company, enabling fraudsters to simply input new bank details. However, such transactions appear to be genuine and are usually much harder to detect if robust mechanisms are not in place.

Overtime, some countries especially the developing ones like Nigeria have had bad and tiring Experiences with the persistent problem of ghost workers' syndrome especially in the public sector. In some cases, payroll clerks may include names of fictitious or separated employees on the payroll, forge their signatures, and collect the salaries on their behalf (Izedonmi 2012). Most of these salaries are falsely paid through multiple transfers to a particular account holder in the bank or through opening inactive accounts with the names of dead or retired staff and new bank details are simply inputted (Ikechukwu, Idowu, Chizoba, Nkiruka, & Thomas, 2020).

Financial management systems serve as a useful tool to enforce an entity's guidelines and policies, it involves the ascertainment, recording, summarizing, and reporting of financial information used in evaluating and monitoring a firm's economic undertakings. Therefore, the introduction of the Integrated Personnel and Payroll Information System (IPPIS) project in 2006 was done in an effort to drastically reduce or eliminate this menace of payroll fraud. The strategy of using BVN rather than requiring the physical presence of each staff has significantly simplified and accelerated the progress of the IPPIS project (Negedu, 2015). However, the introduction of the BVN was initiated as a solution to the slow pace of progress being encountered in the enrolment of staff on the Integrated Payroll and personnel information system (IPPIS) (negedu, 2015). This manace can better be tackled through payroll

audit and biometric verification. For Ikechukwu, Idowu, Chizoba, Nkiruka, and Thomas, (2020), a staff audit is a fresh review of staffing. Staff audits give an up-to-date analysis of the work-force and provide the basis for subsequent benchmarking and work-force analysis. They also provide the necessary database for accurate estimation of costs of alternative severance and pension strategies, and for the eventual disbursement of payments to workers. Up-to-date records of personnel and removal of ghost workers are immediate benefits of a staff audit.

Regular audits (internal and external) that check employee behavior, verify records, and provide general oversight can mitigate payroll fraud. Internal audits should be performed consistently to identify weaknesses and make adequate adjustments and improvements. But internal audits may not be enough, skillful employees can still get away with payroll fraud without external checks. It's important to have third-party audits performed periodically, making it much harder for insiders to continuously get away with fraud. It also deters fraudsters from trying in the first place, as they know they'll be caught out. Typically, fraudsters committing payroll fraud believe there are weak controls that they can circumvent—allowing them to get away with it. Employers should conduct periodic audits of their payroll reports to ensure employees are getting the correct pay. It's also essential to review Social Security numbers to make sure there aren't any duplicate or missing numbers that may point to a ghost employee scheme (Couch, 2018).

Internal audit that encompass maintenance of fraud prevention and detection program which includes: the fraud incident response team process and procedures; education and awareness of antifraud safeguards; continuous antifraud auditing; periodic fraud risk assessments; periodic reports to senior management and the audit committee of the institutional board on the activities of the fraud prevention and detection programme; and annual plan review and update should be routinely carried out (Scripps, 2013). Conduct ongoing auditing and fraud detection reviews: Internal Audit conducts routine fraud detection and continuous auditing reviews within the institutions where there exists the potential for financial loss due to fraud, financial irregularity, processing errors, or control deficiencies. At a minimum, the institutions will be subject to routine fraud detection and continuous auditing with follow-up performed accordingly.

Another way of curbing ghost names could be the use of Biometrics Technology. Biometrics Technology employs one or more of an individual's physical characteristics as a means of identification. The Technology makes use of accurate measurement of, for example, an employee's eyes, hands, or voice; digitizes the measurement; saves the records in a computer's memory, and later compares it against the same measurement when taken later. Because it is difficult, if not impossible, to duplicate employee's physical measurement, biometrics is discovery applications in the provision of access to financial records, and other security-sensitive areas, such as access to medical records, buildings, payroll systems, attendance records, and banking services. To check payroll fraud, biometrics can have very wide application in the ministries and parastatal across the country. Tying each civil servant to his or her unique biometrics identifier is a step in the right direction for eradicating ghost names (Obara, Nangih & Agba, 2017).

