

E-Taxation Adoption and Revenue Generation in Nigeria

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Abstract

The study examined the effect of E-taxation adoption on revenue generation in Nigeria. Specifically, the study assessed the effect of E-taxation on Company Income Tax (CIT) and Value Added Tax (VAT). Expo facto research design was adopted and data were sourced from Federal Inland Revenue Service. The study period covered six (6) years and three (3) quarters, spanning from the first quarter of 2012 to the second quarter of 2018. The study was on quarterly bases and the period for pre-E-taxation covered thirteen (13) quarters, spanning from the first quarter of 2012 to the first of 2015 while the period for post E-taxation covered thirteen (13) quarters, spanning from the second quarter of 2015 to the second quarter of 2018. The analysis that was carried out through paired sampled t-test revealed a positive insignificant difference between pre and post company income tax revenue with t-statistics and p-value reported to be 0.833 and 0.421 respectively; and that there was a positive insignificant difference between pre and post value added tax revenue with t-statistics and p-value of 0.520 and 0.612 respectively. It was concluded that E-taxation has not significantly spur revenue generation in Nigeria. Thus, the study recommended that federal government through Federal Inland Revenue Services should work out modalities on how to sensitize companies on the nitty-gritty of E-tax payment so as to maximize the expected positive impact of the initiative and that Federal Inland Revenue Services must ensure that the website is of good quality and accessible to all and sundry.

Keywords: E-Taxation, Revenue Generation, Company Income Tax (CIT) Value Added Tax (VAT)

1. Introduction

World over, taxation has remained the major source of revenue through which governments defray their expenses and attained economic growth through the provision of adequate and enticing infrastructures. The tax system is an opportunity for government to collect additional revenue needed in discharging its pressing obligations. A tax system offers itself as one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive to the promotion of economic growth. Tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society (Maisiba & Atambo, 2016).

In Nigeria, taxation has been existing before the amalgamation in 1914 of the North and South protectorate to form the territory now called Nigeria. However, its place has not been well reorganized as it were in other countries (Okoye & Ezejiofor, 2014). For example, while most countries both within and outside Africa categorize their revenues as tax-revenues and non-tax revenues, in Nigeria federally collected revenue is categorized under oil revenue and non-oil revenue. It is also discouraging to reveal that tax revenues have not contributed significantly toward the economic growth of Nigeria when compared with tax-to-GDP ratio of other African countries such as Cameroon, Senegal, Tunisia, and so on (Chijioke, Leonard, Bossco & Amaefule, 2018).

It has been observed that in most countries where tax revenues significantly constitute a major part of the economy's revenue, they have been using Electronic Tax system for years. Wasao (2014) describes electronic tax system is an online platform whereby the taxpayer is able to access through internet all the services offered by a financial authority such as the registration for a personal identification number, filing of returns and application for compliance certificate, a perfect example of such system is the Electronic taxation system that was rolled out in 2013 by the Federal Inland Revenue service (FIRS).

According to Atika (2012), electronic tax system forms part of the revenue collection reforms by FIRS whose main motive is enhancing tax collections and tax efficiency and thus, tax revenues have been increasing rapidly due to the country's rapid economic development accelerated by the new systems. In this regard, the planning and formulation phase of an elaborate electronic system strategy was done in the FIRS Corporate plan of 2003

and was implemented in the fourth corporate plan of 2009. FIRS have a centralized Information Communication Technology (ICT) department that provides support services in terms of electronic systems to the entire organization all these to try and achieve its goals for achieving increased revenue collection and facilitating voluntary compliance by taxpayers (Atika, 2012).

Despite all these efforts, challenges still exist though not much than the increased revenue collection indicators that the country is enjoying. Other economic and finance experts argue that the increase in revenue might not contingent electronic system but other factors (Ezomike, 2016). Similarly, Andarias (2006) argued that while looking at the importance of technology, the electronic form of taxation is considered as an efficient tool when properly used; otherwise it can also become a problem which needs to be solved, rather than the solution. The electronic tax system comprises modern Technology that has in the form of computers, internet and software applications. Such technology is considered to be only efficient when handled by well-trained personnel and embedded in the workflow of the organization.

