ISSN: 2635-2966 (Print), ISSN: 2635-2958 (Online).

Available online at http://www.atreview.org

Original Research Article

Employment Status, Gender and Tax Compliance Behaviour of Informal Sector Operators in Nigeria

Anthony O. Garuba[1] & Dominic Eichie[2]

[1] *Western Delta University, Oghara. Delta State.*
[2] *Bursary Department, University of Benin, Benin City, Nigeria.*

For Correspondence, email: *anthonygaruba@yahoo.com*

Received: 06/05/2022 Accepted: 26/06/2022

Abstract
The major problem of administering income taxes in Nigeria is in the area of collecting taxes from operators in the informal sector. The issue of tax evasion has become a global phenomenon and the hardest hit are the developing nations in Sub-Saharan Africa. Tax non-compliance in Nigeria is grave and problematic, resulting in a huge shortfall in revenue that would have accrued to the government for developmental projects. No doubt there is a need to improve compliance and bring more taxpayers into the tax net especially those that have been evading tax. The government can improve its tax revenue base by strengthening its tax system. Taxation is one of the significant ways that a government can boost its internally generated revenue in this era of COVID-19 (Coronavirus) pandemic across the globe. Therefore, the objective of this study is to critically examine the impacts of employment status and gender (as demographic factors) on informal sector operators' tax compliance in Nigeria. The survey research design was employed in gathering data. While the Statistical Package for Social Sciences (SPSS, version 17) and econometric techniques were applied in analysing the data. The results of the study showed that employment status has a positive relationship with informal sector operators' tax compliance in Nigeria. It was, therefore, recommended amongst others that there should be enforcement of tax laws and zero tolerance for an infraction.

Keywords: Employment, Tax compliance, evasion, income and informal sector.

JEL Classification Code: H20, H26

Citation: Garuba, A.O., & Eitchie, D. (2022). Employment status, gender and tax compliance behaviour of informal sector operators in Nigeria. *Accounting and Taxation Review, 6*(2): 87-104.

1. INTRODUCTION

This study is focused on the personal income tax compliance of the informal sector operators in Nigeria. Personal income tax is a statutory charge enforced by the government on individuals who are employees either in the public or private sector (i.e. under 'pay as you earn (PAYE) and those running their businesses (self-employed), in a partnership or under a business name (i.e. direct tax) as per (Personal Income Tax Act, amended 2011). This tax is a direct form of taxation whose impact is on the taxpayer. Under the direct form of taxation, the burden or incidence of tax is upon the taxpayers who finally bear the money burden and are unable to pass the burden to others (Bhatia, 2008). The personal income tax is one of the ways that state governments can generate revenue internally for development purposes.

The main reason government imposes taxes according to Shanmugam (2003) is undeniably to raise internally generated revenues to finance its budget and expenditure. Other reasons adduced amongst others by Lymer and Oats (2009) are: to reduce inequalities between the rich and the poor through the redistribution of income and wealth, protection of local industry and discourage unhealthy lifestyles such as smoking and alcohol. Therefore, the significance of tax revenue to the government cannot be overemphasized.

Taxation is one of the significant ways that a government can boost its internally generated revenue in this era of COVID-19 (Coronavirus) pandemic across the globe. The ravaging coronavirus pandemic and the uncertainty in crude oil markets, continue to stress the business cycle of the local and global economy due to the volatility of the oil prices (Mzoughi, Urom, Uddin & Guesmi, 2020). The price of oil has dwindled in the world market and this is hurting the revenue profile of the country because the country has been a mono-product economy depending on oil revenue since the 1970s (Eiya, Ilaboya, & Okoye, 2016). Over the years Nigeria has mainly depended on the revenue from the oil sector to finance its developmental projects without paying much attention to taxation. However, this is now changing because of the unstable nature of the oil price in the world market.

With the fluctuation of the world oil market prices coupled with the increasing costs of running the government, it has become expedient for the government to look inward on how to increase its revenue base. One of the ways the government can improve its internally generated revenue (IGR) is by strengthening its tax system. The focus of most Sub-Sahara African countries recently is on improving their internally generated revenue through taxation (Drummond, Daal, Srivastava, & Oliveira, 2012). Tax compliance has been an issue in many emerging economies.

Tax compliance no doubt improves the revenue base of the government which helps it to execute its capital projects, less dependent on mono-product and foreign aids. However, the aggregate revenue generated from taxation depends on the adherence to the tax laws and voluntary compliance of the taxpayers (Eshag, 1983). Eiya et al., (2016) posit that the amount generated or realized by the government from taxation depends on the desire of the taxpayers to uplift their society by willingly paying their taxes as patriotic citizens. The failure to adhere to the tax laws indicates that the taxpayer may be committing an act of tax non-compliance. Tax non-compliance has been a worrisome issue in most countries of the world. According to Cobham (2005), the issue of tax evasion has become a global phenomenon and the hardest hit are the developing nations in Sub-Saharan Africa.

The challenging issue of tax evasion now occupies the front burners of most countries of the world (Mohd, Mohd, & Wan, 2013). Modugu and Omoye (2014) posit that evasion constitutes the major problem confronting emerging economies against the backdrop of corrupt practices prevalent in such countries. Tax non-compliance happens when a taxpayer misrepresents revenue or income, allowable deductions from taxable income or fails to render tax returns (Serkan, Tamer, Yiizba, & Mohdali, 2016). No doubt that the Nigerian government has been fleeced of tax revenue that would have been channelled to the development of capital projects.

