DETERMINANTS OF INFORMAL SECTOR TAX EVASION IN SOKOTO METROPOLIS

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ABSTRACT

The objective of this paper is to empirically investigate the determinants of informal sector tax evasion in Sokoto Metropolis. A survey was conducted using a seven-point Likert scale that included 13 arguments and distributed 317 questionnaires to potential tax payers within Sokoto Metropolis, 300 questionnaires were returned and analyzed using regression analysis. The 13 arguments were ranked in terms of strength, from strongest to weakest. The results of the study show that taxational and fiscal factors, economic factors and administrative factors, among other factors are statistically significant for individuals' tax-evasion behavior. These findings may be useful to policy makers and researchers. Specifically, tax authorities should design policies to help increase the income level of taxpayers rather than increasing administrative

measures toward taxpayers. This may lead to higher tax compliance in the long run.

Keywords: Taxation, Tax Evasion, Informal sector

1. INTRODUCTION

Tax is a system of payment that individuals and firms are legally required to make to the government. It is a compulsory transfer of money from private individuals and groups or institutions to the government. Alm and Martinez-Vasquez (2007) have made it known that most of the people do not like to pay taxes, and, because of this fundamental reason, it is hard for tax administrators to levy and collect taxes efficiently. However, taxing informal sectors is a major challenge for tax administrations in both developed and developing countries and the "fiscal gap" that arises from the failure to tax this sector can be quite large.

Tax evasion refers to the deliberate refusal of a tax payer towards his /her tax obligation. It is a deliberate refusal to disclose one's source of income to the tax authority with the intention of paying nothing or something lesser than one's tax liability. According to Sikka and Hampton (2005) and Olatunde (2007) tax evasion is one of the major social problems inhibiting development in developing countries and eroding the existing welfare state in developed economies. This has led to a growing attention among policy makers, and scholars. The terms tax evasion simply refers to the under reporting of taxable money income with the intention to escape taxes. Tax evasion is a common phenomenon that is present in all societies. This is due to certain factors which include ignorance and non- compliance on the part of taxpayers, poor standard of record keeping and incorrect returns made by small scale business. Hence drastic measures should be set and implemented to be able to overcome such problems and improve revenue collection performance. This taxation and tax evasion, in turn, influence public expenditure and capital accumulation, which affect output and economic growth.

Economic growth depends to a certain extent on availability of funds to run a state. Several options according to Asher (2001), and Soyode and Kajola (2006) are available to government for raising fund, for bidding resources away from the other sector of the economy and from the other claimants of the economy to undertake their activities. The options include taxes, non-tax revenue such as fees, levies, cost of recovery, property and investment income, domestic and foreign borrowing including loans from multilateral institutions, domestic and foreign grants. Thus, a major source of fund for any government is tax revenue (Asher, 2001 and Soyode and Kajola, 2006).

The most recent studies show that the informal sector in developing countries ranges in size from 20% to 70% of Gross

Domestic Product (GDP). The informal sector in Africa as a percentage of GDP was 42 percent in 2000, and accounted for 48 percent of the official labor force on the continent (Schneider 2005). Zimbabwe, Tanzania and Nigeria had by far the largest informal economies with 59.4, 58.3 and 57.9 percent respectively, and Mozambique, Côte d'Ivoire and Madagascar in the middle with 40.3, 39.9 and 39.6 percent. At the lower end is Botswana with 33.4 percent, Cameroon 32.8 percent and South Africa with 28.4 percent (Schneider, 2005). It has been noted that evasion is directly linked to budget deficit and hence to lower revenue and investments in public goods. Therefore, tax evasion is inimical to a country's economic growth (Schneider 2005).

This study differs from other studies done on tax evasion in informal sector in Sokoto state, this is because it uses the data collected from the informal sector of small businesses in Sokoto state, and no other study of this type has been done in Sokoto state to the best of our knowledge.

2. LITERATURE REVIEW

This section reviews previous empirical researches on the causes and effects of tax evasion on economic development in various states in the country. Empirical studies have been done on this area using descriptive and inferential techniques of data analysis. These studies were carefully reviewed in this section.

Kofar-Wambai and Hanga (2013) examine the causes of tax evasion in Kano state and the appropriate approach to tackling such causes. The survey method was used to administer questionnaire on 40 respondents to generate data which is measured on a simple majority or percentage of opinions. It was discovered that informality is a self-reported lack of tax compliance in a sample of individuals and businesses who also answered questions on a large set of issues**.** The study found that more tax compliance is significantly associated with adequate campaign and judicious utilization of tax funds. The authors recommend that the tax base should be expanded in order to bring the hidden economy into the tax net. The tax law shall also be simplified to get rid of ambiguity in the interpretation of its provisions.

