

## Effect of Economic Determinant Variables on Voluntary Taxpayer Compliance among Self-Employed

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### Abstract

The paper examines the effect of economic determinant variables on voluntary taxpayer compliance among self-employed individuals in Borno State, Nigeria. Survey research design was used in data collection. The paper used a sample of 105 self-employed taxpayers in Borno State, Nigeria who voluntarily comply. They were grouped into Major, Intermediate and Small. The paper discovered that the level of income and the imposition of penalties by the tax authority do not affect voluntary taxpayer compliance in the State. It that compliance would be easily increased if governments simply imposed more severe fines. This, however, is inconsistent with major theoretical and empirical studies. The paper recommends that further research in this area should include more economic variables and consider working with a larger sample by taking the whole of the population of this study and also including the unregistered self-employed individuals in the study area.

**Keywords:** Economic Determinants, Voluntary Tax Compliance, Borno State Self-employed

### Introduction

Tax compliance can be described as the degree to which a taxpayer obliges to tax rules and regulations. James and Alley (2004) indicated that tax compliance concept can be looked at from different perspectives. They defined tax compliance as the willingness of individual and other taxable entities to act in accordance with the tax laws. McBarnet (2003) identifies three forms of compliance, which include committed compliance, capitulative compliance and creative compliance. Committed compliance is the willingness to discharge tax obligations by taxpayer without grumbling. While capitulative compliance is the reluctant in discharging of tax obligations by taxpayer and creative compliance refers to any act by taxpayer aimed at reducing taxes by redefining income and deductible expenditure within the confinement of the law.

Studies have been devoted to the analysis of tax compliance determinants as they are of paramount importance for tax levying, public spending, and providing public goods. Anderhub, Giese, Güth, Hoffmann and Otto (2001) focus on the influence of economic factors (tax rate, audit rate, income, penalty) on compliance behavior. Feld and Frey (2002) focus on the role of trust as a psychological contract between taxpayers and tax authorities.

Braithwaite (2003) identifies five motivational postures (commitment, capitulation, resistance, disengagement, game playing) which shape tax compliance behavior. Torgler (2003) supports the idea that tax morale (the intrinsic motivation to pay taxes), plays a key role in raising tax compliance levels.

Kirchler (2007) provides a thorough description of the determinant variables of tax compliance, dividing them into three categories. His study states that there are socio-psychological determinants comprising attitudes, different types of norms, fairness perceptions, as well as motivational features relating to voluntary tax compliance; political determinants such as complexity of law and tax system, or fiscal policy; and economic determinants like the rational decision-making process and the effect of audit, fine, tax rate and income on tax behavior.

Despite the arrangement put in place through tax system to ensure voluntary compliance with tax rules and regulations, the system is still facing numerous cases of tax noncompliance. Tax noncompliance is the failure of taxpayer to meet tax obligations whether the act is done intentionally or unintentionally (James & Alley, 2004). However, Kirchler (2007) argued that since degree of compliance varies then certain noncompliance might not violate the law.

The growing concern of tax administrators throughout the world is on how to simplify the tax assessment system to encourage voluntary compliance and generate more revenue for the government (World Bank, 2011). Various State governments in Nigeria today are formulating strategies to improve revenue generation to adequately meet the challenges of increasing cost of government expenditure. In order to supplement the amount of revenue generation from the petroleum sector, the collection of income tax from self-employed persons which consist of individuals/sole traders, partnerships, professionals, communities and families still remain a great challenge. Self-employed persons are expected by law to collect Tax Assessment Form from the relevant tax authority and file the correct tax returns to government. If every self-employed person can perform his/her duty of filing tax returns, declaring all taxable income accurately and payment of assessed taxes to government as at when due, the problem of revenue generation will be minimized.

