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### Tax Collection, Utilization Systems and the Performance of Small and Medium Scale Enterprises in Nigeria: A Multivariate Approach

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#### ABSTRACT

In both developed and developing nations, there are a number of empirical studies that had assessed the roles tax revenues play in augmenting economic growth; however, there is a literature gap on what is known about tax collection and utilization system and their effects on small and medium scale enterprises' performance in developing country like Nigeria. In line with the above, this study was carried out with the view to assess the relationships between tax collection and utilization systems and the performance of small and medium scale enterprises in Nigeria. The theories of expediency and benefits received from tax revenues were employed as the theoretical underpinning and the descriptive survey design involving questionnaire was used. A sample of 190 employees and 50 owners of small and medium scale enterprises were employed, hence the study sample comprised of 240 respondents. The dependent variable is small and mediums scale performance (measured by quality of service, profitability and turnover) while the independent variables are tax collection and utilization systems. Data obtained in the survey were analyzed using descriptive statistics (mean, standard deviation, and Karl Pearson correlation); diagnostic statistics (variance inflation factor) and inferential statistics (multivariate regression). In specific, the multivariate regression result indicated that tax collection and utilization systems negatively and significantly affect SMEs performance in areas of quality of service, profitability, and turnover in Nigeria. It was recommended that Nigerian government should put stringent mechanisms aimed at enhancing the collection and utilization of tax revenues and more importantly, multiple tax collections that seek to frustrate small and medium scale enterprises' performance should be adequately addressed.

#### KEYWORDS

tax collection, tax utilization, small and medium scale enterprises, quality of service, profitability, turnover


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### Влияние систем сбора и использования налогов на эффективность малых и средних предприятий в Нигерии: многовариантный подход

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#### АННОТАЦИЯ

Как в развитых, так и в развивающихся странах проводится ряд эмпирических исследований, в которых оценивается роль налоговых поступлений в ускорении экономического роста. Однако существует пробел в литературе о том, что известно о системе сбора и использования налогов, а также их влияния на де-

тельность малых и средних предприятий в развивающихся странах, таких как Нигерия. Данное исследование было проведено с целью оценки влияния систем сбора и использования налогов на эффективность малых и средних предприятий в Нигерии. В качестве теоретического обоснования использовались теории целесообразности и выгоды, получаемой от налоговых поступлений. Дизайн исследования включал анкетирование. Выборка состояла из 190 сотрудников и 50 владельцев малых и средних предприятий, следовательно, выборка исследования состояла из 240 респондентов. Зависимой переменной является производительность малых и средних предприятий (измеряемая качеством обслуживания, прибыльностью и оборотом), а независимыми переменными являются системы сбора и использования налогов. Данные, полученные в ходе опроса, были проанализированы с использованием описательной статистики (среднее значение, стандартное отклонение и корреляция Карла Пирсона); диагностическая статистика (фактор инфляции дисперсии) и статистика вывода (многомерная регрессия). В частности, результат многофакторной регрессии показал, что системы сбора и использования налогов негативно и существенно влияют на показатели малого и среднего предпринимательства в сферах качества обслуживания, прибыльности и товарооборота в Нигерии. Было рекомендовано, чтобы правительство Нигерии создавало строгие механизмы, направленные на повышение сбора и использования налоговых поступлений. Кроме того, следует решить проблему множественности налогов, снижающих эффективность малых и средних предприятий.

#### КЛЮЧЕВЫЕ СЛОВА

собираемость налогов, использование налогов, малые и средние предприятия, качество обслуживания, рентабельность, оборот

### 1. Introduction

In nations where businesses are accorded fair playing grounds, businesses like small and medium scale enterprises (SMEs) and economic successes are well thought-out as almost indistinguishable. SMEs have been hailed as crucial drivers of inclusive globalization and as a major promoter of economic growth.

