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# TAX AUDIT AND DIRECT TAX REVENUE IN LOTTERY INDUSTRY IN NIGERIA: CAN FORENSIC ACCOUNTING BRIDGE THE GAP?

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***Abstract***
*This study examined the factors discouraging the literates from staking; appraised the problems affecting ineffective application of Direct Tax provisions on "stakers" income; and determined the extent at which FA could influence DTR in Lottery industry in Nigeria. Sample size was purposively selected from the population, consisting of tax officials of lotto in Lagos/Ogun States, FAs, and licensed lotto companies' staff/agents/"stakers". Primary data with semi-structured questionnaire sent with 209 validly returned. Descriptive Analysis and multiple regression analysis were used to analyze the data. The study reveals that many of the literates believe that staking does not match the expectations of their education; that lack of effective data on the "stakers" contributes in the use of an "agreed" amount as minimum tax and the regression analysis shows that FA is an effective method of reducing economic crimes, including tax evasion and it could be used to increase DTR in Lotto industry.*

***Keywords:*** *Lottery Industry, Direct Tax, Minimum Tax, Tax Evasion, Forensic Accounting*

***Jel. Classification:*** *G38, H26, M42, P45*

## 1. INTRODUCTION

The continuous and constant enforcement steps taken by the state governments to propel the agents and the primary consumers (locally refer to as *stakers*) of lottery business to fulfil their civic responsibilities, in the area of tax has been a major concern to the tax authorities. This concern is becoming clearer to the tiers of government that without enforcements, this class of taxpayers hardly come forward to voluntary pay the taxes due. The agents and the stakers are majorly self-employed and they are expected to remit their taxes on the income earned in form of Direct Tax. The agents get their income in form of commission earned on the value of the money staked by the stakers and the incomes of the stakers come from the respective winnings.

The failure of these lotto consumers, who are mostly artisans with low literacy level, among others to voluntary pay the direct taxes has increased the concern of the tax authorities in

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view of the cost associated with enforcements as well as the difficulty in locating the primary place of business of the concerned. This has resulted into low level of revenue to the state governments and some have looked at the possibility of reaching an 'agreement' in determining what could be acceptable to the parties as an alternative minimum tax. The tax authorities are of the opinion that this will reduce the impact of the cost of enforcement and to some extent increase the revenue of the respective state governments. In the years to around 2005, coupon and paper lottery were mostly the avenue at which lotteries were staked, without feasible scientific method and this made it difficult for the computation of taxes payable to government by the operators, agents and the *stakers* (Gbajabiamila, 2017). The inability of the lottery authorities to accurately verify the sales proceeds of the operators, the commission collected by the agents and the winning to the stakers as asserted by Gbajabiamila (2017) is an impediment to the expected revenue due to the government, most especially on direct tax.

Lotteries, gaming machines, sports-betting, among others are a form of gambling that involves the staking of items of value, which the outcome will only depend on probability or what is called – a game of chance (Rickwood, Blaszezynski, Delfabbro, Dowling and Heading, 2010). In the plan to increase revenue from non-oil sector, especially from taxes, some state governments have engaged the services of tax consultants/auditors. This tax audit exercise is made much easier if there is an adequate and enough information on the taxpayers. The information needed for a successful tax audit exercise has been much easier in the formal sector. This involves the deduction of employees' taxes from source by the employers and the data and information of these are easily available through various government agencies like Corporate Affairs Commission, Federal Inland Revenue Service, State Internal Revenue Service, among others, thereby reducing the incidence of tax evasion.

In the informal sector, where majority of the agents and the stakers belong, has been an area where accurate information on eligible taxpayers is seen by the stakeholders as more difficult to obtain. In the lottery industry, especially lotto, where this study is focused, the stakers use cash to stake and same method is used in paying them on winning. This makes it difficult to capture their respective income through the banking process. In addition, majority of the stakers and some of the agents hardly have any major reason to relate with the government through obtaining of tax clearance and other documents citizens get from the governments, which could have assisted in getting the needed information about them.

In spite of the belief that some educated elites have ventured into the lottery business in form of setting up of lottery businesses that are licensed by the relevant government agencies, the final consumers of their products in Nigeria are still majorly the artisans like drivers, vulcanizers, panel beaters, mechanics without formal education and by their nature are seen as having element of violence. It is with regards to this that the tax enforcement agents have been experiencing huge resistance in applying the relevant tax rules for the collection of the taxes due. While scholars have postulated the effectiveness of tax audit exercise on corporate tax compliance, like Value Added Tax (VAT), Corporate Tax, PAYE on employees, among others and has brought additional revenue to the governments (Modugu and Anyaduba, 2014; Saw, 2019; Harelimana, 2018; Wuyah, Aku, and Ahmed, 2018; Olaoye and Ogundipe, 2018), that of the lottery industry as it concerns the accurate income of the agents and the stakers; and the information needed on their profile, for effectiveness of appropriate tax collection has been a major issue.

In spite of the use of tax auditors over the years by the state government, there have been reports of tax evasion. This has been more among the self-employed, like the lotto agents and

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stakers, hence the need to ascertain if the engagement of forensic accountants could reduce the effect of this on government revenue. Forensic accounting is a specialized area in the field of accountancy, and it involves using the outcome of the engagement for possible evidence in the law court (Liodorova and Fursova, 2018). The forensic accounting has been established by authors to be positively linked with financial and economic crimes, including money laundering, tax evasion, corruption, among others (Akinadewo, 2016; Debajie, 2019; Enofe, Omagbon and Ehigiator, 2015; Ezejiofor, Herbert, Tsegba, Ene and Onyilo, 2017; Lucy, Okoh and Nnaemeka, 2016; Nwakoby and Okoye, 2016; Oyedokun, Enyi and Dada, 2018).

