

KADUNA STATE INTERNAL REVENUE SERVICE SUPERVISION OF REVENUE COLLECTION AS DETERMINANT OF REVENUE GENERATION IN THE STATE

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Abstract

Revenue generation constitutes a critical pillar for effective governance, as it provides the financial resources required for the delivery of public goods and services. At the state level in Nigeria, internally generated revenue largely depends on efficient tax administration and effective supervisory mechanisms. This study examined the effect of supervision of revenue collection by the Kaduna State Internal Revenue Service (KADIRS) on revenue generation in Kaduna State. The objective is to determine the extent to which supervisory activities influence revenue performance in the state. The study adopted a survey research design, targeting 434 staff of KADIRS across the three senatorial districts. Using the Krejcie and Morgan sampling table, a sample size of 260 respondents was selected through cluster sampling. Data were collected through structured questionnaires, with 229 valid responses (88% response rate). Descriptive statistics and Simple Linear Regression analysis were employed using SPSS version 23. Findings revealed a positive and statistically significant effect between supervision of revenue collection and revenue generation. The study rejected the null hypothesis and concluded that effective supervision through periodic performance reviews, target monitoring, training and enforcement mechanisms significantly improves revenue generation in Kaduna State. The study recommends strengthening supervisory mechanism, enhancing continuous training of revenue officers, establishing clear performance benchmarks and minimizing revenue leakages through improved monitoring systems. These measures are essential for optimizing internally generated revenue and supporting sustainable fiscal development in Kaduna State.

Keywords: Supervision, Revenue Collection, Revenue Generation

1.1 Introduction

Revenue generation remains a fundamental responsibility of government at all levels, as it provides the financial backbone for the provision of public goods and services. Government revenue refers to public receipts collected from all legitimate sources to finance public expenditure. Ihimodu (1995) as cited in Obiechina (2010) defines government revenue as income collected by government from all sources, while more recent perspectives such as Mikesell (2022) and Alm (2023) emphasize the diversification of revenue sources in modern economies, particularly in the context of globalization and digital transformation. In Nigeria, Section 162 (10) of the 1999 Constitution defines revenue as any income accruing to government from taxes, investments, interests, dividends, and other statutory sources.

At the state level, revenue generation largely depends on tax and non-tax sources administered by state revenue authorities. In Kaduna State, the responsibility for tax administration and revenue collection lies with the Kaduna State Internal Revenue Service (KADIRS). The state tax system includes Personal Income Tax (PIT), Withholding Tax, Capital Gains Tax, Stamp Duties, Land Use Charge, Presumptive Tax, Road Taxes and other levies as provided under

the Kaduna State Tax Law (2020). Among these, Personal Income Tax—administered through Pay-As-You-Earn (PAYE) and Direct Self-Assessment—constitutes a significant portion of internally generated revenue. The effectiveness of these revenue streams depends not only on the legal framework but also on the efficiency of supervision mechanisms.

Supervision in revenue administration is a critical management function aimed at ensuring compliance with tax laws and minimizing revenue leakages. Scholars such as Ghulam et al. (2011) describe supervision as a supportive and developmental process designed to improve performance, while Ani (2007) views it as a collaborative partnership between supervisors and supervisees. In the context of revenue collection, supervision involves systematic monitoring, tax audits, evaluation of compliance, and enforcement of established procedures. Soemarso (2007) defines supervision of revenue collection as a series of activities undertaken to test compliance with tax obligations in line with statutory provisions. Effective supervision therefore ensures that taxpayers accurately declare income, remit taxes promptly, and comply with relevant regulations.

Empirical studies provide mixed findings on the effect of supervision on revenue generation. For instance, Olatunde et al. (2021) found that desk and field tax audits positively influence revenue generation in Nigeria, while Basrowi (2019) reported that enhanced tax supervision increases taxpayer compliance and revenue. Conversely, Mustapha and Edegware (2017) observed that supervision had no significant impact on productivity in the Edo State Board of Internal Revenue, and Gangl et al. (2014) found no overall positive effect of close supervision on tax compliance in Austria. These divergent findings suggest that the effectiveness of supervision may depend on contextual factors such as institutional capacity, supervisory models, and administrative practices.

