



Effect of Internally Generated Revenue Strategy on Personal Income Tax Administration in Adamawa State, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Personal income tax has remained one of the most reliable sources of income generation to government globally. However, there were cases of tax evasion particularly in developing nation, this has remained the major setback in realizing the much anticipated income. This menace can only be minimized through the enforcement of an effective and efficient income generation strategy. The paper assessed the influence of revenue generation strategy of state board of internal revenue service on personal income tax (PITA) administration of Adamawa state. Three research questions and three hypotheses guided the research. The study adopted survey research design while questionnaire was used for data collections and data obtained were analysed using both

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descriptive and inferential statistical tools. The result revealed a positive and significant relationship between all the measures of revenue generation strategy adopted for the study and the administration of PITA in Adamawa. Hence, the study recommended that, the Adamawa state board of internal revenue service should pay more attention to staff development in addition to improving ICT infrastructures, tax education and awareness to enhance effective and efficient administration of personal income tax.

Keywords: Adamawa state; human resources management; ICT; personal income tax administration; tax education.

1. INTRODUCTION

In the current waves of economic hardship, it is generally agreed that, the diversification of national revenue base is the most viable way-out, particularly among the developing countries. Hence, tax is considered as one of the most important means through which governments at various levels can generate revenue, if properly managed. Tax as an old concept, has received a considerable attention from both government and scholars. Taxation is the imposition of financial obligation by a taxing authority usually government with a view to generate ample financial resources for developmental projects. There are basically two types of tax on the account of method of payment which are direct or indirect. On the other hand, there are three forms of tax on the account of the percentage to be paid which are progressive, regressive and proportional. The concern of this study is on the direct type of tax (personal income tax) and its administration. [1] concluded that tax administration is full of challenges. Some of the challenges as identified by Adeyeye et al. [2]. Akujuru and Chintuwa [3] and Bwalya [4] are recruitment of unqualified personnel, lack of human resources development, use of manual accounting system rather than automated accounting system, and lack of awareness among tax payers. The existence of these problems increases the tendencies of tax evasion, tax avoidance, high tax rate, tax fraud and poor enforcement of tax laws and as such contributes to insufficient tax revenue generation [5].

Given these challenges, the Adamawa state government is not exempted as stated by Adamawa State transition committee report (2019). The report stated among other things that, a lot of government money was wasted in the previous administration as the result of poor tax administration in the state. Thus, the motivation to assess the influence of the strategies adopted in administering personal

income tax in Adamawa state. To achieve this objective, three (3) hypotheses were formulated and tested.

The significance of this research lies in its contributions to knowledge in the area of personal income tax administration and revenue generation in Nigeria, since there is dearth need of economic diversification among the federating states. More so, the study will inform policy makers especially the state governments in Nigeria and Nigerian tax authority in policy formulations that will be acceptable to its citizens at the same time enhance revenue generations for the government. The following hypotheses guided the research.

H₀₁: There is no significant relationship between human resource management and effective and efficient personal income tax administration of Adamawa State board of internal revenue service.

H₀₂: There is no significant relationship between the application of information and communication technology and effective and efficient personal income tax administration of Adamawa state board of internal revenue service.

H₀₃: There is no significant relationship between the rate of taxpayers' education and awareness conducted by the Adamawa state board of internal revenue service and effective and efficient personal income tax administration.

2. REVIEW OF RELATED STUDIES

2.1 Conceptual Review

The concept of taxation and tax administration has received a tremendous attention from both government and scholars of economist. Hence, personal income tax (PIT) is given different definitions based on the various objectives of the studies. Nigerian Personal Income Tax Act 2011

as amended viewed PIT as tax charge on employee's remuneration. While Bala et al. (2017) defined PIT as a tax chargeable on income earned by an individual, hence refers to as Pay-As-You-Earned (PAYE). This is one of the direct tax and in Nigeria, it is collected by the state governments. An individual or its employer is expected to carry-out personal income assessment and remit the amount of tax payable to the state tax authorities. This concept is known as self-assessment. To arrive at chargeable income, various income exemptions and reliefs are allowed.

Under Section 33(1), the items that are tax exempted are National Housing Fund Contribution, National Health Insurance Scheme, Life Assurance Premium, National Pension Scheme and Gratuities. The various allowable rates are provided in this section of the law to guide the determination of taxable income. However, [6] were of the view that, the administration of this tax provisions is bound by several challenges. Some of the challenges as identified by Onyekwelu and Ugwanyi [7] and Enejo and Gabriel [6] are tax evasion and tax avoidance. To reduce the tendencies of these problems, [8] and Altindag and Bilaloglu, [9] were of the view that, proper application of ICT, personnel management, and tax payer's awareness are necessary.