Ilaboya (2012) study the impact of indirect tax on economic growth in Nigeria using annual time series data from 1980-2011. Data for the indirect tax variables were collected from the Central Bank of Nigeria annual accounts and the Federal Inland Revenue Services. The study adopted a combination of cointegration and error correction mechanism after series of dagnostic tests which helped to check the adequacy of the specified model. The Engel-Granger two step procedure was used to test the short run dynamic behavior of the model while the Autoregressive Distributed Lag (ARDL) was used to correct the discrepancies between short and longrun impact of the explanatory variables. The result of the diagnostic tests shows the adequacy of the specified model. The study found a negative and an insignificant relationship between indirect tax and economic growth in Nigeria. The ratio of total indirect tax to total tax revenue reported a negative coefficient of (0.5817). The ratio of total tax to total federal revenue reported a robust t-value of (19.9276) and a positive coefficient of (2.0886) at the 1% level of significance. Against the above result, it was recommended that emphasis should be shifted from indirect tax as a growth driver in Nigeria.

Umoru and Anyiwe (2013) investigate the impact of New National Tax Policy in Nigeria using annual time series data from 1975-2011 by employing cointegration and error correction as methods of empirical estimation. The empirical results indicate that while the policy of direct taxation is significantly and positively correlated with economic growth, indirect taxation proved insignificant with its negative impact on economic growth in Nigeria. The implication of this study is that global transition from direct taxation to indirect taxation lack empirical justification in developing countries such as Nigeria. Thus, the authors recommend that rather than expanding the indirect tax structures, the government should expand the structures of direct taxes in Nigeria.

Ibadin and Eiya (2013) examine tax evasion and tax avoidance behavior of the self – employed, using some selected states in Nigerian geo-political zone. The study attempts to ascertain the ethical view, educational attainment, mode of tax administration, religion and cultural practices and how these variables affect tax evasion and tax avoidance decisions of the self – employed. The authors employ the statistical tools of ANOVA and Ordinary Least Square (OLS) method of regression, to estimate the difference in means of the sampled groups in each geo-political zone and relationships between tax evasion and avoidance and the independent variables. Results reveal that respondents are of the opinion that tax evasion is ethical sometimes, and that significant relationship exists between the ethical view, mode of tax administration and cultural practices of the self employed and tax evasion and avoidance. The authors recommended that authorities should constantly review tax rates to reflect prevailing economic realities, make tax laws and procedures less technical, and ensure that necessary assistance is provided at all times.

Worlu and Nkoro (2012) examine the impact of tax revenue on the economic growth of Nigeria using annual time series data from 1980 to 2007 collected from the Central Bank of Nigeria (CBN) Statistical Bulletin, Federal Inland Revenue Service (FIRS) and previous works done by scholars. The data collected were analyzed using the three stage least square estimation technique. The results show that tax revenue stimulates economic growth through infrastructural development. That is, it highlights the channels through which tax revenue impacts on economic growth in Nigeria. The study also reveals that tax revenue has no independent effect on growth through infrastructural development and foreign direct investment, but just allowing the infrastructural development and foreign direct investment to positively respond to increase in output. However, tax revenues can only materialize its full potential on the economy if government can come up with fiscal laws and legislations and strengthen the existing ones in line with macroeconomic objectives, which check-mate tax offenders in order to minimize corruption, evasion and tax avoidance. These bring about improvement on the tax administration accountability and transparency of government officials in the management of tax revenue. Above all, these increase the tax revenue base with resultant increase in growth.

Akintoye and Tashie (2013) examine the effect of Tax compliance on economic growth and development in Nigeria using primary data collected through the administering of questionnaires to self employed in each senatorial district in Oyo and Lagos States. Frequencies and percentages were used to measure the demographic variables of the respondents, and also the factors that affect the willingness to pay tax, while the Chi-square technique was used to measure the difference between willingness to pay tax of citizens in Lagos and Oyo States. The study reveals that many Nigerians are complying with tax payment and that the willingness of citizens to pay tax in Lagos State is significantly higher than that of Oyo State. The authors concluded that compliance through the willingness of citizens to pay tax is very important and cannot be ignored. It suggests that government should pay attention to the factors that influence the willingness of citizens to pay tax and improve on them, thereby improving people willingness to pay tax, government revenue and economic growth and development of the nation generally.

Akenbor and Arugu (2014) investigate state government taxation in Nigeria with a view to determine its impact on economic growth using annual time series data for the periods 1999-2013 generated from the Central Bank of Nigeria (CBN) Statistical Bulletin. The data were analyzed using multiple regression analysis. The findings revealed that state government taxation has a significant impact on economic growth in Nigeria. Based on the above, it was recommended that state government should rise to the challenge of boosting its revenue base by ensuring that all available sources of revenue are adequately tapped and also ensure that tax administration and collections become more effective and efficient.