Despite the acknowledged importance of supervision in revenue administration, there is limited empirical evidence focusing specifically on the supervisory mechanisms of KADIRS and their direct impact on revenue generation in Kaduna State. While previous studies have examined tax audits, internal controls, and compliance in other states or countries, none has provided a localized and in-depth analysis of how supervision of revenue collection by KADIRS influences internally generated revenue within Kaduna State.

In recent years, Kaduna State has implemented reforms aimed at strengthening tax administration and expanding the revenue base. However, challenges such as weak monitoring systems and inadequate capacity of revenue officers. Ineffective supervision can result in revenue leakages, reduced taxpayer compliance and suboptimal revenue generation. On the other hand, inspectional supervision may create resistance among staff and taxpayers, thereby affecting productivity and compliance.

It is against this backdrop that this study examines the effect of supervision of revenue collection by KADIRS on revenue generation in Kaduna State. By addressing this gap, the study aims to contribute to the discourse on state-level revenue administration and provide empirical evidence that can guide policy decisions for improving revenue generation in Kaduna State.

Research Question

To what extent does KADIRS supervision of revenue collection affect revenue generation in Kaduna state?

1.2 Research Objective

To examine the extent to which KADIRS supervision of revenue collection affect revenue generation in Kaduna state.

1.3 Hypothesis

KADIRS supervision of revenue collection has no significant effect on revenue generation in Kaduna state

2.1 Literature Review

Concept of Revenue Generation

Financial resources of government constitute the bulk of its revenue and this relate to monies mobilized or generated in the economy. Ihimodu (1995) as cited in Obiechina (2010) define government revenue as public receipts, which the government collects from all sources. Recent studies of Mikesell (2022) and Alm (2023), expand on this by highlighting the evolving nature of government revenue in the context of globalization and digital economies. They emphasize that modern governments increasingly rely on a diverse range of revenue sources including taxes, non-tax revenues and innovative financial instruments to sustain public services and fulfill their fiscal responsibilities.

section 5, 162 (10) of 1999 constitution defined revenue as any income or returns accruing to, or derived by the government from any property belonging to government, any return by way of interest on loans and dividends in respect of shares or interest held by the government, in any company or statutory body incidental sources resulting from a particular environment, permissive sources from normal operations and statutory sources recognized by the Nigerian constitution.

Revenue generation is one of the greatest significant actions that government and businesses can involve in. In relation to business, it is defined by Innocent et'al (2020) as a process by which a business strategies how to market and sell its products or services in order to make more money. Government revenue is money government received. Revenue generation according to Chukwunwike et'al (2021) is the use of legitimate mechanisms within the reach of government to cause an inflow of money from all sources approved by the law for the benefit of all citizenry. Sources of revenue available to the Nigerian government may include statutory allocation, income taxes, fees, licensing, and government investment. They also include rent on government properties, grants, and loans from internal and external financial institutions. Musa et al. (2022) define revenue generation as the periodic or annual collection of taxes and other income sources that a nation, state, or public sector gathers for public use. Joy (2022) emphasizes revenue generation as the process through which the government raises funds to fulfill its responsibilities.

Each level of government has distinct sources through which it generate revenue to finance its expenditure. In Nigeria and at national level, government generate revenue from oil and non-oil sources. While oil proceeds covers all income collected from oil and gas doings in the country, non-oil proceeds stares at any income received from sources other than oil and gas activities. At the state level, primarily government revenue is classified as tax and non-tax revenue. These sources of revenue mainly aid to fund education and health care. Although the tax may be a huge part of state revenue, not all states rely on the same sources of income.

In Kaduna state, the following are some of the major sources of revenue as contain in the state Tax Law (2020) personal income tax, withholding tax, capital gain tax, stamp duty and education tax. Others are tenement rate, business premises registration fee, development levy, naming of street fee in the state capital, private schools registration and road taxes.

Supervision of Revenue Collection by other Agencies

Supervision is one of the most important task of the management. The basic function of supervision is to help the organisations to improve in their activities. It is not only visiting the team of employees in organisation and just checking whether the work has been done according to the set plan or not. Ghulam et'al (2011) defined supervision as the process of counseling, sharing and supporting staff to improve their performance in the organization. They went ahead to point out that supervision involved confidential, positive, forward looking, primarily educational and developmental process designed to help the individual to progress. Victor (2011) viewed supervision with negative and positive connotation. The negative view of supervision according to him involve directing, investigating and policing the activities of personnel in the organization. He however positively described supervision as a guide, advise and or even teach the personnel the best way to do the work so as to achieve the required targets.

