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# An Investigation into the Impact of Cash Accounting Basis on Financial Statement Transparency in Tertiary Institutions in Nigeria

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#### **Abstract:**

The study investigated the impact of cash accounting basis on financial statement transparency in tertiary institutions in Nigeria using Ekiti State as a case study. The population of the study includes relevant staff in the three public institutions in Ekiti State namely; College of Education Ikere, Ekiti State University and Federal Polytechnic Ado Ekiti. A total of 299 respondents are sampled and structured questionnaires are used to elicit information form the respondents on the following variables; accurate record of budget ARB, Resource management accountability RMA, Quality accounting information QAI and Fraudulent financial practices FFP. All these are used as the independent variables while, the dependent variable is financial statement transparency. Both ANOVA and regression analysis result show that, the higher the financial fraudulent practices the higher the level of financial statement transparency. The implication of the conclusion is that fraudulent financial practices will also prompt more financial transparency. Quality accounting information is very germane in promoting financial statement transparency in the institutions under investigation. Also, resource management accountability has significant direct relationship with financial statement transparency. Accurate Record and cost of Revenue has a direct relationship with financial statement transparency but insignificant. The implication is that accurate record and cost of revenue have not been effective in promoting financial statement transparency in these three institutions.

Key words: Financial Statement transparency, Cash accounting basis, tertiary institutions

# 1. INTRODUCTION

Government exists to serve the needs of the citizens and ensure those needs are provided efficiently and effectively. It accomplishes these goals by providing clear processes and structures for all aspects of executive management (decision-making, strategic alignment, managerial control, supervision and accountability). Governance in both private and public arena has been a hot topic and now hotter due to various recent financial scandals. Citizens and regulators are calling for higher levels of transparency and accountability in all areas of business especially in public service (Okpala, 2012). Developments in governmental activities in recent years have raised concerns over whether the cash basis of accounting is sufficient for governmental accounting and reporting. Accrual accounting, previously thought to be only suitable in the private sector, has been seen to be an alternative for better reporting of government activities. Although there is a continuing debate over the use of cash versus accrual accounting, accrual accounting has been adopted in the governments of several countries including Australia, New Zealand and the United Kingdom. Government accounting and financial reporting aims to protect and manage public money and discharge accountability (Rayegan, Parveizi, Nazari and Emami, 2012).

The notion of cash accounting is based on the principle of "intergenerational equity" (Vinnari and N'Asi, 2008), which is the main criteria for governments' fiscal allocation. This principle upholds the view that tax payers of a certain accounting period should finance current year expenditure, therefore requires a balance of expenditure and revenue reporting. Ahn, Jacobs, Lim and Moon (2014) and Shehu (2010) opined that public budgeting is based on this principle of balance and is a practice of most governments, where revenues are equated with expenditure. Of oegbu (2014) stated that cash basis is a basis of accounting where only cash receipts and payments were recognized.

The cash accounting basis has been in use in the public sector all over the world for over two hundred years and its wider acceptance has been based on the argument that the main objective of public sector accounting is

protection of public fund (Pallot, 2001). Government budgets are also cash based, so it becomes very easy to verify compliance with the budget through direct comparison of budgeted amount and actual expenditure (Barret, 2006). Chan (2003) opined that cash-based accounting has the virtues of simplicity and is applicable in many government institutions, due to dearth of skilled accountants and where financial management is seen as of lesser importance than legal compliance. Though, cash accounting is adjudged as a good accounting basis for government accounting purpose; it has been criticized for its susceptibility to manipulations, ability to provide misleading view of state of affairs of government, and inconsistency in the treatment of transactions (Ibanichuka and James, 2014; Irvine, 2011; Izedonmi and Ibadin, 2013).