Thus, tax evasion implies the use of illegal or dishonest means by the taxpayer to pay less tax or the outright failure not to pay tax. That is, reducing tax liability through illicit means while tax avoidance is using legal means to reduce tax liability (James & Alley, 2004). Tax evasion hurts the economy because it indicates the abdication of the civic responsibility of the taxpayers (Garuba, 2021). As to Okoye and Odia (2012) tax evasion is a thoughtful act by a taxpayer to avoid tax payment. To them tax non-compliance in Nigeria is grave and problematic, resulting in a huge shortfall in revenue that would have accrued to the government for developmental projects. Tax evasion presents a serious problem for several countries.

The major challenge of administering income tax in Nigeria is in the area of collecting tax from operators in the informal sector (Modugu & Omoye, 2014). Tax evasion has been a major issue in emerging economies across the globe. The issue of compliance, evasion and avoidance has been a mounting problem globally (Mohd, Mohd, & Wan, 2013). Nigeria is not isolated from this problem because the fund that would have been channelled to the development of capital projects is lost to tax evasion. It is, therefore, necessary to understand why taxpayers evade tax to address the issue of compliance.

There is a need to improve compliance and bring more taxpayers into the tax net especially those that have been evading tax. Therefore, improved tax compliance would help to increase the revenue base of the government to finance its basic infrastructures.

Therefore, the objective of this study is to critically examine the impacts of employment status and gender (as demographic factors) on informal sector operators' tax compliance in Nigeria. This study is focused on the self-employed known as the unregistered and unregulated operators in the informal sector. The justification for the informal sector is because of the lack of an accurate database and the untaxed incomes due to tax evasion in that sector.

Against the above backdrop, we hypothesised in the null form that There is no significant relationship between employment status and informal sector operators' tax compliance in Nigeria and There is no significant relationship between gender and informal sector operators' tax compliance in Nigeria.

The rest of the paper is structured into five sections namely: literature review, methodology, results and discussions, conclusions and recommendations.

2. LITERATURE REVIEW

This section explores the conceptual review and framework of the study. The following will be examined in the course of this paper: the concept of tax, personal income tax, tax compliance, employment status and gender; as demographic factors and the informal sector.

2.1 The concept of tax

Governments have the responsibility of providing social infrastructure in return for taxes collected from their citizens. Such infrastructures require huge capital outlays which are financed by taxation and other revenue sources. According to Anyaduba and Okoye (2015) government relies heavily on its tax-based revenue to fulfil most of its numerous responsibilities and obligations ranging from the provision of pipe-borne water, electricity, schools, hospitals, roads, bridges, dams, etc. to security and the rule of law.

Tolby (1978) describes the tax system as a worldwide apparatus whereby the state imposes a statutory levy on its citizens for the benefit of society.

Akanle (1991) defines taxation more generally as "a compulsory levy imposed on a subject or upon his property by the government having authority over him". This definition reflects a wider base of taxation, as tax may be charged not only upon persons but also upon properties and transactions to raise money for public purposes. Anyaduba (2000) states that tax is an obligatory levy imposed by the government on the profit, wealth/income of either an individual or a corporate body for a public purpose. From the definitions given above three essential characteristics of a tax can be deduced: Firstly, it is an obligatory levy. Secondly, the government imposes a tax. Thirdly, the revenue generated should be for public purposes. These definitions show that not all internally generated revenues of government are taxes. That is, not all government revenues are compulsory levies. For instance, some charges are imposed rather by way of penalties or fees. The revenue generated from the fine paid for wrong parking or for beating traffic lights is not a tax. Also, revenue realized from tolls or payments for specific services is not considered as tax but just levies.

Although tax assessment is based on the reasonable rule of apportionment on persons or property within the control of the tax authority, the benefits derived by the individuals are not necessarily proportionate to the amount of tax paid. A taxpayer cannot sue the government for not spending enough tax money in his locality, even when he pays more tax than others. The government's authority to levy is not dependent on the conferment of benefit but its sovereign power.

Therefore, the significance of taxation to the government in meeting its numerous responsibilities and obligations cannot be over-emphasized. The ability of the government to effectively tax the personal income taxpayers will improve its revenue base. With the prevailing dwindling prices of oil in the world market, it is expedient for the government to diversify the economy and make use of fiscal policy to improve its revenue base. According to Anyaduba (2000), fiscal policy is the conscious effort by the government to raise revenue (mainly through taxation) and with decisions relating to government expenditure. However, tax for this research paper is defined as a compulsory levy imposed on employees or self-employed by the government, to raise funds to finance its budget (Garuba, 2021).

2.2 Personal Income Tax (PIT)

Personal income tax is an obligatory amount imposed on individuals who are employees either in the private or public sector and the self-employed running their businesses under a business name or partnership (i.e. organised) and the unregistered and unregulated operators by the government. The Personal Income Tax (Amendment) Act (PITA) 2011 consists of two forms. They are: (i) Pay-As-You-Earn (PAYE) meant for those in paid employment either in the private or public sector; and (ii) Taxes for the self-employed which consist of those who own and run organised businesses and the unregistered and unregulated operators in the informal sector. Under PAYE the employers are charged with the responsibility of deducting taxes from the monthly salaries of their staff and remitting the same to the appropriate tax authority. Where the employer fails to deduct or remit deductions from employees to the appropriate tax authorities, such employer shall be subjected to a fine on conviction of ₦5,000, and in addition, ₦100 daily for the period of the failure together with the principal amount (Personal Income Tax (Amendment) Act, 2011).

This type of tax is a direct method of taxing employees and business owners. The impact of the tax is on the taxpayer who cannot shift the burden to other persons.

