

Electronic Tax System and Tax Compliance Behavior of SMEs in Abia and Akwa Ibom States.

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ABSTRACT

This study on the effect of electronic tax system on tax compliance behavior of SMEs in Abia State and Akwa Ibom State. The study was conducted through questionnaire administered to 55 respondents from Federal Inland revenue Service (FIRS) in Abia and Akwa Ibom States. The independent variable is electronic tax system and it is measured using E-tax registration, E-filing E-payment system and government support. While the dependent variable is tax compliance behavior. The data collected were analyzed using ordinary least square multiple regression analysis. The findings revealed that E-tax registration has a significant effect on tax compliance-filing significantly influence compliance. Government support has a significant impact on compliance, however E-payment has no significant impact on compliance. Therefore the study concludes that electronic tax system significantly affects tax compliance behavior of SMEs in Abia and Akwa Ibom State. The study therefore recommends that since E-tax registration has a significant effect on tax compliance, tax authorities should continue to improve the accessibility, reliability and user friendliness on online tax registration platforms. This will encourage more SMEs to register and comply with tax regulations. Finally, since government support significantly impacts tax compliance, governments should provide adequate taxpayer education, technical assistance, responsive customer support, and incentives for the adoption of electronic tax systems. Such support will enhance taxpayers' confidence and willingness to comply with tax obligations.

Keywords: SMEs, E-tax registration, E-Filings, Tax compliance, Tax Authorities.

INTRODUCTION

The adoption of electronic tax system (e-tax) has transferred tax administration globally. Government in various stages now use digital platforms to enhance efficiency, transparency and revenue collection. According to Mustahaeetal(2015) the level of success that has been recorded in the use of information technology for tax administration, which has improved the variety and quality of tax services being provided to tax payers is of good standard.

In Nigeria agencies like the federal Inland Revenue services (FIRS) have introduced electronic system such as e-filing e-payment and tax identification number (TIN) registration. These innovations are expected to simplify tax processes and improved compliance among taxpayers particularly small and medium enterprises (SMEs). E-tax system is a technological situation which points taxpayers to electronically file their tax returns, make tax payment and receive e tax refunds as it partners to a web based platform that facilitates taxpayers access to all the series by monitoring authority. The aforementioned service encompasses the process of obtaining a personnel identification number submitting tax returns and soliciting a compliance certificate. E-Tax provides various advantages over conventional tax collection techniques such as enhanced efficiency, reduced cost and minimized errors in collecting tax. The online tax submission offers tax payer with a convenient method of filling tax forms and paying tax online, Adegbola et al(2021),

In the word of David (2014) e-tax is defined as a system that is designed and launched by revenue authority which provides electronic platform for tax payers to access tax services with the use of computers and internet facilities,

in Nigeria the use of information technology for tax administration dated back to 2017 and the online tax system, states with online tax registration, online filing online tax assessment online tax payment, online receipt and online tax clearance certificate, Pemu(2017).

The implantation of digital tax system is increasingly seen to address the persistent issue of tax evasion and underreporting with the informal economy, Adeleke(2024). These digital platform aim to simplify the tax filling process improve record-keeping and increase transparency they by encouraging voluntary compliance among informal sector participant despite this digital administration, it effectiveness in enhancing tax compliance with the informal sector remain in doubt, Oladipo&Adekunle(2021). SMEs play an important role in the economic growth in Nigeria commercial hub. These enterprises contribute to job creation innovation and economic diversification. PWC (2020). However despite their economic significance , SMEs are often face with challenges related to tax compliance, steaming from factor such as limited resource, administration compliance and inadequate awareness of tax laws, incepting revenue generation and hindering government ability to provide essential service, in all the introduction of e-tax system holds promise for enhancing tax compliance and streaming tax filling process among SMEs, Lummuba etal(2010) the introduction of e-tax system is expected to address these challenges yet compliance behavior among SMEs in the south -south region various inconsistent, according to Chisala(2020) element affecting the ETax differs between nations owing to the peculiarities of their economy, implementation, method and other factors, In Nigeria and south -south in particularly, decisions are influence by social factors such as family and friends making social inference, another important difference of E-tax adaptation is trust in the system which can be imparted by concern about internet fraud and scam as well as inefficient network infrastructure is another major factor influencing E-tax system. Awareness about the system also plays a considerable role influencing adoption among SMEs salawu(2025)

