

Effect of Financial Control System on Fraud Prevention in the Nigerian Public Sector

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Abstract

The study broadly examined the impact of Financial Control System in Transmission Company of Nigeria (TCN). Specifically, the study examined the extent to which communication, control activities, and effective monitoring impact on Transmission Company of Nigeria. The population of study was the entire staff of TCN in Nigeria. The sample population was the staff of accounts Department of TCN in the South-Southern and South-Eastern regions of Nigeria. The study adopted the descriptive research design using the questionnaire as the research instrument for data generation. Data generated from the research instrument was used for the analysis of the study. The analytical technique used in the study was the descriptive statistics and the econometric approach. Our findings showed that Communication and effective monitoring have a strong positive impact on the Transmission Company of Nigeria. However, our findings also showed that control activity has no significant effect on improvement in the government sector. It was recommended that focus should be on the use of less forceful and very subtle ways of achieving financial control by government. Human relations activities should always be a key factor in carrying out public sector accounting and financial control functions. Also, communication channels and monitoring activities should be improved on in the public sector. Finally, there should be adequate financing of public sector firms in general.

Keywords: Public Sector, Accounting, Financial Control System, Transmission Company

INTRODUCTION

Adams (2014) defines public sector as all organizations that are not privately established and operated but which are owned, run and financed by the government on behalf of the public. While Public sector is that portion of an economic system that is controlled by the federal, state and local governments, Public Sector Accounting is the process of recording, communicating, summarizing, classifying, analyzing, and interpreting government financial statements in aggregate and in details, reflecting all levels of transactions involving the receipts, custody and disbursements of government funds and rendering of stewardship of public funds entrusted in them (Kara, 2012). It is an accounting method that helps to regulate the resources and expenditures of government. The practice of Public Sector Accounting had evolved over the years with the focus on cash receipts and disbursements on the cash accounting basis or the modified cash accounting basis. Therefore, government revenue is only recorded and accounted for when cash is actually received and expenditure incurred. Nonetheless, the system is not planned to provide information on the cost of services, earned revenues, account receivables, account payables, long-term assets and liabilities, accrued interest on external debt and stock value (Akenbor, 2011). The cash accounting system is not significantly effective in providing accounting information for efficient performance of public sector organization as indicated by Okoye and Oghogameh (2011). Government accounting is interested in gathering information that will enable her to prepare receipts and payments account (Omolehinwa and Naiyeju 2012) for better financial management and greater accountability by government. This is because public sector has a direct impact on the financial control system of Nigeria. The essence of financial management control is to ensure the inflow and outflow of revenues and safeguarding the assets and liabilities and ensuring that the resources are sufficient to implement the plans. However, this was found unachievable by government, hence, the adoption of accrual basis of accounting.

Presently, Ministries, Departments and Agencies (MDAs) in Nigeria have adopted the accrual basis of presenting and reporting financial statements of government as stipulated by the International Public Sector Accounting Standards (IPSASs). This was reinforced by other international organizations whose

position was that IPSASs compliance is a condition for providing funds to developing countries (IPSAS, 2011). The program received endorsement and financial support from several international financial and development institutions interested in advancing the cause of better financial management and greater accountability. Most Ministries, Department and Agencies (MDAs) in Nigeria encountered problems in handling the financial control of their respective departments. These problems include inadequate funding, inappropriate use of accounting principles, poor administration and management of public funds, ineffective and inadequate internal control systems in place and so on, which has led to the shortfalls in financial management of public funds by government. These problems were identified with Transmission Company of Nigeria, being a unit of public sector, hence, the need for this study. To this end, the study seeks to examine the impact of financial control system on public sector of Nigeria using Transmission Company of Nigeria as a study. The basic hypotheses underlying this study are stated thus;

Ho₁: Communication has no significant impact on the financial activity in TCN.

Ho₂: Control activities have no significant effect on improvement in the financial activity in TCN.

Ho₃: Effective monitoring does not significantly impact on the financial activity in TCN.