Moreover, few studies have investigated the effect of E-taxation adoption on revenue generation such as Githinji, Mwaniki, Kirwa and Mutongwa (2014), Asiligwa and Wenga (2016), Hamudu and Zinash (2012), Maisiba & Atambo (2016), Chijioke, Leonard, Bossco and Amaefule (2018) and Okoye and Ezejiofor (2014). However, none of these studies have used disaggregation approach (Pre and Post) to specify the effects of E-tax payment on revenue generation using Company Income Tax (CIT) and Value Added Tax (VAT). This creates a knowledge gap which this study attempts to fill. It is therefore vital to provide empirical evidences on the effect of E-taxation on revenue generation in Nigeria.

Objectives of the Study

Basically, the main objective of this study is to examine the effect of adoption of E-taxation on revenue generation in Nigeria. Specifically, the study will:

- i. assess the effect of E-taxation on Company Income Tax (CIT) in Nigeria.
- ii. assess the effect of E-taxation on Value Added Tax (VAT) in Nigeria.

Research Hypotheses

The following hypotheses are formulated for this study

Ho₁: E-taxation does not have significant effect on Company Income Tax (CIT) in Nigeria.

Ho₂: E-taxation does not have significant effect on Value Added Tax (VAT) in Nigeria.

2. Literature Review

2.1 E-taxation

E-taxation is the process of assessing, collecting and administering the taxation process through an electronic media. In the words of Che-Azmi and Kamarulzaman (2014), E-taxation is one of the ways through which governments around the world utilize information and communication technologies to improve the delivery of public services and the dissemination of public administration information to the public. Wasao (2014), describes electronic tax system as an online platform whereby the taxpayer is able to access through internet all the services offered by a financial authority such as the registration for a personal identification number, filing of returns and application for compliance certificate, a perfect example of such system is the Electronic taxation system that was rolled out by FIRS in Nigeria

According to Australian National Audit Office (2015) e-taxation was first introduced in 1986 in the U.S.A. In Australia electronic tax-filling was introduced in 1987 through its modernization programme. By 1993, Canadian taxpayers commenced electronic filling of tax returns through the E-fills, Malaysia, Netherlands & Uganda all introduced electronic payment of tax to their taxpayers for the commences of both the revenue authorities and taxpayers in 2009. In March 2013, Egypt launched electronic payment of tax for its taxpayers, to keep pace with the international trades towards automated payments systems, especially for government services.

Nigeria joined the trend in 2015 when Federal Inland Revenue Service (FIRS) in collaboration with Inter - bank settlement System (NIBSS) implemented the technology in the Nigeria tax system (Okunowo, 2015). Electronic tax system was introduced by Nigeria Tax Authority to increase financial collection, administration, render services to the tax payers all the time from anywhere, reduce costs of compliance and improve tax compliance. It

is rapidly replacing paper-based tax reporting systems. Promising many advantages over the traditional method of hard copy tax filing, these systems promise faster process, lower costs and increased efficiency. FIRS have a centralized Information Communication Technology (ICT) department that provides support services in terms of electronic systems to the entire organization all these to try and achieve its goals for achieving increased revenue collection and facilitating voluntary compliance by taxpayers.

2.2 Revenue

The concept of revenue is described by various scholars. The Longman dictionary of contemporary English cited in Edogbanya and Ja'afaru (2013) defined revenue as money that a business or an organization receives over a period of time especially from selling goods or services. It also described revenue as money that government received from tax. Buhari (2001), defined revenue as the total annual income of the state collected for public use. It further described it as income, derived from taxation. Odusola (2003) described revenue as the total income generated from federal, state and local government.