Tax administration operates at the three levels of government in Nigeria. PITA (2011) imposes a tax on individuals and unincorporated bodies. The federal government collects corporate taxes while the states are responsible for collecting that of the individuals and unincorporated bodies. The local government councils collect sundry rates and levies based on the statute of the federal or state governments. The federal government collects income tax of companies, hydrocarbon tax and the personal income tax of citizens residing in the Federal Capital Territory, employees of the Ministry of Foreign Affairs, expatriates and Nigerians residing abroad but earning income in Nigeria. Civilians who are working in the military formations and the police force pay their taxes to their respective internal revenue services of the states where they reside. The responsibility of collecting personal income tax from residents in a state who are employees of federal, state, local government, private sector and those who own their business (self-employed) rest with the State Internal Revenue Service (IRS).

The key highlights of PITA (2011) are: Consolidated relief allowance which replaced the old personal relief allowances; increase in the minimum tax (section 37) and new rates; provision of specific tax deductible contributions like gratuity and pension; taxation of expatriate incomes except for countries with double tax treaties with Nigeria; keeping of proper books of account; deductions of personal income tax and remittance of same to the appropriate tax body within 30 days, failure attracts a penalty; establishment of tax appeal tribunal in place of body of appeal commissioners to adjudicate over rows arising from the FIRS Act operations and provides independent outlet for aggrieved taxpayers' complaints and speedy resolutions of tax disputes (sections 60-67); re-definition and clarification of the period of residency and principal place of residence in Nigeria to include the period of annual leave or temporary period of absence; non-taxability of reimbursable expenses; Tax Clearance Certificate (TCC) and Taxpayer Identification Number (TIN) are made mandatory to be demanded by Ministries, Departments and Agencies (MDAs) and demands by banks for TCCs in respect of certain (specified) transactions; the introduction of penalty and imprisonment on conviction as prescribed; removal of tax immunity for civic office holders such as Deputy Governors, Governors, Vice-President, and Presidents (Odia, 2014).

2.3 Tax Compliance

The aim of imposing tax laws is to achieve compliance with them. Theoretically, tax compliance means the taxpayers abiding by the tax laws and such laws differ from one country to another. The taxpayer should provide correct information to the appropriate tax authority promptly, accurately files his returns and pays the tax liability timely. Kirchler (2007) states that compliance is either willingly or imposed. Nevertheless, willingness is understanding and trust between taxpayers and the relevant tax body. However, where there is a lack of cooperation and trust it hurts tax compliance. Under such circumstances, the tax authority can compel compliance through sanctions, fine, tax audits and threats. Tax compliance is when a taxpayer pays his tax based on the correct declaration, computes his tax liability and files his returns on time (Brown & Mazur, 2005). According to Thuronyi (2003) tax compliance consists of stating accurately all assessable income, payment of the assessed tax liability timely without a reminder from tax officials and filing tax returns. As for Devos (2005) tax compliance is complying with the applicable tax laws, whereby the taxpayer precisely reports his tax assessment according to IRS regulations or relevant laws and files his returns promptly. Plumley (1996) explains that when a taxpayer timely files his returns, reports his tax liability accurately and pays all assessed tax obligations willingly; it can be described as voluntary compliance. The taxes imposed by the government consist of four basic obligations on the taxpayer: registration (taxpayers' identification number), assessing tax liability, filing returns/ reporting the liability, and paying the liability as and when due. Thus, tax obligation which is hinged on compliance includes filing returns with the appropriate tax office. Only then are the risks associated with registration, filing, reporting and payment eliminated or reduced drastically. Compliance is the readiness to adhere to relevant laws by taxpayers (Andreoni, Erard & Feinstein, 1998). In this paper tax compliance is the capability of taxpayers to conform to relevant laws without any compulsion. It should be noted that the contemporary issue in most developing countries is tax compliance because of the resolve of the governments to efficiently improve their internally generated revenue to finance their budgets (Maseko, 2014).

Literature on compliance behaviour highlights among others the important role of demographic variables in taxpayers' behaviour. Generally, demographic factors such as employment status and gender could influence tax compliance. The probability that a taxpayer is compliant is shaped by the following variables: tax rate, income level, morals and attitude (psychological factors) and demographic factors such as age and gender (Brooks, 2001). According to Aruwa and Oklobia (2014), there is the argument that voluntary tax compliance is the key to any country's revenue growth. These arguments are centred on the belief that the more taxpayers are willing to remit more taxes, the more government can provide basic amenities to the citizens but this may not be sustained in a country where there is a high level of corruption. Taxation is the key to the survival of most economies, particularly the developing nations. Therefore, every committed government must strive to attain tax compliance. However, there are challenging issues of risk related to tax compliance in areas of registration, filing, and payment and reporting. The government needs to consider approaches that would improve compliance and consequently increase tax revenues.

2.4 Employment Status, Gender and Tax Compliance

From extant literature, certain demographic factors such as employment status, gender, age, education, income level, race/ethnicity and religion were acknowledged as influencing tax compliance in emerging and the developed economies of the world. In this research paper, we examined the impacts of employment status and gender on tax compliance behaviour.