Transparency in financial statement has emerged as one of the most widely used characterizations of desirable financial reporting in recent years and it is a widely cited prescription in the financial press for a variety of financial reporting inadequacies, including financial reporting fraud, aggressive reporting, off balance sheet practices and inadequate or fuzzy transactions, but the concept is not directly used in the official FASB conceptual framework as a fundamental characteristic of good financial reporting, although it is implied (Mensah, Nguyen, Prattipati, 2006). Transparency comprises all means of facilitating citizens access to information and their understanding of decision-making mechanism, public sector transparency begins with the clear application of standards and access to information (Adegbite, 2010). Ofoegbu (2014) stated that transparency is the openness with which government business is conducted which implies that people can clearly see the activities of government and understand what the government is doing. It requires openness which makes it easier for those outside the government to monitor and evaluate the performance of the government and its consistency with the policy intentions for fairness, propriety and sound stewardship.

IMF (2012) stated that financial transparency is the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government's fiscal policy-making process. The financial transparency of financial statement captures the intensity and timeliness of financial disclosures, and their interpretation and dissemination by analysis and the media (Bushman, Joseph and Smith, 2003). Financial transparency means that an outsider should be able to easily read and understand the financial statements of a company. Transparency plays an essential role in accessing outside capital and reducing the cost of capital because it reduces information risk – that is, the risk of losses due to lack of availability of information or information uncertainty (GIIRS, 2010). Financial transparency is the timely, meaningful and reliable disclosures about a company's financial performance (Sec, 2002).

There have been many empirical researches on financial transparency in public institutions and they showed that: articulation between cash based accounting and accruals based accounting remains central to public service accountability, which should remain framed in a public service institutional order (Tiron andMutiu,2006; Yuri, 2013), perspectives for the assessment of public accountability which are democratic, constitutional and cybernetic rendered different types of accountability deficits (Bovens, 2006), public accountability has been reduced to financial accountability that undermines the 'publicness' in public tertiary institutions (Narayan, 2013).

In Nigeria, research has showed that the: level of accountability is very poor, because the attributes of accessibility, comprehensiveness, relevance, quality, reliability and timely disclosure of economic, social and political information about government activities are completely non available or partially available for the citizens to assess the performance of public officers mostly the political office holders (Onuorah and Appah, 2012; Okpala, 2012), public accounting principles applied by government is inappropriate and ineffective and the control of public fund measures adopted is also inappropriate (Ibhahulu, 2012). Uremadu (2004) stated that Nigeria lost several hundred billions of Naira over the last few decades due to flagrant abuse of procedures lack, of transparency and merit in the award of contracts in the public sector and accountability quandary

However, some of the recent studies that have been carried out on financial transparency did not include the influence that cash basis has on financial statement transparency of public tertiary institutions. Therefore, this study tends to fill the gap by embarking on the effect of cash basis on financial statement transparency of public tertiary institutions in Nigeria using Ekiti State as a case study. However, to achieve this objective the following research questions come to mind: What is the influence of cash basis on fraudulent financial practices in public tertiary institutions?, What is the significance of cash basis on presentation of quality accounting information in public tertiary institutions among others.

## 2. LITERATURE REVIEW

Yuri (2013) studied governmental accounting and austerity policies: accounting representations of public debt and deficit in Europe and abroad, using theoretical analysis. The study revealed how articulation between budgetary

accounting and accruals based accounting remains central to public service accountability, which should remain framed in a public service institutional order it belongs to.

Bovens (2006) in his study: analyzing and assessing public accountability: a conceptual framework. The study revealed perspective for the assessment of public accountability which are democratic, constitutional and cybernetic perspective and each of these three perspectives rendered different types of accountability deficits.

Tiron and Mutiu (2006) revealed cash versus accrual accounting in public sector, with the use of descriptive statistics. They found out that accounting conventions and procedures need to be made compatible with concepts related to the disbursements of EU funds — commitments, payments, eligible expenditures, etc. Fiscal reporting should be timely, comprehensive and reliable, and identify deviations.