Supervision is a complex process that must play a prominent function in all revenue administration systems. Ani (2007) viewed supervision as a partnership between supervisors and supervisees, in which both partners are actively involved in the planning and direction taken. He further explained that feedback and guidance are essential components and so it is vital that supervisors provide supervisees with both. In return, supervisees must demonstrate an openness and commitment to the process, along with a strong sense of self-motivation and self-improvement (Ani, 2007).

Supervision of revenue collection is based on standard operational procedures. According to Soemarso (2007), supervision of revenue collection is "a series of activities to find, collect, process data and other information to test compliance with tax obligations and for other purposes in order to implement the provisions of tax laws and regulations". To Kurnia (2010), "tax audit is a supervision of the implementation of a self-assessment system carried out by taxpayers, by adhering to tax laws". The purpose of tax supervision is to test compliance with tax obligations and for other purposes in order to implement the provisions of tax laws and regulations". There are preparatory steps for supervision as the form of activities carried out by the supervising authority before carrying out the inspection action and includes: a) studying the taxpayer file, b) analyzing the tax return and financial statements of the taxpayer, c) identifying the problem, d) conducting taxpayer location recognition, e) determining the scope of the examination, f) compiling the inspection program, g) determining the books and documents to be borrowed, h) providing a means of examination.

Organizing supervision is a series of activities carried out to prepare human resources, systems and facilities and infrastructure needed in the inspection process, namely a) organizing human resources examiners; b) organizing the system to be used; c) organizing the scope and inspection program; d) organizing documents; e) organizing third parties; and e) organizing taxpayers.

According to Basrowi (2019), the higher the supervision, the higher the obedience to pay taxes. Conversely, if the supervision decreases, the obedience to pay taxes also decrease. Logically, when tax supervision and tax collection together increase, the obedience to pay taxes also increase. Conversely, if the tax supervision and tax collection together decrease, the obedience to pay taxes also decrease. Tax supervision affects tax revenue. The higher the tax supervision, the more tax revenue will be. Conversely, the lower the tax supervision, the lower the tax revenue.

While the literature emphasizes the importance and benefits of supervision in revenue collection, there are several counterpoints and criticisms to consider. Supervision according to Victor, (2011) can sometimes be perceived negatively, leading to feelings of being policed or micromanaged among employees. This can result in decreased morale and productivity. Soemarso (2007) pointed that the complex and bureaucratic nature of supervision, particularly in revenue collection, can lead to inefficiencies and slow down the processes it aims to improve. The multiple steps and layers of supervision can be time-consuming and resource-intensive.

In summary, while supervision plays a critical role in enhancing organizational performance and compliance in revenue collection, it must be implemented thoughtfully to balance its benefits with potential drawbacks. Effective supervision requires a combination of appropriate models, competent supervisors, and a flexible approach that adapts to the specific needs of the organization and its employees.

Supervision of Revenue Collection and Revenue Generation

Olatunde et'al (2021) conducted a study on The Impact of Tax Audit Practices on Revenue Generation in Nigeria with the objectives to investigate the relationship between desk tax audit and company income tax in Nigeria; and to determine the relationship between field tax audit and company income tax in Nigeria. They administered 277 questionnaire and use Pearson Product Moment Correlation Coefficient with the aid of Statistical Package for Social Sciences (SPSS) version 23.0 to test the null hypotheses. The findings of the study reveal that desk tax audit and field tax audit have a positive relationship with company income tax. The study therefore, recommends that tax authorities should not concentrate only on desk tax audit but also on field tax audit so that revenue leakages will be blocked and increase the level of tax payers' compliance. Finally, there should be regular tax audit practices by tax authorities in Nigeria. This will assist in increasing government tax revenue. Tax audit is closely related to supervisory role of KADIRS but that does not make the study of Olatunde et'al (2021) similar to this study.