2.4.1 Employment status and tax compliance

Employment is a key basis of assessable income. Assessable income could be derived from paid employment or self-employment. However, self-employment occupation income is more susceptible to under-reporting than income from employment occupation for tax purposes (Alabede, 2014). For example, under the Pay-As-You-Earn (PAYE), employers are expected to deduct tax at source from employees' salaries and remit the same to the relevant tax authority. That is, employers under PAYE are charged with the responsibility of deducting taxes from the monthly salaries of their staff and forwarding same to the appropriate tax body. Where an employer fails to deduct or remit deductions from employees to the appropriate tax authorities within the stipulated time, such employer shall be liable to a fine as stated in the Act. That is, N5, 000 on conviction, plus N100 for each day the failure last in addition to the principal amount to be remitted. However, this amount is too meagre for now and calls for a review. This arrangement reduces the rate of tax non-compliance.

Tax non-compliance is more likely in self-employment occupations such as sole proprietorship and partnership (Chau &

Leung, 2009). Andreoni, Erard, and Feinstein (1998) averred that a greater percentage of sole-proprietors are involved in the understatement of taxes. It was also observed that employees subjected to payment of withholding tax have fewer opportunities to be non-compliant (Fjeldstad & Semboja, 2001). However, empirical evidence revealed a mixed result. The study carried out by Alabede (2014), in Nigeria found correlation exists between demographic variables such as age, gender and employment status and compliance. It should be noted that it is the organised self-employed aspect that is referred to here and not the unregistered and unregulated operators in the informal sector. It, therefore, shows that the self-employed consists of two aspects namely: (1) the organised self-employed individuals such as practising professional accountants, architects, engineers, lawyers, medical doctors, etc. and (2) the unregistered and unregulated operators in the informal sector. This second aspect is the focus of this study.

2.4.2 Gender and Tax compliance

Gender implies the characteristics that distinguish between men and women, which reflect one's biological sex or gender identity (Sari & Supadmi, 2014). Gender is a key factor that influences taxpayers' behaviour and compliance attitude (Jackson & Milliron, 1986). Prior studies show a correlation between gender and tax compliance. However, the findings vary and are inconsistent. Some of the studies found male taxpayers to be less tax compliant than female taxpayers. This position was espoused in the work of Tittle(1980). This is because women by their nature are more moral restraint, conservative, and conforming and therefore, are more tax compliant than their male counterparts (Jackson & Milliron, 1986). Olowookere and Fasina (2013) concurred with the Jackson and Milliron that traditionally females are conformists, ethical and conservative in their lifestyle. Therefore, the female taxpayers are more tax compliant than their male counterparts. Hasseldine and Hite (2007) also observed that male taxpayers are less tax compliant than female taxpayers. Likewise, in his study Palil (2010) reported that women are more tax compliant than their men. Moreover, as regards tax awareness, the female taxpayers were better informed than the male taxpayers and this makes them to be more tax compliant than the male taxpayers. However, the work of Houston and Tran (2001) showed a contrary result that females are less tax compliant than males. Richardson (2006) posits that gender does not influence tax compliance based on a study carried out across 45 countries. He, therefore, opined that there is no correlation between gender and compliance. Alabede (2014) agreed with Richardson that gender does not significantly impact the tax compliance behaviour of taxpayers in Nigeria. In summary, it shows that the effect of gender on taxpayers' compliance behaviour is inconsistent.

2.5 *The informal sector*

The economy can be broadly classified into formal and informal sectors. The informal sector generally, comprise the economic activities or interactions of individuals, enterprises or other unincorporated entities or organizations whilst the formal sector represents the economic interactions of an organized individual or corporate entities.

The term informality means different things to different people. It is characterized by unprotected workers, excessive regulation, low productivity, unfair competition, evasion of the rule of law, underpayment or non-payment of taxes, and work `underground' or in the shadows." (Perry, Haloney, Arias, Fajnzyiber, Mason, & Saavedra-Chenduvi, 2007). Informal work is by nature heterogeneous. It includes self-employed individuals, as well as those working under them (often a few family members and friends). Fairlie (2005) explains the self-employed as those individuals who identify themselves as working for themselves in business, professional practice or farming. While Camel (2000) defines self-employed as, "persons working for themselves who may or may not employ other workers or members of the family who help to run an enterprise without payment".

The informal sector can be described as the market-based production of goods and services, whether legal or illegal, that escape detection in the official estimate of tax administration and gross domestic product. While for the most part, the economic activities of informal workers are legal, they are often not taken into account in official statistics, and much of the income they generate goes untaxed. However, those who are rationed out of the formal segment have the opportunity to take a job in the (free entry) informal sector.

According to the Bank of Industry (2018), the informal sector comprises any economic activity or source of income that is not fully regulated by the government and other public authorities; this includes enterprises that are not officially registered and lack accurate accounting records, and workers hold jobs lacking critical social or legal protection and employment welfares. Examples of the operators in the informal sector are Street traders, subsistence farmers, small-scale manufacturers, service providers (such as private taxi drivers, carpenters and hairdressers), etc. It should be noted that there is no unanimous perspective concerning the informal sector. Some see it as a sector that encourages fraudulent activities that result in the loss of revenue from taxes, weakens unions, creates unfair competition that leads to loss of regulatory control, and reduces observance of health and safety standards, amongst others. While others see it as creating employment opportunities and income generation for the army of unemployed youths and helping to address poverty in the economy.

According to the findings of Enhancing Financial Innovation and Access (EFInA, 2018), the Nigerian informal sector has a population of 67.2 million. The breakdown of the population is as follows: individual entrepreneurs 36.8 million, business owners with employees of 7.5 million and those employed 22,9 million. It shows that the business owners with employees (i.e.7.5 million) can employ 22.9 million staff in the sector. The 'business owners with employees' and the 'employed staff' consist of 45% of the total population. Hence the focus of this study is on the business owners (self-employed) with employees who are the unregistered and unregulated operators in the informal sector.