In Nigeria, the importance of SMEs cannot be overemphasized, for instance, Nsoke et al. [1] observed that the Central Bank of Nigeria (CBN) in collaboration with Federal and State Governments through the Bank of Industry, Microfinance banks, Centers for entrepreneurship developments established different training SMEs centres for those already in existing businesses as well as those starting up new businesses.

Adekola et al. [2] asserted that SMEs are substantial contributors to value creation adding about 60% of value added in Nigeria. Buttressing the role of SMEs in Nigeria & Adeyeye [3] added that SMEs serve as primary source of employment, making up 70% of jobs.

Recently, there are over forty million, sixty-seven thousand, four hundred and

sixteen (40,067,416) SMEs, employing more than 84% of the labour force and contributing 48.47% to Gross Domestic Product (GDP) in Nigeria<sup>1</sup>. Currently, SMEs makeup 90% of enterprises in Nigeria as compared to 53% in the United States and 65% in Europe<sup>2</sup>; given the widespread acknowledgment of the import of SMEs in an economy, one is left to ask why SMEs in Nigeria still struggle to survive and fail to maintain enhanced performance.

Akpubi & Igbekoyi [4] had identified several reasons for the inability of SMEs to survive and maintain enhanced performance to include inadequate knowledge of information and communication technology (ICT), weakness in legal and regulatory framework of SMEs, poor infrastructures, lack of financial incentives and unwillingness of most governments to use tax revenue as building blocks for promoting an enabling business environment for SMEs.

<sup>1</sup> Small and Medium Enterprises Development Agency of Nigeria, 2021; National Bureau of Statistics, 2020.

<sup>2</sup> IFC, 2022.

While most empirical studies such as Oaya & Mambula [5], Adeyeye [3], Ofurum et al. [6], Veiga & McCahery [7] had focused on how ICT, legal/regulatory frameworks, infrastructure and financial incentive affect SMEs' performance in both developed and developing nations, studies are yet to consider if tax collection and utilization systems will affect SMEs' performance (particularly as it concerns quality of service, profitability, and turnover) in Nigeria.

An effective tax structure or system could promote performance of organizations and SMEs inclusive Fu et al. [33]. Heet al. [8] asserted that SMEs that would have rather performed well left the market due to tax-related problems. Ochani & Gamade [9] observed that constraints of diverse taxes have continued to be significant obstacle for SMEs in Nigeria. The tax system is expected to affect how successfully favourably and significantly SMEs may operate in any economy [11]. However, in the Nigerian context, execution of tax laws that aim to create efficient systems of revenue-generation appear to be mostly outside of reality.

Practically gaining information on how tax system affects SMEs' performance in Nigeria, a cross-examination of SMEs owners and employees revealed that due to amount of tax fraud and abuses in Nigeria, SMEs are not getting the benefits they are entitled to get as taxpayers. As a relatively re-occurring problem, due to the tax laws where enterprises are liable to tax in the first operational year, enterprises that produce profits are often liable to several taxes, thus increasing the likelihood of failure of SMEs within the first few years of existence [1]. According to Bradshaw et al. [12], it inhibits investment and raises the likelihood that enterprises would collapse in periods of little or no profits.

Arising from the above, there is the need to find out how tax collection and utilization systems will affect SMEs' performance by adjudging from the perceptions of key players of SMEs.

This study was carried out with the view to assess the relationships between

tax collection and utilization systems and the performance of small and medium scale enterprises in Nigeria. In that light, this paper emphasises on how tax collection and utilization systems will affect three key SMEs' performance metrics-quality of service, profitability and turnover.

In view of the above, the following were hypothesized:

*Ho1:* There is no significant relationship between tax collection and the performance of small and medium scale enterprises.

*Ho2:* There is no significant relationship between tax utilization and the performance of small and medium scale enterprises.