It is in line with all these that this study would want to empirically examine the factors that are discouraging the educated from participating in lotto industry, specifically – staking; to appraise the problems behind the inability to apply the provisions of Direct Tax fully on stakers' income; and to determine the extent at which Forensic Accounting (FA) could influence Direct Tax Revenue (DTR) in Lottery Industry in Nigeria. The following hypothesis stated in null form is formulated for this study:

There is no significant relationship between Forensic Accounting and Direct Tax Revenue in Lottery Industry in Nigeria.

## 2. LITERATURE REVIEW

### 2.1 Conceptual Framework

#### 2.1.1 Brief History of Lottery and the Modus Operandi

Lottery is one of the components of gambling and it is a regulated industry. It involves the staking of an item of value on an outcome that is governed by chance like the other components of gambling like electronic gaming machines, casino games, racing and sports-betting (Rickwood, Blaszezynski, Delfabbro, Dowling and Heading, 2010). Rickwood, Blaszezynski, Delfabbro, Dowling and Heading (2010), posited that gambling is a major entertainment and tourism industry in Australia and a valued source of revenue to government and private enterprise. Lotteries have been in the picture and historically, it is documented in the Old Testament when Moses distributed the land west of the Jordan river in Numbers 26:52-56 in form of lot, and many other Roman emperors used these for entertainment (Willmann, 1999). Lotteries represent one of the oldest and most common forms of gambling around the world with origins dating back at least to ancient Rome and possibly even earlier to the Han Dynasty of China in the second century B.C. (Grote and Matheson, 2011).

In the 15$^{th}$ century, lotteries came back as a means of raising revenue and from economic perspectives, it firstly involves the purchasing of tickets by people and then presents a challenge to the theory of decision making under uncertainty, but it was the Romans whose use of chance came closest to what is defined as a lottery in the narrow sense (Willmann, 1999). Farrell and Walker (1999) posited that lotteries offer huge prizes at long odds and that most countries use this highly as a form of revenue generation. Gambling has a socio-economic impact and it should not be left floating by the governments and policy makers without adopting adequate and effective measures of regulatory control (Ayodeji, 2017). Willmann (1999) opinionated that the early center of modern-day lotteries came from Italy, which was the introduction of a game

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called *bianca carta.* Bianca Carta is called after the white colour of blank tickets whose loudly proclaimed drawings far outnumbered the few winning tickets (Willmann, 1999).

The lottery business unlike many other businesses that involve either the buying and selling of goods and services, as well as the rendering of services for productive reward, function on probability and majorly seen as a game of chance. Oyeleke and Otekunrin (2014) citing Bradley (2009) and Grundlingh (2004) postulated that lottery is a game of chance and it involves the distribution of prizes among purchasers of tickets. It is an 'unusual' business that requires no formal education for the *stakers*, but only the ability to predict correctly, numbers that will match the drawn winning numbers. These *stakers* in Nigeria are majorly self-employed and within the context of the Personal Income Tax (Amendment) Act, 2011, their income is expected to be subjected to Direct Tax. Rickwood, Blaszezynski, Delfabbro, Dowling, Heading, (2010) opinionated that almost all forms of commercial gambling are designed to provide a negative return to players, that is, a relative advantage to the house or gambling operator (Rickwood, Blaszezynski, Delfabbro, Dowling, Heading, 2010).

Lotteries are mostly run and regulated by the government to raise funds for several reasons including the improvement of infrastructural facilities (Oyeleke and Otekunrin, 2014). The Calofornia lottery was created to raise supplemental funds for public school and the Big Lottery Fund in the UK is a non-departmental public body that distributes 46% of all funds raised by the national lottery for good causes (Chen, Yang, Chen, 2010; Paine, Taylor and Alcock, 2012, cited by Oyeleke and Otekunrin, 2014).

According to Barboianu (2009), cited by Oyeleke and Otekunrin, (2014), the possibility of winning a huge amount of money is a great feature that attracts players despite the very low probabilities of winning. In the United States of America, the odds of winning the Mega Millions jackpot are 1 in 175 million and that of the Powerball jackpot is 1 in 195 million (Barboianu, 2009, cited by Oyeleke and Otekunrin, 2014). This confirms the fears of those not participating in lottery business that it is highly risky and could impoverish the players. Lottery operationalize through the sale of tickets by an organized body – government and private operators or charities to possessors for a potential monetary reward (Grote and Matheson, 2011).

### 2.1.2 Lottery Business in Nigeria

The National Lottery Act 2005 and the National Lottery Regulation 2007 regulate lottery business in Nigeria. In Nigeria, some states regulate their own lotteries through the establishment of various lotteries and gaming board in conformity with the legislation guiding the collection of taxes exclusively allocated to the three tiers of government and which gave an exclusive rights on Pool, Betting, Lottery, Gaming and Casino to the state governments. However, this has resulted into legal battle between the Federal Government and the states. Western Lotto Nigeria Limited and Wesco Pools & Lottery Limited went to the Federal High Court in Lagos to stop Ogun State and Lagos State governments from stopping them from operating. In their belief, holding of the licence of the National Lottery Regulatory Commission was enough and that there was no need to obtain state licence (Onyekwere, 2018). In the lead judgement, Justice Idris held that the national permits were enough for the two companies and that the two states cannot close their businesses for reason that the plaintiffs have not obtained additional licence to operate their lottery business (Onyekwere, 2018).

In the South Western Nigeria, Lagos State established the Lagos State Lotteries Board; Osun State lottery is under the state Internal Revenue Service; Ekiti State Internal Revenue

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Service regulates lotteries; Ondo State established Ondo State Pools, Betting and Lotteries Boards; and Oyo State came up with Oyo State Gaming Board (OYSGB). The OYSGB is described as an innovative agency saddled with the responsibility of regulating betting, lottery, pools and all gaming activities for the purpose of accountability, improve transparency in the industry, stakeholder's confidence, revenue generation, and utilizing proceeds earned towards good causes and community development. This is with the aim of taking over from the Oyo State Betting & Gaming Commission under the Oyo State Gaming Law 2018. According to the information extracted from OYSGB website, most lotteries and lotto are said to be digital/technology driven terminals that are directly linked to the lottery operators. The dominant server provides real time information on the activities of the Lottery operators, their agents and sub agents. In Ogun State, the operation of lotto is controlled by the Department of Lottery, Pools and Betting Ogun, which is under the Ogun State Internal Revenue Service (OGIRS). Others states in Nigeria also have their different regulatory bodies.

