Application of Forensic Accounting Skills on Government Revenue in Nigeria: The Domestic Debt Factor

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Abstract

The study examined the nexus between forensic accounting and government revenue in Nigeria with the inclusion of domestic debt factor. The study adopts survey research by employing primary data through structured questionnaire and judgmental sampling technique. The target population was 1,500 experienced professionals in Public finance, forensic accounting and other types of audit and practicing and or working in Lagos State, Nigeria. The sample size was 306, determined with the use of Krejcie and Morgan (1970) formula. Data were analysed through logit regression technique. The findings show a positive significant relationship between forensic accounting techniques proxied by Critical Thinking Skill (CTS); Analytical, Accounting, Finance and Management Skills (AAFMS); Fraud and Corruption Detection and Prevention Skills (FCDPS); Information Technology, Computing, Artificial Intelligence, and Cloud Transactions Skills (ITCAICTS); and Psychology, Interpersonal and Communication Skills (PICS). This is affirmed as calculated, 1.098 is greater than t-tabulated of 0.273 at 5% level of significance. The empirical investigation also shows that the application of Forensic Accounting skills would reduce the incidences of ineffective management of domestic debt. The study recommended among others for a strong policy for the institutionalization of forensic accounting units in the public sector.

Keywords: domestic debt, financial accountability, forensic accounting techniques, government revenue, service cost

Introduction

Traditionally, the revenue of Government is germane to its developmental programs. In the new global economy and with the recent emergence of COVID–19 on its survival, the Governments across the globe have faced challenges on effective revenue generation. Thus, the global economy is adjusting to developing better strategies for efficient management of its revenue sources. In the recent time, Nigeria has had increased domestic debt profile with the resultant service cost on the other revenue of government. This has partly been linked to the mismanagement of borrowed domestic loans (Ayuba & Khan, 2019; Eyide & Nzewi, 2018). Studies also show that public debt has had negative impacts on the growth of Nigeria economy because the borrowed funds were either channelled into non-productive ventures or completely diverted for personal enrichment (Ngerebo-A, 2014, citing James, 2006; Ngerebo-A & Agundu, 2010; Oshadami, 2006). Thus, this has increased pressure on Government revenue through loan repayment and interest cost that could have been used for productive undertakings. The Nigeria’s domestic debt rose from N3, 228.03 billion in 2009 to N12, 774.41 billion in 2018, which increased the interest cost from N271,540.13 million in 2009 to N1, 797.90 billion in 2018. Consequently, the crippling debt overhand in Nigeria has contributed to the slow economic growth (Eyide & Uzewi, 2018; Imimole & Imoughel 2012; Yusuf, Idowu, Okunnu & Adeyemi, 2010). Thus, if the revenue of Government, most especially the domestic loans are fully utilized for productive purposes, it will impact the economy positively.

Consequently, the stakeholders and the scholars have debated at different economic, professional, and scholastic for a need to deploy forensic accounting for better efficient management of Government revenue. Forensic Accounting as an emerging investigative tool in accounting discipline has been empirically proven to be an effective combat against corruption, among others. The literature is replete with diverse results but in similar direction that Forensic Accounting is an effective mechanism for fights against fund diversion and mismanagement, among other financial and economic crimes (Akinadewo, Akinkoye, Oyedokun & Asaolu, 2019; Akinadewo & Akinkoye, 2019; Folayan & Adeniyi, 2018; Saidu, 2015; Oyedokun, Enyi &
Dada, 2018; Modugu & Anyaduba, 2013, Enofe, Idemudia & Emmanuel, 2015; Eiya & Otalor, 2013; Ehiohigren & Atu, 2016; Mansor & Gurama, 2016; Modugu & Omoye; 2014).

To successfully discharge the Forensic Accounting engagement, forensic accountants utilize the respective skills and techniques. Thus, the deployment of these is expected to bring about a more efficient use of Government revenue including borrowed domestic loan for better accountability in the Nigerian public sector. Although, several studies have reported the effectiveness of forensic accounting but there is little scientific understanding of its link to Government revenue from the contributory factor of domestic debt. This study, therefore, seeks to address the problem of inefficient management of Government revenue with the use of forensic accounting proxied by the selected skills.

