Accounting Systems and Payroll Fraud in the Public Sector: A Survey of Selected Ministries and Parastatals in Rivers State, Nigeria.

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ABSTRACT
This research work examined the extent to which Accounting system put in place affect payroll fraud in the Nigerian public sector. Data for the study was gotten from a structured and well validated questionnaire distributed to staff of Ministries, Departments, and Agencies (MDAs) of Government Parastatals in Rivers State of Nigeria. Data gathered were presented using descriptive statistical tools such as tables, percentages, and charts. Formulated hypotheses were tested at 0.05 level of significance level using t-tests and simple regression. Findings from the study revealed that there was significant correlation between the effectiveness of manual and computerized accounting system payroll fraud in the Nigerian public sector. Based on the findings, the study concluded that government should take strict methodology in recognizing the need for an active accounting and payroll system; which includes stiffer penalties in public sector. The study further recommends that everyone should join hands with EFCC and ICPC to curb corrupt practices in Nigeria. It further enjoined the Government to train Forensic accountants to block all the leakages in the Ministries and parastatals as an active measure to check the incidence of payroll fraud.

Keywords: Accounting Systems, Payroll Fraud, Payroll System, Public Sector

INTRODUCTION
Accounting information serves a veritable tool in the enforcement of an entity’s guidelines and policies. It involves ascertainment, recording, summarizing, and reporting of financial information used in evaluating and monitoring a firm’s economic undertakings. The word
“Accounting” according to business dictionary can be defined as a systematic procedure that identify, record, measure, classify, verify, summarize, interprets, and communicate financial facts. It reveals profit or loss for a given period, and the value and nature of a firm’s assets and liabilities and owner’s equity.

Accounting system therefore, is an organized set of manual and computerized accounting methodology, processes, and wheels which are used in gathering, recording, classifying, analyzing, summarizing, interpreting, and presenting accurate and timely financial information for decision making in an organization.

Accounting plays an important role of recording and managing funds in any public organization in the most suitable way. Kolade and peter, (1987) looked at the role on the number of staff employed by these sectors to facilitate accounting work in an organization. They opined that the role accounting plays in the public sector is very important, that the numbers of employees who carry out these accounting functions in an organization are few when equated to the work they perform. Nigeria is filled with stories of wrong practices especially, stories of ghost workers on the payroll of ministries and parastatals, Fraud, embezzlements, setting ablaze of offices housing sensitive documents and corruption, Okwoli, (2004). Bello, (2001) believes huge amount of money is missing through one financial mishandling or another in Nigeria, which drains the country’s scanty resources through dishonest means with extensive consequences on the development and/or socio-economic or political programmes of the country. Billions of naira are lost in the public sector every year through dishonest practices. This represents only the amount that is uncovered and made public. Indeed, much more substantial or huge sums of money are missing in concealed frauds. Appah and Appiah (2010) cited that some cases of fraud is predominant in public sector of Nigeria, that every segment of the public service seem to be involved in one way or the other in some of these horrible acts. Mismanagement of funds in Nigeria has existed since the era of oil boom, a period in which control mechanisms are weak, which created an assortment of ambiguities that have tended to facilitate and sustain corrupt practices. This includes the fact that there is a notion and ethics of accountability in the conduct of public affairs in the country (Bello, 2001).

In Nigeria, not enough researches have been carried out by scholars on the Effect of Accounting Systems on Payroll Fraud in the Public Sector. Though some Scholars have look at the effect of Bank Verification Number on the Ghost Worker Syndrome; there are still much to be done; considering the negative impacts of this ugly phenomenon in our public sector financial management. The study therefore is very important and significant as it will aid the Governments at all levels (Federal, State and Local) in the eradication of Payroll Fraud; save monies previous diverted by fraudsters and then use it to further provide the needed infrastructure for the good of the citizenry.

STATEMENT OF THE PROBLEM
If payroll fraud, which has become a serious menace in our public financial management system, is not quickly checked or properly managed, it will further impact negatively on our already depleted public revenue. Realizing this fact, the government has come up with various measures towards checking the problem. One of the measures was the introduction of the Integrated Payroll and Personnel Information System (IPPI). The other measure introduced by the government recently is the use of Biometrics Technology.
PURPOSE OF THE STUDY
The purpose of the study was to examine the impact of Accounting System on Payroll Fraud in the Nigerian Public Sector. Some specific objectives were as follows:

1. To examine the extent to which computerized accounting system will affect payroll fraud in the public sector?
2. To establish the extent to which manual accounting system facilitate the problem of ghost workers in the public sector?
3. To know the extent to which manual accounting system influence falsification of attendance of staff in the public sector?
4. To investigate the effect of integrated payroll and personnel information system (IPPIS) on corruption in government ministries and parastatals.