Cenar (2010) assessed cash accounting standardization in the public sector with the use of cross research method. The study showed that there is no invincible assertion regarding the budgeting basis corroborated with the ideal accounting basis used in financial reporting.

Mihály and Attila (2011) reviewed university accounting in post-communist economies in contrast to the anglo-saxon system with the use of empirical analysis. They revealed that the financial reporting of Hungarian public higher education institutions differs greatly from the accrual type of accounting reports used in Anglo-Saxon countries.

Grubišić, Nušinović and Roje (2009) studied towards efficient public sector asset management using empirical design and descriptive statistics. They revealed the lack of accounting and financial expertise resource and cost allocation practice prevent public asset management from being efficient.

Narayan (2013) examined the relationship between accounting and the state in the transformation of public tertiary institutions with the use of ethnographic analysis. The study found out that public accountability has been reduced to financial accountability that undermines the 'publicness' in public tertiary institutions.

Ibhahulu (2012) examined the impact of public sector accounting in Nigeria financial control system using Esan south east local government area of Edo state as the case study, with the use of chi-square. He found out that the public accounting principles applied by the said local government area is inappropriate and ineffective and the control of public fund measures adopted is also inappropriate.

Onuorah and Appah (2012) studied accountability and public sector financial management in Nigeria using multiple regression analysis. They revealed that the level of accountability is very poor in Nigeria because the attributes of accessibility, comprehensiveness, relevance, quality, reliability and timely disclosure of economic, social and political information about government activities are completely non available or partially available for the citizens to assess the performance of public officers mostly the political office holders.

Nwaigburui and Markii (2014) studied the impact of the use of accounting information in decision making in the tertiary institutions with the use of chi-square. The study showed that the use of accounting information as it create impact in decision making.

#### 3. METHODLOGY

#### **Population**

The population will consists of members of staff of the internal audit department and Bursary (account) department and other relevant departments as stated under the scope of this study of the three (3) tertiary institutions in Ekiti State. The population as stated in table 1 consists of total of three hundred and ninety eight (398) members of staff in the stated tertiary institutions comprising one hundred and forty two (142) officers in Ekiti State University, one hundred and thirty four (134) officers in Federal Polytechnic Ado Ekiti and one hundred and twenty two (122) officers in College of Education IkereEkiti.

# Insert table 1

#### Sample Size and Sampling Technique

The famous Yamane technique sample selection techniques will be adopted by the study. The calculation of the sample size will be done as follows:

$$n = \frac{N}{1 + N * (e)^2}.$$
 (1)

Where n = the sample size

N =the population size

e = acceptable sampling error

\* 95% confidence interval is assumed (p=0.5)

Following the formulae, the sample size is stated in table 2 . A total of two hundred and ninety nine(299) members of staff of the stated tertiary institutions comprising a selection of one hundred and five(105) officers for Ekiti State University, Ado-Ekiti, one hundred(100) officers for Federal Polytechnic, Ado-Ekiti, ninety four (94) officers for College of Education, Ikere-Ekiti based on Taro Yamane's statistical formula and simple random sampling technique are selected.

#### Insert table 2

#### **Instruments and instrumentation**

This study will make use of primary source of data collection, in other to make sure that relevant information is adequately obtained. The data will be collected through the use of a well-structured questionnaire that will be prepared and administered to the members of staff of internal audit department and Bursary (account) department of the stated tertiary institutions' in Ekiti State. The source will be used in other to help proffer solution to the Research Question, because it cannot be answer through the use of secondary data and to obtain firsthand information. The questionnaire will be ranked using four point Likert scale which ranges from "Strongly Agree" to "Agree" to "Disagree" and to "Strongly Disagree". The questionnaire will be drafted to cover the research questions raised in the study, provide the relevant data for the testing of research hypotheses and achieve the broad and specific objectives of the study.