The remaining part of the paper is sectioned as follows in order to realize the study's goal: Review of Related Literature; Methods; Results and Discussions; Conclusion and Recommendations

## 2. Review of Related Literature

### 2.1. Taxation and SMEs Performance

Taxation relates to the determination, collection, supervision and management of tax proceeds. It deals with increasing tax income, controlling government spending, and managing government debt and the main goal of taxes is to finance public goods and services (Olaoye & Atilola [10]).

However, the merits that taxpayers receive from the government are not proportionate to or connected to the taxes paid (Okolo et al. [13]). Taxes are a requirement that cannot be evaded without incurring penalties, and the government makes no promises of reward or compensation to those who pay tax [14]. Tax Law of 2017 made it explicit that taxes are significant sources of government income and tools used by policymakers to promote economic growth.

Furthermore, while taxes are imposed for other purposes, the basic goal of the majority of taxes is to generate income for the government. Therikildsen [14] opined that taxes are now more crucial than ever because they guaranteed social fairness

and stimulating economic growth. In developing countries, stabilizing income and spending is not the primary aim of tax; these nations experience a variety of issues with insufficient capital accumulation and savings, necessitating the promotion of particular goods to close supply and demand gaps.

Taxes decrease consumption, and thus alter the way income is redistributed. Włodarczyk et al. [15] argued that the success of any tax system largely depends on its ability to have an efficient system for collecting and utilizing tax revenues.

Emudainohwo & Ndu [17] showed that tax administrators must ensure that all taxpayers comply with tax obligations as regards tax filing and payment so as to provide a fair level playing round for all businesses.

In contrast, Prichard et al. [19] showed that SMEs bear an inordinate amount of tax burden; hence making SMEs exhibit negative performance.

Atawodi & Ojeka [16] showed that more worrisome is the inability of SMEs to access adequate financial resources to promote their operations, they sometimes fail to file tax returns within the required statutory time, understate income and overstate deductions to aggressively reduce tax returns to the government and in turn to enhance their performance.

Thus, efficient tax collection and utilization systems are imperative to improving tax administration in any given nation (Pope & Abdul Jabbar [18]). In Nigeria, while tax authority has been able to fulfill its role of tax-filing by SMEs, the collection and utilization of tax reve-

nues has been a major problem facing the relevant it. The argument in this paper is whether tax collection and utilization will lead to increased SMEs performance (quality of service, profitability and turnover) in Nigeria. Hence, we conceptualized our model as follows (Figure 1).

## 2.2. Theoretical Underpinnings

The expediency and benefits theories were used in explaining the relationship that exists among tax collection, utilization systems and SMEs performance. Firstly, expediency theory advocates that every tax system needs to satisfy the practicability test which is to ensure that taxes paid should as a matter of fact be done in a convenience and feasible way for the taxpayers. Thus, the impact of a tax system as well as the state's economic and social goals should be viewed as irrelevant when determining how expedient or practical tax collection and utilization systems should be Bhartia [12]. The expediency paradigm thus conforms to the view of SMEs who seek to conveniently pay taxes as their revenue increases.

In a practical sense, SMEs would want to make tax remittance to the relevant tax authorities when they are assured of stable turnover and profitability levels (Bradshaw et al. [20]; Okoro & Egbunike [21]).

This assertion is true because a tax that cannot be assessed and/or collected in the most efficient way is pointless. Second, the benefit theory operates under the presumption that taxpayers and the government have a basic contractual relationship. As argued in Okolo et al. [13] that members of the society get certain

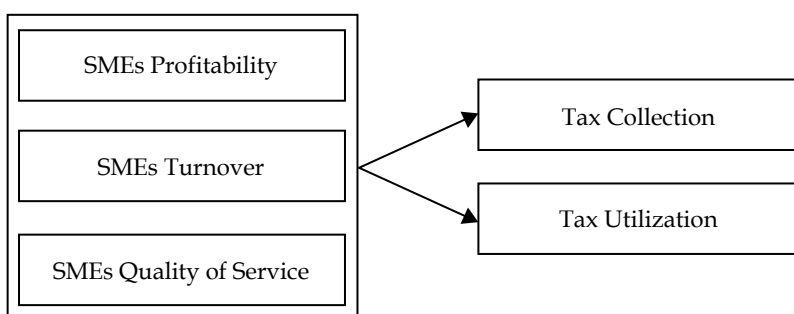


Figure 1. Conceptual Model by the Researcher

services from the government and in exchange for this, taxpayers (SMEs) pay a percentage of the associated costs from their profits.