Biometric in a laymans' perception could be viewed as a measure of identity based on a physiological (fingerprints, face, eyes) or behavioural (speech or signature) characteristics. It is an effective personal identification mechanism as it is unique to an embodied in each person and cannot be forgotten, lost or stolen like other conventional identification methods. Biometric identification mechanism requires devices such as camera or scanner to capture and store the image or measurement of an individual's characteristics with the aid of computer hardware and software. Features extracted during biometric enrolment and acquisition stages are often transformed through a non-reversible process into templates in an effort to facilitate the storage and matching process (Nana, 2016).

Shabnewa (2016) also stressed that the main advantages of using a biometric system is that it identifies a person by who the person is rather than what the person has, unlike most traditional authorization systems such as personal identification number, passwords, or ID cards. Unlike these solutions that rely on "what you have", biometric credentials such as fingerprints, finger vein, and palm vein or iris image cannot be lost, forgotten, guessed or easily cloned. Nangih and Davies (2017) maintained that the utilization of biometrics is to eliminate ghost workers such that employees can be uniquely identified, virtually eliminating duplicate registration in any form and eradicating ghost worker payroll fraud plus help establish accountability. The benefits of biometric verification mechanism are elimination of fake employee registration into the payroll system. During salary and benefit disbursement to the right employees, biometric identification creates concrete audit trails for employee's punctuality which in turn improves service quality, with ghost workers eliminated.

Biometrics can fulfil two basic functions: authentication and identification. These are important functions in the regulation of any Civil Service, as they provide evidence of the true identities of government employees and verify those identities. These concerns are non-trivial as Nigeria's emergence from manual payroll management systems has come with gaps, being exploited for fraud and corruption (Okoowo, 2022). Mike (2019) further affirmed that through the use of biometrics, Nigerian civil service employees can be accurately identified. This has helped eliminate many duplicate registrations, removing ghost workers from the payroll. It is on this basis that the researcher was curious to find out the influence of financial control best practices on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.

### **Purpose of the Study**

The purpose of this study was to find out the influence of financial control best practices on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Specifically, the study aimed at examining the influence of:

1. Payroll audit on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.
2. Biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.

### **Research Questions**

1. To what extent does payroll audit influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria?

2. To what extent does biometric verification influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria?

### **Statement of Hypotheses**

1. Payroll audit does not significantly influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.
2. There is no significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.

### **Methodology**

Ex-post-facto design was adopted for this study. This design was preferred because the major variables in the study were fundamentally not manipulated. Isangedighi, Joshua, Asim and Ekuri (2004) stated that ex-post-facto research essentially studies phenomena after they have occurred. The variables payroll audit and biometric verification (independent sub-variables) an payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria (dependent variable) had already interacted in the study area long before the researcher even thought of going to study them. The researcher by this, merely determine the relationship that existed among these variables. This study was delimited to state owned tertiary institutions in Cross River State of Nigeria. The population of the study was 89 staff in the bursary departments of state owned tertiary institutions in Cross River State of Nigeria (University of Cross River State, Calabar = 35; University of Education & Entrepreneurship, Akamkpa = 16; College of Health Technology, Calabar = 10; Institute of Technology & Management, Ugep = 7; College of Nursing & Midwifery Sciences, Calabar = 8; College of Nursing & Midwifery Sciences, Itigidi = 7; College of Nursing & Midwifery Sciences, Obudu = 6). Census approach was used to sample the 89 respondents. This is because the population of this study is relatively small.

The instrument for the study was Financial Control Best Practices and Payroll Fraud Questionnaire (FCBPPFQ). The instrument contained 17 items (2 measured the demographic description of the respondents in terms of designation and age; 10 measured payroll audit and biometric verification. while 5 measured payroll fraud). The 15 items were developed based on Likert 4 points rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with weight 4, 3, 2 and 1 for positively worded items and 1, 2, 3, and 4 for negatively worded items respectively. The instrument after being developed by the researcher, was presented to the two experts in the departments of Educational Management and Educational Psychology (Measurement and Evaluation) of University of Calabar for face and content validation. The instrument was further administered on 10 respondents that formed an equivalent population to the study population in state owned tertiary institutions in Ebonyi State. The responses were coded and prepared on a spread sheet as Cronbach Alpha Reliability Estimates was used to determine the reliability coefficient which ranged from .85 to .88, ascertaining that the instrument was reliable. Simple linear regression was used for testing the null hypothesis at .05 level of significance.