Lagos State pride itself as the pioneer of lotteries in Nigeria. The Lagos State Lotteries Board (LSLB) asserted that prior to the enactment of the Lagos State Lotteries Law in 2004, the lottery industry was unregulated and formed part of the informal sector. The LSLB officially became functional in 2005 with an amendment to the law in 2008. This amendment empowered LSLB to issue multiple lottery licenses in addition to the State-owned lottery license thereby providing a competitive platform for lottery operators in the State (LSLB – Amendment, 2008). The LSLB says that it promotes conducive operating environment; protects the interest of stakeholders; regulates gaming activities; and generates revenue for state government and apply same to Good Causes project in Education, Infrastructure, Environment and Social & Health Sector in the state, categorizes her games to – Public Online Lotteries; Online Sports Betting; Casino; Other Lotteries (Promo); Scratch Card and Interactive Games; Gaming Machine; Pools Betting and Other Games.

### 2.1.3 Tax, Tax Audit and Lottery Industry Stakeholders

The tax audit initiative was primarily as a result of the non-compliance to tax provisions. It became imperative to verify with documentary evidence, the level of compliance, the outstanding taxes due and identify eligible taxpayers that have failed to fulfil their civic responsibilities to the respective governments. The failure of the taxpayers to remit on time the outstanding liabilities encourages the enforcements from the tax authorities, and with a possible litigation. Kircher (2008), cited by Badara (2012) posited that Tax Audit is an examination of an individual or organization's tax report by the relevant tax authorities in order to ascertain compliance with applicable tax laws and regulations of state. Tax audit is therefore very critical in the process of ensuring that tax evasion is minimized, helps to ascertain the appropriateness and completeness of taxes paid by the taxpayers, which will eventually bring more revenue to the coffers of government.

The stakeholders in the Lottery Industry include the government, the operators (licensed companies), the agents/sub-agents and the stakers (the final consumers). The government regulates and create a conducive environment in the industry and gets taxes from the other stakeholders; the operators mostly deal with the agents; the agents/sub-agents relate with the stakers. The licensed companies are to remit corporate taxes to the federal government under the Companies Income Tax, but in the Part VI of National Lottery (Amendment) Bill 2017, signed by the National Assembly on 17$^{th}$ November 2017, an Imposition of Lottery Companies Income

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Tax was introduced. This Lottery Tax includes that there shall be computation of income tax at the rate of 10 percent on the net proceeds of the Licensee at each assessment year; that a Licensee shall pay a minimum of 40% of the proceeds of a lottery into a Prize Fund. The amount paid into the Prize Fund shall be exempted from all forms of taxes, levies, among others. In addition, where the Licensee applies the Lottery Tax in any year, it shall be exempted from Companies Income Tax Act (Cap. C21 LFN. 2004); and Value Added Tax Act (Cap VI LFN 2004). This new law was documented in the Federal Republic of Nigeria Official Gazette No. 135 Vol. 104 on 27th December 2017.

The governments expect the licensed operators to deduct withholding taxes from the commission of the agents/sub-agents and remit same to the relevant state government, but this is still contentious between the two parties. According to the Personal Income Tax Act as amended, the agents/sub-agents and the stakers like other self-employed, are to pay direct taxes on their income to the respective state governments where they are resident. The failure to properly identify the relevant data on this class of eligible taxpayers made agencies of states like Lagos State Lottery Board and Ogun State Internal Revenue to solicit for the assistance of the operators as agents for collections. In line with this agreement, Lagos State and Ogun State peg their minimum taxes for this class of taxpayers to N10,000 and N3,100 per annum respectively. Wuyah, Aku and Ahmad (2018) posited that tax audit and investigation can increase value added tax revenue and Olatunji and Temitope (2018), asserted that tax audit can influence the tax compliance. Regardless of the postulations by these scholars, it is still difficult for the tax authorities to correctly determine the total direct tax on the income of agents and stakers in the lottery industry.

### 2.1.4 Forensic Accounting

Forensic Accounting (FA) includes the use of accounting, auditing and investigative skills to assit in legal matters and could involve the application of special skills in finance, quantitative methods, law and research (Okoye and Gbegi, 2013). The authors asserted that FA brings significant improvement in the quality of fraud detection and prevention. Being a forensic accountant requires a professional possession of multidisciplinary backgrounds and skills and knowledge to comprehend the trajectories of international crimes and fraud (Herbert, Tsegba, Ene, and Onyilo, 2017). The authors further postulated that while many universities in different parts of the world have recognized the importance of systematic education training of forensic accountants and fraud examiners, there is a noticeable lacuna in forensic accounting education and practice in Nigeria and other African countries. A forensic accountant is skillful and experienced to analyze, interpret, summarize and present complex financial and business-related issues in a manner that is both understandable and properly supported evidentially and can be engaged in criminal investigation, personal injury claims, fraud investigations, matrimonial disputes, among other services (Yadav and Yadav, 2013). Despite the positive influence of tax audit in improving tax compliance, Okoye and Gbegi (2013), opinionated that the use of forensic accountants can help better in detecting and preventing fraud cases in the public sector organizations.

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## 2.2 Theoretical Framework

This study reviews Economic Deterrence Theory and Institutional Anomie Theory.