The choice of complementing the expediency theory with the benefit theory of taxation is that in a realistic scenario, ability of SMEs to pay tax cannot be done in convenience. Fair distributions of wealth and incomes have no place in benefit theory of taxation; instead, benefits received are taken to represent the basis for distributing tax burden in a specific manner. However, Islahi [22] and Okolo et al. [13] argued that taxes should be collected on the basis of benefit received from government. Also, the theory overlooked the possible use of tax policy to establish economic growth or stabilization in a country.

Overall, while there are theories that can be used to describe the relationship between tax collection and utilization and SMEs performance, to the researchers' knowledge, there is lack of empirical studies that had investigated whether tax collection and utilization affect the performance of SMEs in Nigeria; the literature gap which this study has identified and seeks to fill.

### 3. Methods

This study adopted the survey research design in its investigation of tax collection, utilization systems and SMEs performance in Nigeria. The study population comprised of owners and employees of SMEs in Nigeria. There are over forty million, sixty-seven thousand, four hundred and sixteen SMEs and more than 84% of the total labour forces in the country are employees of SMEs.

Thus, we employed the convenience sampling technique in arriving at a sample of two hundred and forty (240) respondents who are owners and employees of SMEs in Delta State of Nigeria; the sample size was made up of fifty (50) SMEs owners and one hundred and ninety (190) employees of SMEs.

The sampled SME owners were those whose activities span across chemical, paint, shoes, apparel, and cosmetics. As a result, 190 employees of the sampled SMEs who partake in the management, marketing and accounting departments were selected.

Questionnaire designed on a 5-point scale of strongly agree, agree, undecided, disagree and strongly disagree was used as data gathering method. The questionnaire was administered on face-to-face basis and to ascertain the dependability of the questionnaire, the Cronbach Alpha reliability test was performed (Table 1).

The result in Table 1 showed that all the independent variables (tax collection and tax utilization) and dependent variables (SMEs profitability, turnover and quality of service) met the minimum threshold for a reliable instrument since they are above 0.7. Given the dependent and independent variables of the study, the multivariate regression model was employed, and the empirical model is given as follows:

$$SMEsPerf = f(Taxcol, Taxutil), \quad (1)$$

Where: *SMEsPerf* is a measure of SMEs profitability (prof), turnover (turn), and quality of service (qalser); *Taxcol* is tax collection system; *Taxutil* is tax utilization system.

Table 1

Reliability of Instrument on Tax Collection, Utilization and SMEs Performance

S/N	Variable(s)	No. of Items	Alpha Coefficient	Factor Loading
1	Tax Collection	3	0.721	0.865
2	Tax Utilization	3	0.835	0.622
3	SMEs Profitability	5	0.751	0.756
4	SMEs Turnover	5	0.711	0.649
5	SMEs Quality of Service	5	0.830	0.689

Source: Computed by the Researcher (2023).

Equation 1 was re-estimated as equation 2 to incorporate the regression coefficients as follows:

$$SMEsPerf_i = \delta_0 + \delta Taxcol_1 + \delta Taxutil_2 + \varepsilon_i \quad (2)$$

Where: *i* represents the individual respondents (SMEs owners and employees);  $\delta_0$ - $\delta_2$  represents the regression coefficients; while *e* represents the error term.

Data obtained in the field survey were analyzed via descriptive statistics (mean, standard deviation and Karl Pearson correlation matrix), diagnostic statistics (variance inflation factor) and inferential statistics (multivariate regression). The statistical analysis was carried out using SPSS 25.0.

