

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/343905932>

E-COMMERCE AND TAX REVENUE

Article · January 2020

CITATION

1

READS

1,383

2 authors, including:



Agbo ELIAS Igwebuike

Godfrey Okoye University

75 PUBLICATIONS 31 CITATIONS

[SEE PROFILE](#)

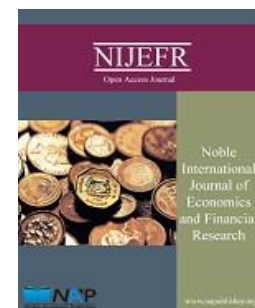
Some of the authors of this publication are also working on these related projects:



PUBLIC DEBT MANAGEMENT [View project](#)



IMPACT OF EARNINGS PER SHARE AND DIVIDEND PER SHARE ON THE STOCK PRICE OF LISTED NIGERIAN INSURANCE COMPANIES [View project](#)



E-COMMERCE AND TAX REVENUE

Elias Igwebuike Agbo^{1*}, E. O Nwadiolor²

^{1*2} Department of Accounting and Finance, Faculty of Management and Social Sciences, Godfrey Okoye University, Ugwuomu-Nike, Emene, Enugu State, Nigeria

ABSTRACT: Beyond the Global System for Mobile Communications, the advent of the Internet and its related infrastructures in the recent times have accounted for the significant shifts and restructuring in the manner that business is transacted across the universe. A sizeable percentage of commercial activities is already being carried out electronically. However, considered from a different perspective, the growth in internet has been presenting some disturbing challenge to the tax authorities' traditional approaches to both direct and indirect taxation globally. For instance, e-commerce business model has several tax implications such as disintermediation, increased magnitude of cross-border transactions and digitization of information - to mention a few. These characteristics of e-commerce make it difficult to identify the source and destination of transactions. Consequently, they create opportunities for high-level tax avoidance schemes and the resultant tax losses. These intrinsic challenges of e-commerce taxation explain the much debate and discussions that have taken the center-stage among stakeholders on how to regulate the internet while preserving the interests of all. This debate on the full implications of e-commerce for tax revenues is yet to be settled this paper seeks to explore the development of internet taxation and the related issues globally with particular emphasis on Nigeria. The study observes that issues such as tax loss and tax evasion are significant just as the challenges like uncertainty and double taxation make the parties of e-commerce reluctant and affect the development of e-commerce negatively. As is the case with many other developing nations, Nigeria is gradually embracing e-commerce.

Keywords: E-commerce, Tax Revenue, Nigeria, Economy.

1. INTRODUCTION

The advancement in information and communication technology (ICT) makes e-commerce an important characteristic of the modern world economy (Opara, 2014). At the moment, several transactions are consummated online. In Nigeria, Central Bank of Nigeria (CBN) has been at the fore-front of promoting 'cash-less policy' with the intention of driving development and modernizing Nigeria's payment system.

Information and Communications Technology (ICT) has developed rapidly in the universe. Such developments have had the greatest influence on society in the recent times (Duke *et al.*, 2013). Beyond the Global System for Mobile Communications (GSM), the advent of the Internet and its related infrastructures in the past twenty years have been responsible for the radical shifts and restructuring in the way business is transacted across the universe. Here, a sizeable percentage of commercial activities are already being carried out electronically (Duke *et al.*, 2013). Just as globalization has generally enhanced the tempo of world trade, the internet has particularly driven its recent growth. The latter has not only altered the manner that companies, customers and sellers interact but has also restructured the internal operations of firms. In addition, it has impacted on the nature, basis and intensity of competition across industries worldwide see (Wheelen and Hunger, 2012) cited in Duke *et al.* (2013).