Literature Review

The Effect of Forensic Accounting on Transparency and Financial Accountability in Government

The Nigerian public sector has been enmeshed in corruption, bribery and other related. Thus, the Economic and Financial Crime Commission (EFCC) have conducted series of investigation culminating in the prosecution of some of the offenders. Recent developments showed the impunity at which public officers divert public fund to personal use. Thus, the efforts of the EFCC have led to 890 convictions with over N200 billion from final forfeiture cases in 2019 (Adegboyega, 2019; EFCC, 2019). Recently, the retired Air Vice Marshal (AVM), Salu Atawodi, Atawodi Winnie and Vector Integrated Services Ltd were issued an interim order to forfeit $228,428.16, and N120, 546,042.02, including a property recovered by EFCC for the Government on alleged corrupt enrichment (EFCC, 2020).

Thus, the lack of transparency, the breach of Government financial regulations and the lack of financial accountability would encourage the magnitude of the level of this personal enrichment of public funds. Khotami (2017) argued that accountability is a form of liability that refers to who and for what and what is accountable, which is understood as the obligation of the holder of the trust to provide accountability, presenting and reporting all activities that are his responsibility to the party who provides the trust and has the authority to hold such accountability. It is established in the literature that the diversion of public debt and its poor utilization has contributed to the slow movement of the economy (Ngerebo-A, 2014; citing James, 2006; Oshadami, 2006; Ngerebo-A & Agundu; 2010, Lotto & Mmari, 2018).

Consequently, to safeguard Government revenue including public borrowed fund, there should be both external and internal mechanism in form of forensic accounting to ensure effective and efficient financial accountability and transparency in public sector. Forensic Accounting sees beyond the surface through the skills and techniques’ binoculars of the forensic accountant to identify and expose the financial bacteria injected underneath by the fraudster to defraud the system. Thus, the findings and the reports of the Forensic Accountant could be used for litigation purpose.

Unfortunately, while the effectiveness of forensic accounting in the prevention and detection of corruption, fraud and other financial and economic crime are replete in literature in the developed and the developing economies, not much of it has been adequately utilized in Nigeria. Besides, there have been reports of revenue diversion, foreign and domestic loans applied to different purposes, which has brought about the argument of the necessity for such loans (Abata, 2014; Abdulrasheed, 2017; Kiabel & Nangih, 2018; Oyedokun, Fowokan, Akintoye & Dada, 2018; Fagbemi, Uadiale & Noah, 2010; Nmesirionye & Ihendinihu, 2016; citing Ihendinihu, 2013).

In Nigeria, professional bodies like the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) have strengthened the Forensic Accounting profession through the training and certification of professional accountants in the skill of Forensic Accounting and the expectations of an expert’s reports in the law court. These certified Forensic Accountants have been engaged in various sectors like the banking, insurance and crime fighting bodies like the EFCC, among others. Thus, it is expected that these Forensic Accountants would be able to close
the existing gap between Government revenue inclusive of domestic debt and transparency/financial accountability.

**Application of Forensic Accounting for Effective Utilization of Domestic Debt in Nigeria**

The mismanagement of public debt has been identified as a major issue confronting the rising profile of domestic debt, which has resulted in worsening economy in Nigeria. (Ayuba & Khan, 2019; Eyide & Nzewi, 2018). Mismanagement could be the diversion of borrowed fund to personal use, and the utilization of domestic loan to unproductive ventures, among others. Thus, the ineffective utilization of internal debt for developmental projects distorts the expected level of growth and reduces private investment. Thus, the application of Forensic Accounting mechanism to detect and prevent the aspect of corruption, and fraudulent diversion of fund, among others should expectedly ensure efficiency in utilization of Government revenue, including domestic debt.