#### 4. Results

In Table 2, evaluation of mean and standard deviation of dependent variables (SMEs performance dimensions - PROF, TURN & QALSER) and independent variables (tax collection & utilization systems) were presented.

The results revealed that dimensions of SMEs performance (PROF = 3.2813; TURN = 3.0644; & QALSER = 3.0115),

tax collection and utilization systems (TAXCOL = 3.3534; & TAXUTIL = 3.0158) beat the mean cut-off threshold of 2.5, thus validate the position that tax collection and utilization systems are good indicators for assessing SMEs performance.

Furthermore, the standard deviation values for the variables (tax collection and utilization systems) imply that the respondents' perception on the relationship between tax collection, utilization systems and SMEs performance are not too dispersed from each other and that most probable they share similar views on the research theme.

Presented in Table 3 are the Karl Pearson correlation results of tax collection, utilization systems and SMEs performance. The result showed that all the variables are carrying the negative signs; an indication that there is negative correlation between tax collection, utilization systems and SMEs performance; the results followed a-priori expectation advocated by the expediency theory that taxpayers (SMEs inclusive) seek to make tax remittance on the basis of practicability so as not to have their performance impaired.

Table 2

Results of Measures of Central Tendency and Dispersion

Parameters	Obs.	Mean Value	Standard Deviation
SMEs Profitability (PROF)	240	3.2813	0.4372
SMEs Turnover (TURN)	240	3.0644	0.3578
SMEs Quality of Service (QALSER)	240	3.0115	0.3848
Tax Collection (TAXCOL)	240	3.3534	0.4637
Tax Utilization (TAXUTIL)	240	3.0158	0.5477

Source: Computed by the Researcher (2023).

Table 3

Karl Pearson Correlation Results

Parameters	PROF	TURN	QALSER	TAXCOL	TAXUTIL
Profitability (PROF)	1.0000				
Turnover (TURN)	-0.2573	1.0000			
Quality of Service (QALSER)	-0.1251	0.2312	1.0000		
Tax Collection (TAXCOL)	-0.1146	0.1871	0.2246	1.0000	
Tax Utilization (TAXUTIL)	-0.1132	0.0079	-0.0301	-0.0072	-0.2016

Source: Computed by the Researcher (2023).



Besides, none of the Pearson correlation coefficients exceeded 0.8 as recommended by Gujarati (2003) as cited in Okoro [23]. The result suggests the nonexistence of multicollinearity problem between the pairs of the independent variables of the study.

Table 4 showed the VIF results; the mean VIF (2.0392) is less than the conventional VIF of 10.0. This implies the nonexistence of multicollinearity in the empirical model of tax collection, utilization systems and SMEs performance in Nigeria. Thus, the dataset satisfies one of the axioms of linear regression.

Table 5 showed the multivariate regression result for tax collection (TAXCOL), tax utilization (TAXUTIL), and measures of SMEs performance (PROF, TURN & QALSER). Firstly, R-squared of 0.8031 suggests that tax collection accounts for about 80.3% of the systematic variation in the SMEs performance while tax utilization explained about 76% variation in the SMEs performance. The R-squared results suggest that the independent variables (TAXCOL & QALSER) provide good fit to the empirical model.

Secondly, the  $t$ -values for SMEs profitability ( $t = -4.72$ ), SMEs turnover

( $t = -2.87$ ) and SMEs quality of service ( $t = -2.84$ ) indicated that tax collection and utilization systems negatively and significantly affect SMEs performance in Nigeria. Also, a unit decrease in tax collection and utilization systems will lead to an increase in SMEs performance in Nigeria.