## Results

### Hypothesis one

Payroll audit does not significantly influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. To test this hypothesis, simple linear regression analysis was used with Payroll audit as independent variable and payroll fraud as dependent variable. The f-ratio was used to test the overall influence. The results are presented in Table 1. The results in Table 1 showed that a regression coefficient (R) of .012 was obtained giving a coefficient of determination ( $R^2$ ) of .000. This means that about 0.0% of the total variation in payroll fraud was accounted for by the variation in payroll audit. The P-value (.908) associated with the computed F-value (.013) is greater than .05. As a result, the null hypothesis not was rejected. This means that Payroll audit does not significantly influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria.

The coefficients ( $B = .014$  and  $Betta = .012$ ) indicated that a little increase in Payroll audit will lead to insignificant positive detection of payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Furthermore, when the parameters were tested for prediction, only regression constant made significant contributions to the prediction of payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria ( $P = 000$ ,  $t = 7.040$ ) while payroll audit did not ( $P = 908$ ,  $t = .116$ ).

**Table 1:** Regression analysis of influence of payroll audit on payroll fraud in in state-owned tertiary institutions in Cross River State, Nigeria

R – value = .012		Adj R – square = - .011			
R – square = .000		Std. Error = 2.31520			
Source of variation	Sum of squares	Df	Mean square	F – value	P – value
Regression	.072	1	.072	.013	.908
Residual	466.333	87	5.360		
Total	466.404	88			
Predictor variable	Unstandardised coeff B	std. Error	Std coeff Betta	t-value	P – value
Constant	13.488	1 .916		7.040*	.000
Payroll audit	.614	.120	.012	.116	.908

\*Significant at .05 level,  $P < .05$

### Hypothesis Two

There is no significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. To test this hypothesis, simple linear regression analysis was used with biometric verification as independent variable and payroll fraud as dependent variable. The f-ratio was used to test the overall influence. The results are presented in Table 2. The results in Table 2 showed that a regression coefficient (R) of .273 was obtained giving a coefficient of determination ( $R^2$ ) of .074. This means that about 7.4% of the

total variation in payroll fraud was accounted for by the variation in biometric verification. The P-value (.010) associated with the computed F-value (6.995) is less than .05. As a result, the null hypothesis was rejected. This means that there is significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. The coefficients (B = .266 and Beta = .273) indicated that a little increase in biometric verification will lead to insignificant positive detection of payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Furthermore, when the parameters were tested for prediction, both regression constant and biometric verification made significant positive contributions to the prediction of payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria (P = 000, t= 6.714; P= 010, t= 2.645).

**Table 2:** Regression analysis of influence of biometric verification on payroll fraud in in state-owned tertiary institutions in Cross River State, Nigeria.

R – value = .273		Adj R – square = - .064			
R – square = .074		Std. Error = 2.22755			
Source of variation	Sum of squares	Df	Mean square	F – value	P – value
Regression	34.711	1	34.711	6.995	.010
Residual	431.693	87	4.962		
Total	466.404	88			
Predictor variable	<u>Unstandardised coeff</u>		Std coeff	t-value	P – value
	B	std. Error	Betta		
Constant	9.870	1 .470		6.714*	.000
biometric verification	.266	.100	.273	2.645	.010

\*Significant at .05 level, P < .05

## Discussion

The finding that payroll audit lacks a statistically significant influence on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria suggests a disconnect between the audit function as practiced and its intended deterrent or detection role. In principle, payroll audits are designed to verify the accuracy, validity, and completeness of payroll records, identify ghost workers, and flag irregular payments. When audits fail to show a significant effect, it usually points to limitations in how they are designed and implemented rather than to the irrelevance of auditing as a concept.

