

---

---

## Demographics and Taxation in Rural Cross River State

**Peter, A. Oti (Ph.D) & Sunday, A. Effiong (Ph.D)**

Department of Accounting,  
Faculty of Management Sciences,  
University of Calabar,  
Nigeria

**Ferdinand, I. Odey (Ph.D Student)**

Department of Economics,  
Faculty of Social Sciences,  
University of Calabar,  
Nigeria  
ferdinandodey82@gmail.com

---

### **ABSTRACT**

*The study assessed the trend analysis of the demographic factors that influence taxation in rural Cross River State between 2007 and 2014. Secondary data sought from Cross River State internal revenue service and National population Commission was used for the study. Descriptive statistics were used to analyse the trend of internally generated revenues and population level as well as other demographic factors such as age, gender, employment status and ethnicity. Findings indicate that the trend of revenue generation in the state is not influenced by population, age and gender but by employment status, income level and the availability of natural resource endowments. The study recommends that there is need for the Cross River State government to continue to increase its aggregate revenue mostly from internally generated revenue base by taking into consideration some demographic factors, since only revenue from internal sources can boost the state income given the dwindling allocations from the federation account and debt servicing commitments in recent times. It was recommended that policy makers particularly the tax administrators should take into consideration the demographic background of individual taxpayers in mapping out better strategies towards improving individual tax compliance behaviour in the state and country. Furthermore, since this study indicates that tax compliance is not influenced by cultural background of the taxpayers as observed from extant literature, policy makers should have a rethink on the uniform personal income tax system. The personal income tax system should reflect the gender, population, age and cultural diversity of the state and for this reason; the state governments should be allowed to adopt tax administration style that fits the culture of the taxpayers in their jurisdiction. The state should equally be desirous of transforming the economy and hence generate huge financial resources to enable her bridge the funding gap in her resource profile to invest in agriculture, grow the tourism industry, provide affordable and qualitative education, institutionalize basic health care, develop a strong private sector driven economy, build, upgrade and maintain infrastructure for transportation, electricity supply, communication, water supply and sanitation in the urban and rural communities and preserve the physical environment through conservation and promotion of environmentally friendly practices. Furthermore, the state should make use of electronic revenue assessment for tax collection, monitoring and unique taxpayer personal identification number as improved strategies to attract both the self-employed and salary earners that hitherto evaded the payment of tax in the state.*

---

---

**Keywords:** *Demographic factors trend analysis, taxation, tax compliance, Cross River State.*

---

## **1.0 INTRODUCTION**

Taxation is a veritable source of income, especially in developing economies such as ours. The success of any government in tax administration depends on careful tax planning and implementation of policies. The functioning of the Nigerian federal system is governed by a fiscal policy which emphasizes inflows and outflows of resources for the purpose of service delivery. The fiscal policy structure has a distinctive characteristics; defining the sources of revenue of the three tiers of governments and areas where they can exercise control.

From all indications, government's ability to carry out its functions depend largely on the amount of revenue generated and the benefit that the citizens of a particular society enjoy in terms of basic social amenities, infrastructure and security (Oti et al., 2016). The recent emphasis on internally generated revenue across all states of the federation points to the imperative of taxation as the main source of funds for the provision of public goods and services.

It has been observed that tax compliance in Nigeria is affected by many factors such as government spending, equity and fairness in tax administration, penalties, financial constraints and changes in government policies. Beyond these broad perspectives are other indices which are purely demographic factors, such as age, gender, education, employment status, income level, religion and race/ethnicity.

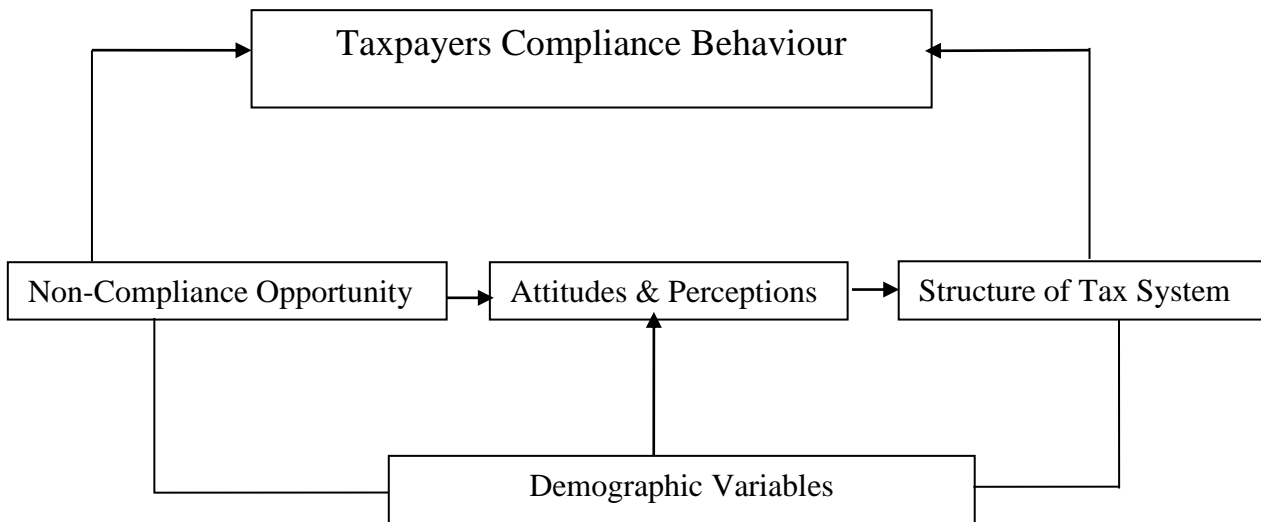
The researchers were not aware of any other study that has been carried out to establish how demographic factors influence tax compliance in Cross River State. The extent of the impact of demographic factors on taxation is not well understood and studies in this area have not been carried out in rural Cross River State. Therefore, addressing this knowledge gap is the primary purpose of this study and hence the study attempts to find out the effect of demographic factors on taxation in rural Cross River State, Nigeria.