Scholars have opined that forensic accounting is an effective instrument for fraud detection, economic and financial crime, and money laundering among others (Liodorova & Fursova, 2018; Akinadewo & Akinkoye, 2019; Akinadewo, Akinkoye, Oyedokun & Asaolu, 2019; Blessing, 2015; Qureshi & Tazilah, 2015; Oyedokun, Enyi & Dada, 2018; Adegbite, Oyebanji & Oyedokun, 2018; Azih & Okoli, 2015). Thus, studies have shown that Forensic Accountants, trained in the skills of critical thinking, accounting, finance, management, analytical, fraud and corruption detection, psychology, communication, cloud transactions, among others are well equipped to unknot fraudulent practices.

**Classical Theory**

This theory argues that a country destroys the economy (capital) with the financing of expenditure with loans, which results in the creation of debt burden on the future generations (Karazijiene, 2015). Thus, the theorist posited that the burden is the extra charge in the future that is being borne now through the payment of interest and repayment of debt. Consequently, the debt burden on the future generations could only be justified if the Government utilizes the loans for productive ventures that will be beneficial to the public.

Some classical theorists like Smith, Ricardo and J.S. Mill however, believed that Government expenditures satisfy valuable social functions, which in all sense of it, would not have been appropriate for the private to perform (Tsoulfidis, 2007).

**Conceptual Framework**

This study adopts a concept that enables the easier identification of the relationship between forensic accounting and Government revenue, using the components of the independent variables as detailed:

- **GR** = Government Revenue = Dependent Variable
- **FA** = Forensic Accounting = Independent Variable

While the independent variable is proxied by:

- **CTS** = Critical Thinking Skill
- **AAFMS** = Analytical, Accounting, Finance and Management Skills
- **FCDPS** = Fraud and Corruption Detection and Prevention Skills
- **ITCAICTS** = Information Technology, Computing, Artificial Intelligence and Cloud Transactions Skills
- **PICS** = Psychology, Interpersonal and Communication Skills
Empirical Review

In the recent years, forensic accounting has received the attention of scholars with several studies in the literature on its relationship with fraudulent practices prevention, tax evasion detection, and the detection of mismanaged funds, among others. Many researches have also been carried out specifically on how forensic has impacted on tax evasion detection, efficient management of government revenue, and corruption elimination, among others. These studies have however, concluded with diverse discoveries. For instance, a closer study was conducted by Abu (2019) on the impact of forensic accounting on Government revenue generated by the Federal Inland Revenue Service (FIRS) in Nigeria. The study employed the primary data through the 5-points Likert scale questionnaire and the data were analysed through descriptive statistics. The findings revealed that Forensic Accounting has not contributed to upward movement of the revenue generated by FIRS.

Azih and Okoli (2015) investigated the skills and the uses of Forensic Accounting in the efficient management of Government owned establishment in Ebonyi State, Nigeria. The population was 156 accountants in the state ministries and a sample size of 62. The study administered structured questionnaire. Data were analyzed through descriptive and inferential statistics. The findings showed that Forensic Accounting is essential to calculate economic damage, to determine the level of bankruptcy/insolvency and to check on security fraud, among others. Akinadewo, Akinkoye, Oyedokun and Asaolu (2019) examined the extent at which forensic accounting influenced Government direct tax revenue in lottery industry in

Figure 1: Components of conceptual framework for the model

Source: Authors’ Model Conceptual Framework (2020)
Nigeria. The study employed primary data, with the administration of semi-structured questionnaire on 209 respondents. Descriptive and inferential statistics were employed to analyse the data. The findings showed among others, from the regression analysis results that Forensic Accounting proxied by Arbitration, Mediation and Litigation Skills (AMLS), Detection, prevention and Deterrence Skills (DPDS), and Communication, Digitalization and Analytical Skills (CDAS) positively influence DTR and is effective control mechanism for mismanagement of government revenue.