Okoi and Omini (2014) investigate efficiency and effectiveness in the administration of tax in Nigeria using Cross River State as a case-study. The authors sourced their data through administration of structured questionnaires to survey the three senatorial districts in the state; the central limit theory is adopted as their analytical technique. The findings of the study showed a significant degree of inefficiency in the administration of taxes in Cross River state. It is recommended that periodic review and update of tax policy will bring innovation and effectiveness in the administration of taxes. Also proper appropriation of tax revenue will drive development in needed infrastructural and social services.

Obafemi (2014) examines the effects of tax avoidance and tax evasion on Nigeria economic development. A survey research design was adopted and responses were obtained through the use of a well structured questionnaire administered to 150 Nigerians, out of which are tax payer and tax evader. Findings from the analysis using statistics techniques reveal that tax evasion and avoidance have adversely affected economic growth and development in Nigeria. Also, it has been noted that lack of good governance and unpatriotic act of tax payer are the basis for which tax evasion and tax avoidance activities are perpetrated. The study therefore recommends that the government should embrace and promote good governance so as to encourage voluntary compliance of tax liability by the tax payers.

Modugu and Omoye (2014) appraise the evasion of personal income tax in Nigeria using primary data obtained through administration of 160 questionnaires to some selected self-employed individuals in Edo State comprising businessmen, contractors, professional practitioners like lawyers, doctors, accountants, architects and traders in shops as well as staff of Federal Inland Revenue Service in Benin City, Edo State, Nigeria. The study used the spearman rank correlation due to the qualitative nature of the data. The result revealed that the tax payers' relationship with tax authority and weak penalties have a significant influence on tax evasion in Nigeria. Tax rate showed a positive relationship with tax evasion. This means that the higher the tax rate the higher the tendency of tax evasion. The study recommendes that tax authority should intensify tax payer education and maintain a harmonious relationship capable of fostering voluntary compliance. In addition, efforts should be made towards entrenching stiff penalties for evaders. Finally the prevailing tax rates should be reviewed optimally as not to serve as disincentives to compliance.

Adereti, Sani and Adesina (2011) study the impact of Value Added Tax on economic growth of Nigeria using annual time series data for 1994-2008 sourced from Central Bank of Nigeria (CBN). The author employs both simple regression analysis and descriptive statistical method for data analysis. The findings show that the ratio of VAT Revenue to GDP averaged 1.3% compared to 4.5% in Indonesia, though VAT Revenue accounts for as much as 95% significant variations in GDP in Nigeria. A positive and significant correlation exists between VAT Revenue and GDP. Both economic variables fluctuated greatly over the period though VAT Revenue was more stable. No causality exists between the GDP and VAT Revenue, but a lag period of two years exists. They recommend that all identified administrative loopholes should be plugged for VAT Revenue to continue to contribute more significantly to economic growth of the country.

Olabisi (2010) examines the causes and effect of tax evasion and tax avoidance in Lagos state using primary data sourced from the total number of 127 questionnaires administered to personal income tax payers in Lagos state. The author used chi-square method in analyzing the data. The study reveals that the tax administration in Lagos state is very inefficient and ineffective and that there is no adequate information on the tax payers in the state. Hence, some people can hold from their tax liabilities. It was also discovered that there is a significant relationship between tax evasion and tax avoidance and the revenue generation.

Olatunji, Asaolu and Odewoye (2009) conduct a study on the review of revenue generation in local government Areas of Nigeria using Ekiti State as a case study. Data were collected from local governments in the state and analyze through descriptive and inferential statistical methods. The findings of the study reveal that, the dishonesty on the part of officers collecting revenues seems to be the major obstacle to revenue collection. In addition lack of enlightening the tax payers on the use of revenue generated from tax. The authors suggest that, supply of social and economic services, establishment of projects and staff motivation should be encouraged so that they can put in their maximum effort to improve revenue generation.

Adebisi and Gbegi (2013) examines the effect of tax avoidance and tax evasion on personal income tax administration in Nigeria. The researchers carried out a survey in Nigeria with particular reference to Federal Inland Revenue Service Abuja. The sample size was derived statistically using Yaro Yamani formula. The sample size consists of three hundred and five (305) employees of Federal Inland Revenue Service Abuja. The study utilizes primary and secondary data. Tables and percentages were used for the analysis. The Analysis of Variance (ANOVA) was used to test the hypotheses. The research findings disclose that enlightenment and adequate utilization of tax revenue on public goods will discourage tax avoidance and tax evasion. The researchers therefore conclude that there is a direct and positive relationship between tax avoidance, tax evasion, tax rates and personal income tax administration in Nigeria. Hence recommended that tax officials should be constantly trained and retrained on the job as well as a deliberate and more aggressive public enlightenment campaign should be embarked upon by government and the reduction in tax rates for the poor.