## **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **2.1 Theoretical Framework**

This study is premised on the Fischer model. Brooks (2011) opined that the possibilities of a taxpayer to be a highly complaint taxpayer can be influenced by some factors. It ranges from economic factors such as income level and tax rate in a country, psychological factors such as moral and attitudes of taxpayers, and demographic factors such as age and gender.

Jackson & Milliron (1986) in a comprehensive review of tax compliance literature here identified fourteen factors of tax compliance summarized from previous studies. However, these fourteen factors are categorized by Fischer et al (1992) into four groups in a model named Fischer model: the first group is based on demographic factors such as age, gender, and education of taxpayers. The second group is based on noncompliance opportunities of taxpayers such as income level, income source, and occupation. The third group is predicated on attitudes and perceptions of taxpayers such as fairness of the tax system. The last group is based on the tax system or tax structure such as complexity of tax system, probability of detection due to the amount of penalties and tax rates level. Hence, Fischer model explains the relationship between demographic factors and taxation and combines all the groups into a comprehensive one. This Fischer model has been chosen in this study to explain the nexus of the relationship between demographics and taxation in rural Cross River. The framework of this relationship can be seen in figure 1 below.



**Figure 1:** Fischer Models of Tax Compliance

Title (1980) established that the relationship between demographic factors and taxation has attracted many researchers' attention in the last few decades. Jackson & Milliron (1986) states that age, gender and education as major demographic factors have evidence on their relationship with tax compliance in which demographic factors affect tax compliance. Fischer et al (1992) as described in figure 1 state that the demographic variables such age, gender and education will directly influence attitudes and perceptions of taxpayers. The concentration of this paper in tax compliance challenge is on the demographic factors which affect taxpayers behaviour related to their tax responsibilities and returns by the respective local government areas in the state.

## 2.2 Empirical Studies

Hazman (2009) examined the behavioural models that affect taxpayer compliance with the obligation to pay tax. He identified two basic norms, which are internal and external. The thoughts and perceptions of taxpayers about taxation that shape their behaviours and attitudes are viewed as internal. The external factors considered were tax system and technique, approach of tax administration to taxpayers, general sense of political confidence in public opinion, tax knowledge as well as legal arrangements.

Abdieva et al (2011) carried out a study in the capital city of Kyrgyzstan among 500 tax payers and the results showed that the most important factors affecting the tax culture include; trust in the government, quality of public services and availability of informal economy. Atawodi & Ojeka (2012) conducted a study using Small and Medium Enterprises (SMEs) in Zaria, North-central Nigeria to evaluate and rank the factors that encourage non-compliance with tax obligation. The authors found that high tax rates and complex filling procedures are the most crucial factors causing non-compliance of SMEs. Other factors like multiple taxation and lack of proper enlightenment affect tax compliance among the SMEs surveyed. The study recommends that, to allow enough funds for business development and better chances of survival in a competitive market, SMEs should be levied lower percentage of taxes. The government should increase tax incentives such as exemptions and tax holidays to encourage voluntary compliance and attract potential investors.

Olowookere et al (2013) examined the impact of demographic factors on tax compliance. Using the survey method, he opined that principally, demographic variable such as age is demonstrated to have a positive correlation with tax compliance that can be attributed to higher commitment to society at old age or tendency to take risk and face

sanctions at young age. Furthermore, females have been identified with more constraint, moral restraints, more conservative life pattern etc.

Saruc (2003) opined that the role of gender impact on tax compliance has begun to decline due to social changes, as more women participate in working life, and there is no significant difference between male and female in tax compliance behaviour. Education was found to have inconsistent association with tax compliance. The effect of marital status on tax compliance was also found inconsequential in the study.