The fall in the revenue accruable to State governments in Nigeria, occasioned by the falling crude oil price, has raised questions about the capacity of state governments at handling the multiplier effects of the fall. This has also raised another question on how the State government seeks to boost the State economy. Contribution from Personal Income Tax (PIT) of self-employed persons and understanding the reasons that derive their decision to

comply remain a key challenge. Increase in the amount of tax revenue through taxpayers compliance will ensure that in the absence of oil, the State would remain self-sufficient and be able to cater for the needs of its people.

This paper examines the effect of economic determinant variables on voluntary taxpayers compliance among self-employed persons in Borno State. To achieve this, the hypothesis “Economic determinant variables have no significant effect on voluntary taxpayer compliance” was formulated. The paper covered voluntary taxpayer compliance among self-employed individuals who were registered with the of Borno State Board of Internal Revenue.

### **Literature Review**

Kirchler (2007) defined tax compliance as the most neutral term to describe taxpayers’ willingness to pay their taxes. Voluntary tax compliance is the ability and willingness of taxpayers to comply with tax laws, declare the correct income in each year and pay the right amount of taxes on time.

McBarnet (2003) suggested tax compliance should be perceived in three ways, namely; Committed compliance (taxpayers’ willingness to pay taxes without complaint); Capitulative compliance (reluctantly giving in and paying taxes); and Creative compliance (engaging to reduce taxes by taking advantage of possibilities to redefine income and deduct expenditures within the bracket of tax laws). Compliance might be voluntary or enforced compliance. Voluntary compliance is made possible by the trust and cooperation ensuing between tax authority and taxpayer and it is the willingness of the taxpayer on his own to comply with tax authority’s directives and regulations. However, in the presence of distrust and lack of cooperation between authority and taxpayer, which creates tax hostile climate, authorities can enforce compliance (Kirchler, 2007). The manner in which taxpayers are treated in the course of the provision of tax service has impact on their compliance behavior (Feld & Frey, 2006).

Torgler (2007) argued taxpayers’ willingness to cooperate with tax authority will increase, if the authority sees itself as service institution and providing quality service and treating the taxpayers as partners. OECD (2007) equally submitted that delivery of quality of service to taxpayers will strengthen their willingness to comply with tax rules and regulation voluntarily as result will contribute to overall level of tax compliance. Tax enforcement aspects like penalties and the probability of detection also relate to tax compliance while other labour market

behaviour factors including an individual's wages and tax bracket also contribute to tax compliance (Kirchler, 2007).

Feld and Frey (2002) have attributed the response of voluntary compliance to a set of intrinsic motivation or attitude often referred to as tax morale. Tax morale emphasizes the taxpayers internal motivations, social norms, personal values, cognitive processes and sense of moral obligation to pay taxes can help to explain the motivation for voluntary tax compliance. Thus positive morale may signal higher voluntary compliance while negative morale will signal lower voluntary compliance.

### **Determinants of Voluntary Taxpayer Compliance**

According to Wang and Conant (1988), generally taxpayers' decisions to comply (or not comply) are determined directly by the complexity of the tax system, taxpayers' confidence in government, taxpayers' perception of fairness of the entire tax system, the social setting and societal norms, the effectiveness of tax authorities, and the effective tax rate to enhance shareholder value. Wang and Conant (1988) concluded that taxpayers' confidence is largely dependent on the efficiency and efficacy of government services, the perceived level of fraud and corruption in the government and whether government is serious in combating fraud and corruption.

Gilligan and Richardson (2005), the tax system that is perceived as unfair by the citizens may likely be less successful and this will encourage the taxpayers to engage in noncompliance behavior. The literature indicates that government regulators can benefit by employing fair procedures, it has been shown that taxpayers are generally more compliant when they think they have been treated fairly by tax authority.

The theoretical and empirical studies reported that tax compliance behavior is as complex as taxpayer's personality (Chan, Troutman, & O'Bryan, 2000; Trivedi, Shehata & Mestelmen, 2004). Determinant variables which influence the decision to voluntarily comply include the socio-psychological determinants (attitudes and norms), political determinants (complexity of law and fiscal policy), and the economic variables (penalty and income). Therefore to increase tax compliance, there is the need to examine the variables which have effect on the individual taxpayer's behavior.