LITERATURE REVIEW

Conceptual Framework

Odike, (2006) defines public sector accounting as an accounting method applied to not-for-profit pursuing entities in the public sector which include the central, local, and quasi-governmental special corporations for which the size of its profits does not provide an effective measurement for evaluating performance. The regulatory frameworks of public sector include the constitution of the Federal Republic of Nigeria, 1999 as amended, the Finance (Control and Management) Act of 1958, the Audit Ordinance Act of 1956, Financial Regulation and Revenue Allocation Laws (Adams, 2014) and the International Public Sector Accounting Standards (IPSASs, 2011). This implies that all activities of public sector are regulated by government's pronouncements and the constitutions. These regulations help to effectively and efficiently monitor the public sector activities with a view to achieving her set objectives. Public activities include but not limited to national defense, homeland security, police protection, firefighting, urban planning corrections, taxation, provision of social amenities, infrastructural facilities and other various social programs.

Basis for Recognition of Transactions under Public Sector

The bases for recognition of public sector transactions are the 'cash' and 'accrual' bases of accounting. The cash basis of accounting recognizes revenues and expenses only when cash is received and expenses paid out. This accounting basis does not match costs incurred and revenues earned to the appropriate period in which transactions took place, hence, negates the "Matching Concept" principles which is the Generally Accepted Accounting Principles. The accrual basis of accounting recognizes revenues and expenses when a transaction has been concluded and sealed between two willing parties in an arms-length-transaction. This means that transactions are recorded when revenues are earned and costs incurred, not minding that cash has not been received and expenses not paid. This basis of accounting gives a true financial position of government account as it conforms to the matching concept of GAAP. This method of recording transactions is currently adopted by countries that have adopted International Public Sector Accounting Standards including Nigeria.

Measures Used by Public Sector in Controlling Financial Systems

The variables considered in this study as measures to control financial system in TCN and by extension the Nigerian public sector are: (i) Control activities, (ii) Communication, and (iii) Effective monitoring.

Control Activities

Control activities are the policies, procedures, tools, techniques, and mechanisms put in place by management or government that help identify, prevent or reduce the risks that can impede the

accomplishment of set objectives arising from management directives and executions (Whittington & Delaney, 2009). Control activities are a component of internal control system which includes such activities as authorizations, approvals, verifications, reconciliations, reviews of operating performance, safeguarding of assets, and the segregation of duties (Quall, 2004), organization control, physical control, arithmetical and accounting controls, personnel controls, and supervision control (Jenfa, 2002). They are essential for proper stewardship and accountability of government resources for achieving effective and efficient program results.

Information Communication

Information has recently been identified as a major asset to both public and private establishments. Therefore, pertinent financial information must be identified, captured, and communicated in forms and timeframes that enable people to carry out their responsibilities effectively and efficiently. Information systems produce reports of operational, financial, and compliance-related information that make it possible to run and control the business (COSO, 2013). Information systems deal not only with internally generated data but also information about external events, activities, and conditions necessary to informed business decision making and external reporting (COSO, 2013). Employees in an organization must understand their own role in the internal control system, as well as how individual activities relate to the work of others (Pickett & Pickett, 2005). Effective communications should occur in a broad sense with information flowing down, across, and up the department (Jackson, 2006). Effective communication must exist with external parties, such as customers, suppliers, regulators, and shareholders (COSO, 2013). Management should establish communication channels that: provide timely information, inform employees of their duties and responsibilities, enable the reporting of sensitive matters including fraudulent or unethical behaviors, enable employees to provide suggestions for improvement, convey top management's message that internal control responsibilities are important and should be taken seriously (Quall, 2004).

Monitoring Activities

Monitoring activity is a process that assesses the quality of the internal control system's performance over time through ongoing monitoring activities, separate evaluations, or a combination of the two (COSO, 2013). Monitoring activity is the review of government's activities and transactions to assess the quality of performance over time and to determine whether controls are effective. Ongoing monitoring that occurs in the course of operations includes regular management and supervisory activities as well as other actions that personnel undertake while performing their duties (Jackson, 2006). The Monitoring performed by a department should focus on the following major areas: control activities, mission control, environment, communication, risks and opportunities. The scope and frequency of separate evaluations depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures (COSO, 2013). Internal control deficiencies should be reported upward, with serious matters reported to top management and the board of directors (Jackson, 2006).