This study examined e-taxation system and tax compliance behavior of SMEs in Abia State and Akwa ibow. The paper is detailed as follows section two detail literature review and theoretical frame work section three discuss the details and research methods adopted to achieve the research objective. Section four present result and discussion of findings, while section five concludes and make recommendation based on the research findings.

Statement of Problem

The implementation of electronic tax system in Nigeria aims to improve tax collection and compliance through increase efficiency, cost serving and reduce error. Introduction of technology into the system brings benefit the effectiveness of electronic tax system is enhancing efficiency and compliance. Despite the introduction of electronic tax system in Abia and Awka ibom states many SMEs still evade or avoid tax compliance level remain low and also digital platform underutilizes.

Objectives of the Study

The main objective is to examine the effect of electronic tax systems on tax compliance behavior of SMEs in Abia and Akwa Ibom States.

Specific objectives are to:

1. Examine the effect of e-tax registration on tax compliance
2. Determine the impact of e-filing on compliance behavior
3. Assess the influence of e-payment systems on compliance
4. Evaluate challenges affecting e-tax adoption

Research Questions

1. How does e-tax registration affect SME compliance?
2. What is the effect of e-filing on compliance behavior?
3. Does e-payment enhance tax compliance?
4. What challenges hinder e-tax adoption?

Research Hypotheses

H01: E-tax registration has no significant effect on tax compliance

H02: E-filing does not significantly influence compliance

H03: E-payment has no significant impact on compliance

Ho4: Government support has no significant impact on compliance.

LITERATURE REVIEW

Conceptual Review

The conceptual framework for this study explains the relationship between the electronic tax system and tax compliance behavior among Small and Medium Enterprises (SMEs) in Abia and Akwa Ibom States. The framework identifies key dimensions of the electronic tax system as independent variables and links them to tax compliance behavior as the dependent variable. It also acknowledges the role of intervening factors such as technological literacy, infrastructure, and taxpayer awareness.

Concept of Electronic Tax System

An electronic tax system (e-tax system) refers to the use of digital platforms provided by tax authorities to facilitate tax administration processes, including registration, filing, and payment of taxes. In Nigeria, agencies such as the Federal Inland Revenue Service have deployed electronic systems (e.g., TaxPro Max) to modernize tax administration and improve efficiency.

The e-tax system eliminates the need for physical interaction between taxpayers and tax officials, thereby reducing administrative bottlenecks, minimizing corruption, and enhancing transparency. It also allows real-time processing of tax transactions and improves record-keeping.

For the purpose of this study, the electronic tax system is operationalized into three key components:

(i) E-Tax Registration (ETR)

E-tax registration refers to the process through which SMEs register electronically with tax authorities to obtain a Tax Identification Number (TIN). It simplifies the onboarding process and ensures that businesses are properly captured in the tax database.

Efficient e-registration systems are expected to increase the number of registered taxpayers and promote voluntary compliance.

(ii) E-Filing (EFL)

E-filing involves the online submission of tax returns by taxpayers through digital platforms. It replaces manual filing procedures and reduces errors associated with paperwork.

E-filing enhances convenience, saves time, and improves accuracy in tax reporting, thereby encouraging compliance.

(iii) E-Payment (EPM)

E-payment refers to the electronic remittance of tax liabilities using digital payment channels such as online banking, debit cards, and mobile payment systems.

This component ensures timely payment of taxes and reduces delays caused by traditional payment methods.