RESEARCH QUESTIONS
In course of carrying out the study, the following questions were addressed:

1. How does computerized accounting system affect payroll fraud in the public sector?
3. Does manual accounting system influence falsification of attendance of staff in the public sector?
4. How does integrated payroll and personnel information system (IPPIS) influence the incidences of corruption in government ministries and parastatals.

RESEARCH HYPOTHESES
To answer the above stated Research Questions, the following hypotheses were formulated:

HO₁: There is no significant relationship between computerized accounting system and payroll fraud in the public sector.

HO₂: There is no significant relationship between manual accounting system and ghost workers in the public sector.

HO₃: There is no significant relationship between manual accounting system and falsification of attendance time in the public sector.

HO₄: Integrated payroll and personnel information system (IPPIS) does not significantly reduce the incidence of corruption in government ministries and parastatals.
LITERATURE REVIEW
According to the Association of Certified Fraud Examiners, payroll fraud is the major source of accounting fraud and staff theft. The fact is, fraud perpetrated in the payroll is not avoidable, but is catchable. Any person at any time can steal. However, catching and minimizing the risk is what is emphasized. Periodically reconciling the payroll at least quarterly with persons other than the staff who prepares the payroll is the best way to do it. Payroll fraud are of two common types, the first being falsification of attendance time, this type of fraud which can be identified easily through the payroll reconciliation and staff evaluation method. The second most common type of payroll fraud is “ghost employees.” Ghost employees are employees that do not exist.

Payroll fraud involves the theft of cash from government establishment through the preparations of the establishment’s payroll. Some prominent examples of payroll fraud are: Pay cheque diversions, Kickbacks, and Ghost workers. Like other forms of crimes, payroll fraud is a type of crime is prevalent at all levels of government in Nigeria. We have observed, that as a type of corruption, it continues because the society and the environment we live in today support material accomplishment (Babalobi, 2008). This represents attempt to safeguard wealth or power at government expenses by government employees. Payroll fraud thrives because of greed on the part of public officers to divert government funds to personal accounts to make quick money. Fraudster and other perpetrators see it as the quickest means to “get rich quick”. Jaja (2012) observed that, passion for worldly things, pressure for a shortcut to wealth, exaltation, and approbation of illicit rich among others account for the increased rate of crime in Nigeria. The regrettable yard stick of measuring good life in Nigeria is ostentatious living and wealth (Olaleye, 2008).

It therefore shows that the unending desires for riches by whatever feasible mean contribute to fraud in public sector. According to Babalobi (2008), corruption in the public service is encouraged by weak government institutions, poor pay incentive, lack of openness and transparency. In his view, the payroll fraud apparently becomes a means to making up with the meager pay incentives. Obinna (2013) noted that, there is collaboration within the system that enhances the operation of payroll fraud. He further observed the insider influence as a means that tends to obstruct possible anxiety and arraignment of offenders. It has not been easy for the government to get to the source of the problem which is fueled by employees’ corruption.

Biometrics Technology
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. (Tuffour 2002).
The Integrated Payroll and Personnel Information System (IPPIS)
The Integrated Payroll and Personnel Information System (IPPIS) is one of the Federal Government of Nigeria Public Financial Management reform initiatives. It is aimed at improving the management of human resources and eliminates fraud in the Nigeria Public Service. IPPIS was produced to accomplish the following goals:
1. Facilitate human resources planning by providing information for decision making;
2. Provide a ground for accurate budgeting and yearly recurrent expenditure on worker’s emoluments
3. Monitor monthly payment of staff emoluments against FGN’s annual budget to ensure minimal wastage and leakage
4. Eradicate payroll fraud such as numerous payment of emoluments to single worker or payment of monthly salary to a fictitious employee;
5. Expedite easy storage, updating, and retrieval of staff records;
6. Ensure database integrity so that once entered cannot be manipulated by unauthorized users;
7. Improve confidence in the method of determining worker’s emolument.
8. Prompt deduction and remittance to accounts of all third parties’ payments such as PFAs, NHF, PAYE, etc.