Fayemi (2011) defined revenue as all tools of income to government such as taxes, rates, fees, fines, duties, penalties, rents, dues, proceeds and other receipt of government to which the legislature has the power of appropriation. He further classified government revenue into two kinds – recurrent revenue and capital revenue. According to Edogbanya and Ja'afaru (2013), revenue is defined as the funds generated by the government to finance its activities. In other words, revenue is the total fund generated by government (Federal, state, local government/ to meet their expenditure for a fiscal year. This refers also to the grand total of money of income received from the source of which expenses are incurred.

2.3 Company Income Tax (CIT) and Value Added Tax (VAT)

Companies' Income Tax is a compulsory levy by government on the profits made by the registered companies. This type of tax is a sub-set of direct taxes because the incidence of payment and burden of the companies' income tax are borne by the companies and not transferable to third parties. The relevant tax authority charged with responsibility of assessing and collection of companies' income tax among others is the federal Inland Revenue service (FIRS) under the supervision of a board called Federal Board of Inland Revenue (FBIR). It deals with the taxation of all limited liability companies in Nigeria with the exception of those engaged in petroleum operations (Naomi & Sule, 2015).

The adoption of VAT was an important landmark in tax reforms in Nigeria. VAT is a form of consumption tax on all business profits and labour. It is levied on the value-added to the product at each stage of the production and distribution cycle as well as the price paid by the final consumer. In Nigeria, VAT came into operation in 1994 through the VAT Act, No. 106 of 1993. According to Adereti, Sanni & Adesina (2011), it was introduced by the federal government of Nigeria to replace Sales tax. The aim was to increase the revenue base of government and make funds available for development purposes that will accelerate economic growth.

2.4 Theoretical Underpinnings

This study was theoretically underpinned by Technology Acceptance Model (TAM) and Resource Based View Theory (RBV). In 1989, Davis presented the technology acceptance model to explain the intent of the behaviour of the user with the ability to use innovative technology. TAM was based on the theory of reasoned action (TRA), a psychological theory that attempted to explain the behaviour and involves two primary predictors - perceived ease of use and perceived usefulness and the dependent variable behavioural intention, which TRA assumed to be closely linked to actual behaviour.

The goal of TAM was to provide an explanation of the determinants of computer acceptance that in general is capable of explaining user behaviour across a broad range of end-user computing technologies. The major determinants are defined as perceived usefulness and perceived ease of use. Perceived usefulness was the level that people believe using a particular system would enhance his or her performance, and perceived ease of use is the level that people believe using a particular system would be free of effort. Obviously, this study is related to this work on this basis that companies respond to E-tax payment differently on the basis of perceived usefulness and perceived ease of use. It can therefore be argued that when companies perceived that payment of tax electronically is easy, convenient and very useful, they tend to embrace the innovativeness.

Resource Based View Theory (RBV) was propounded by Barney (1991). It holds that the success of a firm or Government is based on the resources and capabilities it holds in control which may become a source of

competitive advantage. It means key strategic and organizational routine used by the government to alter their resource bases to generate new value-creating strategies. This theory is related to this study on the premises that E-taxation is one of the government policies introduced by Federal Inland Revenue Services (FIRS) in Nigeria to ease the payment of tax by companies and improve revenue generation by the government. An organization adopting E-payments would adequately improve the revenue collection for the country.

2.5 Effect of E-taxation on Revenue Generation

World over, many researchers have been credited to this topic. This explains the acceptance the E-taxation as a way of improving revenue generation. In Kenya, Asiligwa and Onwenga (2016) assessed the roadmap for the adoption of government E-payments. It was survey study and questionnaire were used to elicit data from ICT and Finance employees of 262 state corporations, 19 Ministries, and 47 counties. The analysis that was carried out through multiple regression revealed that there was significant relationship between adoption of e-payment system and adequacy of ICT infrastructure, awareness of e-payment system, E-payment security and compliance and change management.