Concept of Tax Compliance Behavior

Tax compliance behavior refers to the extent to which taxpayers adhere to tax laws and regulations. It includes:

- Timely registration with tax authorities
- Accurate reporting of income
- Prompt filing of tax returns
- Timely payment of tax liabilities

Compliance behavior among SMEs is influenced by both economic and behavioral factors, including perceived fairness of the tax system, ease of compliance, and trust in government institutions. Tax compliance is defined as the adherence to tax laws and regulation by accurately reporting income, expenses and other filling details the relevant tax authorities, Paojen etal(2023) it involves timely filling of tax returns and correct payment of taxes due. Tax compliance in the view of filling tax obligation. Tax compliance is describe as the process to fulfilling the tax payers civil obligation for payment and filling of tax returns including the provision of necessary document and explanations required by the tax authority in timely manner, Oyedele(2009). In the world of Alm(2019) he said that tax compliance can be divided into two main categories, voluntary compliance , where tax payers willing follow tax laws and enforced compliance driven by the fear of legal consequences and audits. To improve tax compliance government use strategies such as simplifying tax regulation enhancing tax payer service and boosting the perceived and transparency of the system. According to Muiyiwa(2025) tax compliance is influenced by various futures such as economic condition the complexity of tax laws enforcement measure and perceptions of fairness in the tax system. Abdulrasaq(2024) is of the option that intrinsic nutrition's such as fear of audit, fine and legal consequences affect tax compliance. In this study tax compliance is defined as abiding to the laws in taxation, including timely and proper reporting among entities and individual as at when due.

Link between E-Tax System and Tax Compliance

The adoption of electronic tax systems is expected to positively influence tax compliance behavior among SMEs. This relationship is based on the premise that digital systems:

- Reduce compliance costs
- Simplify tax procedures
- Improve accessibility to tax services
- Enhance transparency and accountability

When SMEs perceive the e-tax system as easy to use and beneficial, they are more likely to comply with tax obligations. Conversely, challenges such as poor internet connectivity and low digital literacy may weaken this relationship.

Empirical review

Bojuwon et al (2021) investigated E-Tax filling management system on tax compliance behavior in Nigeria. The study focused on those who have adopted the system. A total of 5000 taxpayers who actually use e-filling system in Nigeria, while a 400 respondent were randomly selected. The data collected were analyzed using SPSS statistical package. The result showed that most of the respondents are aware that integrated system was effective for the increscent in the level of tax compliance level in Nigeria.

Ihenyen et al(2025) instigated the relationship between small business owners compliance behavior and their tax knowledge in Bayelse state. The study made us of survey research design, and focused on 548,049 SMEs structured questionnaire were used to collect data and a sample size of 400 respondent were used, the result of the study showed that tax knowledge and compliance were strongly positively correlated. The study went further to find out that small business none compliance is significantly improved by having more tax knowledge in other to promote voluntary compliance and revenue generation.

Muiyiwa et al (2025) worked on evaluating the effect of electronic tax system on tax compliance within Nigeria informal sector. The study employed a survey research design using well-structured questioner to collect primary

data from artisan's street vendors and small scale traders. Total of 700 questionnaires were distributed and 651 were returned. Data was analyzed using descriptive statistics, the finding of the study is that electronic system including electronic tax filing, billing and payment had a positive and significant impact on tax compliance.

Ihenyena et al. (2024) worked on electronic tax system and tax compliance, evidence from Nigeria tax jurisdiction. The study made use of 100 respondents randomly drawn from SMEs in Bayelsa & Delta state, Nigeria. The proxies for the e-tax system were user-friendliness, convince and perceived reduced tax submission cost. The data were collected and submitted to a Cronbach's alpha test of dependability. The study concludes that user-friendly online interface and convenience of e-tax system substantially impact tax compliance among taxpayers.