Some Controls that Can Help Minimize the Risk of Payroll Fraud Include:
• Proper segregation of duties in the payroll area including entering time data, authorizing time cards, commissions, or bonuses, distributing payroll, transferring funds to payroll accounts, and reconciling the payroll bank account.
• Supervisors should be present at the beginning and end of shifts when an automated time-keeping system is used.
• Comparing the number of paychecks with the number of authorized workers.
• Examining all time cards submitted for proper authorization.
• Analytical review.

METHODOLOGY
The quasi-experimental design was considered most appropriate for this study. The population for this study consists of government ministries and parastatals in Nigeria. However, due to the difficulty of conducting an effective study on the entire population, the researcher resorted to limit the scope of the study to Ministries, Departments, and Agencies in Rivers state. A simple random sampling technique was used to select 54 (using the Yaro Yemen method) of the total number 120 MDAs in Rivers State, from which were collected via questionnaires.

DATA ANALYSIS TECHNIQUE
The research questions were answered and hypotheses tested with one or more of the following statistical tools: tables, percentages, graphs, and charts. To ascertain the strength of the relationship between variables, simple regression statistic was used. These were analyzed with the Statistical Package for Social Science (SPSS). Testing of hypotheses were done at 0.05 level of significance.
The analysis of the responses to the question shows that there was a relationship between computerized accounting systems and prevention of corruption. The computerized accounting system addresses the manual accounting system.

**Presentation of Empirical Data**
For the study, a total of 90 copies of the questionnaire were distributed to staff drawn from the management and accounting departments/sections of the affected ministries and parastatals in Rivers State. Out of 90 copies of the questionnaire administered, a total of 85 were retrieved and used for the study, representing 94% response rate. Whereas 5 copies of the questionnaire representing (6%) were not returned as shown in the table below;

**Table 1.1 Response pattern**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of ministry</th>
<th>Allocation number</th>
<th>Returned number</th>
<th>Percentage returned</th>
<th>Not returned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finance</td>
<td>15</td>
<td>14</td>
<td>93</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Labour &amp; productivity</td>
<td>15</td>
<td>15</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Health</td>
<td>15</td>
<td>13</td>
<td>87</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Justice</td>
<td>15</td>
<td>14</td>
<td>93</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Water board corporation</td>
<td>15</td>
<td>15</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>State board of internal revenue</td>
<td>15</td>
<td>14</td>
<td>93</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>90</td>
<td>85</td>
<td>93</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Survey data, August 2016*

**Data Analysis**
This involves the evaluation of responses from the respondents to the questions in the questionnaires. In chapter one, five research questions were stated, they are analyzed in this section with simple percentage mathematical formula based on the 85 questionnaires retrieved.

**Impact of Computerized Accounting System on Payroll Fraud in the Public Sector**

**Table 1.2 Computerized Accounting Systems and Payroll System**

<table>
<thead>
<tr>
<th>Grade</th>
<th>VGE</th>
<th>GE</th>
<th>ME</th>
<th>SE</th>
<th>N</th>
<th>RESPONSE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINT</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Score to question 7</td>
<td>65×5 = 325</td>
<td>10×4 = 40</td>
<td>5×3 = 15</td>
<td>4×2 = 8</td>
<td>1×1 = 1</td>
<td>85 (389)</td>
</tr>
<tr>
<td>Percentage Score%</td>
<td>84</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 8</td>
<td>50×5 = 250</td>
<td>15×4 = 60</td>
<td>13×13 = 39</td>
<td>5×2 = 10</td>
<td>2×1 = 2</td>
<td>85 (361)</td>
</tr>
<tr>
<td>Percentage Score%</td>
<td>69</td>
<td>16</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 9</td>
<td>60×5 = 300</td>
<td>16×4 = 64</td>
<td>5×3 = 15</td>
<td>3×2 = 6</td>
<td>1×1 = 1</td>
<td>85 (386)</td>
</tr>
</tbody>
</table>
Based on the analysis of research question, it was revealed that computerized accounting system impact on the preparation of payroll to a great extent.