#### **Research Instrument**

The study will use self-administered questionnaire as research instruments to justify survey research to be carried out. Structured questionnaire will be design and the questionnaire will be divided into parts (A and B); part A will be to provide the qualification and educational background of the respondents while part B will be comprises of three (3) sections; Section 1 will consider the influence of cash basis on fraudulent financial practices in public tertiary institutions; Section 2 will ask question on the role of cash basis on the presentation of quality accounting information in public tertiary institutions; Section 3 will explore the relationship between cash basis and public resource management accountability in public tertiary institutions.

#### **Validation and Reliability of Data Collection**

The instruments will be administered on internal auditors and accountants in other tertiary institutions for the purpose of validation and corrections proposed will be effected.

Kaiser Meyer Olken (K M O) and Bartlett's-Test of sphericity (B T O) will be adopted for internal validation of the questionnaire.

#### **Data Analysis Techniques**

The data to be collected through responses given in the questionnaire personally delivered will be analyzed through the use of both descriptive and inferential methods of analyses. The descriptive statistics includes: cross tabulation and simple percentages while the inferential statistics will be: Pearson's correlation matrix which will be used to seek relationships between study variables and Multiple Regression which will be used to find out the variable with most influence on the dependent variables and ANOVA which will be used to find differences in the respondent because ANOVA test is used to determine the impact independent variables have on the dependent variable in a regression analysis.

#### 4. RESULTS AND DISCUSSION

### Age, sex and qualification distribution of the respondents

The three institutions covered in the study are analyzed based on the age, sex and qualifications of the respondents. The results are presented in tables 3, 4, and 5.

Insert tables 3, 4 and 5

The tables show that we have more male as respondents, which mean that Ekiti State University, Federal Polytechnic and College of Education have more male staff and students than female staff. Also, the tables further show that people above 50 years were not responded much in FEDPOLY and College while EKSU gives lowest number of respondents in age bracket of 30 years below. Majority of the respondents were learned persons, they had at least O' Level qualification but the highest percentage are graduates i.e. first degree respondents.

# Regression Analysis: Impact of Cash Accounting Basis on Financial Statement Transparency

One of the major objectives of this study is to examine the influence of cash accounting on financial statement transparency in the institutions. From the literature the following variables are used to capture cash accounting basis; accurate record of budget ARB, Resource management accountability RMA, Quality accounting information QAI and Fraudulent financial practices FFP. All these are used as the independent variables while, the dependent variable is financial statement transparency.

#### Insert table 6

Table 6 is the regression coefficient table. It is an important table to explain the relationship between two or more variables i.e. explanatory variables and explained variable. From the above table, the constant coefficient gives a positive value of 0.087 implies that if all explanatory variables are held constant, the Financial Statement Transparency will increase by 0.087 units. The beta coefficient of fraudulent financial practices (FFP) variable in the model gives a positive value of 0.162 implies that a unit increase fraudulent financial practices will result in 0.162 units increase in Financial Statement Transparency, the beta coefficient of quality accounting information (QAI) shows a positive value of 0.148, indicates that a unit increase in the variable quality accounting information will result into 0.148 units increase in dependent variable Financial Statement Transparency, the beta coefficient of resource management accountability (RMA) have a positive value of 0.110 which indicates that an increase in the value of RMA leads to 0.110 units increase in Financial Statement Transparency. Also, the coefficient of Accurate Record of Revenue and Cost (ARB) gives 0.105 units and indicates that a unit increase in the ARB will result into 0.105 units in the Financial Statement Transparency.

# **Test for the Significance of Parameters (T-test)**

The T-test is a two tailed test used to test the significance of parameters and can be summarized in the table below. Insert table 7

The table above shows that three explanatory variables (fraudulent financial practices, quality accounting information Resource Management Accountability) are significant because their respective T-calculated is greater than T-tabulated, while the remaining one variable (Accurate Record of Revenue and Cost) is insignificant because T-calculated is lower than T-tabulated. Hence, we accept the  $H_0$  and reject  $H_1$  for insignificant variable while for FFP, QAI and RMA, we accept  $H_1$  (alternative hypothesis) and reject  $H_0$  (null hypothesis) which means that the first three variables are significant in impacting financial statement transparency of public tertiary institutions in Ekiti State through the use of cash accounting basis weapons.