Smith et al. (2023) used a robust mixed method approach in the United States, combining qualitative survey data and qualitative interviews. This dual approach allowed for a comparative understanding. Their findings show significant challenges including concerns about data security and familiarity with technology which may limit broader adoption.

Chen & Wu (2022) carried out a quasi-experimental study in China that demonstrated an increase in compliance rate post implementation of electronic filing system. Their work showed that there is improved accuracy and reduced tax evasion.

Garcia & Rodriguez (2022) did a cross-section survey in Mexico with a focus on SMEs using stratified random sampling and regression. The result shows a significant compliance behavior and the influence of electronic filing adoption.

Akpabi & Igbekoyi (2019) assessed the effect of level of awareness on electronic tax on tax compliance by small and medium scale enterprises (SMEs) in Lagos state; it also examined the effect of perceived ease of use on tax compliance and determined the effect of electronic tax filing system cost on tax compliance among SMEs in Lagos state. This was done with a view to determine the effect of electronic tax filing system on tax compliance among SMEs in Lagos state, Nigeria. The study employed the survey research design. Data were collected from primary sources through the use of structured questionnaire distributed to the SMEs at their place of work. The population of the study consists of nine hundred and fifty (950) small and medium scale enterprises in Lagos state in the fast food restaurants sub sector. A sample size of two hundred and eighty-one was selected using the Taro Yamane formula. Data collected were analyzed using descriptive statistics, structural equation model analysis and regression. Analysis of the study revealed that level of awareness showed significant positive relationship with tax compliance. It was also revealed that perceived ease of use has a positive effect on tax compliance but was statically non-significant. The tax compliance cost showed a non-significant negative effect on tax compliance.

Saptono et al. (2023) explored how technological factors influence certified tax professionals' intent to obey tax regulations. Their framework integrates convenience and reduced adherence costs as proxies of tax submission intent, with fulfillment as a moderator. Analyzing data from 650 e-filing and 492 e-form users through hierarchical multiple regression, the study found that quality of service and reduced costs positively impact submission intents, with fulfillment playing a crucial mediating role. The results

Chiamaka et al. (2021) explored the impact of computerized tax filing on Nigeria's domestic revenue generation, in Ebonyi State. They assessed digital tax compliance—registration, returns, and payments—through a quantitative survey of 94 out of 124 qualified respondents. The study, based on the expediency theory of taxation and the technology acceptance model, found that online tax registration and return filing significantly boost revenue, while online payments do not. The research recommends adopting a user-friendly electronic tax system to improve the tax filing and payment process.

Oladele et al. (2020) explored the implication of e-tax systems on tax compliance and revenue. Using quantitative methods and data from the Federal Inland Revenue Service, they analyzed tax revenue before and after the implementation of e-tax in 2013. The study applied a pairwise t-test, revealing a significant increase in tax revenue from an average of N3,051,200.00 pre-e tax to N4,466,828.57 post-e-tax, with an annual increase of N1.4 trillion. The findings show a strong correlation between e-tax systems and improved tax submission. The

study recommends enhancing ICT infrastructure and security protocols to further boost taxpayer engagement and protect against cyber risks.

Augustine and Akintoye (2019) examined the influence of Government Transparency (GTRP) on individual taxpayers' voluntary tax compliance (VTC) behavior in Nigeria. Survey design was used with focus on South-West, Nigeria. Population was 5,216,422 registered taxpayers while a sample size of 1,200 was used to collect data with a validated questionnaire. The study used descriptive and inferential statistics to analyze data at 5% significance level. The Result of the study showed that trust from government, government's transparency and employment status have significant relationship with voluntary tax compliance behavior while gender, age and educational level do not have significant relationships with voluntary tax compliance.

Okpeyoba, Musahb and Gakpetor (2019) examined the factors that influence tax compliance by small and medium tax payers, the difference in the level of compliance between small and medium tax payers and strategies to improve tax compliance in Ghana. The study adopted stratified sampling technique and data was analyzed qualitatively and quantitatively. The study provided evidence that there is a significance difference in the tax compliance level between small and medium scale enterprises, which is largely attributed to the inability of small enterprises to file their tax returns on due dates and also to keep proper books of records of their business transactions.