According to Armstrong and Taylor [10,11] the concept of personnel management is a well-known concept in management that involve the adoption and application of appropriate policies in engaging and maintaining human resource in achieving organizational objective. Therefore, the board is expected to give due attention to personnel management processes in order to maximize tax revenue generation [12].

In the modern economy, the importance of the use of computer cannot be over emphasized. Tax administration, like all other public and private organizations, has at least two main types of processes that can be supported by ICT, these are operational processes and the supporting processes. The use of ICT in tax administration is cost efficient and effective in its management [13,14] Its application in tax administration would help in minimizing possible human errors, time consumptions, accessible data, enhanced tax payer's voluntary compliance, thus curtailing tax evasion and expediting better decision making by the board. Hence, the importance of the implementation of electronic tax system.

Given adequate physical infrastructure will not guarantee payment of tax, otherwise taxpayers are willing to pay. [15] was of the view that, the conscious and voluntary payment of taxes as a form of moral attitude is paramount in the concept of tax. In other words, taxpayers need to exhibit moral support towards tax payment. This can be achieved were the taxpayer is well informed about the benefits of the tax paid. Taxpayers' awareness defines the attitude in compliance with tax payments. The higher the level of awareness in accordance with the provisions of tax laws the higher the compliance rate [16] Understanding of tax obligations by taxpayer will improve tax compliance.

2.2 Empirical Review

It is a well-known fact that, effective tax administration brings not only financial benefits but its serve as an economic regulatory mechanism. Hence, some of the previous empirical studies carried out on PIT administration and revenue generation are reviewed as follows. [17] conducted a study on PIT and revenue generation in Benue state over a period of ten (10) years (2007-2016), and reported a positive influence of PIT on revenue generation in the state. In respect to electronic tax, [18] examined the association between the digitalization of government services and tax evasion via the moderation effect of information and communication technologies (ICTs). The results of the analysis indicated that the digitalization of government services play a significant role in alleviating tax evasion, hence improved tax revenue. In the same vein, [19] assessed the effect of data technology on tax administration in Nigeria and recommended the necessity for tax authorities to improve the utilization of data technology to be able to improve tax revenue. Furthermore, Michael (2016) in his study on the nexus of ICT on tax administration reported that, tax leakages were minimized through the use of ICT.

In response to the need of tax education and awareness among tax payers, [20] reported a positive and significant relationship between tax payers' awareness and tax compliance in Nepal. Also, [21] studied the effect of tax education and enlightenment on total tax revenue. The results showed that tax education and enlightenment positively and significantly affect the total tax revenue. In a study conducted by Savitri and Musfiaily (2016), they scholars reported a positive and significant mediating effect of

service quality on the relationship among taxpayers' awareness, tax socialization, tax penalties, compliance cost on tax compliance. Lestari and Wickasono (2017) analyzed the influence of taxpayers' awareness, knowledge of taxation, and taxpayers' attitude influence on docility taxpayers in KPP Pratama Boyolal. The result of the research shows that attitude and awareness of the taxpayers significantly influences taxpayer compliance. Furthermore, Anto et al. (2020) reported a positive and significant relationship between taxpayer awareness, tax knowledge and taxpayer compliance. This implies that the greater the rate of taxpayers' awareness and tax knowledge the better the taxpayer compliance. This was also in support of the findings of the earlier study by Rahayu et al. (2017) who reported the positive contribution of taxpayer's awareness, knowledge and understanding of tax laws in taxpayer compliance.

As it can be seen in the empirical review, the studies that have investigated the relationship between human resources (HR), information communication technologies (ICTs) and taxpayer education and awareness (TEA) as regards to generating revenue through Personal Income Tax are rather too scanty or sparse. The few studies conducted in Nigeria were mostly from the southern part and southeast of the country, therefore the motivation of this study to observe the influence of revenue generation strategy of Adamawa state on personal income tax administration of the state.

2.3 Theoretical Review

Several theories were used by previous researchers to explain the concept of tax administration. Some of the theories as listed by Appah [22] and Jhingan [23] are Ability-to-pay theory, Benefit-received theory, and Theory of crime. Hence, this study adopted Benefit received theory to analyzed and explain PIT administration in Adamawa state.