Randlane (2012) informed that one should not ignore the biologically inherited and socially acquired norms that shape moral values, and tax morale affecting tax compliance is a socio-psychological factor which is connected to the internal motivation of a person to pay tax. The tax compliance is also affected by social norms as well as public services, confidence in public institutions, subjective and cultural characteristics of the person, the fairness of the tax system, person's own conception about moral principles of others, awareness of how tax revenue have been utilized, his/her trust in the country as well as administrative and tax policies. Helhel & Ahmed (2014) investigated the influence of attitudes and considerations of individual tax payers on tax compliance in Yemen, taking both internal and external factors into consideration. A questionnaire was designed using a five point likert scale and distributed to taxpayers. The results from the findings indicate that high tax rates and unfair tax system are the two important factors influencing low compliance. More so, insufficient tax audit, little deterrent effects of tax penalties and tax amnesties enacted frequently has impact on taxpayers' compliance decision. When responses are compared by gender and age, females were found to be more compliant compared to males whereas age was not a significant factor in general, especially for external factors. Older group was found to be more complaint compared to young in terms of factors having significant difference.

Alabede (2012) opined that the contribution of income taxes to the total revenue of Nigeria's government remained consistently low and is relatively shrinking due to low tax compliance. The study expanded the tax compliance model to incorporate perceived tax service quality, public governance quality, ethnic diversity as well as moderating effects of personal financial condition and risk preference. The study employed primary data using multi-stage cluster sampling technique and multiple regression analysis was used to analyze the data. The results revealed that taxpayer's perception about tax service quality and public governance quality significantly relates to taxpayers' compliance behaviour. It was recommended from the findings that policy should be directed towards strengthening these factors to reawaken the culture of tax compliance among individual taxpayers in Nigeria.

Widianto (2015) examined individual tax compliance problems faced by Indonesia using taxpayers' data in fiscal year 2013 in a district, Duren Sawit. The analysis was based on five explanatory variables consisting in two demographic factors: age level and gender of taxpayers, and three other explanatory variables: service-sector taxpayers, tax return status in 2011, and tax return status in 2012. By comparing three statistical method, which are probit method, logit method, and linear probability method the analysis of the paper was divided into two models based on the inclusion and exclusion of the previous tax return status. The first model finds that all the explanatory variables are statistically significant in influencing individual tax compliance. In the second model, only service-sector variables was statistical significant in explaining individual tax compliance. In the second model, only service sector variable shows statistical significance in explaining individual tax compliance. Conclusively, the service-sector of taxpayers has a significant correlation to individual tax compliance problems in Indonesia.

Tilahun & Yidersal (2014) examined the determinants of tax compliance behaviour in Ethiopia using structured questionnaire. The study employed one-way ANOVA, two samples

and one sample T-test. The findings revealed that perception on government spending; perception on equity and fairness of the tax system; penalties; personal financial constraint, changes on current government policies and referral group (friends, relatives etc.) are factors that significantly influence tax compliance behaviour. However, gender and probability of being audited have no significant impact on tax compliance. The findings equally revealed that older people will comply less if there is no equity and fairness in tax administration.

### 2.3 Demographic Factors and Taxation

From extant literature, many demographic factors were identified in influencing tax compliance in both developed and developing economies of the world. These factors include; gender, age, education, employment status, income level, race/ethnicity as well as religion. These indices are discussed in turn.

- i. **Gender:** One of the major factors identified in literatures in terms of the effect of demographic factors on tax compliance is gender. Title (1980) finds that females are more likely to abide by tax laws than males. Moreover, similar findings by Jackson & Milliron (1986) also points out that “women have been identified with confronting roles, moral restraints and more conservative life pattern”. Moreso, Torgler (2004) state that the differences of tax morale levels between men and women may be due to different tax treatment or lower female labour participation rates. Then, this argument is supported by Torgler & Scheider (2007) stating that women are more compliant than men in fulfilling their tax obligations. However, a contradictive result has been found in a study conducted by Houston & Tran (2001) who state that women have the tendency to do tax evasion than men. This finding supports the study by Friedland, Maital & Rutenberg (1978) who have previously researched about tax compliance on Israeli undergraduate students. They claimed that women have tendency to not being complaint than me. Eicher, Thomas & Wendy (2002) studied that individual perception about various crimes including cheating on tax return, observed that more women than men accepted that it is wrong to cheat on income tax returns. These different results have attracted this paper to do more investigation whether gender affects tax compliance in rural Cross River State.
- ii. **Age:** Empirical evidence suggests that young people are more willing to take risk; more clines to crime and less sensitive to sanction (Tittle, 1980). On the other hand, older people are considered to be more experienced, risk averse, endowed with more wisdom and knowledge. These characteristics are likely to make the young people to be tax noncompliant and the older people to be complaint. However, the findings linking age to tax behaviour are mixed. Mason & Calvin (1978) found that young people are significantly more likely to admit underreporting of taxable income than the older people. Spicer & Lundstedt (1976), in a survey relating taxpayers’ attitude toward tax evasion to some demographic factors in United States of America reported that respondents’ age is significantly related to attitude toward tax evasion. In the study by Chan, Troutman & O’Bryan (2000) using taxpayers in the US and Hong Kong, found that the decision to comply with tax rules is driven by the age of the respondents. The result suggests that older taxpayers are more tax compliance than the younger tax payers. In other findings, Birch et al (2003), Richardson (2005), Devos (2008) also reported the same result between respondents age ad tax compliance behaviour. However, Gupta (2009) provides evidence which suggests that age has no effect on taxpayers’ attitude toward tax compliance.
- iii. **Education:** From the literature, the effect of education on taxation is not clear. However, Ilornhauser (2007) argued that through its role in the process of internationalization of social norm and inculcating higher moral reasoning in