Theoretical Framework:

Introduction

This study is anchored on a combination of the Technology Acceptance Model and the Economic Deterrence Theory. These theories provide a comprehensive explanation of tax compliance behavior among Small and Medium Enterprises (SMEs) in the context of electronic tax systems. While the Technology Acceptance Model explains the behavioral and technological factors influencing the adoption of e-tax systems, the Economic Deterrence Theory explains compliance from an enforcement and penalty perspective. The integration of both theories offers a robust framework for analyzing SME tax compliance in Abia and Akwa Ibom States.

Technology Acceptance Model (TAM)

The Technology Acceptance Model was developed by Fred Davis in 1989 to explain how users accept and utilize new technologies. TAM posits that the adoption of any technological innovation is primarily determined by two key constructs: **Perceived Usefulness (PU)** and **Perceived Ease of Use (PEOU)**.

Perceived usefulness refers to the degree to which an individual believes that using a system will enhance their performance, while perceived ease of use refers to the extent to which the system is free from effort. These factors influence users' attitudes toward the system, which subsequently shape their behavioral intention and actual usage.

In the context of this study, TAM is highly relevant in explaining how SMEs perceive and adopt electronic tax systems. When SMEs perceive the e-tax system as useful—by reducing compliance costs, saving time, and improving accuracy—they are more likely to adopt it. Similarly, when the system is easy to use, SMEs are encouraged to engage with e-tax platforms such as e-registration, e-filing, and e-payment systems.

Thus, TAM explains tax compliance behavior as a function of technology adoption. SMEs that adopt e-tax systems are more likely to comply with tax obligations due to the simplicity and efficiency provided by these platforms.

Economic Deterrence Theory

The Economic Deterrence Theory originates from the works of Gary Becker (1968) and Michael Allingham and Agnar Sandmo (1972). The theory posits that taxpayers are rational individuals who decide whether to comply based on a cost-benefit analysis of evasion versus compliance.

According to this theory, tax compliance is influenced by:

- Probability of detection
- Severity of penalties
- Level of tax rates

If the expected cost of non-compliance (penalties and detection) outweighs the benefits, taxpayers are more likely to comply.

In this study, Economic Deterrence Theory explains that even with the availability of electronic tax systems, SMEs may not comply unless there are effective enforcement mechanisms. The presence of digital systems enhances monitoring, tracking, and audit capabilities, thereby increasing the probability of detection and encouraging compliance

CHAPTER THREE: METHODOLOGY

Research Design

Survey research design

Population

Registered SMEs in Abia and Akwa Ibom States

Sample Size

Sample determined using Taro Yamane formula

Data Collection

Primary data through structured questionnaires

Model Specification

$$TC = \beta_0 + \beta_1 ETR + \beta_2 EFL + \beta_3 EPM + \mu$$

$$TC = \beta_0 + \beta_1 ETR + \beta_2 EFL + \beta_3 EPM + \mu$$

Where:

TC=TaxCompliance

ETR=E-tax Registration

EFL= E-filing

EPM = E-payment

RESULTS AND DISCUSSION

Data Presentation

This study on effect of electronic tax systems on tax compliance behaviour of SMEs in Abia and Akwa Ibom States was analysed in this chapter. The data were obtained through questionnaire administrated to 55 respondents from Federal Inland Revenue Service (FIRS) in Abia and Akwa Ibom States. The independent variable is electronic tax systems and it is measured using e-tax registration, e-filing, e-payment systems and government support. However, the dependent variable is tax compliance behaviour.