Thirdly, the F-ratios showed that tax collection (F-value = 32.53; p-value = 0.0000) and tax utilization (F-value = 30.77; p-value = 0.0000) were significant at 0.05%, thus providing evidence that there is significant relationship between tax collection and utilization systems and SMEs performance in Nigeria. Hence the null hypothesis was rejected while the alternate hypothesis was accepted; besides, the relationship between tax collection and utilization was found to be negative.

## 5. Discussion

In Nigeria, tax collection has been faced with the problem of non-compliance on the part of taxpayers (Abiahu & Nwaorgu [26]) while on the other hand, the tax so collected by the tax authorities have been inefficiently utilized, thus raising concerns from taxpayers and researchers alike (Egberi & Egberi [27]). Again, tax collection tends to be dispro-

Table 4

### Variance Inflation Factor Results

Parameters	VIF	1/VIF
Tax Collection (TAXCOL)	1.0074	0.9926
Tax Utilization (TAXUTIL)	1.0318	0.9691
Mean VIF	2.0392	

Source: Computed by the Researcher (2023).

Table 5

### Multivariate Regression Results

Equation	Obs.	R-Squared	F-Value	Probability
TAXCOL	240	0.8031	32.53	0.0000
TAXUTIL	240	0.7597	30.77	0.0000
Parameters	Coefficients	T-value	Probability	
PROF	-0.0417	-4.72	0.0000	
TURN	-0.0459	-2.87	0.0001	
QALSER	-0.0032	-2.84	0.0001	
CONSTANT	0.4049	6.49	0.0000	

Source: Computed by the Researcher (2023).

portionately lower for small and medium scale enterprises (SMEs) (Dabla-Norris et al. [28]), perhaps due to the inability by the government to capture all SMEs in the country (Aminu & Shariff [29]).

On the contrary, some empirical studies such as Obert et al. [30], Abiola & Asiwah [31], Monica et al. [32], Kumai [34], Echekeba & Kasie [35] have shown that poor implication of tax policies and its administration on SMEs has been the major problem militating against tax collection and utilization.

In the light of the above, this study used a multivariate approach in investigating whether tax collection and utilization systems significantly affect the performance of SMEs in Nigeria. The study established from the quantitative data that there is significant link between tax collection and utilization systems and SMEs performance in Nigeria. However, the link between tax collection and utilization systems was found to be negative in influencing SMEs performance.

This finding of the study disagrees in part with the results of Oaya et al. [5], Adekola et al. [2], Ofurum et al. [6], Veiga & McCahery [7], Xu et al. [24], Wadesango et al. [25], and do not conform totally with the results of studies on SMEs since there had been no previously established results on whether tax collection and utilization systems affect SMEs performance in Nigeria.

## 6. Conclusion

In this paper, the relationship between tax collection, utilization systems and SMEs performance were assessed for 240 respondents who are SMEs owners and employees in Nigeria. The study was

motivated due to the absence of studies on whether tax collection and utilization systems affect the performance of SMEs.

Thus, the study employed three performance (profitability, turnover, and quality of service – dependent variables) and two tax (collection and utilization systems – independent variables) measures.

Data obtained in the field survey was analyzed via descriptive, diagnostic, and inferential statistics. In specific, the multivariate regression result revealed that tax collection and utilization systems had negative and significant effects on SMEs performance particularly in terms of profitability, turnover and quality of service.

Hence tax collection and utilization could have been a panacea for SMEs performance in Nigeria if the tax administration were proficient and efficient in collection and utilization of tax revenues to promote SMEs operations

Consequent upon the above, it was recommended that Nigerian government should put stringent mechanisms aimed at enhancing collection and utilization of tax revenues and more importantly, multiple tax collections that seek to frustrate SMEs performance should be adequately addressed.

This paper contributes to management literature by testing empirically, the effects of tax collection and utilization systems on SMEs performance in Nigeria. Also, the study contributes to knowledge by showing that tax collection and utilization significantly and negatively affect the performance of SMEs in Nigeria.

Overall, the result of the study can be used by SMEs and government seeking to impact positively on SMEs performance.

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