individuals, education has influence on tax compliance. Birch et al (2003) reported that the respondents with higher education background and taxation knowledge are least involved in understating taxable income. Kasipillai, Aripin & Amran (2003) determined the influence of education on tax compliance among undergraduate students in Malaysia and found significant relationship between education and tax compliance. In another study to determine the correlation between key demographic variables and tax evasion using Australian tertiary students, Devos (2005) found that education background of the respondents had significant impact on attitude to tax evasion. Unlike other studies, Schuetze (2002) did not find clear link between educational level and tax noncompliance among self-employed in Canada.

- iv. **Employment status:** Employment is a major source of income. Individual may derive taxable income from either self-employment or employment. The income derived from self-employment occupation is more vulnerable to under reporting for tax purpose than income from employment occupation. The reason for this is that the income from employment in the tax system is subject to third party information reporting. For instance, under Nigerian tax system, tax on income from employment is deducted by employers under Pay As You Earn (PAYE) and remitted to relevant tax authority. This arrangement reduces the rate of noncompliance. Fjeldstad & Semboja (2001) also observed that employees paying their taxes through a withholding system have fewer opportunities to be noncompliant. In contrast to the above findings, the study of birch et al (2003) failed to establish a statistical significant relationship between employment status and tax compliance.
- v. **Income level:** Theoretically, as income level increases, tax compliance decreases (Andreoni et al, 1989). The findings in most studies supported theoretical assertion. In one of the earlier studies, Spicer & Lundsteldt (1979) showed that level of income was statistically significant to respondents' attitude to tax evasion. In other studies, Crane & Nouraud (1990) found that individuals with a higher level of income tend to evade tax more. The study of Ritsema & Thomas (2003) showed that income level is positively related to the tax owed.
- vi. **Race/Ethnicity:** Differences in culture means differences in behaviour of taxpayers of different race or cultural background. In line with this, Chan et al (2000) declared that cultural differences have a direct effect on individual taxpayers' compliance behaviour. Other authors considered culture to be a powerful demographic factor having a great influence on taxpayers' compliance behaviour (Chau & Leung, 2009; Tsakumis, Curatola & porcano, 2007). Most empirical studies provided evidence indicating differences in race and tax behaviour. Manaf et al (2005) also reported difference in the tax compliance attitude of major Malaysian races. However, the study of Kasipillai & Jabbar (2006) found no difference in tax compliance behaviour of the ethnic group in Malaysia.
- vii. **Religion:** The influence of religious belief on the taxpayers' behaviour is extensively discussed in the literature (e.g. Mchee, 2006; Torgler, 2003, 2006). Tax payment is regarded differently by different religious belief. While some religions support the payment of tax to finance government spending, others may deny the obligation of tax payment under certain circumstances, such as government engaging in activities regarded as illegal. However, evidence in the study of Torgler (2006) showed that in a country where the attendance of religious worship places is high there is significant tax compliance.

### **3.0 Methodology**

Data analysis was undertaken using descriptive method. A major segment of the information collected during the study was descriptive in nature. Descriptive statistics such as charts, percentages and graphs etc. were employed in most of the analysis in summarizing trends, changes and comparison across certain characteristics. Final presentation took the form of description, tabulation and illustrations. The major source of data is secondary as the data used were sourced from the Cross River State Internal Revenue Service and National Population Commission.

### **4.0 Data Analysis and Discussion of Results**

The trend analysis of projected population of Cross River State and the Internally Generated Revenue between 2007 and 2014 is presented in this section. The essence of the analysis was to ascertain whether demographic factor such as population, gender and age affects the amount of revenue generated in the state.