Bhasin (2013) examined the skills of Forensic Accountants with regards to global occurrence of fraudulent practices in firms like Enron, Worldcom, and Madoff and Satyam. The study employed primary data with the use of questionnaire to different states in India. The study finds out that the core skills of Forensic Accountants as identified by past researchers are not enough for the competencies of Forensic Accountants without combining both professional and academic skills. Okoye and Gbegi (2013) examined the role of Forensic Accounting on fraud detection and prevention in the public sector, in Kogi State, Nigeria. The study adopted secondary and primary data. Questionnaire and interview methods were used under primary data on staff of Kogi State Government officials and secondary data sourced from the records of five Ministries in the State. The study revealed that Forensic Accounting is an effective tool for fraud reduction in the public sector. Nwaiwu and Aaron (2018) examined the nexus between forensic accounting and Quality Assurance on financial reporting of public sector in Nigeria. The study adopted time series data from selected public sector like Federal Inland Revenue Service, State Board of Internal Revenue Service in 18 states in Nigeria. The results showed that there is no significant relationship between the variables of forensic accounting and quality assurance on variable of financial reporting. Thus far, there is still paucity of studies on the nexus between forensic accounting and government revenue in Nigeria with greater emphasis on the utilization of domestic loans.

Methodology

This study adopted the survey research design. Self-administered questionnaire through the administration of questionnaires on respondents. The target population was 1,500 chartered accountants with experience in forensic accounting, public finance, and other investigative audit skills. The sample size was 306, determined through Krejcie and Morgan (1970) formula and were chosen through judgmental sampling techniques.

Data Presentation, Analysis and Discussion of Findings

This study adopts the survey research design. Self-administered questionnaire through the Model Specification:

\[ GR = f (CTS, AAFMS, FCDPS, ITCAICTS, PICS) \]  
\[ GR = f (\beta_0 + \beta_1CTS + \beta_2AAFMS + \beta_3FCDPS + \beta_4ITCAICTS + \beta_5PICS + \mu) \]

Where:
\[ \beta_0 = \text{Constant term} \]
\[ \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 = \text{Coefficient of the independent variable} \]
\[ \mu = \text{Stochastic error term} \]

Result

Test of Hypothesis

Research Hypothesis: \( H_0 \) – Forensic Accounting has no significant impact on government revenue in Nigeria.

The research hypothesis was tested through multiple regression analysis. The empirical test was carried out though the administration of structured 5-points Likert scale questionnaire.
Estimated Model:

From output statistics in table 3:

\[ GR = 0.581 + 0.092\text{CTS} + 0.297\text{AAFMS} + 0.098\text{FCDPS} + 0.0328\text{ITCAICTS} + 0.013\text{PICS}. \]

A priori expectation: \( \beta_0 > 0, \beta_{1.5} > 0. \)

Table 3 shows the level of variation in the dependent variable is explained by the variation of the components in the independent variable. The null hypothesis is thus rejected since the t-calculated of 1.098 is greater than t-tabulated of 0.273 at 5% significance level. Consequently, the results showed that Forensic Accounting, proxied by the respective components has a significant positive relationship with government revenue in Nigeria. This is also indicated by the individual level of significance of 0.103, 0.000, 0.083, 0.000 and 0.830 for the independent variables respectively, which are less than 5% acceptable level of significance. The result also showed that there is positive relationship between CTS, AAFMS, FCDPS, ITCAICTS, and PICS and government revenue since \( \beta_{\text{CTS}} (0.092); \beta_{\text{AAFMS}} (0.297); \beta_{\text{FCDPS}} (0.098); \beta_{\text{ITCAICTS}} (0.328); \) and \( \beta_{\text{PICS}} (0.013) \) are positive. This implies that all the components of independent variables will improve government revenue in Nigeria. This result is line with the studies of Akinadewo, Akinkoye, Oyedokun and Asaolu (2019); Azih and Okoli (2015); and Okoye and Gbegi (2013).