Another study was conducted in Rwanda by Maisiba and Atambo (2016) to investigate the effect of electronic tax management system of tax collection. It was gathered that E-tax payment contributes to timely tax payment and reduced operational cost for both RRA staffs and clients. Both primary and secondary sources with their relevant tools like questionnaire and documentary analysis in order to come up with required data. Similarly, Githinji, Mwaniki, Kirwa and Mutongwa (2014) examined explored the effect of information and communication technology (ICT) on revenue collection in Kenya. Using regression analysis, it was discovered that using regression analysis; finding shows that usage of ICT increases revenue collection in Kenya.

In Nigeria, Okoye and Ezeji for (2014) examined the impact of e-taxation on revenue generation in Enugu. Data were collected through primary and secondary sources were analysed by means and standard deviation and Z-test statistical tool. Findings show that E-taxation can enhance internally generated revenue and reduce the issue of tax evasion in Enugu state. Another finding is that E-taxation can prevent corrupt practices of tax officials. A similar finding was recorded by Efunboade (2014), where he Taxpayer Identification Number- TIN, Factual Accurate Complete Timely- Project FACT, Integrated System of Tax Administration- ITAS and emerging global infrastructures could make it increasingly possible for eligible taxpayers to pay tax online anywhere and anytime.

Another study was conducted by Chijioko, Leonard, Bossco and Amaefule (2018) to examine the impact of E-Taxation on Nigeria's revenue and economic growth. Statistical and Economic Reports on quarterly basis from second quarter 2013 to fourth quarter 2016. The data were divided into two: pre-e-tax period and post e-tax period. Findings from the study revealed that the implementation of electronic taxation has not improved tax revenue, federally collected revenue and tax-to-GDP ratio in Nigeria.

3. Methodology

The study adopted expo-facto research design and Quasi-experimental research design. It adopted expo-facto research design because the study aimed at obtaining important information on the status of specific phenomenon after some naturally occurring treatment without any manipulation of the situation. Quasi-experimental research design calculates the effect of a treatment (i.e., an explanatory variable or an independent variable) on an outcome (i.e., a response variable or dependent variable) by comparing the average change over time in the outcome variable for the treatment group, compared to the average change over time for the control group. Analysis conducted in the study made use of secondary data collated from the Federal Inland Revenue Services (FIRS). The study period was on quarterly bases and the period for pre-e-taxation covered 13 quarters, spanning from the first quarter of 2012 to the first of 2015 while the period for post e-taxation covered 13 quarters, spanning from the second quarter of 2015 to the second quarter of 2018. The analysis was carried out using line and symbol graph and paired sampled t-text.

4.1 Results and Discussion

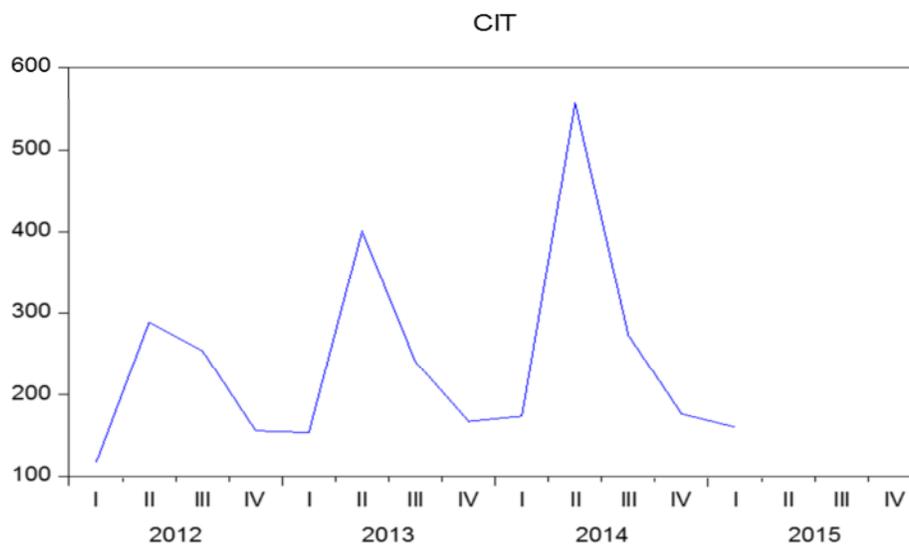


Figure 1: Trend Analysis of Company Income Tax (CIT) Before the Advent of E-taxation