### 2.2.1 Economic Deterrence Theory

This theory propounded by Allingham and Sandom (1972) states that the issue of tax matters rests on uncertainty and that it depends majorly on the attitude and behavior of taxpayers to tax issues. The authors postulated that if a taxpayer knows that if the tax that he evaded is discovered, his past will be investigated, then this will push him into declaring his total income. Ladi and Henry (2015), cited by Onuoha and Dada (2016) concurred to this theory and asserted that the taxpayer is continuously looking at the benefits from government out of the taxes paid. This they said that the taxpayers will be prepared to pay more tax if he has reason to believe the government is keeping to her own part of the contract in the provision of infrastructure and security and vice versa.

### 2.2.2 Institutional Anomie Theory

According to Marandu, Mbekomize and Ifezue (2014), Institutional Anomie Theory (IAT) Anomie is theorized on sociological belief that individuals take decisions in accordance with socialized values and when looked at differently and individually, may contradict one another, but together, balances each other out to produce behavior considered "normal" by society. This theory introduces four theoretically derived sets of national cultural dimensions that are likely to promote or suppress tax evasion. These include individualism, achievement orientation, assertiveness and humane orientation (Marandu, Mbekomize and Ifezue, 2014). This theory says that crime is an indirect consequence of the dominance of the economy over other sectors of the society. This imperatively means that if a society is primarily shaped by economic interests, economic logic permeates other social institutions and areas (Messner, Thome and Rosenfeld, 1994, 2008; Wickert, 2019). In reference to these two theories, the Economic Deterrence Theory appears to be the closest to the focus of this study and it is the guiding theoretical framework.

## 2.3 Empirical Review

Several authors have researched both in the developed economies and emerging economies on tax audit as an independent variable and the associated effect on government revenue. Studies on tax compliance have been done by scholars in sectors including on direct tax. Many have also worked on the effect of forensic accounting on financial and economic crimes including tax evasion. Some of these and their results of the studies are as follows and will lead to establishing the Gap in Literature that this study will fill.

Onuoha and Dada (2016) researched on how tax audit and investigation could make tax administration to be more efficient. The research adopted an expository approach using content analysis of existing literatures and revealed that tax audit and investigation will improve on tax revenue collection in Nigeria. Oyeleke and Otekunrin (2014) investigated three common lottery strategies usually employed by lottery players and discovered that lottery numbers were not chosen randomly. Drogolas, Ioannis, Dimitra and Ioannis (2015) researched on the auditors'

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perception to the effectiveness of tax audit in Greek firms. Primary data with the use of questionnaire were used and factor analysis and multiple regression analysis were employed for the examination of the hypotheses. The study finds out that the use of information system tools can enable tax auditors to track properly tax infringements, which will result into increase in the revenue of government.

Gribbin and Bean (2005) did their research on how the Illinois lottery legislation of 1973 was passed into law and the two purposes for the passage. The study reveals that the two purposes are: to increase the general revenue fund and to curb illegal gambling. The effect of audit activity on tax declaration by the small businesses in Italy was what D'Agosto, Manzo, Pisani and D'Arcangelo (2018) did their study on. The study provides empirical contribution to deterrence analysis through the evaluation of the effect of tax audits on compliance taxpayer behaviors over the period of 2004 to 2009. The study used two databases – Tax Return Register and Italian Revenue Agency audits data. The results show that there is an overall positive effect of tax audits in terms of deterrence.

Herbert, Tsegba, Ene and Onyilo (2017) did their study on the Nigeria's experience on the rise of fraud examination and forensic accounting in Africa. The study reveals that fraud examination and forensic accounting education has become an indispensable subject area in the light of the challenge of fraud and corruption in Nigeria's (Africa's) economy. Ezejiofor, Nwakoby and Okoye (2016) did their study on the impact of forensic accounting on combating fraud in Nigerian banking industry to ensure good corporate governance. Survey method was adopted, and data collected through questionnaire. The data was analyzed with five-point likert's scale. The study finds out that forensic accounting is an effective tool for addressing financial crimes in the banking system.

Olaoye and Ogundipe (2018) did their research on the application of tax audit and investigation on tax evasion control in Nigeria. The study sourced the data through questionnaire and analyzed these using logistic regression and Spearman's rho measure of association. The study reveals that tax audit in the form of desk and back duty are instrumental in the reduction in tax evasion. Harelimana (2018) researched on the effect of tax audit on revenue collection in Rwanda. The study used primary and secondary data, and these were analyzed with the aid of SPSS version 21. The study reveals that tax audit influences revenue collection. Modugu and Anyaduba (2014) did their study on the impact of tax audit on tax compliance of companies in Nigeria. Questionnaire were administered on the staff of selected companies in the sates chosen from the five geo-political zones in Nigeria. the study reveals that there is a positive relationship between tax audit and tax compliance.

Despite the above studies conducted on tax audit effectiveness on tax compliance, the effect of tax audit on tax evasion, the effect of forensic accounting on financial crimes, there is dearth of literature that focused on direct taxes as it relates to lottery industry in Nigeria. Moreover, no serious and known study has been done on how forensic accounting can bridge the gap which the tax audit could not fill on its effectiveness on tax revenue, especially on the direct tax of agents and lottery players (stakers) in Nigeria.