The value of \( R^2 \), the coefficient of determination in table 1 was 0.215. This indicates 21.5% of increase in Government revenue in Nigeria could be explained by forensic accounting, while the remaining 78.5% could be because of other variables not accounted for in this model. The model in tables 2 and 3 also revealed that the relationship between forensic accounting and government revenue is statistically significant \( (P = .000 < .05) \) with t-statistics = 1.098. The adjusted \( R^2 \) was 0.201, which is close to the \( R^2 \) value of 0.215. This means that the model is fit for making generalization. Thus, forensic accounting (measured by CTS, AAFMS, FCDPS, ITCAICTS, PICS) has significant positive effect on inefficient management of government revenue including domestic loan in Nigeria.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.463*</td>
<td>.215</td>
<td>.201</td>
<td>.68488</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant) Source: Authors’ Field Work (2020)

Table 2

ANOVA*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Regression</td>
<td>38.309</td>
<td>5</td>
<td>7.662</td>
<td>16.335</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>140.248</td>
<td>299</td>
<td>.469</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>178.557</td>
<td>304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Government Revenue (GR) b. Predictors: (Constant), CTS, AAFMS, FCDPS, ITCAICTS, PICS Source: Authors’ Field Work (2020)
Table 3

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.581</td>
<td>.530</td>
<td>1.098</td>
<td>.273</td>
</tr>
<tr>
<td>CTS</td>
<td>.092</td>
<td>.057</td>
<td>.086</td>
<td>1.635</td>
</tr>
<tr>
<td>AAFMS</td>
<td>.297</td>
<td>.066</td>
<td>.253</td>
<td>4.473</td>
</tr>
<tr>
<td>FCDPS</td>
<td>.098</td>
<td>.056</td>
<td>.092</td>
<td>1.738</td>
</tr>
<tr>
<td>ITCAICTS</td>
<td>.328</td>
<td>.069</td>
<td>.263</td>
<td>4.735</td>
</tr>
<tr>
<td>PICS</td>
<td>.013</td>
<td>.060</td>
<td>.011</td>
<td>.215</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Government Revenue Source: Author’s Field Work (2020)

Policy Implications and Recommendations

Traditionally, Government’s finance its statutory responsibilities through the various sources of revenue including domestic loans. The revenue, when efficiently utilized is expected to translate to economic growth. Studies have showed, however, that there are incidences of mismanagement of Government revenue and the misapplication of domestic debt to unproductive ventures, which has led to its rising profile (Ayuba & Khan, 2019; Eyide & Nzewi, 2018). Scholar have also opined that Forensic Accounting is an effective mechanism for the combat against fraudulent practices (Liodorova & Fursova, 2018, Akinadewo & Akinkoye, 2019, Akinadewo, Akinkoye, Oyedokun & Asaolu, 2019, Blessing, 2015, Qureshi & Tazilah, 2015, Oyedokun, Enyi & Dada, 2018, Adegbite, Oyebanji & Oyedokun, 2018, Azih & Okoli, 2015).

It is on this premise that this study became necessary for the determination of the impact of Forensic Accounting, proxied by the components on government revenue in Nigeria. The findings revealed that domestic debt in Nigeria has been on an upward movement, resulting in huge service cost. Thus, this has negative effects on the revenue of government and will retard economic growth. The findings also showed that Forensic Accounting skills have positive nexus with government revenue. This implies that when Forensic Accounting is employed, it reduces the mismanagement of Government revenue including domestic debt leading to better utilization of its income for developmental growth. This is in line with the studies of Akinadewo, Akinkoye, Oyedokun and Asaolu (2019); Azih and Okoli (2015); Okoye and Gbegi (2013).

In view of the findings, this study made the following recommendations:

i. The practice of Forensic Accounting should be institutionalized in Nigeria.

ii. Government to engage more Forensic Accountants in public.

iii. Consortium of domestic debt management team, comprising experienced public and private managers should be put in place for better efficiency of domestic loans applications.

iv. The need for training and retraining of Public Sector Official in the skills of forensic accounting.

v. Government to improve on the financial regulations from the perspective of transparency, financial accountability and timely stewardship reporting of Government activities.
References