### Impact of Manual Accounting System on Ghost Workers in the Public Sector

**Table 1.3 Manual Accounting System and Ghost Workers**

<table>
<thead>
<tr>
<th>Grade</th>
<th>VGE</th>
<th>GE</th>
<th>ME</th>
<th>SE</th>
<th>N</th>
<th>RESPONSE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINT</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Score to question10</td>
<td>51×5 = 255</td>
<td>20×4 = 80</td>
<td>8×3 = 24</td>
<td>3×2 = 6</td>
<td>3×1 = 3</td>
<td>85 (368)</td>
</tr>
<tr>
<td>Percentage on score%</td>
<td>69</td>
<td>21</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Score to question11</td>
<td>45×5 = 225</td>
<td>15×4 = 60</td>
<td>16×3 = 48</td>
<td>9×2 = 18</td>
<td>0×1 = 0</td>
<td>85 (351)</td>
</tr>
<tr>
<td>Percentage on score%</td>
<td>64</td>
<td>17</td>
<td>14</td>
<td>5</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question12</td>
<td>41×5 = 205</td>
<td>30×4 = 120</td>
<td>10×3 = 30</td>
<td>3×2 = 6</td>
<td>1×1 = 1</td>
<td>85 (362)</td>
</tr>
<tr>
<td>Percentage on score%</td>
<td>57</td>
<td>33</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Survey data, August 2016*

The analysis of the responses to the question shows a strong indication that manual accounting system does affect ghost workers in the public sector.

### Relationship between Manual Accounting System and Falsification of Attendance Time in the Public Sector

**Table 1.4 Manual Accounting System and falsification of Attendance Time**

<table>
<thead>
<tr>
<th>Grade</th>
<th>VGE</th>
<th>GE</th>
<th>ME</th>
<th>SE</th>
<th>N</th>
<th>RESPONSE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINT</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Score to question13</td>
<td>59×5 = 295</td>
<td>17×4 = 68</td>
<td>7×3 = 21</td>
<td>1×2 = 2</td>
<td>1×1 = 1</td>
<td>85 (387)</td>
</tr>
<tr>
<td>Percentage on score%</td>
<td>76</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question14</td>
<td>20×5 = 100</td>
<td>15×4 = 60</td>
<td>15×3 = 45</td>
<td>20×2 = 40</td>
<td>15×1 = 15</td>
<td>85 (260)</td>
</tr>
<tr>
<td>Percentage on score%</td>
<td>38</td>
<td>23</td>
<td>17</td>
<td>15</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>Score to question15</td>
<td>35×5 = 175</td>
<td>27×4 = 108</td>
<td>11×3 = 33</td>
<td>9×2 = 18</td>
<td>3×1 = 3</td>
<td>85 (337)</td>
</tr>
<tr>
<td>Percentage</td>
<td>52</td>
<td>32</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Survey data, August 2016*
The analysis of the responses to the question shows that there is a relationship between manual accounting and the degree of corruption, and a strong one at that.

**Impact of Integrated Payroll and Personnel Information System (IPPIS) on Corruption in Government Ministries and Parastatals**

Table 1.5 Integrated Payroll and Personnel Information System (IPPIS) and incidence of corruption

<table>
<thead>
<tr>
<th>Grade</th>
<th>VGE</th>
<th>GE</th>
<th>ME</th>
<th>SE</th>
<th>N</th>
<th>RESPONSE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINT</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Score to question 16</td>
<td>45×5 = 225</td>
<td>15×4 = 60</td>
<td>14×3 = 42</td>
<td>8×2 = 16</td>
<td>3×1 = 3</td>
<td>85 (346)</td>
</tr>
<tr>
<td>Percentage score%</td>
<td>65</td>
<td>17</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 17</td>
<td>76×5 = 380</td>
<td>7×4 = 28</td>
<td>2×3 = 6</td>
<td>1×2 = 2</td>
<td>0×1 = 0</td>
<td>85 (416)</td>
</tr>
<tr>
<td>Percentage score%</td>
<td>91</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 18</td>
<td>43×5 = 215</td>
<td>17×4 = 68</td>
<td>10×3 = 30</td>
<td>8×2 = 16</td>
<td>7×1 = 7</td>
<td>85 (336)</td>
</tr>
<tr>
<td>Percentage score%</td>
<td>64</td>
<td>20</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source: Survey data, August 2016**

The analysis of the responses to the question shows a strong indication that integrated payroll and personnel information system (IPPIS) does reduce the incidence of corruption in government ministries and parastatals in Rivers State.