3. METHODOLOGY

The survey research design was employed in the study and primary data were collected with the aid of a questionnaire. Six hundred copies of the questionnaire were administered to informal sector operators in the South-South geographical zone in Nigeria. The South-South geographical zone comprises Akwa-Ibom State, Bayelsa State, Cross River State, Delta State, Edo State, and Rivers State. Only 390 questionnaire out of the total of 600 questionnaire administered were completed and suitable for use, representing a 65% response rate. The questionnaire consists of well-structured close-ended questions comprising fifteen questions using a Likert scale ranging from 1 to 5. The research adopted econometric techniques for data analysis. Descriptive statistics and correlation methods were used in carrying out the preliminary analysis. Thereafter, data were further subjected to regression analysis.

3.1 Theoretical Framework and Model Specification

The study is based on a general equilibrium self-employment theory. Most Economists including Lucas (1978) have built models whereby agents can choose between being either entrepreneurs or workers. These works determine endogenously the proportion of the total workforce that decides to be either an entrepreneur or a worker. In this manner, they determine the average size of a firm. In this type of model, agents differ in their entrepreneurial capacities, so agents with low capabilities financially will decide to be workers. On the other hand, in a different model developed by Kihlstrom and Laffout (1979), agents differ in their level of risk aversion. Such that those with low-risk aversion opt to be entrepreneurs. However, these representations of occupational decision-making are preferable in developed economies, where most of the agents are either entrepreneurs or workers. It should, however, be pointed out that these models are an inadequate way of representing the labour force distribution from the less developing economies, where an important proportion of the total workforce are predominantly self-employed workers. The foregoing shows that there is a strong relationship between the per capita income of a country and the ratio of wage employees and self-employed workers. Therefore, the focus is on a general equilibrium model that introduces self-employment as an occupational choice.

It is expedient at this juncture, to examine employment status and gender which are the demographic variables of the study.

Employment status

A theory of self-employment is different from the general theory because there is no hiring decision. In an economy composed of self-employed farmers and artisans, the employment decision is simply a production decision, that is, how much effort to exert to obtain goods other than leisure. However, a decision by a self-employed worker to produce for sale rather for stock or for personal consumption may involve money. Where an economy is based on employment production requires payment of money-wage, and such arrangement can be described as an entrepreneur or monetary production economy.

Prior literature reviewed indicates that self-employment occupation income is more susceptible to under-reporting than income from employment occupation for tax purposes (Alabede, 2014). It was also posited that a greater percentage of sole-proprietors are involved in the understatement of taxes (Andreoni, Erard & Feinstein, 1998). While Gupta (2009) in his study found that most of the significant variables that affect tax evasion are employment status, education level, gender and residential location.

Gender

Prior literature reviewed as regards the correlation between gender and tax compliance behaviour revealed varied results across studies. Some of the results showed females to be more compliant than their male counterparts. Jackson and Milliron (1986) state that the females based on tradition are conformist and therefore, likely to be more compliant. While on the hand Okoye and Odia's (2012) study on "ethics for tax evasion in Nigeria" posit women are less tax compliant. That is, the females tend to evade tax more than their male counterparts. However, it was also found that there is no correlation between gender and compliance (Richardson, 2006). Therefore, the influence of gender on compliance behaviour is inconsistent.

Against the backdrop of the above theoretical and empirical review, we propose a functional relationship between demographic variables (employment status and gender) and informal sector operators' tax compliance in Nigeria. Schematically, this relationship is as shown in figure 3.1

Independent Variables **Dependent Variable**

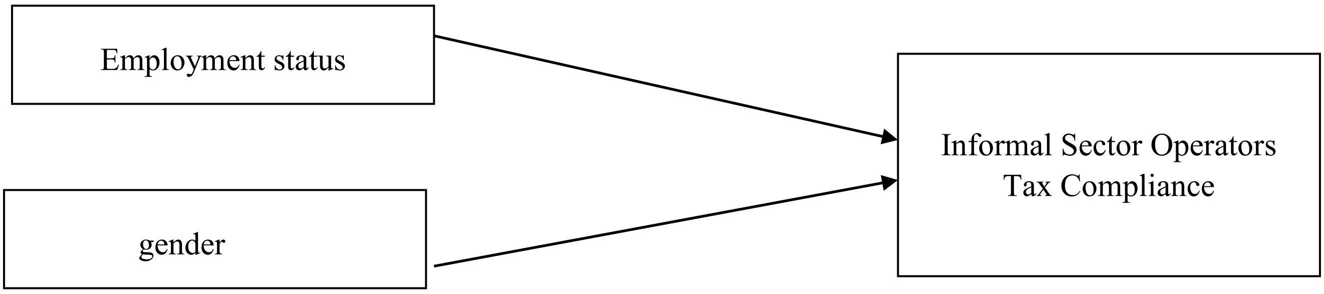

Figure 3.1: *Schematic representation of the relationship between demographic factors of employment status and gender; and informal sector operators' tax compliance.*
Source: Researchers' Compilation (2021)

Against the above backdrop, it is expected that employment status may improve or adversely affect tax compliance. The effect of employment status on informal sector operators' tax compliance is of mixed results. Some studies such as Gupta (2009) and Alabede (2004) state that employment status is statistically significant in impelling the compliance behaviour of taxpayers'. Therefore, the expected functional relationship between employment status and informal sector operators' tax compliance is as shown below:

Informal sector operators tax compliance = *f (employment status)* ……………….(i)

In the same vein, gender as a demographic factor may also improve or adversely affect tax compliance. The results of studies carried out on gender as a demographic variable are conflicting. Some of the studies revealed that gender seems to have a substantial influence on tax compliance and female taxpayers are more tax compliant than their male counterparts because they are averse to risk-taking (Spicer & Becker, 1980; Tittle, 1980; Jackson & Milliron, 1986; Hasseldine & Hite, 2003; Olowookere & Fasina, 2013). The results of other researchers showed males are more compliant than females because they dare to take risk (Houston & Tran, 2001; Somnya & Tjaraka, 2011).