## 3. METHODOLOGY

This study used primary data through the administration of questionnaire to 231 respondents, with 209 validly returned. The population was purposively employed on tax officials of Lagos State and Ogun State. Lagos State was chosen because of the pioneering status

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on the redefining and reshaping of the lotto industry in Nigeria and because of her economic contributions to the GDP ratio in Nigeria. Ogun State was chosen due to her closeness and sharing of border with Lagos and it has over the years benefitted from that closeness economically. In addition, the two states have been in the vanguard of the courts matters with the Nigeria government (federal government), for the proper interpretation of the exclusive right on Pools, Beting and Lottery industry. The 5-point Likert scale was used to determine the respondents' opinion on the factors discouraging the literates from staking and used same method to appraise the problems affecting the ineffective application of Direct Tax provisions on the income of the agents and the stakers. The decisions were reached using statistical tools like mean and standard deviation. The gap bridged with the use of forensic accounting in determining the extent at which this could influence Direct Tax Revenue in the lottery industry more effectively than Tax Audit exercise was determined using multiple regression analysis with the aid of SPSS version 23. This method has been employed by many researchers in the past including Enofe, Omagbon and Ehigiator (2015) in their study of the relationship between forensic audit corporate fraud. Correlation analysis was also carried out to confirm the kind of relationship that exists between the dependent variable – Direct Tax Revenue (DTR) and the independent variables Forensic Accounting (FA) as represented by (Arbitration, Mediation and Litigation Skills (AMLS), Detection, Prevention and Deterrence Skills (DPDS), and Communication, Digitalization and Analytical Skills (CDAS). The components of the independent variable were adopted from Oyedokun, Enyi and Dada (2018) with little modification.

### 3.1 Model specification:

$DTR = f(AMLS, DPDS, CDAS)$……..…….. (1)
$DTR = \beta_o + \beta_1 AMLS + \beta_2 DPDS + \beta_3 CDAS + \mu)$……..……. (2)
A priori expectation: $\beta_o, \beta_1, \beta_2, \beta_3 > 0$.

Meanwhile, the independent variables are expected to be positively related to the dependent variable. These independent variables are the skills known with forensic accountants, which will enable them to do an in-depth, analytical and critical examination of the data related on any investigation, with the mind-set that the results will be useful for prosecution at the law courts.

## 4. FINDINGS AND DISCUSSIONS

One of the objectives that this study planned to achieve is the examination of the factors that are discouraging the literates from getting involved in staking (*staker*) in the lottery industry. Table 1 below descriptively explains the responses from the respondents:

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**Table 1: Descriptive Results of the Factors Discouraging the Literates from Staking**

| Statements | N | Min. | Max. | Mean | Std. Deviation | SA & A | SD & D | U | Blank |
|---|---|---|---|---|---|---|---|---|---|
| Staking do not meet the expectations of their education | 209 | .00 | 5.00 | 3.5167 | 1.79769 | 148 (70.8%) | 22 (10.5%) | 9 (4.3%) | 30 (14.4%) |
| The mode of operations of lottery is more encouraging to illiterates | 209 | .00 | 5.00 | 3.2488 | 1.60986 | 137 (65.6%) | 19 (9.1%) | 22 (10.5%) | 31 (14.8%) |
| Lottery encourages violence and exposes one's societal standing to unhealthy attack from the majority of the stakers because of their level of education and the kinds of jobs that they do. | 209 | .00 | 5.00 | 3.2488 | 1.65405 | 128 (61.3%) | 25 (11.9%) | 26 (12.4%) | 30 (14.4%) |
| It is against religious beliefs | 209 | .00 | 5.00 | 3.2632 | 1.70481 | 129 (61.8%) | 25 (12.0%) | 24 (11.5%) | 31 (14.8%) |
| It encourages laziness | 209 | .00 | 5.00 | 3.1292 | 1.70901 | 130 (62.2%) | 37 (17.7%) | 10 (4.8%) | 32 (15.3%) |
| It is psychological | 209 | .00 | 5.00 | 3.4211 | 1.69409 | 140 (67.0%) | 17 (8.1%) | 21 (10.0%) | 31 (14.8%) |
| It cannot enhance educational career. | 209 | .00 | 5.00 | 3.0670 | 1.70274 | 122 (58.4%) | 38 (18.2%) | 17 (8.1% | 32 (15.3% |
| Valid N (List wise) | 209 | | | | | | | | |

**Source: Field Survey and SPSS 23 Analysis Results (2019)**

Table 1 above shows the descriptive statistics of the mean and standard deviation of the factors against the lack of interest of the literates on staking. The table also shows the responses of the respondents in numbers and in percentages. The questionnaire was unstructured, given the opportunity for the respondents to include other factors which might not have been included in the factors stated. 5-points Likert scale was used as follows: Strongly Agree (SA), Agree, Undecided, Disagree, Strongly Disagreed and with allocation of numbers from 5, 4, 3, 2, and 1 respectively. However, the minimum number started from 00 because some of the respondents did not tick any of the five columns.

In that table 1, 148, representing 70.8% of the respondents believed the literates are discouraged from staking because it does not meet the expectations of their education. The mean of 3.5167 indicates that many of the respondents asserted to that factor and with a standard deviation of 1.79769 which shows that the spread in response is about 179.77%. 137 representing 65.6% of the respondents mentioned that the mode of operations of lottery is more encouraging to illiterates. This mean and standard deviation on this factor are 3.2488 and

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1.60986 respectively. This means that many of the respondents consent to this and with a spread in response of 160.99%. other factors with the respective mean, standard deviation, number of consenting respondents and the percentage are shown in table 1. Meanwhile, the numbers of respondents and the respective percentages that left the spaces blank are in the range of 30 to 32 and 14.4% to 15.3%. This was as a result of many of the agents and the stakers included in the sample size but that said that those questions were not meant for them.