## **Economic Determinants of Tax Compliance**

The classical economic model of tax evasion assumes that audit probability, fines, tax rates and income there are four different determinant variables that shape taxpayers' behaviour. According to the model, tax evasion decreases when audit probability and fines increase, because the expected utility of evasion mitigates as well. As for the other two parameters, their increase leads to ambiguous results concerning compliance. Lin and Yang (2001) also predicts a negative influence of tax rate on compliance provided the taxpayers are able to determine their desired level of compliance.

According to the traditional model of tax compliance, taxpayers choose how much income to report on their tax return by solving a standard expected utility-maximization problem that trades off the tax savings from underreporting true income against the risk of audit and penalties for detected noncompliance (Allingham & Sandmo, 1972). In this framework, both the threat of penalty and audit make people pay their taxes.

Fagbemi, Uadiale and Noah (2010), found that it is prevalent in developing countries and it hinders development thereby leading to economic stagnation and other socio-economic problems. Chipeta (2002) identified tax rates as one of the causes of tax evasion. He pointed out that a higher tax rate increases taxpayers' burden and reduces their disposable income therefore, the probability of evading tax is higher.

According to Anyanfo (1996), Faculty theory states that one should be taxed according to the ability to pay. This is the most popular and commonly accepted principle of equity or justice in taxation in which citizens of a country are expected to pay taxes to the government in accordance with their ability to pay. It appears very reasonable and just that taxes should be levied on the basis of the taxable capacity of an individual. An average individual feels that income should be the basis of measuring a man's ability to pay.

## **Methodology**

Data collection was carried out using survey research design. The paper considered self-employed individuals in Borno State, Nigeria. There were 1250 registered self-employed individuals with the Borno State Board of Internal Revenue who were grouped into Major, Intermediate and Small. Each of these groups have different level of compliance and contribution to the total revenue of the State. The Major group comprising of 200

registered self-employed individuals pay above N100,000 per annum in taxes. 250 registered self-employed individuals constituting the Intermediate group pay between N50,000 and N100,000 per annum in taxes. The remaining 800 registered self-employed individuals categorized as Small pay below N50,000 per annum in taxes.

This study considered only voluntarily complying self-employed individuals within these three groups. Thus 20% of the population of the Major group, 10% of the population of the Intermediate group, and 5% of the population of the Small group are self-employed taxpayers who voluntarily comply within each group in the State. The sample size amounted to a total of one hundred and five (105) respondents, about 8.4% of the population. See Table 1.

**Table 1:** Sampling Frame

GROUP	TAX PAYABLE PER ANNUM	NUMBER OF TAXPAYERS IN EACH GROUP (POPULATION)	COMPLIANCE LEVEL IN PERCENTAGE (%)	COMPLYING INDIVIDUALS (SAMPLE SIZE)	RETRIEVED
Major	Above N100,000	200	20	40	30
Intermediate	N50,000-N100,000	250	10	25	17
Small	Below N50,000	800	5	40	33
Total		1250	35	105	80

**Source:** Field survey, 2015

Questionnaires were administrated to the one hundred and five (105) respondents, out of which eighty (80) were retrieved. The remaining twenty-five (25) respondents in the sample either did not responded to the research instrument or completed the instrument inadequately. The questionnaire design developed by Evans, Carlon and Massey (2005) was adopted. Five-point Likert-style rating scale was employed in collecting the views of respondents. The dependent variable in this study is represented by voluntary taxpayer compliance while the independent variables are represented by socio-psychological determinant (norms and attitude).