Mustapha and Edegware (2017) assessed Managerial Supervision and Productivity in the Edo State Board of Internal Revenue (2010 – 2012). The objective of their study are to find out the impact of capacity building on tax collection productivity in the Edo State Board of Internal Revenue, to determine whether or not target setting affect the progressive increase in tax collection by Edo State Board of Internal Revenue within the period under study and to determine the extent to which supervision in the Edo State Board of Internal Revenue was responsible for progressive increase in the tax revenue collection in Edo State within the period under study. They adopts Chester Barnard's theory of organization as a cooperative system for the framework of analysis. The work adopt survey research design. The total population was 450 staff of Edo State Board of Internal Revenue out of which 50 sample was drawn. Questionnaires were administered and telephone interview was conducted to complement the responses from the questionnaire. The findings of the study revealed that periodic training of officers in the operations department has widened the scope of tax payers within the tax net in the state; target setting for tax officers particularly in the operations department was a major factor contributory to productivity of officers; and supervision has no significant impact on their productivity. They recommended that Ministries Departments and Agencies of government particularly Edo State Board of internal Revenue should organize more intensive trainings for its staff; target setting in the real sense of the word should be part of public service tradition in Nigeria, meeting the target should be rewarded and there must be consequence for poor performance; and the orientation of the public service should also start changing to seeing all the workers as members of the same team working together to achieve organizational goals

with one person being the team leader or the coordinator, a scenario like this will make everybody feel important to the achievement of the organizational goal.

Gangl et al (2014) investigated the “effects of supervision on tax compliance: Evidence from a field experiment in Austria”. Their study aimed at examining effect of tax authorities’ supervision on timely tax payments is examined. Interestingly, results show no positive overall effect of close supervision on tax compliance.

Basrowi (2019) conducted the study on “The Effect of Tax Supervision and Tax Collection on Obedience to Pay Taxes and Tax Revenue”. The study aimed to know the effect of supervision and collection of taxes on compliance with taxpayers both partial and simultaneous and its implications for tax revenue. The study utilized secondary panel data from previous studies conducted at the Provincial Pratama Tax office with initials A and B. Based on the result of the analysis of data, the study found that the dimensions of tax supervision have a positive and significant influence on taxpayer compliance; dimensions of tax collection have a positive and significant influence on taxpayer compliance; dimensions of tax supervision proved to have a significant effect on tax revenues; and dimensions of taxpayer compliance have a positive and significant influence on tax revenue. The study recommended that the Tax Directorate should always increase the compliance of Taxpayers through upgrade supervision or add supervision division or increase scope of supervision.

Geographically, none of the studies specifically focus on Kaduna State or the operations of KADIRS; on institutional context, the unique operational and supervisory mechanisms of KADIRS are not covered; analytically, there is lack of studies examining the direct impact of KADIRS’s supervisory activities on revenue generation; and methodologically, existing studies use a variety of methods, but there is a need for localized, primary data collection specific to KADIRS's supervisory role. This study address a significant gap by focusing on the specific supervisory mechanisms of KADIRS and their direct effect on revenue generation in Kaduna State. This study provide localized insights using primary and secondary data collection methods, contributing new knowledge to the field of state-level revenue generation and supervision in Nigeria.

3.1 Methodology

This part consists of methodology adopted to collect, present and analyse data to arrive at logical conclusion. The study adopted survey design which involves collecting data through questionnaire from sample of population and generalize the finding. The targeted population of the study are the entire staff of Kaduna State Internal Revenue Service (KADIRS) across 3 senatorial districts in the state which stood at 434 according to KADIRS Human Resources Department (2023). The study used Krejcie and Morgan table to determine sample size and arrived at 217. The researcher adhered to the suggestion of Adam (2021) by adding 20% of the sample size to reduce the incorrect filling of questionnaire and accommodate non-return questionnaires. By adding 20% to 217, the sample is now 260. The study employ cluster method of sampling. The collected data were analyzed using both descriptive and inferential statistical methods. Simple Linear Regressions statistical technique was used in this study with the aid of the Statistical Package for Social Sciences (SPSS) version 23, and inference was drawn based on the results. Thus, the model is specified as follows: $RG = \beta_0 + \beta SRC + u_i$ Where, RG = Revenue Generation, SRC = Supervision of Revenue Collection by other agencies and U_i = Gaussian stochastic term with white noise.