Empirical Study

Ademola (2003) carried out a study on the fund management and control in the state governments of Nigeria, using Ekiti State Government as the case organization, with the objective of finding out whether there is effective fund management and control of the state government fund. The study adopted the survey design using a 21-item questionnaire. The sample size was 175 respondents drawn from the treasurers, accountants, cashiers and other fund managers in the state. The formulated hypotheses were tested using the Spearman's correlation method. The findings show that there is weak internal control over the state government funds which leads to ineffective fund management; that fund management positively correlated with the procedures and the state government performances. Onuorah and Appah (2012) on accountability and prudent financial management in Nigerian public sector, the control of public funds with respect to the manner of account rendition of public office holders as stewards were

evaluated. Data was collected from Central Bank of Nigeria Statistical Bulletin for 48 years. The findings show that the level of public accountability in Nigeria is not something to write home about due to the non-availability or partially available socio-economic and political information about the activities of government for the governed to assess the performance of their leaders. The study recommends that integrity, transparency and accountability in the management of public funds are of paramount importance if Nigeria is to move higher in the area growth and development. Also, accountability mechanisms and institutions of control need to be solidified to minimize the tempo of corruption in the country.

Ademola (2012) studied the effect of internal control system in Nigeria public sector; a study of the Nigerian National Petroleum Corporation. Using chi-square to test the hypotheses showed that understanding the Internal Control techniques by both the management and the low level employees helps to reduce embezzlement and fraud in the corporation. Emem (2008) carried out a study on public fund management and control in Nigeria using Boki Local Government as the case organization. A survey research design was adopted using 27 questions administered on 75 respondents. The result of the study revealed that the laid down procedures of fund administration are not strictly followed which leads to ineffective fund management in the public settings. Also, there is ineffective fund management caused by weak internal control system in the council as well as collaborations by the public fund administrators. Ugwoke and Onyeonu (2013) studied the problems in the principal instrument of control of public sector accounting and financial management in Nigeria. The paper aimed at determining the effectiveness and adequacy of the existing financial authorities. With a robust literature review, the primary data collected from 200 federal public/civil servants was used. The student t-test statistic at 5% level of significance was adopted as the suitable statistical tool to test the 2 formulated null hypotheses. The results indicate that the financial authorities are both ineffective and inadequate. It thus recommends that a substantial review of the existing laws, rules and regulations that guide public sector accounting and financial management be done; and a strengthening of the legal process not only to include very punitive sanctions but also to enforce same timely and exhaustively upon any infringement. It was observed from all the empirical studies reviewed that there is need for the improvement of the ardency of the internal control over public funds in order to achieve the set objective for which they were created. While Onuorah and Appah (2012) examined accountability and prudent financial management with respect to the manner of account rendition of public office holders as stewards in the Nigerian public sector using the secondary data, however, the researchers observed that none of the studies examined the impact of financial control system in Transmission Company of Nigeria (TCN) using primary data and Qualitative Response Modeling technique of analysis. This is the knowledge gap the study seeks to fill.

Theoretical Framework

This study hinges on the agency theory which explains the relationship that exists between principals and agents in a business environment, in this context, government and its employees. An agency relationship arises whenever one or more individuals, called principals, hire one or more other individuals, called agents, to perform some service and then delegate decision-making authority to the agents (Meckling and Jensen, 1976). The primary agency relationships in business are those between stockholders and managers and between debt-holders and stockholders. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). These relationships are not necessarily harmonious; indeed, agency theory is concerned with so-called agency conflicts, or conflicts of interest between agents and principals. Agency theory addresses problems that arise due to differences between the goals or desires between the principal and agent. This situation may occur because the principal is not aware of the actions of the agent or is prohibited by resources from acquiring the information. This has implications for and among other things, corporate governance and business ethics. Agency theory is therefore concerned with resolving problems that exist in agency relationships due to unaligned goals or different aversion levels to risk (Uguru, 2016). When agency conflict occurs, it also tends to give rise to agency costs, which are expenses incurred in order to sustain an effective agency

relationship (e.g., offering management performance bonuses to encourage managers to act in the shareholders' interests and so on).

METHODOLOGY

The research is descriptive in nature and generally surveys and assesses issues of perception of control systems. The research made use of primary source of data using the questionnaire as an instrument to harvest data used for the study. Sixty (60) questionnaires was distributed to respondents, 54 which forms 90% were retrieved for the analysis of the study while 6 questionnaires which forms 10% could not be retrieved, hence, voided. Two main analytical methods were applied in this study, namely, descriptive statistics and econometric approach. In order to effectively conduct a valid analysis in the presentation and analysis of the data collected on the research field, the researchers used descriptive statistical methods. However, in order to determine the effects of the selected determinant factors on audit independence, econometric techniques were employed, using the Qualitative Response Modeling technique. This method was applied since the responses from the questionnaire generated qualitative data which was obtained by taking the average responses of the respondents based on the subsections in the questionnaire. The Ordinary Least Squares (OLS) method breaks down the estimation of such data set since the probability distribution of the dependent variable was not continuous. The particular qualitative response modeling technique applied is the *Logit* method which estimates the relationships using the Maximum Likelihood approach.