# **Regression Model Summary**

The table that summarizes the estimated regression that explains the influence of cash accounting basis on financial statement transparency result in table 6 is table 8. It shows all indicators that explains the overall significance of the model.

Insert table 8

A). Predictors: (constant), Fraudulent Financial Practices (FFP), Quality Accounting Information (QAI), Resource Management Accountability (RMA) and Accurate Record of Budget (ARB)

B). Dependent variable: Financial Statement Transparency

According to the model summary in Table 8, the R (correlation Coefficient) gives a positive value of 0.928; this indicates that there is a positive relationship between Cash Accounting Basis and Financial Statement Transparency in Public Tertiary Institutions in Ekiti State. The R<sup>2</sup> is a portion of the total variation in the dependent variable which explained by the variation in the independent variables. From the results obtained, R square is equal to 0.863, this implies that there is a linear relationship between Cash Accounting Basis and Financial Statement Transparency in Public Tertiary Institutions in Ekiti State using three different tertiary institutions as proxy. That is, the model was able to account for 86.3% behaviour of cash accounting basis, this is further proven by the adjusted R square which gives a value of 0.769, implying that when all errors are corrected and adjustments are made the model can only account for 76.9% behaviour of Financial Statement Transparency while the remaining 23.1% can be account for by stochastic variables or error terms. The model summary of this study can be said to be capable of explaining the relationship between the explanatory variables and the explained variable.

# **Analysis of Variance (ANOVA)**

Insert table 9

An analysis of variance (ANOVA) is used to test whether there is a significant linear relationship between the dependent variable and explanatory variables. The ANOVA table indicates that there is a significant linear relationship between the cash accounting basis and financial statement of public tertiary institutions in Ekiti State, the study takes cognizance of three different tertiary institutions from the State which includes University, Polytechnic and College of Education. The next table explains the F-test which the table for F-Tabulated and F-calculated with their functions in the analysis which is drafted from statistical table and ANOVA table respectively. The F test is used to test the overall significance of a model by comparing the F-calculated with the F-tabulated; the comparison is done below;

Insert table 10

From the table above, the F-calculated gives a value greater than the F-tabulated. Hence, we accept  $H_1$  (alternative hypothesis) and reject  $H_0$  (null hypothesis). Thus, it signifies that the overall model is significant and explain further that the three hypotheses stated earlier is rejected and accept the fact that cash accounting basis is significantly impacts on the financial statement transparency of public tertiary institutions in Ekiti State.

#### 5. CONCLUSIONS AND RECOMMENDATIONS

Following the findings from the study, it can be concluded that there exist a linear relationship between fraudulent financial practices and Financial Statement Transparency. Considering the coefficient of fraudulent financial practices (FFP) variable which gave a positive value of 0.162 implies that a unit increase in fraudulent financial practices will result in 0.162 units increase in Financial Statement Transparency. This implies that the higher the financial fraudulent practices the higher the level of financial statement transparency. The implication of the conclusion is that fraudulent financial practices will also prompt more financial transparency.

Quality accounting information has direct relationship with financial statement transparency. Also considering the value of its coefficient which is positive it implies that a unit increase in QAI will lead to 0.148 units of financial statement transparency. The conclusion here is in line with the current practices in the public service where quality information has added to operational efficiency of the organization. Therefore this conclusion is supporting the current practice that quality accounting information is very germane in promoting financial statement transparency in the institutions under investigation.