**4.1 Results of the comparison of the annual income of agents, stakers and the annual taxes paid:**

Appendixes 1, 2 and 3 show the details of the annual income of the agents, the stakers, the respective taxes paid and the validity of these taxes from the annual tax amount collected by the tax authorities. From the 209 respondents, 41 agents representing 19.62%; 31 stakers representing 14.83% and 43 tax officials that are specifically in charge of the collection of direct taxes, representing 20.57% responded to the questions relating to the annual income of the agents/stakers and the taxes paid. In appendix 1, out of the 41 respondents, 11, representing 26.83% of the agents affirmed their income to be in the range of N0 to N100,000; 6 out of 41, representing 14.63% said their annual income was in the range of N10,001 to N500,000; 12 out of 41, representing 29.27% said that their annual income was between N500,001 to N1,000,000; 6 respondents ticked the income of N1,000,001 to N5,000,000; and 6 persons ticked N5,000,001 to N10,000,000. In the respective taxes paid, 35 out of the agents responded on the taxes paid, while 6 persons abstained and refused to fill the section. However, out of the 35 agents that responded on the tax paid, only 2 out of the 11 persons who income were between N0 and N100,000 affirmed that the annual tax paid was between N0 to N1,000. The remaining 9 persons either abstained or did not pay tax at all, which is an indication of tax evasion. Meanwhile, 14 out of the 35 agents that disclosed the taxes paid, representing 40% confirmed the annual payment of between N3,001 to N3,500 as against N7,510, N30,010 that should have been paid according to appendix 1, which is a clear case of tax evasion and the ineffectiveness of the application of direct tax provisions on their income. Same pattern follows with that of the stakes in appendix 2 and 3.

In appendix 3, 22 tax officials out of the 43, representing 51.16% confirmed that the annual taxes paid by the agents/stakers were between N3,001 to N3,500, whereas according to appendix 1 and 2, the income of majority of the agents falls between N500,000 to N10,000,000 and that of the stakers was between N100,000 to N1,000,000. If the minimum tax of 1% is assumed to be followed, then it is evident that there is a huge tax evasion in the lottery industry as it concerns the direct tax of agents and the stakers. Despite the effectiveness of tax audit exercise and the respective enforcement as posited by many authors, it has proved that it has been a difficult situation for the tax officials in the collection of direct taxes from the agents/stakers in the lottery indistry. This is evident from the responses of the responds to the questions relating to the most effective between normal tax audit and the engagement of forensic accountants (appendix 4). This then brought the appraisal of the problems associated with the inability of the tax authorities to effectively apply the provisions of the direct tax on the income of the agents and the stakers.

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**Table 2: Descriptive Results of the problems of ineffective application of Direct Tax Provisions on *Stakers*' Income**

| Statements | N | Min. | Max. | Mean | Std. Deviation | SA & A | SD & D | U | Blank |
|---|---|---|---|---|---|---|---|---|---|
| Incomplete data on stakers | 209 | .00 | 5.00 | 4.2105 | 1.19843 | 183 (87.6%) | 8 (3.8%) | 9 (4.3%) | 9 (4.3%) |
| The informal operations of the stakers | 209 | .00 | 5.00 | 3.8558 | 1.08497 | 172 (82.3%) | 5 (2.4%) | 21 (10.0%) | 11 (5.3%) |
| Many stakers have no business to do with government and this affects the effectiveness of enforcement. | 209 | .00 | 5.00 | 4.1435 | 1.02773 | 185 (88.5%) | 5 (2.4%) | 12 (5.7%) | 7 (3.4%) |
| Many stakers transact their businesses in cash and this makes it difficult to capture their total income | 209 | .00 | 5.00 | 3.9330 | 1.19104 | 174 (83.3%) | 15 (7.1%) | 11 (5.3%) | 9 (4.3%) |
| Many stakers spend their income (winnings) on women/men and other areas that is difficult for tax authorities to locate. | 209 | .00 | 5.00 | 3.9091 | 1.19258 | 168 (80.4%) | 11 (5.3%) | 22 (10.5%) | 8 (3.8%) |
| Stakers see lottery as gambling luck and the authorities have no reason to tax them. | 209 | .00 | 5.00 | 3.9856 | 1.13289 | 171 (81.9%) | 19 (9.1%) | 12 (5.7%) | 7 (3.3%) |
| Stakers do not see any contributions from tax authorities to the generation of their income. | 209 | .00 | 5.00 | 3.9856 | 1.13289 | 175 (83.7%) | 13 (6.2%) | 14 (6.7% | 7 (3.3%) |
| The low literacy level of the stakers | 209 | .00 | 5.00 | 3.8708 | 1.17160 | 166 (79.5%) | 23 (11.0%) | 11 (5.2%) | 9 (4.3%) |
| Valid N (List wise) | 209 | | | | | | | | |

**Source: Field Survey and SPSS 23 Analysis Results (2019)**

Table 2 shows the problems that made it impossible for the tax authorities to effectively apply the direct tax provisions on the income of the agents and the stakers. 183 of the 209 respondents, representing 87.6% opinionated that incomplete data on the stakers is a major factor, with 4.2105 mean and 1.19843 standard deviation to show the spread of the respondents; 185 respondents, representing 88.5% believed that many stakers have no business to do with government, which affects the effectiveness of enforcement, with a mean and standard deviation of 4.1435 and 1.02773 respectively. The other specified problems, mean, standard deviation and the percentage of agreement by the respondents are shown on that table 2. However, the table 2 also show that the percentage of those who were not in agreement with the problems and those who left the spaces blank, were cumulatively around 20.5% as he highest and 11.5%, as the least.

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### 4.2 Test of Hypothesis

The SPSS package version 23 was employed to analyze data collected from questionnaires on Forensic Accounting (FA) and Direct Tax Revenue (DTR) in Lottery Industry in Nigeria. Meanwhile, in the questions relating to the effectiveness of tax audit on direct revenue, many respondents believed that tax audit can improve the tax compliance on direct tax in lottery industry, with 180 of the respondents, representing 86.1% gave credence to this with a mean of 4.8612 and standard deviation of .34652 showing the spread, with a minimum of 4.00 and maximum of 5.00. 171, representing 81.8% agreed that tax audit is an effective method to improve the revenue of government on direct tax in lottery industry, with a mean of 3.9522 and standard deviation of .56126. Despite this, the respondents believed that forensic accounting is more effective than normal tax audit if used for tax assignments. The mean on that was 4.0000, with a standard deviation of 1.18078 to show the spread.