**TABLE 1**  
**PROJECTED POPULATION OF CROSS RIVER STATE BY LOCAL GOVERNMENT AREA, 2007-2014**

LGA	2007	2008	2009	2010	2011	2012	2013	2014
ABI	147,752	152,935	157,435	162,067	166,836	171,090	175,436	179,769
AKAMKPA	153,268	158,645	163,313	168,118	173,065	177,478	181,1986	186,481
AKPABUYO	278,742	288,520	297,010	305,749	314,746	322,772	330,970	339,145
BAKASSI	32,394	33,530	34,517	35,533	36,578	37,511	38,464	39,414
BEKWARRA	108,008	111,797	115,086	118,473	121,959	125,069	128,246	131,414
BIASE	172,114	178,152	183,394	188,790	194,345	199,301	204,363	209,412
BOKI	191,052	197,754	203,573	209,563	215,730	221,231	226,850	232,453
CALABAR MUNICIPALITY	188,053	194,650	200,377	206,273	212,399	217,815	223,348	228,865
CALABAR SOUTH	196,073	202,951	208,923	215,071	221,399	227,045	232,812	238,562
ETUNG	81,941	84,815	87,311	89,880	92,525	94,884	97,294	99,697
IKOM	167,587	173,466	178,570	183,824	189,233	194,058	198,987	203,902
OBANLIKU	112,242	116,180	119,598	123,117	126,740	129,972	133,273	136,565
OBUBRA	176,650	182,846	188,227	193,765	199,467	204,553	209,749	214,930
OBUDU	165,300	171,098	176,133	181,316	186,651	191,283	196,142	200,987
ODUKPANI	197,472	204,402	210,417	216,608	222,982	228,668	236,000	241,829
OGOJA	175,657	181,820	187,170	192,677	198,346	203,404	208,570	213,722
YAKURR	200,942	207,991	214,111	220,412	226,897	232,084	237,979	243,857
YALA	216,592	224,190	230,787	237,578	244,568	250,804	257,174	263,526
<b>TOTAL</b>	<b>2,961,839</b>	<b>3,065,742</b>	<b>3,155,952</b>	<b>3,248,814</b>	<b>3,254,466</b>	<b>3,429,022</b>	<b>3,511,643</b>	<b>3,604,530</b>

**SOURCE:** NATIONAL POPULATION COMMISSION (2008-2011) AUTHOR'S COMPUTATION (2007; 2012, 2013, 2014) USING POPULATION GROWTH RATE OF 2.38, 2.55, 2.54 AND 2.47, RESPECTIVELY.