Uadiale, Fagbemi and Ogunleye (2010) examine the relationship between culture (represented by legal enforcement, trust in government and religiosity) and personal income tax evasion in Nigeria. The study uses the chi square statistics and ordinary least squares regression to estimate the relationship between tax evasion and the independent variables namely legal enforcement trust in government and religiosity. Four hypotheses were tested. It was found that legal enforcement and trust in government have positive impact on personal income tax evasion in Nigeria. However, the study could not establish a significant relationship between tax evasion and the religious variables. Government policymakers should find the results of this study useful in assessing the likelihood of tax evasion from legal, political and religious perspectives, and in developing tax reform policies aimed at minimizing tax evasion.

3. METHODOLOGY

This section described the methodology followed in conducting the study, the population and sample size, variables and variables measurements data and data analysis techniques, as well as the research model

3.1 POPULATION AND SAMPLE OF THE STUDY

The population covers market vendors from the four concentrated markets in Sokoto metropolis; Central Motor park 218, Old Market 834, Central Market 956 and Marina market 121. This makes total observations of 2,129 market vendors. Sample of 317 was selected using Taro Yamani's formula.

3.2 SOURCE AND METHOD OF DATA COLLECTION

The study used primary data collected through administration of structured questionnaire to the market vendors in four market areas in Sokoto metropolis.

3.3 TECHNIQUE OF DATA ANALYSIS

Ordinary Least Square (OLS) regression has been employed to measure the joint and individual effects of the economic, administrative and additional factors that are responsible for tax evasion in Sokoto metropolis.

4.4 RESEARCH MODEL

$$\mathbf{Y = b_0 + b_1 X_1 + b_2 X_2 + \ldots\ldots\ldots\ldots\ldots\ldots + b_k X_k}$$

$$\mathbf{TE = \beta0 + \beta1YREPT + \beta2FPAY + \beta3TBURD + \beta4KNOWL + \beta5IGNO + \beta6CURRPT + \beta7LDEV + \beta8LASSES + \beta9LENLIGHT + \beta10ETAX + \mu}$$

Where:

TE = Tax evasion

β0 = Constant parameter

YREPT = Income Reporting

FPAY = Frequent Payment of Tax

TBURD = Tax Burden

KNOWL = Knowledge of Tax Evasion

IGNO = Ignorance of Tax Payers

CURRPT = Corruption of Tax Officials

LDEV = Lack of Government Development

LASSES = Lack of Proper Assessment

LENLIGHT = Lack of Adequate Enlightenment

ETAX = Ethical of Tax Evasion

μ = Error term

4. REGRESSION RESULTS

Regression results are presented in Table 1a and 1b above. Our results show that economic, administrative among factors are statistically significant at 1% level. There is a positive relationship between tax evasion and taxation and fiscal factors. This result indicates that increases in the tax rate and in the tax burden increase tax evasion. This result supports the studies by Kofar-Wambai and Hanga (2013), Ibadin and Eiya (2013) and Akintoye and Tashie (2013). The result reveal a positive relationship between administrative factors and tax evasion, which is in accordance with the findings by Modugu and Omoye (2014) and Olatunji, Asaolu, Odewoye (2009) and Adebisi and Gbegi (2013). Economic factors have negative and statistically significant effects on tax evasion.

Education also has a negative effect on tax evasion. This finding can be interpreted as indicating that those taxpayers who have less education tend to evade taxes more often than higher-educated taxpayers. With regard to income level, there is a negative effect on tax evasion. As income increases, taxpayers show tax compliance behavior rather than showing tax-evading behavior. As Alm, Jackson, and McKee (1992) note, "Higher income leads to higher compliance".

Table 1a: OLS Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.460[a]	0.212	0.146	0.45662

Source: Author's calculation using SPSS Software

R^2 = 0.212

Table 1b: ANOVA Regression Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.097	9	.677	3.249	.002***
	Residual	22.726	109	.208		
	Total	28.824	118			

Source: Author's calculation using SPSS Software

F = 3.249 (prob. 0.002), *** significant at 1% level

5. CONCLUSION

In many countries, there is an enormous gap between the amount of taxes legally owed and the amount of taxes that taxpayers report and pay. One of the reasons for this gap may be different tendencies in the tax evasion behavior of taxpayers. The results of this study show that taxational and fiscal factors, economic factors, demographic factors, administrative factors, and additional factors are statistically significant for individuals' tax-evasion behavior. These findings may be useful to policy makers and researchers. Specifically, tax authorities should design policies to help increase the income level of taxpayers rather than increasing administrative measures toward taxpayers. This may lead to higher tax compliance in the long run. Our findings contribute to the literature by providing additional evidence on the factors related to tax evasion. However, the data used in this study were collected in only one city. Further studies may be conducted to obtain more supportive evidence by using a multi-city analysis.

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