Data Analysis

The analysis of data is presented in the subsequent sections:

Descriptive statistics

The descriptive statistics for both the dependent and independent variables are presented in table 4.1 below:

Table 4.1 Descriptive statistics

	ETR	EF	EPS	GS	TCB
Mean	3.922857	4.188571	4.117143	4.120000	3.914286
Median	4.000000	4.200000	4.200000	4.200000	3.800000
Maximum	4.800000	5.000000	4.800000	5.000000	5.000000
Minimum	2.800000	3.000000	3.200000	3.000000	2.800000
Std. Dev.	0.479484	0.396924	0.414928	0.461127	0.517039
Skewness	-0.478912	-0.267784	-0.318628	-0.261254	0.039209
Kurtosis	2.639215	2.894310	2.163564	2.626961	2.435566
Jarque-Bera	3.055477	0.869179	3.225018	1.202168	0.947144
Probability	0.217026	0.647531	0.199387	0.548217	0.622774
Sum	274.6000	293.2000	288.2000	288.4000	274.0000
Sum Sq. Dev.	15.86343	10.87086	11.87943	14.67200	18.44571
Observations	55	55	55	55	55

Source: Extracted from appendix 2

Table 4.1 showed the result of the descriptive or summary statistics of various variables (ETR, EF, EPS, GS and TCB).

The mean values indicate the average responses of the SMEs surveyed. Electronic Filing (EF) recorded the highest mean value of **4.1886**, followed by Government Support (GS) with **4.1200**, Electronic Payment Systems (EPS) with **4.1171**, Tax Compliance Behavior (TCB) with **3.9143**, and Electronic Tax Registration (ETR) with **3.9229**. Since all mean values are above the benchmark of 3.0 on a five-point Likert scale, the results suggest that respondents generally agreed that electronic tax systems are being utilized and that tax compliance behavior among SMEs is relatively high.

The median values range from **3.8 to 4.2**, indicating that the responses are concentrated around the "Agree" category, which further confirms the positive perception of electronic tax systems and tax compliance behavior.

The maximum values range from **4.8 to 5.0**, while the minimum values range from **2.8 to 3.2**. This indicates some variation in respondents' opinions, although the responses remain within a relatively high range, suggesting a generally favorable assessment of electronic tax systems and compliance behavior.

The skewness values are: ETR = **-0.4789**, EF = **-0.2678**, EPS = **-0.3186**, GS = **-0.2613** and TCB = **0.0392**. The negative skewness values for ETR, EF, EPS, and GS indicate a slight concentration of responses toward the higher end of the scale. TCB has a skewness value close to zero, indicating that its distribution is approximately symmetric. Since all skewness values fall within the acceptable range of ± 1 , the variables do not exhibit substantial departures from normality.

The kurtosis values range from **2.1636 to 2.8943**, all of which are close to the benchmark value of 3. This suggests that the distributions are approximately mesokurtic (normally distributed), with no evidence of extreme peakedness or flatness.

The Jarque-Bera statistics and their corresponding probability values are used to test for normality. The probability values are: ETR = **0.2170**, EF = **0.6475**, EPS = **0.1994**, GS = **0.5482** and TCB = **0.6228**. Since all probability values are greater than **0.05**, the null hypothesis of normal distribution cannot be rejected. Therefore, the data for all variables are normally distributed and suitable for further statistical analyses such as correlation and regression.

Effect of electronic tax systems on tax compliance behavior of SMEs

Table 4.2: Model Summary

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.263366	0.433573	2.913849	0.0043
ETR	0.389884	0.091655	4.253842	0.0000
EF	0.606605	0.087963	6.896105	0.0000
EPS	0.002076	0.078380	0.026482	0.9789
GS	0.454192	0.061177	7.424170	0.0000
R-squared	0.526875		Mean dependent var	3.946667
Adjusted R-squared	0.510418		S.D. dependent var	0.489028
S.E. of regression	0.342173		Akaike info criterion	0.733776
Sum squared resid	13.46451		Schwarz criterion	0.849921
Log likelihood	-39.02655		Hannan-Quinn criter.	0.780943
F-statistic	32.01618		Durbin-Watson stat	2.024858
Prob(F-statistic)	0.000000			

Source: E-View Output Extracted from Appendix 3A

Table 4.2, presents the regression result on the electronic tax systems (ETR, EF, EPS and GS) on tax compliance behavior (TCB) of SMEs in Abia and Akwa Ibom States. From the model summary table above, the following information can be distilled.