**Relationship between Computerized Accounting Systems and Prevention of Corruption**

Table 1.6 Computerized Accounting systems and prevention of corruption.

<table>
<thead>
<tr>
<th>Grade</th>
<th>VGE</th>
<th>GE</th>
<th>ME</th>
<th>SE</th>
<th>N</th>
<th>RESPONSE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINT</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Score to question 19</td>
<td>57×5 = 285</td>
<td>18×4 = 72</td>
<td>5×3 = 15</td>
<td>4×2 = 8</td>
<td>1×1 = 1</td>
<td>85 (381)</td>
</tr>
<tr>
<td>Percentage score%</td>
<td>75</td>
<td>19</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 20</td>
<td>62×5 = 310</td>
<td>16×4 = 64</td>
<td>6×3 = 18</td>
<td>1×2 = 2</td>
<td>0×1 = 0</td>
<td>85 (394)</td>
</tr>
<tr>
<td>Percentage score%</td>
<td>78</td>
<td>16</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Score to question 21</td>
<td>35×5 = 175</td>
<td>20×4 = 80</td>
<td>15×3 = 45</td>
<td>10×2 = 20</td>
<td>5×2 = 10</td>
<td>85 (330)</td>
</tr>
</tbody>
</table>

**Source: Survey data, August 2016**

The analysis of the responses to the question shows a strong indication that computerized payroll systems do reduce the incidence of corruption in government ministries and parastatals in Rivers State.
<table>
<thead>
<tr>
<th>Statistical variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation (R)</td>
<td>0.980</td>
</tr>
<tr>
<td>R Square (R²)</td>
<td>0.961</td>
</tr>
<tr>
<td>Adjusted R Square (AR²)</td>
<td>0.951</td>
</tr>
<tr>
<td>T-Test (t) payroll fraud</td>
<td>9.945</td>
</tr>
<tr>
<td>T-Test constant</td>
<td>0.599</td>
</tr>
<tr>
<td>F figure</td>
<td>98.901</td>
</tr>
<tr>
<td>B value</td>
<td>0.886</td>
</tr>
<tr>
<td>Beta</td>
<td>0.980</td>
</tr>
</tbody>
</table>

**Source:** values obtained from SPSS result in appendix 2

### Table 1.8 showing the relationship between manual accounting system and ghost workers in the public sector

<table>
<thead>
<tr>
<th>Statistical variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation (R)</td>
<td>0.530</td>
</tr>
<tr>
<td>R square (R²)</td>
<td>0.300</td>
</tr>
<tr>
<td>Adjusted R Square (AR²)</td>
<td>-0.330</td>
</tr>
<tr>
<td>T-Test (t) ghost workers</td>
<td>0.092</td>
</tr>
<tr>
<td>T-Test constant</td>
<td>1.015</td>
</tr>
<tr>
<td>F figure</td>
<td>0.900</td>
</tr>
<tr>
<td>B value</td>
<td>0.200</td>
</tr>
<tr>
<td>Beta</td>
<td>0.530</td>
</tr>
</tbody>
</table>

**Source:** values obtained from SPSS result in appendix 2

### Table 1.9 shows result of the relationship between manual accounting system and falsification of attendance time in the public sector.

<table>
<thead>
<tr>
<th>Statistical variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation (R)</td>
<td>0.962</td>
</tr>
<tr>
<td>R square (R²)</td>
<td>0.925</td>
</tr>
<tr>
<td>Adjusted R Square (AR²)</td>
<td>0.906</td>
</tr>
<tr>
<td>T-Test (t) Attendance time</td>
<td>7.015</td>
</tr>
<tr>
<td>T-Test constant</td>
<td>1.128</td>
</tr>
<tr>
<td>F figure</td>
<td>49.213</td>
</tr>
<tr>
<td>B value</td>
<td>0.882</td>
</tr>
<tr>
<td>Beta</td>
<td>0.962</td>
</tr>
</tbody>
</table>

**Source:** values obtained from SPSS result in appendix 2
Table 1.10 showing result of integrated payroll and personnel information system and reduction in the incidence of corruption in government ministries and parastatals

<table>
<thead>
<tr>
<th>Statistical variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation (R)</td>
<td>0.553</td>
</tr>
<tr>
<td>R square (R²)</td>
<td>0.330</td>
</tr>
<tr>
<td>Adjusted R Square (AR²)</td>
<td>-0.330</td>
</tr>
<tr>
<td>T-Test (t) corruption</td>
<td>1.199</td>
</tr>
<tr>
<td>T-Test constant</td>
<td>0.092</td>
</tr>
<tr>
<td>F figure</td>
<td>0.800</td>
</tr>
<tr>
<td>B value</td>
<td>0.550</td>
</tr>
<tr>
<td>Beta</td>
<td>0.553</td>
</tr>
</tbody>
</table>

Source: values obtained from SPSS result in appendix 2

TEST OF HYPOTHESES
The hypotheses were tested using the primary data collected from respondents.