A simple regression model was used to identify the relationships between audit independence and each of the independent variables based on the survey method in the study. Given the nature of the data derived for the dependent variable (i.e., either audit independence or no audit independence), the *Qualitative Response* model is adopted in the estimation of the relationships. Here, we estimate the probability of audit independence given the perception of the respondents. Therefore, the baseline model for the primary data analysis may be specified as:

$$Pr[FCONTROL] = f(COMM, CONSY, MONITOR, X)$$

Where; FCONTROL = financial control system – used in three scenarios (i) appropriateness of financial control system (ii) basic financial control (ii) outcome of financial control (each of the variables are captured as a binary indicator taking the value of 1 when the perception is “positive” and 0 when the perception is “negative”).

COMM = communication

CONSY = Control system which is based on computerization and TSA

MONITOR = Monitoring activities

X = other control variables that improve financial control in the organization including irregularities, sufficiency of revenue, and effectiveness of revenue use.

It should be noted that the determination of the variables above is based on qualitative data obtained from the questionnaire. Following Bieren (2008) and Greene (2004), the Maximum Likelihood econometric form of the model is written as:

$$Pr[FCONTROL_j = 1|Z_j] = \frac{1}{1 + \exp(-\alpha_0 - \beta_0 X_j)}$$
$$Pr[AUDIND_j = 0|Z_j] = 1 - Pr[AUDIND_j = 1|Z_j]$$
$$= \frac{\exp(-\alpha_0 - \beta_0 X_j)}{1 + \exp(-\alpha_0 - \beta_0 X_j)}$$

Where; the Z_j 's are the explanatory variables and α_0 and β_0 are unknown parameters to be estimated.

According to Greene (2004), the *Logit* regression model is a type of regression analysis used for predicting the outcome of a binary dependent variable (a variable which can take only two possible

outcomes, e.g. "yes" vs. "no" or "available" vs. "not available") based on one or more predictor variables. Logistic regression attempts to model the probability of a "yes/success" outcome using a linear function of the predictors. Specifically, the log-odds of success (the logit of the probability) is fit to the predictors using linear regression. Logistic regression is one type of discrete choice model, which in general predict categorical dependent variables - either binary or multi-way. In order to ensure that the estimated equations are standard and tabled across the various cross sections in the study, various robustness check are provided. These are the multicollinearity test which helps to ensure that independent variables in the estimates are not highly related; the heteroskedasticity test which ensure that the variances among the different cross section in the observations are constant; and the CUSUM of Squares test.

RESULT AND DISCUSSION

Relevant background information about the respondents that participated in the study relates to their gender, age, marital status, qualifications and job status since each of these could influence the extent to which the respondents are knowledgeable about the variables that were involved in the study and the extent to which the data that they provided can be generalized to the population. Subsequently, information pertaining to these variables was elicited and the findings are summarized in table 4.1. Table 4.1 shows that a cross section of gender (that is, male 35.2% and female, 64.8%) in TCN in South-South and South-East states was involved in the study. This means that the conclusions based on the data that they provided is trustable and plausible, since it was generated from all the key categories of stakeholders in terms of gender. In the same vein, slightly more female staff of TCN was involved in the study.

Table 4.1: Distribution of respondents that participated in the study

	Outcome	No	Percentage
Sex	Male	19	35.2
	Female	35	64.8
	Total	54	100
Marital status	Single	26	48.1
	Married	28	51.9
	Total	54	100
Age	25 years and above	41	75.9
	below 25 years	13	24.1
	Total	54	100
Working Experience	15 years and above	28	51.9
	below 15 years	26	48.1
	Total	54	100
Qualification	WAEC	0	0
	NCE/ND	5	9.3
	B.Sc./HND/BA	27	50.0
	M.Sc./MA	20	37.0
	Ph.D.	2	3.7
	Total	54	100
Professional qualification	ACA	18	36.0
	ACCA	17	34.0
	ACTI	0	0
	Others	15	30.0

	Total	50	100
Ranks attained	Top management	12	26.0
	Ordinary staff	17	37.0
	Middle management	17	37.0
	Total	46	100