The R^2 which measure the level of variation of the dependent variable caused by the independent variables stood at 0.526875. The R^2 otherwise known as the coefficient of determination shows the percentage of the total variation of the dependent variable (TCB) that can be explained by the independent or explanatory variables (ETR, EF, EPS and GS). Thus the R^2 value of approximately 0.527 indicates that 52.7% of the variation in tax compliance behavior in SMEs can be explained by a variation in the electronic tax systems while the remaining 47.3% (i.e. $100-R^2$) could be accounted by other factors not included in this model.

The adjusted R^2 of approximately 0.510 indicates that if other factors are considered in the model, this result will deviate from it by only 0.017 (i.e. $0.527-0.510$). This result shows that there will be a further deviation of the variation caused by the independent factors to be included by 0.017%.

The regression result as presented in table 4.2 above to determine the relationship between ETR, EF, EPS & GS and TCB shows that when all the independent variables are held stationary; the TCB variable is estimated at 1.263366. This simply implies that when all independent variables are held constant, there will be an increase in the TCB up to the tune of 1.263366% occasioned by factors not incorporated in this study. Thus, a unit increase in ETR will lead to an increase in TCB by 0.389884%. For EF, a unit increase in EF will lead to an increase in TCB by 0.606605%. For EPS, a unit increase in EPS will lead to an increase in TCB by 0.002076%. For GS, a unit increase in GS will lead to an increase in TCB by 0.454192%. Finally, the result shows that there is a significant variation of Fisher's statistics (32.01618) at 0.000000 which means the model as a whole is statistically significant at an autocorrelation level of 2.024858 (Durbin-Watson), which is less than 2.5.

Post Estimation Diagnoses

Table 4.3: Breusch-Godfrey serial correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.390338	Prob. F(2,113)	0.6777
Obs*R-squared	0.823349	Prob. Chi-Square(2)	0.6625

Source: Extracted from Appendix 3B

Table 4.3 displayed the findings of the post estimation analysis using Breusch-Godfrey Serial Correlation LM Test. Given the probability level, which was greater than the allowable limit of 5%, the null hypothesis of "no autocorrelation" could not be rejected. Breusch-Godfrey test results showed that the residual of the computed model was devoid of serial correlation. (autocorrelation).

Test of Hypotheses

Hypothesis one

H0₁: E-tax registration has no significant effect on tax compliance.

HA₁: E-tax registration has a significant effect on tax compliance.

Based on the OLS result, the T-statistic of 4.253842 has a probability value of 0.0000% significant level. Since the probability value is less than the significance level of 0.05, therefore the study rejects the reject the null hypothesis (H_0) and accepts alternative hypothesis (H_A) which states that e-tax registration has a significant effect on tax compliance.

Hypothesis two

H0₂: E-filing does not significantly influence compliance.

HA₂: E-filing significantly influences compliance.

Based on the OLS result, the T-statistic of 6.896105 has a probability value of 0.0000% significant level. Since the probability value is less than the significance level of 0.05, therefore the study rejects the reject the null hypothesis (H_0) and accepted alternative hypothesis (H_A) which states that e-filing significantly influences compliance.

Hypothesis three

H0₃: E-payment has no significant impact on compliance.

HA₃: E-payment has a significant impact on compliance.

Based on the OLS result, the T-statistic of 0.026482 has a probability value of 0.9789% significant level. Since the probability value is greater than the significance level of 0.05, therefore the study accepts the null hypothesis (H_0) which states that e-payment has no significant impact on compliance.