HO₁: There is no significant relationship between computerized accounting system and payroll fraud in the public sector.

*Interpretation*
Table 1.7 above shows a correlation coefficient (r) of 0.980. This implies that a very strong correlation exists between preparation of payroll sheet and explanatory variables. The coefficient of determination (r²) is 0.961 which shows that 96% of the variation in preparation of the payroll sheet is attributable to the variations in computerized accounting system. Also, the F-value calculated of 98.901 has a correlation corresponding value of 0.00 which implies a good model utility.

The test of significance conducted as shown in the tables above states that payroll preparation has a calculated value of 9.945 and a corresponding significance value/probability value of 0.000. The positive sign of t-value (9.945) shows the direction of the variables. This therefore implies that when computerized accounting system is used, this leads to a better preparation of the payroll sheet that is objective and represent the true state of affairs in the ministry/parastatal proportionately. However, given that the probability value (PV) of 0.000 is less than 0.05 level of significance, the researcher concludes that return on payroll sheet preparation is significantly influenced by computerized accounting system.

Conventionally, t-test (payroll fraud) = 9.945, t-constant = 0.599.
Therefore, the null hypothesis HO is rejected meaning that there is a significant relationship between computerized accounting system and preparation of the payroll sheet.

HO₂: There is no significant relationship between manual accounting system and ghost workers in the public sector.

*Interpretation*
Table 1.8 as shown above indicates a correlation coefficient (r) of 0.530. This implies that a moderate correlation exists between manual accounting system and ghost workers in the public sector. The coefficient of determination (r²) is 0.300 which shows that 30% of the variation of
ghost workers in the public sector is attributable to the variation in manual accounting system. This may be as a result of the fact that government ministries are still using manual accounting system in this modern time. Even where the computerized accounting system is installed, the manual accounting system thrives because of inexplicable interest on the part of stakeholders. Also, the F-value calculated of 0.900 has a correlation corresponding value of 0.932 which implies an improper model utility. The simple regression table shows the linearity of the variables.

However, the t-figure of 0.092 for ghost workers in the public sector being less than the constant t-figure of 1.015 shows an insignificant correlation of manual accounting system and ghost workers in the public sector; therefore, the null hypothesis HO is accepted, this shows that there is no significant relationship between manual accounting system and ghost workers in the public sector. Ghost worker syndrome is not a function of manual accounting system but of human activity. As indicated by the information collected, manual accounting system is important but can be manipulated by users. The beta values give the contribution or relevance of the independent variable. The beta value of 0.530 shows a moderate correlation between the variables.

\textbf{HO}_2 \textbf{ There is no significant relationship between manual accounting system and falsification of attendance time in the public sector.}

\textit{Interpretation}
Table 1.9, above shows a correlation coefficient (r) of 0.962. This implies that a very strong correlation exists between manual accounting system and the falsification of attendance time in the public sector. The coefficient of determination (r²) 0.925 shows that 96% of the variation in falsification of attendance time is attributable to the variation in manual accounting system in the public sector. Also, the F-value calculated of 49.213 has a correlation corresponding value of 0.02 which implies a good model utility.

The test of significance conducted as shown in the tables above depicts that falsification of attendance time has a calculated t-value of 7.015 and a corresponding significance value/probability value of 0.002. The positive sign of t-value (7.015) shows the direction of the variables. This therefore implies that when manual accounting system is properly used and all the details ascertained, falsification of attendance time reduces proportionately. However, given that the probability value (PV) of 0.002 is less than 0.05 level of significance, the researcher concludes that there is a significant relationship between manual accounting system and falsification of attendance time in the public sector.

Conventionally, t-test (AT) = 7.015 \ t-constant = 1.128.