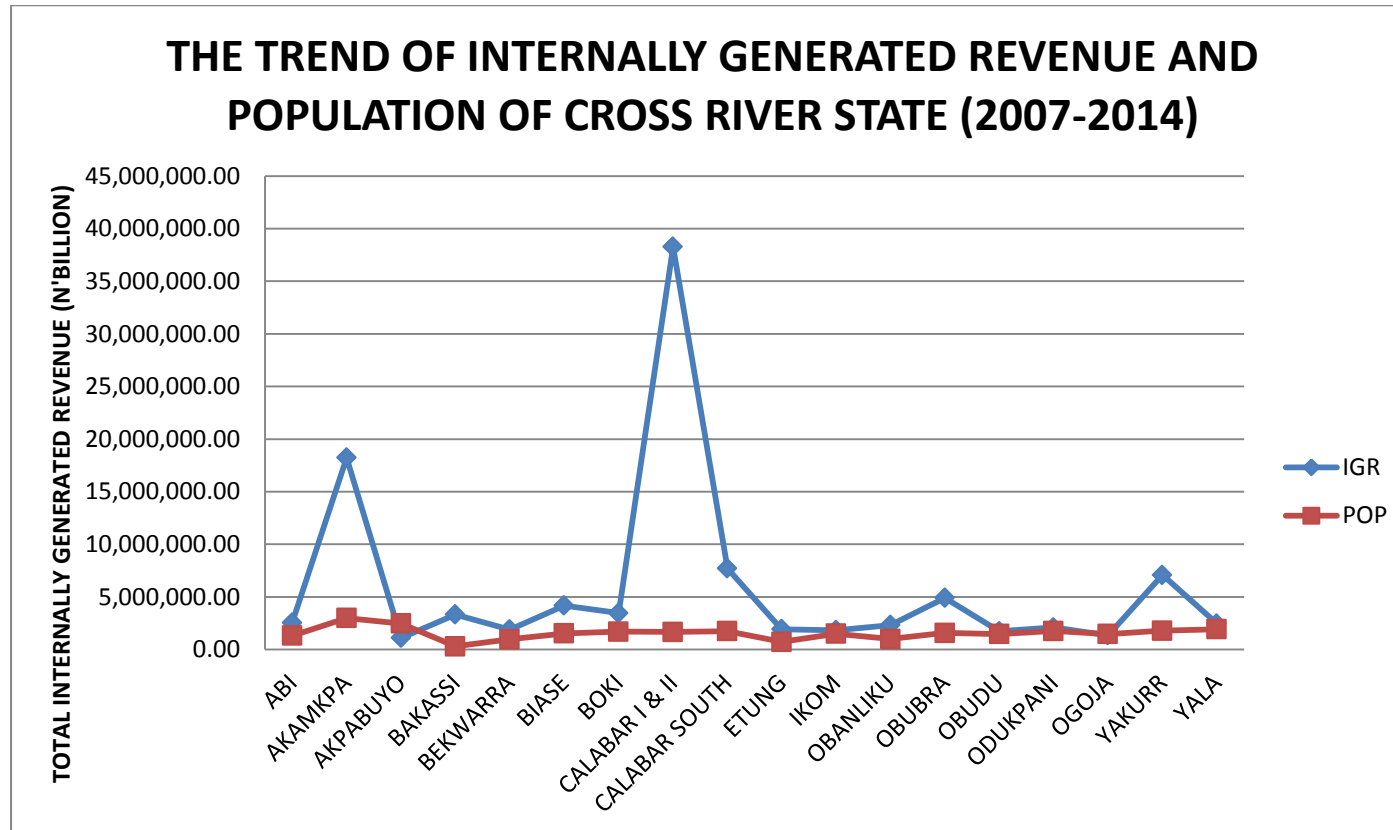


**TABLE 2**  
**OUTSTATIONS REVENUE COLLECTION IN CROSS RIVER STATE (2007-2014)**

LGA	2007	2008	2009	2010	2011	2012	2013	2014	TOTAL
ABI	1,593,950.00	6,756,645.81	3,186,429.66	1,495,021.53	1,861,625.00	1,591,170.00	2,030,500.00	7,003,150.00	25,518,492.00
AKAMKPA	15,862,493.44	25,125,151.03	24,202,929.69	19,384,737.53	15,970,047.28	18,870,833.00	14,155,741.04	48,752,684.53	182,324,617.53
AKPABUYO	882,475.00	1,392,850.00	1,481,975.00	742,700.00	955,800.00	464,075.00	118,000.00	4,967,301.17	11,005,176.17
BAKASSI	1,868,075.00	2,351,175.00	2,002,865.00	1,437,725.00	3,034,527.00	2,020,025.00	5,252,925.00	15,287,660.00	33,254,977.00
BEKWARRA	1,145,070.00	2,246,031.99	1,497,950.00	1,767,643.89	2,289,200.00	2,116,700.00	1,957,225.00	5,873,255.50	18,893,076.38
BIASE	2,787,365.00	3,437,425.00	4,693,926.54	3,122,525.00	5,004,377.71	3,891,466.70	6,136,434.34	12,739,880.64	41,813,400.93
BOKI	2,470,285.00	2,560,255.00	3,734,880.00	1,688,495.00	1,694,225.00	1,059,012.68	1,500,455.00	19,914,096.03	34,621,693.71
CALABAR I & II	13,808,911.00	17,397,092.36	16,966,232.99	12,688,825.00	31,657,707.00	23,956,674.00	46,362,432.00	219,932,730.39	382,770,604.74
CALABAR SOUTH	7,015,665.00	8,560,597.10	6,457,628.48	2,742,420.00	6,800,550.00	8,682,153.00	9,299,850.00	27,497,772.20	77,056,617.78
ETUNG	935,003.00	2,149,819.50	2,344,305.00	2,314,22.00	1,920,754.50	1,433,469.00	2,064,325.00	6,098,505.68	19,260,401.68
IKOM	12,677,392.93	14,235,578.95	21,742,827.44	27,919,783.67	23,395,095.27	16,829,075.44	27,685,773.11	38,182,029.32	182,667,556.13
OBANLIKU	1,219,210.00	1,978,905.38	2,562,053.55	1,574,550.00	2,762,506.62	4,596,039.97	3,039,120.17	5,465,506.55	23,197,992.24
OBUBRA	4,848,149.22	6,465,084.99	6,261,076.43	5,033,065.17	3,620,355.27	3,293,581.01	3,192,230.00	16,406,443.07	49,109,985.16
OBUDU	7,009,155.15	12,972,121.95	14,514,520.07	18,029,450.25	13,056,900.16	22,593,966.74	27,556,900.37	56,311,153.27	172,044,167.96
ODUKPANI	3,788,073.54	4,376,742.85	1,823,370.16	658,900.00	745,150.00	943,925.00	1,099,000.00	7,505,386.00	20,940,547.55
OGOJA	6,185,106.72	11,118,124.60	11,327,089.42	9,060,334.01	10,286,365.85	19,960,742.61	34,131,008.18	32,594,258.45	134,663,029.84
YAKURR	4,378,834.10	8,364,016.08	6,549,454.17	6,155,675.08	6,899,374.36	6,026,116.61	10,102,888.07	22,283,365.74	70,759,724.21
YALA	3,961,693.48	7,015,538.19	2,389,734.66	1,375,477.63	1,602,823.20	1,293,398.68	1,927,744.44	4,957,534.52	24,523,944.80
<b>TOTAL</b>	<b>92,437,007.58</b>	<b>138,503,137.78</b>	<b>133,739,248.26</b>	<b>117,191,548.76</b>	<b>133,557,384.22</b>	<b>139,612,242.44</b>	<b>197,612,541.72</b>	<b>551,772,713.05</b>	<b>1,504,426,005.81</b>

Source: Cross River State Internal Revenue Service (2015).