To determine the relationship that exists between FA, as represented by the components of the independent variables and DTR, the hypothesis was tested using the multiple regression analysis. The coefficients in appendix 7, the t-calculated value of 0.270 is less than the t-tabulated value of 0.787, which means that Arbitration, Mediation and Litigation Skills (AMLS) are necessary skills for forensic accountants that will aid in the increase in the direct tax of agents and stakers. The t-calculated value of 0.511 is less than t-tabulated of 0.610, meaning that Detection, Prevention and Deterrence Skills (DPDS), are essential skills for forensic accountants and these will help in identifying the total income of agents and stakers in the lottery industry for more revenue to the government on direct tax. The t-calculated value of -0.528 is greater than t-tabulated of -0.600, which means that Communication, Digitalization and Analytical Skills (CDAS) are germane skills for forensic accountants and these could be deplored to increase the direct tax revenue payable to governments from agents and stakers in the lottery industry. In this study, Forensic Accounting (FA) as represented by AMLS, DPDS and CDAS, as shown by the sign and size of the coefficient: $\beta_1$ + 0.020, $\beta_2$ +0.055 and $\beta_3$ - 0.060 showed that with the introduction of Forensic Accounting, the direct tax revenue of governments on income of the agents and stakers will improve. This means that the coefficient of AMLS ($\beta_1$), DPDS ($\beta_2$), and CDAS ($\beta_3$) will be greater than zero, mathematically denoted as $\beta_o$, $\beta_1$, $\beta_2$, $\beta_3$, > 0. Therefore, the equation as shown in appendix 7 reveals that the a priori expectation of the model is satisfied, and the result is satisfactory. DTR = 4.056 + 0.020*AMLS + 0.055*DPDS - 0.060*CDAS + 0.090

## 5. CONCLUSION AND RECOMMENDATIONS

The findings of this study established scientifically that while normal tax audit is effective in bringing more revenue on direct tax of agents and stakers, which is in agreement with the study of Olatunji and Temitope (2018); Olaoye and Ogundipe (2018) Wuyah, Aku and Ahmad (2018); Onuoha and Dada (2016) on tax audit and tax revenue of governments, but it has some flaws which is one of the findings that this study has revealed. The study reveals that some skills of forensic accounting which the normal audit do not possess are very essential in efficiently detecting the total income of the agents and stakers for respective taxes in form of more revenue to government. Therefore, forensic accounting, according to the study is more effective and it is positively significant in the detection of any hidden revenue of the agents and the stakers in the lottery industry in Nigeria. This agrees with the findings of Enofe, Omagbon and Ehigiator (2015) in their assertion that forensic accounting is positively linked with corporate fraud. The findings identify also that the literate believes that staking will not enhance

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the expectations of their education, which accounted for one of the reasons why lottery staking is still majorly participated by those without formal education. The study also finds out that the incomplete data on the stakers; the cash method in which staking is transacted, among others, contribute to the ineffectiveness of the increase in the revenue base of the direct tax on stakers and agents in the lottery industry. Therefore, it is suggested that government should take the following steps, in reducing the tax evasion in the lottery industry which this study has found out: the effective compilation of the identity of agents and the stakers through the licensed companies; the names of proper details of the winners of every staking should be documented; winnings should not be paid by cash but through direct transfer to the bank which will then show the records of the income received by the stakers; the commission to the agents should also follow same pattern; government to request annual records of all winnings, commission, which will detailed the game played and the identities of the beneficiaries for a year, which will assist the government to effectively identify the total of the concerned; the government should also employ the services of forensic accountants on tax audit for effectiveness of results, for this study has proved that it will reduce the level of tax evasion on direct tax in lottery industry.

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## APPENDIXES

**Appendix 1: AVERAGE INCOME (AGENTS)**

| INCOME RANGE (P.A) N'000 | AVERAGE INCOME (P.A) N'000 | NO OF RESPONDENTS | PERCENTAGE OF RESPONDENTS | EXPECTED TAX BASED ON 1% MINIMUM TAX |
|---|---|---|---|---|
| 0-100 | 100 | 11 | 26.83% | N1,000 |
| 101– 500 | 301 | 6 | 14.63% | N3,010 |
| 501-1,000 | 751 | 12 | 29.27% | N7,510 |
| 1001-5,000 | 3,001 | 6 | 14.63% | N30,010 |
| 5,001-10,000 | 7,501 | 6 | 14.63% | N75,010 |
| 10,001-20,000 | 15,001 | 0 | 0.00% | N/A |
| 20,000 and above | 20,000 | 0 | 0.00% | N/A |
| Listwise | | 41 | | |

**Source: Researchers' Field Work (2019)**

**Appendix 2: AVERAGE INCOME (STAKERS)**

| INCOME RANGE (P.A) N'000 | AVERAGE INCOME (P.A) N'000 | NO OF RESPONDENTS | PERCENTAGE OF RESPONDENTS | EXPECTED TAX BASED ON 1% MINIMUM TAX |
|---|---|---|---|---|
| 0-100 | 100 | 2 | 6.45% | N1,000 |
| 101– 500 | 301 | 12 | 38.71% | N3,010 |
| 501-1,000 | 751 | 13 | 41.94% | N7,510 |
| 1001-5,000 | 3,001 | 2 | 6.45% | N30,010 |
| 5,001-10,000 | 7,501 | 0 | 0.00% | N/A |
| 10,001-20,000 | 15,001 | 2 | 6.45% | N150,010 |
| 20,000 and above | 20,000 | 0 | 0.00% | N/A |
| Listwise | | 31 | | |