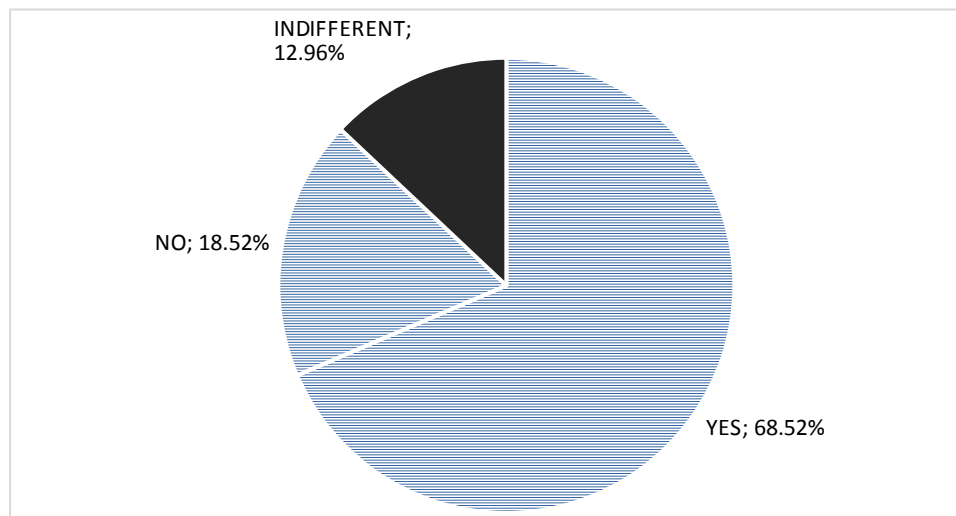
Source: Authors' field survey, 2017.

Information was also collected on the characteristics of the individuals that were involved in the study. This information pertained to the TCN staffs' age and marital status. The results in table 4.1 indicates that slightly more of the staff (51.9%) were married and more of them (75.9%) are aged 25 years and above. This perhaps explains why more of the respondents (51.9%) have over 15 years of experience on the job. In terms of educational qualification of the respondents, 50 percent have their first degree or HND, while 37.0 percent have Masters' degree. In the same vein, most of the respondents have academic qualification in the area of accounting. The job status of the respondents reveals that 26.0 percent are in top management, while 37.0 percent are in middle level and ordinary staff. The information from the respondents' background analysis indicates that most of the staff in the study are well informed of the activities that may go on in their various homes and provide reliable information.

Analysis of Questionnaire

In this section the responses of the survey instruments are reported and analyzed using statistical techniques. The focus is on financial control system in the public sector. In Figure 4.1, the responses on the appropriateness of the overall public sector accounting principles in TCN; South-South and South-East states were reported. It can be seen that 68 percent of the respondents agreed that the accounting principles are appropriate while 19 percent did not agree. Also, 13 percent of respondents are however indifferent about the appropriateness of the principles. These responses suggest that generally, the public sector accounting principles adopted in South-South and South-East states are appropriate in the parastatal.

Fig. 4.1: Is public sector accounting principles by TCN in South-South and South-East states appropriate and effective?

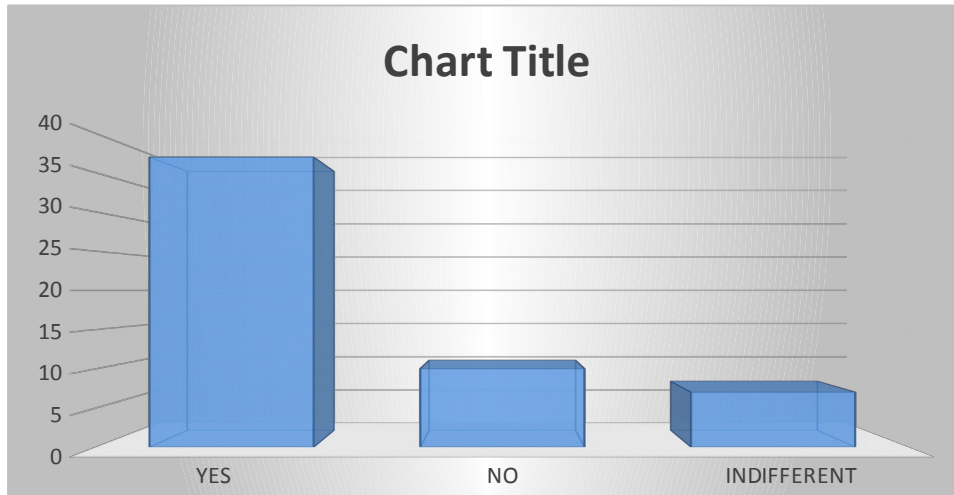


Source: Authors' field survey, 2017.