The independent variable - supervision of revenue collection by other agencies is measured as (a) improving revenue generation effort of other MDAs, (b) periodic performance review, (c)

ensuring that MDAs remit exact targeted amount, (d) assessing training need, and (e) providing continuous training. The measurement for dependent variable of the study which is revenue generation is measured in terms of (a) gap in the annual revenue generation, (b) potentiality to improve performance (c) revenue sources, and (d) improvement in revenue generation.

4.1 Results and Discussion

This part presents and analysed statistical data collected from the field to draw a valid conclusion based on the responses obtained from various respondents. The analysis was performed using Statistical Package for Social Sciences (SPSS) version 23. Before presenting main result, the researcher first conducted descriptive statistical analysis and other preliminary analysis such as coefficient of determination, autocorrelation test, f-statistics then regression coefficient.

Response Rate

A total of 260 questionnaires were administered to the staff of KADIRS. Out of these questionnaires, 229 were filled and returned representing 88% response rate. The questionnaires were administered with the help of KADIRS P.R.O. Being P.R.O. is the part of the organization, the study obtained a high response rate. Table 4.1 provide the response rate of the questionnaires.

Table 4.1: Response Rate

Questionnaire	Frequency	Rate (%)
Distributed questionnaires	260	100
Unreturned questionnaires	31	12
Returned questionnaires	229	88

Source: Researcher's computation (2024)

Table 4.1 shows the response rate of the study was 88% out of 100%, this response rate is considered adequate for analysis in this study. According to Babbie (2007), 50% response rate is considered adequate for data analysis and reporting, where as 60% is good and 70% is very good. Therefore this study's response rate is considered as very good because it is even greater than 70%.

Table 4.2: Responses on Supervision of Revenue Collection by other Agencies

SS/N	STATEMENT	LEVEL OF AGREEMENT				
		SD	D	U	A	SA
1	KADIRS supervision could improve revenue generation effort of other agencies	8 (3.6%)	1 (0.4%)	5 (2.2%)	152 (67.6%)	59 (26.2%)
2	Performance review could enhance revenue collection by other agencies	4 (1.8%)	2 (0.9%)	19 (8.4%)	83 (36.9%)	117 (52%)
3	Agencies remit exact targeted amount	1 (0.4%)	3 (1.3%)	36 (16%)	125 (55.6%)	60 (26.7%)
4	Staff of revenue generation agencies have required training	3 (1.3%)	3 (1.3%)	13 (5.8%)	112 (50%)	93 (41.5%)
5	Staff of revenue collection MDAs received continuous training	3 (1.3%)	-	6 (2.7%)	123 (53.7%)	93 (40.6%)

Source: Researcher's SPSS Output (2024)

From Table 4.2, responses on question number 1 shows that out of 229 respondents, 8 respondents constituting 3.6% of total respondents strongly disagree, 1 respondent constituting 0.4% of total respondents disagree, 5 respondents that represent 2.2% of total respondents undecided, 152 respondents constituting 67.6% of total respondents agree and 59 respondents that constitute 26.2% of total respondents strongly agree that KADIRS supervision could improve revenue generation effort of other agencies.

Responses on question number 2 shows that out of 229 respondents, 4 respondents constituting 1.8% of total respondents strongly disagree, 2 respondent constituting 0.9% of total respondents disagree, 19 respondents that represent 8.4% of total respondents undecided, 83 respondents constituting 36.9% of total respondents agree and 117 respondents that constitute 52% of total respondents strongly agree that performance review could enhance revenue collection by other agencies.

Responses on question number 3 shows that out of 229 respondents, 1 respondents constituting 0.4% of total respondents strongly disagree, 3 respondent constituting 1.3% of total respondents disagree, 36 respondents that represent 16% of total respondents undecided, 125 respondents constituting 55.6% of total respondents agree and 60 respondents that constitute 26.7% of total respondents strongly agree that MDAs remit exact targeted amount.

Responses on question number 4 shows that out of 229 respondents, 3 respondents constituting 1.3% of total respondents strongly disagree, 3 respondent constituting 1.3% of total respondents disagree, 13 respondents that represent 5.8% of total respondents undecided, 112 respondents constituting 50% of total respondents agree and 93 respondents that constitute 41.5% of total respondents strongly agree that staff of revenue generation agencies have required training.