The expected functional correlation between gender and informal sector operators' tax compliance is as shown below:

Informal sector operators' tax compliance = *f (gender)………………………………… (ii)*

Combining equations i and ii, we have a general functional form:

Informal sector operators tax compliance = f (employment status and gender) …… *(iii)*

This is expressed in a functional form as follows:

ISOTC = f (ES, GE) ---------------------------- -------------------- (i)

The above equation is expressed in econometric form as:

ISOTC = $\beta_o + \beta_1 ES + \beta_2 GE + e$ ------------ (ii)

Where,
ISOTC = Informal Sector Operators Tax Compliance,
ES= Employment status,
GE= Gender, β_o = Intercept,
$\beta_{1,2}$ = Unknown Beta coefficients of the explanatory variables.
e = Error term

4. ESTIMATED RESULTS AND DISCUSSIONS

This section discusses the findings and discussions of the study.

Table 4.1: Descriptive Statistics

	TC	EMP	GEN
Mean	1.517949	1.164103	1.397436
Median	2.000000	1.000000	1.000000
Maximum	2.000000	2.000000	2.000000
Minimum	1.000000	1.000000	1.000000
Std. Dev.	0.500320	0.370844	0.489996
Skewness	-0.071841	1.813855	0.419170
Kurtosis	1.005161	4.290069	1.175704
Jarque-Bera	65.00043	240.8990	65.50167
Probability	0.000000	0.000000	0.000000
Sum	592.0000	454.0000	545.0000
Sum Sq Dev.	97.37436	53.49744	93.39744
Observations	390	390	390

Source: Researchers' Computation, 2021

In describing employment status data in Table 4.1, the mean value was 1.164 which indeed is low. The median value of 1 is lower than the mean. It shows that there is more self-employed occupation than employment occupation included in the sample. Table 4.1 also showed that employment status diversity has a minimum value of 1 and a maximum value of 2. The standard deviation from the table had a very low score of 0.371 for employment status which is the reason for the closely clustered data around the mean.

It was also observed from Table 4.1 that the mean value of gender diversity is 1.397 which is quite low. The median value for gender from the table is 1 which is quite small. The median revealed that there are more males included in the sample than the females. The table also showed that the gender diversity had a maximum value of 2 and a minimum value of 1 from the data. The standard deviation from the table is 0.49 which is quite small hence the distribution of the score points between male and female were closely distributed around their mean.

Table 4.2: Correlation Matrix

	TC	EMP	GEN
TC	1.000000	0.081070	-0.055388
EMP	0.081070	1.000000	-0.034461
GEN	-0.055388	-0.034461	1.000000

Source: Researchers' Computation, 2021

The correlation outcome as shown in table 4.2 indicates that there was a negatively very weak correlation between employment status and informal sector operators' tax compliance (-0.034).

However, the result is not in agreement with the findings of Alabede(2014) and Effiong and Odey (2017)which state that a significant correlation exists between employment status and tax compliance. Some researchers also opined that assessable income of self-employment occupation is more susceptible to understatement for purposes tax than income from employment occupation (Andreoni, Erard & Feinstein, 1998; Chau & Leung, 2009; Alabede, 2014). Table 4.2 also indicates that there was a negatively very weak correlation between gender and informal sector operators' tax compliance (-0.055). The result of the study is in accord with the studies of Alabede (2014) and Richardson (2006) which stated that no significant correlation exists between gender and informal sector operators' tax compliance. However, the result of this study is not in tandem with the result of the study by Jackson and Milliron (1986) because they posit that gender is a key factor that has an impact on tax compliance.

Table 4.3: Demographic factors and personal income tax compliance regression model

Variable	Coefficient	Std. Error	z-Statistic	Prob.
GEN	-0.131027	0.130499	-1.004045	0.3154
EMP	0.419125	0.146672	2.857557	0.0097
	Limit Points			
LIMIT_2:C(6)	0.143364	0.610048	0.235004	0.8142
Pseudo R-squared	0.711890			
LR statistic	8.422194			
Prob (LR statistic)	0.267277			

Source: Researchers' Computation, 2021

Table 4.3 showed the regression result in testing the hypotheses of this study, a cross-sectional pooled ordinary least square (OLS) regression estimation conducted to estimate the impact of demographic factors on tax compliance. The OLS result in table 4.3 revealed that employment status predicted a 41.9% change in tax compliance. The statistical inference from the OLS = 0.4191(p= 0.0097) showed a significant relationship exists between employment status and tax compliance at a 5% level of significance. In other words, statistically, employment status predicts a change in tax compliance. Thus, the hypothesis which stated no correlation between employment status and informal sector operators' tax compliance, was rejected.