This theory believes that, tax should be charge base on the benefit received. Thus, [24] were of the view that, the state government should levy taxes on tax payers based on the benefit conferred on them. This implies that, higher the benefits the higher the tax payment. Even though this principle seems fair, it has been severely criticized by various scholars on the ground that; if the state governments maintains the concepts of benefits conferred and the benefits derived,

tax payer can be able to pay taxes. However, it contradicted the basic principle of taxation as a mandatory and compulsory contribution made by citizenry to the public authorities to meet the expenses of the government and the provisions of general benefit. There is no direct quid pro quo in the case of a tax. Furthermore, majority of government expenditure are for public benefit, thus it is not possible to estimate the benefit enjoyed by a particular individual every year to ensure tax with benefit derived is justifiable. Also in practical application, it implies that, less privilege citizens will have to pay the heaviest taxes, because they benefit more from the services of the state. Thus, contravenes the principle of justice, equity and fairness in taxation.

3. METHODOLOGY

The study adopted Survey research design. The population of study were all the staff of Adamawa SBIRS as at 31st December, 2020 which comprised six hundred (600) staff from ten (10) directorates. Out of the ten directorates, ten (10) employees were selected from each directorate base on their grade level from top downward, totaling sixty (60) employees as a sample size. A multi-stage sampling techniques were used in the study. First was through strata (the Directorates) and secondly a non-random (judgmental) sampling techniques. A structured questionnaire (opened-ended) was used to obtain the required information from the respondents, and analyzed using both descriptive and inferential statistic tools.

The model developed to evaluate the effect of human resource management (HRM), information and communication technology (ICT), and tax education and awareness (TEA) on effective tax administration (PTA) is presented as follows.

$$Y = F(\text{HRM, ICT, TEA}) \dots \dots \dots \text{equation}$$

$$PTA_{it} = \beta_0 + \beta_1 HRM_{it} + \beta_2 ICT_{it} + \beta_3 TEA_{it} + e_{it} \dots \dots \dots \text{Model}$$

4. RESULTS AND DISCUSSIONS

The results of the analyses are presented in tables which consisted of the diagnostic test, descriptive statistics, and regression analyses.

The result of the descriptive statistics presented in Table 2 revealed that, personal income tax administration (PTA) has a mean value of 12.335, a minimum score of 6.000 and a maximum score of 30.000, while the standard deviation stood at 5.134. The mean value of 12.335 depicts that on the average, personal income tax administration adds up to 12% of the IGR of the State over the period of the study with the minimum contribution of 6% and maximum contribution of 30% at a given ICT structure, human resources development and tax education and awareness. The standard deviation of 5.134 indicates that there is a great gap between the revenue board effort in the administration of personal income tax in the State and the taxpayers. Even though the index is positively significant, the revenue board need to put more effort to drive the contribution of PIT.

Additionally, the descriptive result in Table 2 shows that human resource management (HRM) has a minimum value of 10.000 which portrays that 10% of the board members has a poor human resource management practice which may leads to poor performance of the employees of the board. The mean of 20.350 (20%) indicates the improvement in human resource management in of the board. The board can still do better if it strategically put in place policies and procedures that would improve the working condition of its staff. The result further shows that information and communication technology (ICT) has a mean score of 20.015, the minimum, maximum and standard deviation are 10.000, 41.000 and 5.765 respectively also reveal a fairly application of ICT to the personal income tax

administration in the State. With regards to taxpayer's education and awareness (TEA), the result shows the mean value of 19.490, a minimum value of 10.000, and a maximum of 45.000 and standard deviation of 6.652.

To identify the existence of appropriate usage and autocorrelation among the variables of the study, Pearson moment correlation and variance inflation factor were adopted, hence the results are presented in Table 3 and Table 4 respectively.

The result in Table 3 shows the correlation Matrix between the variables. As can be seen, the highest correlation is between PTA and TEA with positive correlation coefficient of 0.702. This is confirmed by the result of variance inflation factor (VIF) presented in Table 4. The value of VIF must be less than 10, and the value of tolerance must be less than one (1) to conclude that there exist no multicollinearity problem [25-29]. The result in Table 4 shows that there is no multicollinearity problem among the variables as the computed VIF is less than ten (10), and the value of tolerance is less than one (1).