Therefore, the null hypothesis HO is rejected meaning that there is a significant relationship between manual accounting system and falsification of attendance time in the public sector.
HO₄ Integrated payroll and personnel information system (IPPIS) does not significantly reduce the incidence of corruption in government ministries and parastatals.

**Interpretation**
Table 1.10 shows a correlation coefficient (r) of 0.553. This implies that a moderate correlation exists between integrated payroll and personnel information system and reduction in the incidence of corruption in government ministries and parastatals. The coefficient of determination (r²) is 0.330 which shows that 33% of the variation in reduction in the incidence of corruption is attributable to the variation in expression of integrated payroll and personnel information system. Also, the F-value calculated of 0.800 has a correlation corresponding value of 0.932 which implies an improper model utility. The simple regression table shows the linearity of the variables.

However, the t-figure of 0.092 for reduction in the incidence of corruption being less than the constant t-figure of 1.199 shows an insignificant correlation of expression of integrated payroll and personnel information system and reduction in the incidence of corruption in government ministries and parastatals. Therefore, the null hypothesis HO is accepted, this shows that integrated payroll and personnel information system does not significantly reduce the incidence of corruption in government ministries and parastatals. The beta values give the contribution or relevance of the independent variables (AS). The beta value of 0.553 shows a moderate correlation between the variables.

**SUMMARY OF FINDINGS**
The researcher in the course of their investigations made the following findings;

1. There is a significant relationship between manual accounting system and ghost workers in the public sector. Also, there is a significant relationship between manual accounting system and falsification of attendance time in the public sector.
2. When preparing the payroll of government ministries and parastatals, computerized and manual accounting systems are used.
3. The use of computerized accounting system which involves the use of computer based application brings a new trend of change from the conventional way of accounting to a computerized way which most people are not prepared for or find very difficult to adapt to.
4. It was also found that the majority of users is within the diploma level of education and has minimal experience with the use of computers. This therefore creates a level of difficulty for effective usage of the applications available.
5. The use of computerized and manual accounting system combined, seen to have improved the productivity of the users’ work when preparing the payroll. In addition, the study found out that all three factors influencing the accounting and payroll system were found to have a direct attitude, although no direct effect of this process on behavioural intentions were observed. This accounts for corrupt practices.

**CONCLUSION**
From the results of the statistical analysis, it is assumed that Payroll fraud is widespread in Nigerian public sector; it is reported to have invaded Ministries and parastatals in Nigeria. It is a
miserly to the development of the country and Rivers state in particular as resources meant for
development are diverted into private bags. These fraudulent acts weaken effective governance
and wear away the social fabrics of the State. Until government adopt a proactive measure to
prevent Payroll fraud in the state and prosecute culprits of this fraud using cutting edge
techniques, the biometric exercise will only achieve very little in combating corruption. The state
government will continue to waste its resources paying salaries, which will have a negative
effect on civil servant’s welfare in particular and wave of development of the state in general.

RECOMMENDATIONS
This researcher made the following recommendations as answers to payroll fraud in the Nigerian
ministries and parastatals particularly that of Rivers State:
1. There is necessity for the Government of Nigeria and mostly that of Rivers State to be
proactive in the combat against fraud in its civil service.
2. Rivers State Government is encouraged to learn from the developed societies on how to
investigate fraud using cutting-edge technique called Forensic auditing. The money paid
on biometrics and endless verification/screening exercise should be channeled for
training of deserving Rivers indigenes as forensic accountants.
3. It was recommended that the State Governments should create anti-fraud Department
from the Ministry of Finance.
4. Again, Training Bureaus of the state civil service should be empowered to train
accountants to specialize in forensic auditing. Upon completion of their studies, these
Accountants should be deployed to man all the Ministries, Departments, and Agencies to
help address the issue of payroll fraud in the Public Service.
5. Ministries and parastatals should regularly monitor their administrative activities and
prosecute any officer(s) found embezzling public funds and make the head of account
unit answerable for any such misappropriation.
6. The Economic and Financial Crime Commission (EFCC) should be fortified financially
and technologically for effectiveness in their services to the nation, and for effective use
of their resources both human and capital. The anti-graft agency should hire forensic
accountants for professional detection of evidences which will assist litigation in the
court of law.
7. The Federal Government should introduce computerized accounting system in all
ministries and parastatals in the country, especially in Rivers State.
8. In addition, further studies should be carried out to quantify the impact of accounting
systems on payroll fraud in other to be able to establish its full potential.

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