As regards the prediction of the impact of gender differences on tax compliance, we utilized regression results on GEN as presented in table 4.3. The OLS result revealed that gender has an insignificant negative impact on the informal sector operators' tax compliance. This implies that tax compliance varies with gender The z-statistic score of -1.004 also supported that there was a negative cause and effect relationship between GEN and TC. However, the probability test value of 0.315 predicted that the regression was statistically insignificant even at a 10% level of significance. Thus, the hypothesis on gender which stated no significant relationship between gender and informal sector operators' tax compliance was accepted.

limitations

The limitations of this research work are as follows: (a) is restricted to only two variables; (b) the territorial limit of the research is exclusively restricted to the South-south geographical zone of Nigeria, and (c) is restricted to only the informal sector of the economy. This research is restricted to two variables; a similar study can be conducted using more than two variables which may suggest findings different from ours. Therefore, more variables should be employed for further studies. This study is also restricted to the South-South zone out of the six geographical zones in Nigeria. Therefore, future studies can be conducted by expanding the geographical zones. This study is focused on the informal sector of the Nigerian economy. Further studies can look at different industries in other sectors of the Nigerian economy.

Contribution to knowledge

Most researchers investigated employment status as a demographic factor and found that assessable income from self-employment occupation is more susceptible to under-reporting for tax purposes than assessable income from employment occupation. Thus, the result of this study is in accord with this assertion. However, this study went a step further to examine 'self-employed' employees operating in the informal sector who deduct taxes from the salaries of such employees; and found that most of them do not remit such taxes to the relevant tax authority. It, therefore, means that such self-employed operators in the informal sector do not only under-report income but are also guilty of non-remittance of taxes deducted from the salaries of their employees. Thus, resulting in 'double tax evasion. We contributed to existing knowledge by finding that there are two dimensions to employment status. That is, the self-employed (with employees) not only under-report income but also fail to remit taxes deducted from the employees' salaries, resulting in 'double tax evasion.

This contribution has expanded the frontier of ‘employment status as a demographic factor by the inclusion of non-remittance of deducted taxes. This has implications for the tax authority, to know that ‘business owners with employees’ operating in the informal sector can evade tax in two ways, by under-reporting income and non-remittance of taxes deducted from salaries of employees.

5. CONCLUSION AND RECOMMENDATIONS

This study investigated some of the demographic factors such as employment status and gender that could influence the tax compliance behaviour of informal sector operators in Nigeria. The issue of tax compliance has recently occupied the front burner of most research carried out in several developed and developing countries because of the need to increase the revenue base of the government rather than borrowing to finance its budgets.

In line with extant literature, employment status as a demographic factor was examined and our findings revealed that employment status has a positive significant relationship with tax compliance in Nigeria. Gender plays an important role in influencing taxpayers’ compliance behaviour. Our findings revealed that gender does not significantly influence personal income tax compliance in Nigeria. Having examined the impacts of employment status and gender on informal sector operators' tax compliance in Nigeria, the following recommendations are proffered. The government should tilt towards an informal economy to create more employment opportunities and generate more tax revenues. This can be done by the government providing the enabling business environment, especially in areas of energy (electricity), good roads, etc. There is a need to improve tax awareness in the informal sector because huge potential tax revenue accruable to the government is locked up in that sector. This can be achieved through stakeholders’ town hall meetings, seminars and sensitisation via the mass and electronic media. Since a positive relationship exists between employment status and informal sector operators’ tax compliance, there should be enforcement of tax laws and any infraction by the self-employed, especially those who evade tax and fail to remit deducted taxes to the relevant tax authorities must be prosecuted and sanctioned accordingly. There should be a tax census of the informal sector by the government to enable it to have an accurate database of taxpayers in that sector. This will help to bring a lot of the self-employed in the informal sector evading tax to the tax net. The government can do this in collaboration with the Central Bank of Nigeria (CBN) through disbursements of loans to that sector. Prior to disbursements, the CBN should ensure that the informal sector operators are duly registered to qualify for such loan programmes

REFERENCES

Akanle, O. (1991). *Tax law and administration in Nigeria.* Lagos: Nigerian Institute of Advanced Legal Studies.

Alabede, J.O. (2014). An exploratory analysis of individual taxpayers’ compliance behaviour in Nigeria: A study of demographic differences and impact. *International Journal of Accounting and Taxation,* 2(2), 39-64.

Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. *Journal of Economic Literature, 36*, 818-60.

Anyaduba, J.O. (2000). Personal income taxation. Benin City: United City press.

Anyaduba, J.O. & Okoye, A.E. (2015). The effects of indirect taxes on economic growth in Nigeria. *Accounting frontier. The Official Journal of Nigerian Accounting Association, 6(1), 1-12.*

Aruwa, S.A.S. & Oklobia, F.A. (2014). Tax competence, compliance cost and tax compliance of small and medium taxpayers' in Nigeria. *Nigerian Accounting Association, 2013 National Conference Proceedings,* 523-538.

Bank of Industry (2018). Economic development through the informal sector: A BOI perspective. *Working Paper Series: No. 2. 17th May, 2018.*

Bhatia, H.L. (2008). *Public finance.* New Delhi: Vikas Publishing.

Brooks, N. (2001). Key issues in income tax: *Challenges of tax administration and compliance.* Asian Development Bank.

Brown, R.E., & Mazur, M.J. (2005). IRS's comprehensive approach to compliance. *Paper presented at national tax association spring symposium,* May. Washington D.C.

Camel, D. (2000). Self-employed in the United Kingdom and Ireland. Current trends, policies and programmes, *Working profiles, 9(2),* 45-58.

Chau, G. & Leung, P. (2009). A critical review of Fischer's tax compliance model: A research synthesis. Journal of Accounting and Taxation, 1(2), 34-40.

Cobham, A. (2005). Tax evasion, tax avoidance and development finance. Queen Elisabeth

House Working Paper No.129. Oxford: Oxford University.