In Figure 4.2, we show the responses on the appropriateness of the internal control system of public funds adopted by TCN (the sampled organization). 32 respondents (59%) agreed that the control system is appropriate while 11 respondents or 20 percent did not agree. The responses thus indicate that the overall

perception of public sector accountants is that the internal control system of public funds in TCN is appropriate.

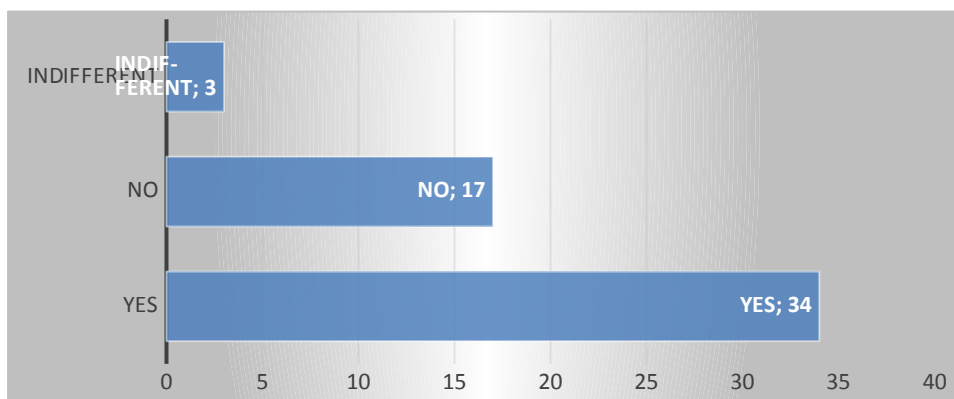
Fig 4.2 Is the internal control system of public fund adopted by TCN in South-South and South-East states appropriate?



Source: Authors' field survey, 2017.

In terms of the perception of the respondents about the effectiveness of the monitoring of financial controls in TCN in South-South and South-East States the Chart in Figure 4.3 shows that 34 respondents or 62 percent of the responses went with yes, while 17 respondents or 31 percent of respondents indicated that the monitoring system was not effective. These responses give a slight indication that monitoring may not be as effective as expected in TCN in South-South and South-East states.

Fig 4.3: Has the monitoring of financial controls in TCN in South-South and South-East state been effective?



Source: Authors' field survey, 2017.

Table 4.2 shows the responses on the other questions contained in the questionnaire. Most of the respondents indicated that the sources of revenue available to the organization (TCN, South-South and South-East states) were not enough for the parastatal's needs. On the other hand, the respondents generally agreed that the funds generated by the parastatal was being put to good use (48%), that the introduction of treasury single account policy helped in the financial control of TCN accounts in South-South and South-East states (77.8%), that the financial control used by TCN in South-South and South-East states helped in maximizing the use of cash resources (70.4%), that the manual accounting method introduced by TCN in South-South and South-East states help improve the financial control system (50%),

that the computerized accounting method introduced by TCN in South-South and South-East states help improve the financial control system (85.2%).

Econometric Analysis

In this section, the model specified in section three was estimated and the results interpreted as follows: The overall performance of the models was observed from the McFadden R² statistic values and the LR statistic. The results show that the first model which shows the effectiveness of financial control systems performed better based on the McFadden R² statistic which is 0.224. This implies that there was assurance of about 22.4 percent that the independent variables predict the responses on financial control systems. Though this value is low, the LR statistic, which shows the overall significance of the first model pass the significance test at the 5 percent level. This implies that only the results from the first model are reliable for analysis. This was because the LR test fails for the other two equations.