Several practical explanations fit this outcome. First, audits in public tertiary institutions are often periodic, predictable, and compliance-oriented. If staff involved in fraudulent schemes know when audits occur and what documents will be examined, they can structure fraud to avoid detection during those windows. Second, internal audit units in state-owned institutions frequently operate under resource constraints, limited autonomy, and pressure from management. Without independence and forensic capacity, audits tend to review paperwork rather than verify physical existence and entitlement to pay. Third, the nature of payroll fraud in these settings may occur upstream of the audit trail during recruitment, data entry, or

system configuration so that by the time an audit reviews payroll listing, the fraudulent entries appear legitimate on paper. This does not imply that auditing is useless. Rather, it indicates that conventional financial audits, as currently executed, do not create enough risk of detection to alter the behaviour of potential fraudsters. For audits to exert a significant influence, they would need to shift toward surprise checks, data analytics on payroll databases, reconciliation with independent personnel records, and mandatory follow-up on findings. Until those conditions are met, payroll audit remains a procedural formality with little measurable impact on fraud levels. This study does not align with Ikechukwu, Idowu, Chizoba, Nkiruka, and Thomas, (2020) who stated that a staff audit is a fresh review of staffing. Staff audits give an up-to-date analysis of the work-force and provide the basis for subsequent benchmarking and work-force analysis. They also provide the necessary database for accurate estimation of costs of alternative severance and pension strategies, and for the eventual disbursement of payments to workers. Up-to-date records of personnel and removal of ghost workers are immediate benefits of a staff audit.

These results negated Couch (2018) who also stressed that regular audits (internal and external) that check employee behavior, verify records, and provide general oversight can mitigate payroll fraud. Internal audits should be performed consistently to identify weaknesses and make adequate adjustments and improvements. But internal audits may not be enough, skillful employees can still get away with payroll fraud without external checks. It's important to have third-party audits performed periodically, making it much harder for insiders to continuously get away with fraud. It also deters fraudsters from trying in the first place, as they know they'll be caught out. Typically, fraudsters committing payroll fraud believe there are weak controls that they can circumvent allowing them to get away with it. Employers should conduct periodic audits of their payroll reports to ensure employees are getting the correct pay. It's also essential to review Social Security numbers to make sure there aren't any duplicate or missing numbers that may point to a ghost employee scheme.

This study is at variance with internal audit that encompass maintenance of fraud prevention and detection program which includes: the fraud incident response team process and procedures; education and awareness of antifraud safeguards; continuous antifraud auditing; periodic fraud risk assessments; periodic reports to senior management and the audit committee of the institutional board on the activities of the fraud prevention and detection programme; and annual plan review and update should be routinely carried out (Scripps, 2013). Conduct ongoing auditing and fraud detection reviews: Internal Audit conducts routine fraud detection and continuous auditing reviews within the institutions where there exists the potential for financial loss due to fraud, financial irregularity, processing errors, or control deficiencies. At a minimum, the institutions will be subject to routine fraud detection and continuous auditing with follow-up performed accordingly.

Another way of curbing ghost names could be the use of Biometrics Technology. Biometrics Technology employs one or more of an individual's physical characteristics as a means of identification. The Technology makes use of accurate measurement of, for example, an employee's eyes, hands, or voice; digitizes the measurement; saves the records in a computer's

memory, and later compares it against the same measurement when taken later. Because it is difficult, if not impossible, to duplicate employee's physical measurement, biometrics is discovery applications in the provision of access to financial records, and other security-sensitive areas, such as access to medical records, buildings, payroll systems, attendance records, and banking services. To check payroll fraud, biometrics can have very wide application in the ministries and parastatals across the country. Tying each civil servant to his or her unique biometrics identifier is a step in the right direction for eradicating ghost names (Obara, Nangih & Agba, 2017).