Hypothesis four

H0₄: Government support has no significant impact on compliance.

HA₄: Government support has a significant impact on compliance.

Based on the OLS result, the T-statistic of 7.424170 has a probability value of 0.0000% significant level. Since the probability value is less than the significance level of 0.05, therefore the study rejects the reject the null hypothesis (H_0) and accepted alternative hypothesis (H_A) which states that government support has a significant impact on compliance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The analysis focused on effect of electronic tax systems on tax compliance behavior of SMEs in Abia and AkwaIbom States. Questionnaire was generated and distributed to respondents from Federal Inland Revenue Service (FIRS) in Abia and AkwaIbom States. The data collected were analyzed using ordinary least square

multiple regression analysis. The findings revealed that E-tax registration has a significant effect on tax compliance. E-filing significantly influences compliance. Government support has a significant impact on compliance. However, E-payment has no significant impact on compliance. Therefore the study concludes that electronic tax systems significantly affect tax compliance behavior of SMEs in Abia and Akwalbom States.

Recommendations

Based on the findings of this study, it is therefore recommended that:

1. Since e-tax registration has a significant effect on tax compliance, tax authorities should continue to improve the accessibility, reliability, and user-friendliness of online tax registration platforms. This will encourage more SMEs to register and comply with tax regulations.
2. Given that e-filing significantly influences tax compliance, tax authorities should provide regular training, awareness campaigns, and technical support to taxpayers to facilitate effective use of e-filing systems. Simplifying filing procedures can further increase compliance levels among SMEs.
3. Although e-payment was found to have no significant impact on tax compliance, efforts should be made to improve the speed, convenience, security, and reliability of electronic payment platforms. Tax authorities should also educate taxpayers on the benefits of e-payment to encourage wider adoption and maximize its potential contribution to compliance.
4. Since government support significantly impacts tax compliance, governments should provide adequate taxpayer education, technical assistance, responsive customer support, and incentives for the adoption of electronic tax systems. Such support will enhance taxpayers' confidence and willingness to comply with tax obligations

APPENDIX 2: DESCRIPTIVE STATISTICS

	ETR	EF	EPS	GS	TCB
Mean	3.922857	4.188571	4.117143	4.120000	3.914286
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Skewness	-0.478912	-0.267784	-0.318628	-0.261254	0.039209
Kurtosis	2.639215	2.894310	2.163564	2.626961	2.435566
Jarque-Bera	3.055477	0.869179	3.225018	1.202168	0.947144
Probability	0.217026	0.647531	0.199387	0.548217	0.622774
Sum	274.6000	293.2000	288.2000	288.4000	274.0000
Sum Sq. Dev.	15.86343	10.87086	11.87943	14.67200	18.44571
Observations	55	55	55	55	55

APPENDIX 3A: REGRESSION RESULT

Dependent Variable: TCB

Method: Least Squares

Date: 03/06/26 Time: 07:19

Sample: 1 55

Included observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.263366	0.433573	2.913849	0.0043
ETR	0.389884	0.091655	4.253842	0.0000
EF	0.606605	0.087963	6.896105	0.0000

EPS	0.002076	0.078380	0.026482	0.9789
GS	0.454192	0.061177	7.424170	0.0000
R-squared	0.526875	Mean dependent var	3.946667	
Adjusted R-squared	0.510418	S.D. dependent var	0.489028	
S.E. of regression	0.342173	Akaike info criterion	0.733776	
Sum squared resid	13.46451	Schwarz criterion	0.849921	
Log likelihood	-39.02655	Hannan-Quinn criter.	0.780943	
F-statistic	32.01618	Durbin-Watson stat	2.024858	
Prob(F-statistic)	0.000000			

APPENDIX 3B: Breusch-Godfrey Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.390338	Prob. F(2,113)	0.6777
Obs*R-squared	0.823349	Prob. Chi-Square(2)	0.6625

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