From the data presented on the trend of revenue generation in the respective local government areas in the state, it was observed that the internally generated revenue does not correlate with population trend. The revenue generated for instance, for Calabar (I & II) , Ikom, Akamkpa, Obudu, Ogoja, Calabar South, Obubra and Biase were ₦382,770,604.6, ₦182,667,556.1, ₦182,324,617.5, ₦172,044,167.9, ₦134,663,029.8, ₦77,056,617.8, ₦49,109,985.2 and ₦41,813,400.9 in 2014, respectively. The population trend on the other hand, does not follow the sequence of revenue generation in the state. Akpabuyo with the highest population figure of 330,970 and 339,145 in 2013 and 2014 generated only ₦4,967,301.17 in 2013 and ₦11,005,176.17 in 2014. Yala, Yakurr and Odukpani with population of 263,526, 243,857, 241,829, respectively in 2014, generated meager revenue of 24,523,944.80, 70,759,724.21 and 20,940,547.55, compared to other local government with the least population trend. This disparity is what prompted this study.



**Fig. 1: THE TREND OF INTERNALLY GENERATED REVENUE AND POPULATION OF CROSS RIVER STATE**

As shown in the figure above, Calabar Municipality which has one of the least populations generated the highest revenues within the period under review, followed by Akamkpa and Ikom respectively. Akpabuyo with the highest population turnout with the lowest revenues for the period under review. From the analysis, it can be observed that demographic factors such as population, age and gender do not influence tax revenue generation in the state. Therefore, the volume of revenue generated is influenced by the availability of natural endowments, taxable items, level of tax compliance, income level as well as the magnitude of tax evasion and avoidance among taxpayers in the state.

## 5. 0 Conclusion and Recommendations

The study was conducted to ascertain the demographic factors that influence taxation in rural Cross River State. The study primarily ascertained the differences in tax compliance behaviour across some demographic backgrounds of taxpayers. The data used in the study were extracted from the projected population of Cross River State gotten from the National Population Commission and Cross River State Internal Revenue Service. The result from the trend analysis indicated that demographic factors such as population, age, gender and religion/ethnicity do not influence tax revenue generation in the state. However, income level, employment status and educational background influence tax compliance among rural tax payers in the state. The present findings have some practical implications on tax administration in Cross River State and Nigeria in general. First, Nigeria's policy makers particularly the tax administrators should take into consideration the demographic background of individual taxpayers in mapping out better strategies towards improving individual tax compliance behaviour in the state and country. Furthermore, since this study indicates that tax compliance is not influenced by cultural background of the taxpayers, policy makers should have rethink on the uniform personal income tax system operating in the state. The personal income tax system should reflect the gender, population, age and cultural diversity of Nigeria and for this reason; state governments should be allowed to adopt tax administration style that fits the culture of the taxpayers in their jurisdiction.

It is worth reiterating that there is the need for government through the State Internal Revenue Service in collaboration with the Federal Inland Revenue Service to undertake sensitization programmes aimed at educating the public about their fundamental obligations as citizens. The operations and client service units of the Federal Inland Revenue Service should adopt mechanisms aimed at clarifying the tax laws. New legislative instruments for the implementation of any budget or fiscal policy should be promptly disseminated and the taxpaying public clearly educated. This will deal with the problem of low levels of understanding of the tax laws. When this is achieved it will conceivably help to increase the amount of revenue mobilized from direct taxation.

## References

- Abdieva, R., Pirimbaev, J. and Özdil, T. (2011), "Kırgızistan'da Vergi Kültürü ve Belirleyenleri", SESSION 5C: Orta Asya Ekonomileri II, 335-341.
- Alabede, J.O. (2014). An exploratory analysis of individual taxpayers' compliance behaviour in Nigeria: A study of demographic differences and impact', *Int.J Account.Tax* 2(2): 39-64.
- Andreoni, J., Erard, B., and Feinstein, J. (1998). Tax compliance *in the Journal of Economics Literature*,
- Birch, A. Peters, T. & Sawyer, A. J. (2003). New Zealanders' attitudes towards tax evasion: A demographic analysis. *New Zealand Journal of Taxation Law and Policy*. 9(1), 65.
- Brooks, N. (2011). Key issues in income tax : Challenges of tax administration and