Also, resource management accountability has significant direct relationship with financial statement transparency. This implies that a unit increase in resources management accountability will lead to 0.110 units in financial statement transparency. The implication of the findings here shows that the level resource management in these academic institutions is very important for promoting financial statement transparency

Finally, Accurate Record and cost of Revenue has a direct relationship with financial statement transparency but insignificant. The implication is that accurate record and cost of revenue have not been effective in promoting financial statement transparency in these three institutions.

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**Table 1: Population distribution for the study** 

Respondents Category	Relevant Members of staff
Ekiti State University, Ado-Ekiti	142
Federal Polytechnic, Ado-Ekiti	134
College of Education, Ikere-Ekiti	122
Total	398

Source: Authors computation

Table 2: Sample size distribution for the study

Respondents Category	Relevant Members of staff
Ekiti State University, Ado-Ekiti	105
Federal Polytechnic, Ado-Ekiti	100
College of Education, Ikere-Ekiti	94
Total	299

Source: Authors computation

**Table 3:Sex Distribution of Respondents** 

Gender	Frequency EKSU POLY COE			1 2			Cum	nulative Pe	ercent
Male	87	75	60	82.9	75	63.2	82.9	75	63.8
Female	18	25	34	17.1	25	35.8	100	100	100
Total	105	100	94	100	100	99			

Source: Author's Computation

Table 4. Respondents' Academic Qualification

Qualifications	F	requenc	су		Percent	-	Val	lid Perc	ent	Cumu	lative P	ercent
Sch. Leaving	0	0	0	0	0	0	0	0	0	0	0	0
O' Levels	5	4	34	4.8	4	36.2	4.8	4	35.8	4.8	4	36.2
First Degree	96	96	60	91.4	96	63.8	91.4	96	63.2	96.2	100	100
M.Sc.	4	0	0	3.8	0	0	3.8	0	0	100		
Ph.D	0	0	0	0	0	0	0	0	0			
Total	105	100	94	100	100	100	100	100	99			

**Source:** *Author's Computation.* 

**Table 5: Age Group Distribution** 

Groups	Frequency			Percent			Cumulative Percent		
Under 30	11	25	25	10.5	25	26.3	10.5	25	26.6
31-40	55	45	39	52.4	45	41.1	62.9	70	68.1
41-50	25	19	19	23.8	19	20	86.7	89	88.3
Above 50	14	11	11	13.3	11	11.6	100	100	100
Total	105	100	94	100	100	99			

**Source:** Author's Computation.

**Table 6: Regression results** 

Model	Unstanda	Unstandardized Coefficients		Т	Sig.
	В	Std. Error	Beta		
(Constant)	.087	.140		.732	.466
FFP	.162	.080	.247	2.516	.001
QAI	.148	.075	.262	2.902	.001
RMA	.105	.082	.085	1.845	.302
ARB	.110	.084	.068	1.249	.407

Source: Authors computation using SPSS17

**Table 7: Test of statistical significance** 

Variables	T calculated	T tabulated	Remark
FFP	2.516	1.827	Significance
QAI	2.902	1.827	Significance
RMA	1.845	1.827	Significance
ARB	1.249	1.827	Insignificance

**Source:** Authors computation

**Table 8: Model summary** 

Model	R	R square	Adjusted R square	Std error of the estimate	Durbin Watson
3	0.928	0.863	0.769	0.712112	2.41213

**Source:** Authors computation using *SPSS 17*.

**Table 9: Analysis of Variance (ANOVA)** 

Model	Sum of	Degree of Freedom	Mean Square	F-Calculated	Significant
	Squares	Freedom			
Regression	18.278	5	3.174	3.218	0.029
Residual	52.096	35	0.948		
Total	70.374	40			

Source: Authors computation.

# Table 10:F-Test

F-calculated	F-tabulated	$\mathbf{H}_{0}$	$\mathbf{H}_{1}$	Remark
3.218	2.68	Reject	Accept	Significance

Source: Authors computation.