The results of hypothesis two showed that there is significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. The significant influence of biometric verification indicates that linking payroll payment to a unique, physical characteristic of the employee directly disrupts the mechanisms through which payroll fraud typically occurs. Biometric systems fingerprint, facial recognition, or iris scans anchor payroll identity to a person who must be present for verification. This directly undermines the most common schemes: ghost workers, salary splitting, and impersonation.

The effectiveness comes from two channels. First, deterrence: the knowledge that payment requires a live biometric match raises the perceived risk of detection and makes it difficult to maintain fictitious employees on the payroll. Second, prevention at the point of transaction: unlike retrospective audits, biometric verification validates identity before payment is released, closing the window for fraudulent entries to be monetized. In practice, this means that entries for non-existent staff or for individuals who have left service cannot be sustained unless collusion extends to capturing and reusing biometric data, which is operationally harder and riskier. This result is consistent with broader experiences in Nigeria's public sector, where biometric exercises under IPPIS and BVN integration led to the removal of large numbers of ghost workers and reduced wage bills. The significance in Cross River State's tertiary institutions suggests that the institutions face fraud types that are sensitive to identity verification controls. It also implies that the implementation of biometric systems in these schools has reached a level of coverage and enforcement where it alters behaviour and outcomes.

This result supported Nana (2016) who stated that biometric is an effective personal identification mechanism as it is unique to an embodied in each person and cannot be forgotten, lost or stolen like other conventional identification methods. Biometric identification mechanism requires devices such as camera or scanner to capture and store the image or measurement of an individual's characteristics with the aid of computer hardware and software. Features extracted during biometric enrolment and acquisition stages are often transformed through a non-reversible process into templates in an effort to facilitate the storage and matching process. This finding corroborated with Shabnewa (2016) who also stressed that the main advantages of using a biometric system is that it identifies a person by who the person is rather than what the person has, unlike most traditional authorization systems such as personal identification number, passwords, or ID cards. Unlike these solutions that rely on "what you have", biometric credentials such as fingerprints, finger vein, and palm

vein or iris image cannot be lost, forgotten, guessed or easily cloned. This study is in agreement with Nangih and Davies (2017) who maintained that the utilization of biometrics is to eliminate ghost workers such that employees can be uniquely identified, virtually eliminating duplicate registration in any form and eradicating ghost worker payroll fraud plus help establish accountability. The benefits of biometric verification mechanism are elimination of fake employee registration into the payroll system. During salary and benefit disbursement to the right employees, biometric identification creates concrete audit trails for employee's punctuality which in turn improves service quality, with ghost workers eliminated.

Biometrics can fulfil two basic functions: authentication and identification. These are important functions in the regulation of any Civil Service, as they provide evidence of the true identities of government employees and verify those identities. These concerns are non-trivial as Nigeria's emergence from manual payroll management systems has come with gaps, being exploited for fraud and corruption (Okooowo, 2022). Mike (2019) further affirmed that through the use of biometrics, Nigerian civil service employees can be accurately identified. This has helped eliminate many duplicate registrations, removing ghost workers from the payroll.

### **Conclusion**

The results showed that payroll audit does not significantly influence payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. This has proven the continuous payroll fraud in spite of the regular payroll audit. This indicates that even the so call auditor corroborated with other personnel to aid the evil irrespective of government strong warning. The results further indicated that there is significant influence of biometric verification on payroll fraud in state-owned tertiary institutions in Cross River State, Nigeria. Biometric technology has proved to be the perfect tool to establish this and provide a cure to the chronic disease of payroll fraud. The contrast between the two results suggests that controls tied directly to identity verification at the point of payment are more effective than retrospective, document-based controls in this setting. Audits may still play a role for accountability and for detecting other types of irregularities, but biometric verification appears to be the stronger lever against payroll fraud in these institutions.

### **Recommendations**

1. Periodic payroll audit should be carried out by independent auditors with proven integrity; and on regular basis, swap the schedule of the internal auditors as this will curb the menace of payroll fraud.
2. Biometric registration of employees should be automated by the Cross River State Government and the management of the state owned tertiary institutions as this will enable the government whose limited resources to education are being sapped through payroll fraud to put an end to this economic evil.

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