**Source: Researchers' Field Work (2019)**

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**Appendix 3: DIRECT TAXES PAID BY AGENTS/STAKERS AND TAX AUTHORITIES' ANNUAL COLLECTIONS**

| RANGE OF TAX PAID (P.A) (a) | TAX AVERAGE (b) | NO OF RESPON. BY AGENTS (c) | % AGE OF RESPON (d) | NO. OF RESPON BY STAKERS (e) | %AGE OF RESPON. (f) | NO. OF RESPON. BY TAX AUTHORITIES (g) | %AGE OF RESPOND. (h) |
|---|---|---|---|---|---|---|---|
| 0-1,000 | N1,000 | 2 | 5.71% | 2 | 8.00% | 5 | 11.63% |
| 1,001-1,500 | N1,251 | 1 | 2.86% | 4 | 16.00% | 2 | 4.65% |
| 1,501-2,000 | N1,751 | 0 | 0.00% | 1 | 4.00% | 0 | 0.00% |
| 2,001–2,500 | N2,251 | 2 | 5.71% | 7 | 28.00 | 0 | 0.00% |
| 2,501-3,000 | N2,751 | 7 | 20.00% | 3 | 12.00% | 7 | 16.28% |
| 3,001-3,500 | N3,251 | 14 | 40.00% | 1 | 4.00% | 22 | 51.16% |
| 3,501-4,000 | N3,751 | 1 | 2.86% | 0 | 0.00% | 4 | 9.3% |
| 4,001-4,500 | N4,251 | 3 | 8.57% | 1 | 4.00% | 3 | 6.98% |
| 4,501-5,000 | N4,751 | 3 | 8.57% | 0 | 0.00% | 0 | 0.00% |
| 5,001-5,500 | N5,251 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| 5,501 and above | N5,501 | 2 | 5.71% | 6 | 24.00% | 0 | 0.00% |
| | | 35 | | 25 | | 43 | |

**Source: Researchers' Field Work (2019)**

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**Appendix 4: Descriptive Statistics of the questions relating to the effectiveness of tax audit Forensic Accounting on Direct Tax Revenue of Agents/Stakers in the Lottery Industry**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| VAR00016: Arbitration, Mediation and Litigation Skills (AMLS) are key skills for forensic accountants that will aid in the increase in the direct tax revenue of agents and stakers in the lottery industry | 209 | .00 | 5.00 | 2.8134 | 2.19891 |
| VAR00017: Detection, Prevention and Deterrence Skills (DPDS), are essential skills for forensic accountants and these will help in identify the total income of agents and stakers in the lotto industry for more revenue to government on direct tax. | 209 | .00 | 5.00 | 2.5072 | 2.01227 |
| VAR00018: Communication, Digitalization and Analytical Skills (CDAS) are germane skills for forensic accountants and these could be deplored to increase the direct tax revenue payable to governments from agents and stakers in the lottery industry. | 209 | .00 | 5.00 | 2.6459 | 2.13240 |
| VAR00019: Tax audit can improve tax compliance on direct tax in lottery industry | 209 | 4.00 | 5.00 | 4.8612 | .34652 |
| VAR00020: Tax audit is an effective method to improve the revenue of government on direct tax in lottery industry. | 209 | 3.00 | 5.00 | 3.9522 | .56126 |
| VAR00021: Forensic Accounting is more effective on tax compliance on direct tax in the lottery industry than Tax Audit without forensic accounting knowledge | 209 | 1.00 | 5.00 | 4.0000 | 1.18078 |
| | | | | | |
| VAR00022: The effectiveness of tax auditor in improving the direct tax revenue in the lotto industry is limited by the lack of skills in Arbitration, Mediation and Litigation Skills | 209 | 3.00 | 5.00 | 4.0909 | .79443 |
| VAR00023: The Forensic accounting is more effective in investigating and obtaining relevant data on eligible taxpayers on direct tax in the lottery industry than tax audit. | 209 | 3.00 | 5.00 | 4.3589 | .71416 |
| VAR00024: Detection, Prevention and Deterrence Skills (DPDS), are special skills for forensic accountants and not too known with the tax auditor. | 209 | 3.00 | 5.00 | 4.4211 | .65394 |
| VAR00025: Forensic accountants are more detailed in investigation than normal tax auditors and this will help them to bridge the gap between tax audit and direct tax revenue in lottery business. | 209 | 2.00 | 5.00 | 4.2775 | .90380 |
| VAR00026: While tax audit can be used to generate additional revenue on direct tax in the lottery industry, forensic accounting can generate more revenue. | 209 | 3.00 | 5.00 | 4.4115 | .59085 |
| VAR00027: The information obtained using forensic accounting will be more reliable than that generated through tax audit during litigation. | 209 | 3.00 | 5.00 | 4.6220 | .57654 |
| VAR00028: Any hidden income for direct tax purposes in the lottery industry can be unearthed more efficiently and effectively through forensic accounting than tax audit not done by a forensic accountant | 209 | 3.00 | 5.00 | 4.5455 | .58761 |
| VAR00029: Forensic accounting can be used to detect the hidden income of agents and stakers in the lottery business effectively than a normal tax audit | 209 | 3.00 | 5.00 | 4.5789 | .72373 |
| Valid N (listwise) | 209 | | | | |

**Source: Authors' Computation using SPSS 23 (2019)**

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## Appendix 5: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .050[a] | .003 | -.012 | .79922 |

**Source: Authors' Computation using SPSS 23 (2019)**

a. Predictors: (Constant), VAR00018, VAR00016, VAR00017

## Appendix 6: ANOVA[a]

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .330 | 3 | .110 | .172 | 915[b] |
| | Residual | 130.943 | 205 | .639 | | |
| | Total | 131.273 | 208 | | | |

**Source: Authors' Computation using SPSS 23 (2019)**

a. Dependent Variable: VAR00022

b. Predictors: (Constant), VAR00018, VAR00016, VAR00017

## Appendix 7: Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.056 | .090 | | 44.869 | .000 |
| | AMLS | .020 | .076 | .057 | .270 | .787 |
| | DPDS | .055 | .107 | .138 | .511 | .610 |
| | CDAS | -.060 | .115 | -.162 | -.526 | .600 |

**Source: Authors' Computation using SPSS 23 (2019)**

a. Dependent Variable: Direct Tax Revenue (DTR)

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