Figure 1 above revealed that there was an upward trend of company income tax from the base period, the first quarter of 2012, a downward trend from the second quarter to the first quarter 2013 before it rose sharply in the second quarter of 2013 and trended downward to the last quarter of 2013. Company income tax rose gently from the first quarter of 2014, before it trended up sharply from the second quarter of 2014 and decline greatly from the third quarter of the same year to the first quarter of 2015.

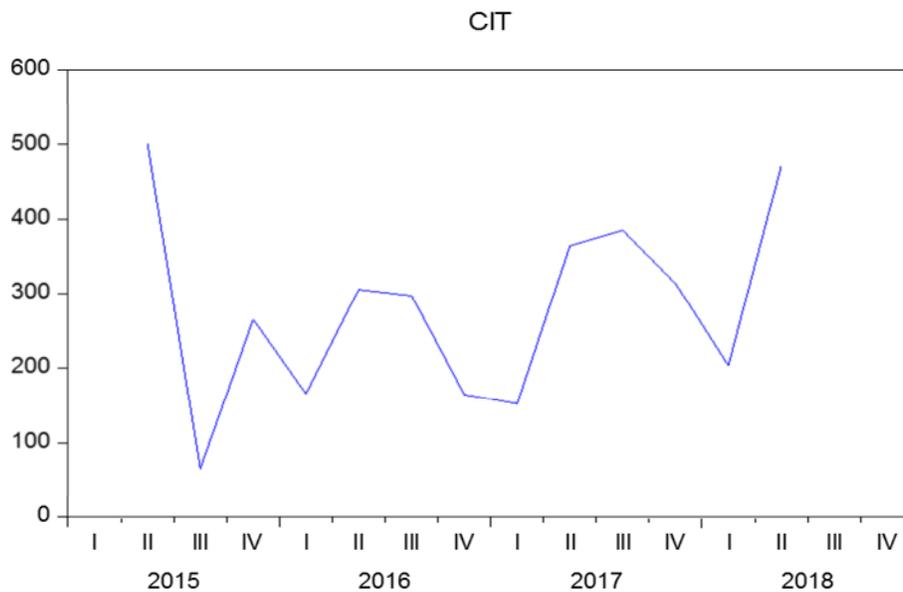


Figure 2: Trend Analysis of Company Income Tax (CIT) After the Advent of E-taxation

Figure 2 above revealed the trend analysis of company income tax after the introduction of e-taxation. Obviously, it could be clearly seen that company income tax revenue has maintained an unstable trend in Nigeria from the second quarter of 2015 to the second quarter of 2018.