Devos, K. (2005). Attitudes of tertiary students on tax evasion and penalties for tax evasion- A pilot study and demographic analysis. *Journal of tax research*, 3(2), 222-273.

Eiya, O., Ilaboya, O.J., & Okoye, A.F. (2016). Religiosity and tax compliance. Empirical evidence from Nigeria. *Igbinedion University Journal of Accounting 1(2)*, 27-41.

Effiong, P.A.O. & Odey, F.I. (2017). Demographics and taxation in rural Cross River state. *International Journal of Economics and Financial Management, 2(3)*, 13-26.

Enhancing Financial Innovation and Access (EFIn A, 2018). Key findings: EFInA access to financial services in Nigeria. 2018 Survey 11th December 2018.

Eshag, E. (1983). *Fiscal and monetary policies and problems in development countries.* Cambridge: Cambridge University Press.

Fairlie, R.W. (2005). Self-employment, entrepreneurship and the NLSY. *Journal of Labour Economics, 20(3),* 40-47.

Fjeldstad, O.H. & Semboja, J. (2001). Why people pay taxes: The case of the development levy in Tanzania. *World Development, 29*, 2059-2074.

Garuba, A.O. (2021). Demographic factors and informal sector operators tax compliance in Nigeria. (A PhD thesis, University of Benin).

Gupta, R. (2009). An empirical study of demographics of perceptions of tax evasion in New Zealand. *Journal of Australian Taxation, 12(1&2),* 1-40.

Hasseldine, J. & Hite, P. (2007). *Key determinants of compliance and non-*

compliance. Tax notes, October 22. Internal Revenue Act (2000), Act 592.

Houston, J., & Tran, A. (2001). A survey of tax evasion using the randomized response technique. *Advanced Taxation,13,* 69-94.

Jackson, B., & Milliron, V. (1986). Tax compliance research: findings, problems and prospects. *Journal of Accounting Literature, 5*, 125-165.

James, S., & Alley, C. (2004). Tax compliance, self-assessment and tax administration. *Journal of Finance and Management in Public Services, 2(2)*, 27-42.

Kihlstrom, R., & Laffont, J, (1979). A general equilibrium entrepreneurial theory of the firm based on risk aversion. *Journal of Political Economy, 87.*

Kirchler, E. (2007). *The economic psychology of tax behaviour.* Cambridge, UK: Cambridge University Press.

Lymer, A., & Oats, L. (2009). *Taxation: Policy and Practice.* 16th ed. Birmingham: Fiscal Publications.

Lucas, R. (1978). On the size distribution of business firms. *Bell Journal of Economics, 9.*

Maseko, N. (2014). The impact of personal tax knowledge and compliance costs on tax Compliance behaviour of SMEs in Zimbabwe. Elite Research *Journal of Accounting and Business Management,2(3)*, 26 - 37.

Modugu, K.P. & Omoye, A.S. (2014). An appraisal of personal income tax evasion in Nigeria. *Asian Economic and Financial Review, 4(1),* 33-40.

Mohd, R.P., Mohd, R.M., & Wan, F.B. (2013). The perception of tax payers on tax knowledge and tax education with level of tax compliance: A study of the influences of religiosity. *ASEAN Journal of Economics, Management and Accounting, 1(1),* 118-119.

Mzuughi, A., Urom, .C., Uddin, G.S. & Guesmi, K. (2020). The effect of COVID-19 pandemic on oil prices, Co2 emissions and the stock market: Evidence from a VAR model. Available at https://www.researchgate.net/publication/341029961

Odia, J.O. (2014). Taxpayers' perception of the amendments to the personal income tax act (PITA) of 2011.*Accounting frontier. The Official Journal of Nigerian Accounting Association,5(3)*, 194-207.

Okoye, A.E. & Odia, J.O. (2012). The ethics of tax evasion in Nigeria. *The Certified National Accountant Journal, 20(2)*, 5-12.

Olowookere, J.K. & Fasina, H.T. (2013). "Taxpayers' Education: A Key Strategy in Achieving Voluntary Compliance in Lagos State, Nigeria", *European Journal of Business and Management, 5(10),* 146-155.

Palil, M.R. (2010). Tax knowledge and tax compliance determinants in self-assessment system in Malaysia. (A PhD thesis, University of Birmingham).

Perry, G., Haloney, W., Arias, O., Fajnzyiber, P., Mason, A., & Saavedra-Chanduvi, J. (2007). *Informality: Exit and inclusion,* Washington DC: World Bank.

Personal Income Tax (Amendment) Act, 2011.

Plumley, A. (1996). The determinants of individual income tax compliance. *Internal Revenue Service, Publication, 1916,* 11-96.

Richardson, G. (2006). Determinants of tax evasion: A cross-country investigation. *Journal of International Accounting, Auditing and Taxation,15(2)*, 150-169.

Sari, M.M. & Supadmi, N.L. (2014). Gender audit committee and audit delay. *The Indonesian Accounting Review,4(1)*, 81-88.

Shanmugam, S. (2003). Managing self-assessment - an appraisal. *National Tax Journal, 1(3)*, 30-32.

Thuronyi, V. (2003). "*Presumptive taxation of the hard to tax*". Paper presented at the conference "The hard to tax: An international perspective". May 14-1, 2003 Atlanta, Georgia.

Tittle, C. (1980).Sanctions and social deviance: The question of deterrence. New York: Praegers.

Tolby, R.A. (1978). *The theory and practice of income tax*. London: Sweet & Maxwell.