Table 4.3: Model Results

Variable	Model 1			Model2			Model3		
	Coeff.	z-Stat.	Prob	Coeff.	z-Stat.	Prob	Coeff.	z-Stat.	Prob
C	-0.896	-0.90	0.37	2.047	1.10	0.27	-3.109	-1.63	0.10
Communication	0.541	2.14*	0.03	0.339	0.87	0.39	0.456	1.15	0.25
Monitoring	1.032	2.06*	0.04	1.200	1.51	0.13	1.920	2.25*	0.02
Computerized	-0.310	-0.56	0.58	-0.229	-0.23	0.82	0.740	0.85	0.40
Irregularities	0.327	1.17	0.24	-0.153	-0.33	0.74	0.292	0.64	0.52
manual_acct	-0.415	-0.88	0.38	0.338	0.43	0.67	1.017	1.20	0.23
revenue sufficiency	-1.406	-	0.01	-0.970	-1.16	0.25	0.130	0.17	0.87
revenue use	0.534	1.05	0.29	0.420	0.51	0.61	-1.402	-1.51	0.13
TSA	-0.601	-1.04	0.30	-1.994	-1.63	0.10	0.393	0.40	0.69
McFadden R ²	0.224			0.155			0.178		
LR statistic	14.73			9.214			11.7		
Prob(LR statistic)	0.05			0.32			0.165		
Mean dep var	0.70			0.76			0.70		
Obs with Dep=0	16			13			16		
Obs with Dep=1	38			41			38		

Source: Authors' computation, 2017.

The relevance of the individual variables in explaining the financial control systems is determined by observing the individual coefficients of the explanatory variables in terms of signs and significance. From the results, only the coefficients of communication, monitoring and sufficiency of revenues are significant at the 5 percent level since their respective z-values are greater (in absolute terms) than the 5 percent critical value of 1.96 for the communication and monitoring variables, the coefficients are positive. This shows that more communication in the parastatal tends to improve financial control systems in TCN. Indeed, any improvement in communication has a 54 percent chance of improving financial control in the organization. For the monitoring variable, the results show that monitoring has a positive impact on financial control of government sector. Increases in monitoring activity have a more than 100 percent chance of improving financial control system. Thus, communication and monitoring in the organization are strong and effective tools for improving financial control systems. The coefficient of sufficiency of

revenue is negative and shows that since revenues are not sufficient, financial control tends to fall in the organization or establishment. The coefficients of the measures of control activities all fail the significance test at the 5 percent level. This implies that internal control activities do not have significant impact on financial control in the parastatal. These results revealed that forceful or overt activities may not be as strong as covert and less forceful methods in improving financial control systems. It shows that the covert and less forceful methods of communication and effective monitoring are more potent tools to achieve financial control than overt methods of direct control activities.

Robustness Checks

In order to check for the robustness of the estimates in the study, multicollinearity and heteroskedasticity tests are conducted and the results presented.

Multicollinearity test

The repressors in the models used in the study are numerous with outcomes that may measure the same effects. Multicollinearity test are therefore conducted on the models to ensure that the explanatory variables are not excessively collinear. Apparently, high collinearity tends to amplify the standard errors of the estimates and render the reliability of the estimated model quite low. In Table 4.4, the result of the multicollinearity test for each of the model results are presented. In the result, only the centred variance inflation factors (VIF) for each of the variables are reported.

Table 4.4: Multicollinearity test Result

	Model1	Model2	Model3
Variable	VIF	VIF	VIF
Communication	2.78	2.75	2.45
Monitoring	2.73	2.70	2.43
Computerized	1.17	1.18	1.17
Irregularities	1.10	1.10	1.08
manual_acct	1.05	1.06	1.04
Revenue Sufficiency	1.04	1.04	1.03
Revenue use	1.13	0.95	1.01
TSA	1.04	1.60	1.01
Mean VIF	1.64	1.64	1.53

Source: Authors' computation, 2017.

For each of the results, the VIF values are quite low with values lower than 5 as required. Thus, the results of the multicollinearity test based on the VIF values imply that there is no form of multicollinearity among the variables of the model. The estimates from the regression results are therefore shown to be effective for drawing conclusions.

Heteroscedasticity Test

Another robustness test conducted for the models is the test of heteroskedasticity given that data used are cross-sectional. Woodridge (2004) has noted that such investigation gives direction on the appropriate estimation technique to be used in emotion. Apparently, a highly heteroskedastic set of observations may lose efficiency properties when estimated with the ubiquitous OLS technique. It should be noted that the Breusch-Pagan-Godfrey tests are used for the analysis. Only the F-value for the test results for each of the models in the study is reported in Table 4.5. The F-statistics for all the results (apart from that of the pooled data and regulators) have probability values less than 5 percent. This means that the null hypothesis of no heteroskedasticity for each of the models is accepted. The non-significance of the test statistics indicates the presence of homoscedasticity in data series for each of the models. This again, confirms the robustness of the estimates from the models.