Since the result of the analyses of Pearson moment correlation, variance inflation factor, and tolerance coefficient indicate the absence of multicollinearity and autocorrelation, the study further conducted regression analyses. The results of the regression model of the study which looks at the effect of revenue generation strategy on personal income tax administration is presented in Table 4.

Table 1. Variables identification and measurement

Label	Variables	Descriptions	Sources
PTA	Personal income tax administration	Effective, fairness and compliance	Oseni and Ehimi (2019)
HRM	Human resources management	Incentive, employees training, selective hiring (recruitment) and job security.	Govand and Nabaz (2021).
ICT	Information technology	E-participation, future orientation, Gov't adoptability, Gov't response to change and legal framework for ICT business model	WEF (2020).
TEA	Tax education and awareness	Tax payer attitude, tax payer perception and tax payer gender.	Eragbhe and Aronmwan (2015).

Table 2. Descriptive statistics

Variables	Mean	Std. Dev.	Min	Max
PTA	12.335	5.134	6.000	30.000
HRM	20.350	6.061	10.000	49.000
ICT	20.015	5.766	10.000	41.000
TEA	19.490	6.652	10.000	45.000

Table 3. Correlation matrix

Variables	PTA	HRM	ICT	TEA
PTA	1.000			
HRM	0.453	1.000		
ICT	0.531	0.489	1.000	
TEA	0.702	0.418	0.647	1.000

Table 4. Coefficient of variables from the test of hypotheses

Model		Unstandardized Coefficient		Standardize Coefficient	t-value	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.106	0.882		-1.254	0.000		
	HRM	0.129	0.041	0.153	3.168	0.002	0.744	1.354
	ICT	0.033	0.051	0.037	2.640	0.003	0.524	1.910
	TEA	0.588	0.043	0.762	13.806	0.000	0.568	1.762

F = 127,402, (P < 0.000) and R² = 66

Source: Researcher's computation using SPSS version 020, 2021

The result of the analysis presented in Table 4 shows the coefficient of determination (R²) of 66%. This implies that the measure of tax administration included in the model accounted for 66% variation in the personal income tax revenue of the Adamawa state board of internal revenue service over the period under the study, while 34% was explained by other factors. The p-value of the intercept is 0.000 at 5% significant level is significant, thus, the model is significant and has a good explanatory or predictive power.

In respect to the variables of tax administration, the result presented in Table 4 shows that ICT has a positive and significant effect on PTA of the board over the period under the study, with p-value of 0.003 at 5% significant level and R-value of 0.037. This implies that any advancement in the use of ICT by the board in personal tax administration by 1% will lead to a significant improvement in the administration of personal income tax, hence improve revenue generation. This provides an evidence for rejecting the null hypothesis which states that, ICT has no significant effect on tax administration.

Furthermore, the result in Table 4 revealed that human resource development (HRM) positively and significantly affects personal income tax administration of the board with R-values of 0.153 and p-value of 0.002 at 5% significant level. This implies that the improvement of human capital development of the board will also positively and significantly improve the management of personal income of the state. Hence the rejection of the null hypothesis and

the conclusion that, human resource management of Adamawa state board of internal revenue service has a positive and significant influence on personal income tax administration of the state. This provide evidence that human capital development improves corporate performance positively. In the same vein, the result of the regression analyses presented in Table 4 indicates that, tax education and awareness has a positive and significant effect on the administration of personal income in Adamawa state, with R-value of .762 and p-value of 0.000 at 5% significant level. This leads to the rejection of null hypothesis three, hence concluded that, tax education and awareness has a positive and significant effect on personal tax administration of Adamawa state board of internal revenue service.

5. CONCLUSION AND RECOMMENDATIONS

The result of the study revealed that the application of information and communication technology, effective human resources management and tax education and awareness have positive and significant effect on effective administration of personal income tax in Adamawa state. Hence, the conclusion that, adequate deployment of ICT infrastructure with a regular personnel development couple with adequate taxpayers' education and awareness on the need of tax payment will improve personal income tax administration in the state and will consequently increases government internally generated revenue.

Going by the above findings, the following recommendations are hereby made:

In order for the state board of internal revenue service to improve internally generated revenue through tax, the board should deploy adequate ICT infrastructure; engage in regular manpower development, with massive tax education and awareness. This will reduce the rate of tax avoidance and tax evasion and also improve good relationship between tax authorities and tax payers thereby encouraging tax compliance. This is because, human resources management, ICT and taxpayers' education and awareness were found to have a positive and significant influence on personal income tax administration in the state.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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