- compliance. Tax Conference. Asian Development Bank.
- Chan, C.W., Troutman, C.T., and O'Bryan, D. (2000). An expanded model of taxpayer compliance: Empirical evidence from United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9(2).
- 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.
- Crane, S. E., & Nourzad, F. (1990). Tax evasion: An empirical analysis. *The Economics and Statistics*, 68(2), 217-228.
- Cross River State Government (2015). Internal Revenue Service, Governor's Office Calabar.
- Devos, K. (2008). Tax evasion behaviour and demographic factors: An exploratory study in Australia. *Revenue Law Journal*, 18(1), 1- 23.
- Eicher, J.D., Thomas, J.S, & Wendy, L.S. (2002). Men, women, taxes and ethics. *Tax Notes*. 401-406.
- Fischer, C. M., Wartick, M., & Mark, M. (1992). Detection probability and tax compliance: A review of the literature. *Journal of Accounting Literature*, 11(2), 1-46.
- Fjeldstad, O. H., & Semboja, J. (2001). Why people pay taxes: The case of the development levy in Tanzania. *World Development*, 29(12), 2059-2074.
- Gupta, R. (2009). An empirical study of demographics of perceptions of tax evasion in New York.
- Hazman, G.G. (2009). Vergi Bilincini Etkileyen Muhtemel Dışsal Etkenlerin Logistik Regresyon Analizi ile Tespiti”, *Sakarya Üniversitesi SBE, Akademik İncelemeler*, Cilt:4, Sayı:1
- Helhel, Y. & Ahmed, Y. (2014). Factors affecting tax attitudes and tax compliance: A survey study in Yemen. *European Journal of Business and Management* , 6(22), 48-58.
- Jackson, B.R. & V.C. Milliron (1986). Tax compliance research and taxation: Critical perspectives on the World Economy 3: 56.
- Kasipillai, J., & Jabbar, H. A. (2006). Gender and ethnicity differences in tax compliance. *Asian Academy of Management Journal*, 11(2), 73-88.
- Kirchler, E. (2007). *The Economic psychology of tax behaviour*. Cambridge: Cambridge University Press.
- Lewis, A. (1982). *The psychology of taxation*. Oxford: Martin Robertson.
- Mason, R., & Calvin, L. D. (1978). A study of admitted income tax evasion. *Law and Society Review*, 13(fall), 73-89.
- National Population Commission (2006). Population census report.
- Olowookere, J.K. and 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.
- Oti, P. A. et al. (2016). Evaluation of the effect of personal income tax amendment act 2011 on internally generated revenue- A focus on Cross River State of Nigeria. *Journal of Empirical Economics*, 5 (2), 114-128.
- Randlone, K. (2012). Tax compliance and tax attitudes: The case of Estonia. *Journal of Management and Change*, 29, 89-103.
- Richardson, G., (2008). The relationship between culture and tax evasion across countries: Additional
- Ritserna, C.M., Thomas, D.W., and Ferrier, G.D., (2003). Economic and behavioural determinants of tax.
- Saruç, N.T. (2003). Vergi Ödemeyi Belirleyen Faktörler: Anket Araştırmasının Sonuçları”, *Vergi Sorunları Dergisi*, S.178, Temmuz, 152-165.
- Schuetze, H. J. (2002). Profiles of tax noncompliance among the self-employed in Canada: 1969-1992. *Canadian Public Policy*. 28(2), 219-238.

- Song, Y., & Yarbrough, T. (1978). Tax ethics and taxpayer attitudes: A survey. *Public Administration Review*, 38(5), 442-452.
- Spicer, M. W., & Lundstedt, S. B. (1976). Understanding tax evasion. *Public Finance*, 21(2), 295-305.
- Tittle, C. R. (1980). *Sanctions and social deviance: The question of deterrence*. New York: Praeger.
- Spicer, M.W. and Lundstedt, S.B. (1979). Understanding tax evasion. *Public Finance*, 31(2), 295-305.
- Tilahun, A. T. & Yidersal, D. D. (2014). Determinants of tax compliance behavior in Ethiopia: The case of Bahir Dar city taxpayers. *Journal of Economics and Sustainable Development*, 5 (15), 268-273.
- Tittle, C. (1980). *Sanctions and Social Deviance: The Questions of Deterrence*. Connecticut: Praeger.
- Torgler, B. & Schelder, M. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Cheltenham: EE.
- Torgler, B. (2003). Tax morale: Theory and analysis of tax compliance. Unpublished doctoral dissertation, University of Zurich, Switzerland.
- Torgler, B. (2004). *Tax compliance and morale*. Cheltenham: Edward Elgar Publishing Ltd.
- Torgler, B. (2006). The importance of faith: Tax morale and religiosity. *Journal of Economic Behaviour and Organization*, 61, 81-109.
- Torgler, B., & Schneider, F. (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, 30, 228-245.
- Tsakumis, G. T., Curtola, A. P., & Porcano, T. M. (2007). The relation between national cultural dimensions and tax evasion. *Journal of International of Accounting, Auditing and Taxation*, 16, 131-147.