Responses on question number 5 shows that out of 229 respondents, 3 respondents constituting 1.3% of total respondents strongly disagree, 6 respondent constituting 2.7% of total respondents undecided, 232 respondents constituting 54.7% of total respondents agree and 93 respondents that constitute 41.3% of total respondents strongly agree that training of staff could enhance revenue collection.

The analysis indicates that oversight mechanisms play a crucial role in ensuring efficiency of agencies supervised by KADIRS. Strengthening this could enhance revenue generation.

Table 4.3: Responses on Revenue Generation

S/N	Statement	Level of agreement				
		SD	D	U	A	SA
1	There is gap in the annual revenue generation	7 (3.1%)	5 (2.2%)	13 (5.8%)	141 (62.7%)	59 (26.2%)
2	KADIRS has potentiality to improve its performance	2 (0.9%)	6 (2.7%)	7 (3.1%)	74 (32.9%)	136 (60.4%)
3	The revenue sources are not adequately harnessed	3 (1.3%)	1 (0.4%)	69 (30.7%)	88 (39.1%)	64 (28.4%)
4	KADIRS improve revenue generation in the state	4 (1.7%)	4 (1.7%)	7 (3.1%)	98 (43.8%)	111 (49.6%)

Source: Researcher's SPSS Output (2024)

From Table 4.3, responses on question number 1 shows that out of 229 respondents, 7 respondents constituting 3.1% of total respondents strongly disagree, 5 respondent constituting 2.2% of total respondents disagree, 13 respondents that represent 5.8% of total respondents undecided, 141 respondents constituting 62.7% of total respondents agree and 59 respondents that constitute 26.2% of total respondents strongly agree that there is gap in the annual revenue generation.

Responses on question number 2 shows that out of 229 respondents, 2 respondents constituting 0.9% of total respondents strongly disagree, 6 respondent constituting 2.7% of total respondents disagree, 7 respondents that represent 3.1% of total respondents undecided, 74 respondents constituting 32.9% of total respondents agree and 136 respondents that constitute 60.4% of total respondents strongly agree that KADIRS has potentiality to improve its performance.

Responses on question number 3 shows that out of 229 respondents, 3 respondents constituting 1.3% of total respondents strongly disagree, 1 respondent constituting 0.4% of total respondents disagree, 69 respondents that represent 30.7% of total respondents undecided, 88 respondents constituting 39.1% of total respondents agree and 64 respondents that constitute 28.4% of total respondents strongly agree that the revenue sources are not adequately harnessed.

Responses on question number 4 shows that out of 229 respondents, 4 respondents constituting 1.8% of total respondents strongly disagree, 4 respondent constituting 1.8% of total respondents disagree, 7 respondents that represent 3.1% of total respondents undecided, 98 respondents constituting 43.8% of total respondents agree and 111 respondents that constitute 49.6% of total respondents strongly agree that KADIRS improve revenue generation in the state.

The responses suggests that there are untapped revenue sources that could be explored to enhance revenue performance. There is also indication of strong confidence in the agency's ability to enhance its revenue. While challenges exist, KADIRS has made significant strides in enhancing revenue. However, there is room for improvement in harnessing revenue sources and addressing the existing gaps in annual revenue generation.

Coefficient of Determination

The coefficient of determination is assessed in order to evaluate the amount of variance explained by independent variables on dependent variable.

Table 4.4: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.494 ^a	0.244	0.227	0.58414	1.621

Source: Researcher's SPSS Output, 2024

d. Predictors: (Constant), Supervision of Revenue Collection.

e. Dependent Variable: Revenue Generation

Table 4.4 shows that Supervision of Revenue Collection explain 24% variance in revenue generation. Hair et'al (2011) pointed that R² values of 75%, 50% and 25% to be considered substantial, moderate and weak respectively. However, Ozili (2023) categorises R-Square as

negative, low and acceptable. He explained that linear model that reports a negative R-Squared should be rejected because the model shows that the explanatory variables do not predict the changes in the dependent variable; R-squared between 0 and 0.09 (0% to 9%) is too low for an empirical model in social science research and this range of R-squared is not acceptable so it should be rejected; R-squared that is between 0.10 and 0.50 (10% to 50%) is acceptable only under the condition that some or most of the explanatory variables are statistically significant; and R-squared between 0.50 to 0.99 is acceptable especially when most of the explanatory variables are statistically significant.