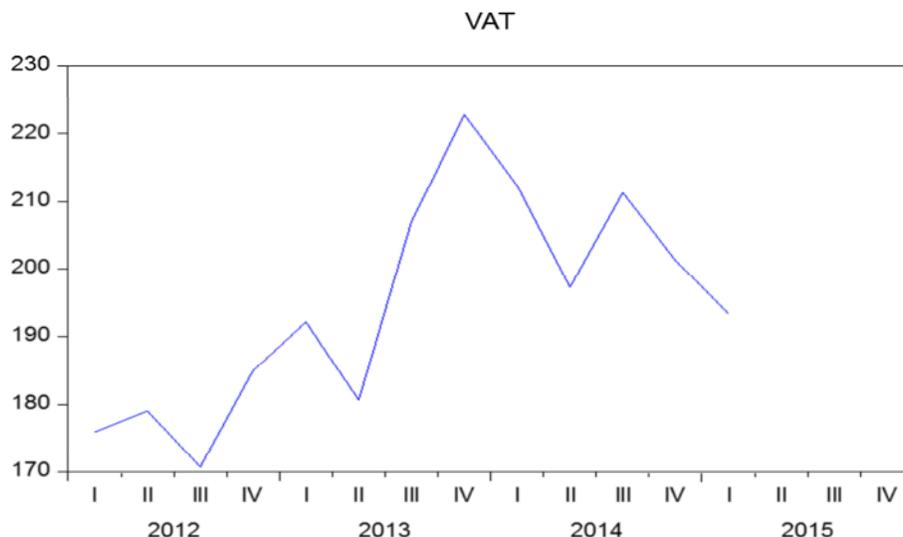


Figure 3: Trend Analysis of Value Added Tax (VAT) Before the Advent of E-taxation

Figure 3 above showed the trend analysis of value added tax revenue before the advent of e-taxation in Nigeria. The analysis revealed a zigzag trend of value added tax revenue from the first quarter of 2012 to the second quarter of 2013, before a sudden sharp upward trend from the third quarter of 2013 to the fourth quarter of the same years. The outcome also showed a zigzag trend of value added tax from the first quarter of 2014 to the first quarter of 2015. This might be due to the inefficiency of the traditional way of collecting Value Added Tax (VAT).

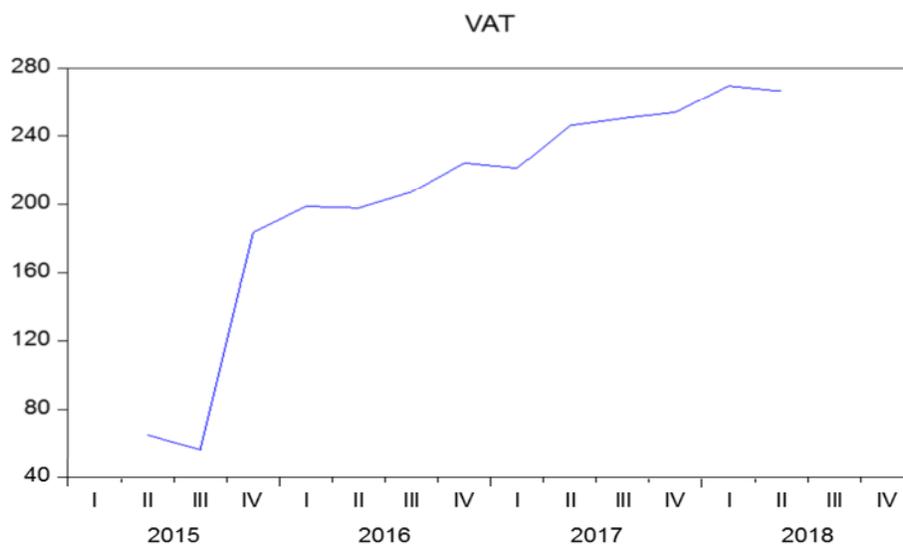


Figure 4. Trend Analysis of Value Added Tax (VAT) After the Advent of E-taxation

The trend analysis revealed that there was a mild decrease of value added tax from the second quarter to the third quarter of 2015, before it rose sharply from the fourth quarter of the same year to the second quarter of 2018. This reveals the efficiency of e-taxation in the generation of value added tax. This drastic increase could also be attributed to political will by the government, international collaboration and corporation of the judiciary.

Table 1. Paired Sampled T-Test Company Income Tax (CIT) and Value Added Tax (VAT) before and After the Advent of E-taxation

Variables		Paired Differences			df	Sig Value
		Mean	Std Deviation	t		
Pair 1	PostCIT- PreCIT	41.132	1.7806	0.833	12	0.421
Pair 2	PostVAT- PreVAT	8.6985	60.297	0.520	12	0.612

Source: Data Analysis, 2018

It could be deduced from the table above that pair 1 has a mean value of 41.132 billion and a standard deviation of 1.7806. Based on the subtraction order, it means that the value of post company income tax revenue (after the advent of e-taxation) was 41.132 higher than pre-company income tax revenue (before the advent of e-taxation) for the periods this study covered. The t-statistics and p-value reported to be 0.833 and 0.421 respectively indicate that the null hypothesis which stated that E-taxation does not have significant effect on Company Income Tax (CIT) in Nigeria is accepted. This implies that there is a positive insignificant difference between post and pre-company income tax revenue. Put differently, this means that e-tax payment does not have significant effect on company income tax revenue in Nigeria.