Table 4.5: Test of Heteroskedasticity Results

<i>Model</i>	F-statistic	Prob.
<i>Model 1</i>	1.583	0.18
<i>Model 2</i>	1.355	0.26
<i>Model 3</i>	0.662	0.65

Source: *Authors' computation, 2017.*

Hypotheses Testing

In this section, the working hypotheses of the study are tested based on the outcome of the results from the estimated models of the study. The hypotheses were tested using the coefficients estimated in the model in terms of significance and signs.

Hypothesis One

HO1: Communication has no significant impact on the financial control system in TCN

To test this hypothesis, the result from Model 1 in Table 4.3 is employed. In the result, the coefficient of the communication variable is 0.541 with a z-value of 2.14. The Z-value is greater than the critical z-value of 1.96 (in absolute term) at the 5 percent level. This shows that the coefficient of communication in the parastatal is significant at the 5 percent level. The significance of the communication variable shows that there is a significant relationship which is positive. The positive sign of the coefficients shows that communication actually has a strong positive impact on financial control system in the parastatal. The null hypothesis is therefore rejected; this implies that Communication has a significant impact on the financial control system.

Hypothesis Two

HO2: Control activities has no significant effect on improvement in the financial control system in TCN

The results from Table 4.4 are employed to test this hypothesis. In the result, none of the control activities in the parastatal's coefficients (computerization, manual accounting and TSA) passed the significance test at the 5 percent level. Since these control activities measures failed the test at the 5 percent level, the null hypothesis is accepted and it is stated that control activities has no significant effect on improvement in the financial control system in TCN.

Hypothesis Three

HO3: Effective monitoring does not significantly determine the financial control system in TCN

The test of this hypothesis is based on the results from the first output in Table 4.3. In the result, the coefficient of the monitoring variable is 1.032 with a z-value of 2.06. The z-value is greater than the critical z-value of 1.96 (in absolute term) at the 5 percent level. This shows that the coefficient of monitoring in the parastatal is significant at the 5 percent level. The positive sign of the coefficient shows that monitoring actually has a strong positive impact on financial control system in the organization. The null hypothesis is therefore rejected implying that effective monitoring has a significant impact on the financial control system in TCN.

CONCLUSION AND RECOMMENDATIONS

In this study, the impact offinancial control system was investigated in the public sector with focus on the Transmission Company of Nigeria. The study seeks to identify the financial control system mechanisms that have direct impacts on public sector by considering the roles of communication, monitoring and

internal control activities. The survey method of data collection was employed using structured questionnaires administered to staff of TCN in the South-South and South-East regions of Nigeria. Both statistical and econometric techniques were employed in the analysis of the data. The overall conclusion of the study was that the method of public sector accounting procedure adopted by a firm matters in ensuring financial control systems in the parastatal. In particular, the study finds that; Communication actually has a strong positive impact on financial control system in the public sector; A control activity has no significant effect on improvement in the financial control system; Monitoring actually has a strong positive impact on financial control system in the government sector; and the covert and less forceful methods of communication and effective monitoring are more potent tools to achieve financial control than overt methods of direct control activities.

Given the foregoing, financial control issues constitute strong consideration for both public and private organizations in Nigeria, especially in the era of increased drive for more revenue by government. In this study, it has been shown that when communication and monitoring activities are improved, instead of undue focus on direct controls in public sector organizations, financial control systems are improved also. Apparently human relations activities should always be a key factor in carrying out financial control functions in the Nigeria public sector. The results from the analysis are apt for recommendations on the appropriate use of effective financial control system in ensuring that adequate accounting procedures are observed in the public sector.

- i.* Firstly, focus should be on the use of less forceful and very subtle ways of achieving financial control. Any system of financial control adopted should not focus more on direct controls; rather the focus should be on getting the personnel to do their jobs through indirect monitoring and improved communication.
- ii.* Secondly, communication channels should be improved in the public sector. With proper communication activities, there will be less need for direct control of sub-ordinates and there will be room for improvement in accounting activities in the public sector.
- iii.* Thirdly, monitoring activities should be improved in the organization. In this regard, peer monitoring in the organization will improve trust and encourage healthy rivalry that will directly contribute to accounting and financial responsibility in the public sector.
- iv.* Finally, there should be adequate financing of public sector firms in general. Poor funding leads to unprofessional accounting activities which hinder effective financial controls in the organizations.

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