In line with the view of Ozili (2023), the R-Square value explained by independent variables on revenue generation which stood at 24% is acceptable because it is within the acceptance range of 10-50% and four out of five explanatory variables are statistically significant (see table 4.4) which fulfill the condition for the acceptance of R-Square within this range.

Auto Correlation Test

Another requirement of linear regression is the assumption of no auto correlation of the error terms. Norusis (1995) opined that Durbin-Watson can be used to test the independence of error terms. He further explained that the general rule of thumb is that if the Durbin-Watson value is between 1.5 and 2.5, the assumption of independence of the terms is not violated. The result revealed that Durbin Watson coefficient stood at 1.621 as shown in Table 4.4 which falls within the benchmark. This indicates the absence of harmful serial correlation. Therefore, this fulfils one of the assumptions of linear regression.

F-Statistics

Table 4.5: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.018	5	4.804	14.078	.000 ^b
Residual	74.385	218	0.341		
Total	98.404	223			

Source: Researcher's SPSS Output, 2024

- Dependent Variable: Revenue Generation
- Predictors: (Constant), Supervision of Revenue Collection.

Table 4.5 shows the F statistics which stood at 14.078 having a p-value of 0.000 which is less than 0.05 indicating that it is significant at 95% confidence level. This implies that the model is fit and the variables are not wrongly selected. Hence, we can proceed with the regression analysis.

Regression Coefficient

Table 4.6: Coefficient^a

VARIABLE	B	Std. Error	Beta	T-VALUE	P-VALUE	DECISION
(Constant)	1.475	0.405		3.643	0.000	
H ₀ Supervision of Revenue Col	0.203	0.096	0.132	2.109	0.036	Significant

a. Dependent Variable: Revenue Generation

Source: Researcher's SPSS Output, 2024

Discussion

The hypothesis posits that supervision of revenue collection has no significant effect on revenue generation in Kaduna state. However, the study results challenge this hypothesis. The coefficient of “supervision of revenue collection” stood at 0.203 which is positive. This implies that effective supervision of revenue collection could lead to an increase revenue generation. However, the significance of this can be judged from the t statistics and its significance. The t statistics of “supervision of revenue collection” stood at 2.109 with a p-value of 0.036, indicating that the relationship depicted in the model is significant at 95% confidence level. This implies that there is no enough statistical evidence to accept the null hypothesis. Based on the above analyses, the study reject the null hypothesis which states that “supervision of revenue collection has no significant effect on revenue generation in Kaduna state” and accept its alternate. This finding revealed that supervision of revenue collection has significant effect on revenue generation in Kaduna state.

The finding also align with the findings of Mustapha and Edegware (2017), Olatunde et al. (2021) and Basrowi (2019). The study of Mustapha and Edegware (2017) revealed that periodic training for tax officers and setting targets significantly enhanced tax collection productivity in Edo State. This aligns with the current study's findings, suggesting that similar mechanisms could improve revenue generation in Kaduna State. The work of Olatunde et al. (2021) found a positive relationship between both desk and field tax audits and company income tax. Although focused on tax audits, the principles of supervision and thorough oversight are comparable to those in the current study. Research conducted by **Basrowi (2019)** demonstrated that supervision positively influenced taxpayer compliance and revenue generation. This supports the finding that enhanced supervision can lead to higher revenue generation. These findings support the need for continuous and targeted supervisory measures to optimize revenue collection processes in Kaduna State.

The implications of the finding is that effective supervision by KADIRS through training, target setting, and periodic reviews, plays a crucial role in improving revenue collection and this can enhance revenue generation by improving compliance and reducing leakages.

5.1 Conclusion and Recommendation

In view of the data presented and analysed as well as the test of hypothesis, the finding of this study have considerable implication on unmet expectations of government desire to realized more revenue at its purse for carrying out its responsibilities of delivering required services to the public. It is therefore recommend to strengthen the mechanisms of supervision of revenue collection. This can be achieve through implementing periodic performance reviews of revenue collection agencies to identify areas for improvement; establishing clear and achievable targets for revenue collection agencies and monitor progress regularly; taking measures to minimize leakages in revenue collection processes, such as improving internal controls and reducing opportunities for corruption; and provide continuous training and development opportunities for the staff of revenue collection agencies to enhance their skills and performance.

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