Similarly, the outcome above revealed that pair 2 has a mean value of 8.6985 billion and a standard deviation of 60.297. Based on the subtraction order, it implies that the value of post value added tax revenue (after the advent of e-taxation) was 8.6985 higher than pre-value added tax revenue (before the advent of e-taxation) for the periods this study covered. The t-statistics and p-value reported to be 0.520 and 0.612 respectively indicate that the null hypothesis which stated that E-taxation does not have significant effect on Value Added tax (VAT) in Nigeria is accepted. This implies that there is a positive insignificant difference between post and pre-value added tax revenue. This connotes that E-tax payment do not have a positive significant effect on value added tax revenue in Nigeria.

4.2 Discussions of Findings

It was discovered that there is a positive insignificant difference between post and pre-company income tax revenue. Put differently, this means that e-tax payment has a positive insignificant effect on company income tax revenue in Nigeria. Unlike the negative effect of e-taxation on capital gain tax revenue and value added tax revenue, e-taxation has positively contributed to the generation of capital gain tax in Nigeria but the contribution is not significant. The inference here is that with adequate and timely orientation on how to pay tax electronically, good website quality and wilful compliance of taxpayers, there is every tendency that e-taxation might improve company income tax revenue significantly. Studies like Okoye and Ezejiolor (2014), Githinji, Mwaniki, Kirwa and Mutongwa (2014) and Ndayisenga and Shukla (2016) negate the outcome of this study that e-tax payment has a positive insignificant effect on company income tax revenue in Nigeria. However, this discovery corroborated the findings of Chijioko, Leonard, Bossco, and Amaefule (2018). They submitted that the introduction of e-tax payment has not improved revenue generation in Nigeria.

Another discovery made was that there is a positive insignificant difference between post and pre-value added tax revenue. Put differently, this connotes that e-tax payment has a positive insignificant effect on value added tax revenue in Nigeria. The consequence of this discovery is that the main aim of introducing e-taxation in Nigeria, which is to improve revenue generation, has not been achieved. This might be due to low awareness by the tax payers of how to pay tax electronically and website quality of the Federal Inland Revenue Services (FIRS). This outcome disagreed with the findings of Asiligwa and Onwenga (2016), Chege, Kiragu, Lagat and Muthoni (2015) and Maisiba and Atambo (2016). They found that there was a significant relationship between adoption of e-payment system and adequacy of ICT infrastructure, awareness of e-payment system, E-payment security and compliance and change management. However, this discovery was in tandem with the findings of Chijioko, Leonard, Bossco and Amaefule (2018). They submitted that the introduction of e-tax payment has not improved revenue generation in Nigeria.

5.1 Conclusion

The fact the E-taxation has improved revenue generation in developed countries and other developing countries without empirical evidences on the effect of E-taxation on revenue generation in Nigeria constituted the basis on which this study was conducted. In line with the findings of this study, it was concluded that there is a positive

insignificant difference between pre and post company income tax revenue and that there is a positive insignificant difference between pre and post value added tax revenue in Nigeria.

5.2 Recommendations

In line with the findings of this study, it was therefore recommended that the Federal government through Federal Inland Revenue Services (FIRS) should work out modalities on how to sensitize companies on the nitty-gritty of E-tax payment so as to maximize the expected positive impact of the initiative; Federal Inland Revenue Services must ensure that the website is of good quality and accessible to all and sundry and that there should be a collaborative work between the government, Federal Inland Revenue Services and taxpayers in Nigeria. This will reveal the shortcomings besetting the effectiveness of the system and improve the revenue pool of the government.

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