### Analysis

Penalty as an economic determinant variable had the highest mean score of 3.31 and standard deviation of 1.176; followed by the influence of tax authority tolerance and lack of punishment on voluntary compliance with a mean of 3.16 and a standard deviation of 1.247; taxpayers' income on compliance with a mean 2.60 of and standard deviation of 1.279; and severity of sanctions with a mean of 2.28 and standard deviation of 1.340

**Table 4.1: Descriptive Frequencies Relating to the Research Variables**

Statements	M	STD	SA	A	U	D	SD	TR
<i>Economic determinants:</i>								
i. The severity of sanctions and penalties ensure voluntary compliance among self-employed persons.	2.28	1.340	30 35.5%	24 30.0%	7 8.8%	12 15.0%	7 8.8%	80 100%
ii. Taxpayers wish not to comply because they feel penalty rates are very low and they can afford to pay the penalty.	3.31	1.176	6 7.5%	15 18.8%	20 22.5%	26 32.5%	13 13.8%	80 100%
iii. If detected not reporting the exact income, the tax authority is tolerant towards such offence and most probably one will escape without punishment.	3.16	1.247	10 12.5%	15 18.8%	18 22.5%	26 32.5%	11 13.8%	80 100%
iv. Financial position (income) is a significant factor that influence taxpayer's decision to deliberately complete tax return inaccurately. Therefore, fail to comply	2.60	1.279	20 25.0%	21 26.3%	16 20.0%	17 21.3%	6 7.5%	80 100%

**Source: Field survey 2015**

Key: M = Mean, STD = Standard deviation, SA = Strongly Agree, A = Agree, U = Undecided, D = Disagree, SD = Strongly Disagree and TR= Total Response

### Test of Hypothesis

The study used a single regression model to test the relationship between voluntary tax compliance and economic factors. The model was depicted thus:

$$VC = \beta_0 + \beta_1 E + \varepsilon$$

Where VC is voluntary compliance

$\beta_0$  is the intercept,

$\beta_1$  is the coefficient of the economic factor

$\beta_0$  is the intercept,  $\beta_1 - \beta_3$  are coefficients and  $\varepsilon$  is the error

E is the Economic factor

$\varepsilon$  is the error

The result of the regression is shown in Table 3. The coefficient Economic determinant (E) is not significantly different from 0 using an alpha level of 0.05 because its P-value of 0.934 is greater than 0.05. The result shows that Economic determinant is not statistically significant in the model, consequently, the hypothesis that economic determinant (E) does not significantly affect voluntary tax compliance is not rejected. This implies that economic determinants (income and penalty) do not significantly affect voluntary taxpayer compliance. Income and Penalty are found not to be determinant factors affecting taxpayers voluntary compliance in the study area.

**Table 4.10: H<sub>02</sub>: Economic determinants have no significant effect on voluntary taxpayer compliance**

Model	b	SE-b	Beta	Sig,
Economic (E)	.563	.442	.622	.934

Source: SPSS Version 20 Outcome

### Discussion of Findings

The result of the hypothesis reveals economic determinants, which is statistically insignificant at 5% with a P-value of 0.934, was not rejected. This explains that income of and imposition of penalty on self-employed persons do not influence voluntarily compliance. Taxpayers choose how much income to report on their tax returns by solving a standard expected utility-maximization problem that trade off the tax savings from underreporting true income against the risk of fines for detected noncompliance. Based on the results predicted by this economic model, one could state that compliance would be easily increased if governments simply imposed more severe fines. Nevertheless, the theoretical and empirical studies departed from this and state that compliance cannot be increased easily by severe sanctions. The identified inconsistencies called for refinements of this model and inclusion of other variables.

### Conclusion

This paper concludes that the level of income of self-employed persons and the imposition of penalties by the tax authority do not affect voluntary taxpayer compliance in the State. It concludes that self-employed persons opt for strategies that yields the highest expected utility under uncertainty conditions, therefore try to evade taxes. This study indicated that, compliance through the willingness of self-employed individuals to pay tax is very important and cannot be ignored. The paper recommends that further research in this area should include more economic variables and consider working with a larger sample by taking the whole of the population of this study and also including the unregistered self-employed individuals in the study area.

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