The benefits that have come with e-commerce notwithstanding, the growth in internet have several implications for tax administration. The increase in electronic commerce (e-commerce) presents a daunting challenge to tax authorities' traditional approaches to both direct and indirect taxation. According to Arinze *et al.* (2018), e-commerce business model has tax implications such as disintermediation, increased magnitude of cross-border transactions and digitization of information all of which make it difficult to identify the origin and destination of transactions. Further, they create difficulties in carrying out audit trails, verifying the parties to business transactions and tax collection

concerns with cross-border digital transactions. As opposed to the traditional commercial activities where the details of transactions, such as the amount involved, the parties to the transaction and the place in which the transaction was carried out can easily be trailed, e-commerce mainly takes place in the virtual and borderless world of the Internet, with the aid of a network of computers. Under this arrangement, untraceable trade can be perfected from obscure or even unidentifiable locations (Rosenberg, 2008). Doernberg *et al.* (2001) contend that's this virtual nature of the Internet makes e-commerce intangible in different ways. For instance, it makes e-commerce to be multi-jurisdictional and susceptible to shielding in tax havens. In addition, e-commerce poses serious challenges to the effectiveness of tax authorities. Tanzi (1998) suggests that its longer-term implications and influence on fiscal policy administration should be given early and close attention as, according to Deloitte and Touche (1997), the ability to respond by adjusting and adapting to the demands of e-commerce continues to constitute the greatest threat to tax regimes.

Concerns are many as regards the various issues relating to e-commerce. According to Bristol (2001), these concerns range from the type of information that can be retrieved online to the types of business transactions conducted. Consequently, there is much debate and discussions take the center-stage among stakeholders on how to regulate the Internet while preserving the interests of all. While most developing countries entrenched in the digital divide do not consider these issues as critical, others have had specific concerns about the effect of the Internet on their domestic economy as they move to incorporate some aspects of e-commerce for the benefit of their citizens.

The main attributes of e-commerce business model have tax implications. These attributes are essentially characterized by disintermediation, increased magnitude of cross-border transactions, digitization of information which makes it difficult to identify the source and destination of transactions, difficulties in carrying out audit trails, verifying the parties to transactions, and tax collection concerns with cross-border digital transactions.

This paper the main objective of examining the development of internet taxation as well as some of the issues concerning both domestic and international Internet taxation with particular emphasis on Nigeria. Specifically, It reviews and analyzes e-commerce and its effects on taxing systems throughout the world, while highlighting the arguments for and against e-commerce taxation and regulation. Section 2 presents the review of the related literature. Section 3 higolgot the origin and development of internet taxation while i Section 4 conclude the paper.

2. REVIEW OF THE RELATED LITERATURE

2.1. Conceptual Framework

2.1.1. The Concept of Tax Revenue

According to Agbo and Nwadiolor (2020), tax has been defined in several ways by different individuals. For instance, the Institute of Chartered Accountants of Nigeria [ICAN] (2009) defines tax as an obligatory contribution imposed on the citizens by the government in order to provide social services and to ensure the citizens' social and economic welfare. Tax is considered as a financial charge or levy imposed upon an individual or legal entity by a government such that failure to pay, or evasion of or resistance to collection, is punishable by law. Taxes are also imposed by many administrative divisions (Opara, 2014). The National Tax Policy for Nigeria refers to tax as a monetary charge on a person's or entity's income, property or transaction which is usually collected by a defined authority at Federal, State or local level. For some others, it is an obligatory levy which government or any recognized authority of the state imposes on the property, goods, services and people living in an area for revenue generation in order to offset the expenses incurred by the government or the authority on behalf of the citizens; a fiscal policy tool employed to redistribute wealth or to achieve other macroeconomic objectives.

As many as the definitions above and other similar definitions may be, there exist some common basic elements in them. For instance, they all consider tax as a compulsory levy imposed by the government on its citizens and business entities to raise fund utilized to finance government operations.

Tax revenues are basically the revenues collected from income taxes, social security contributions; value added tax, payroll taxes, and other items. Social security payments, fines, and penalties are usually excluded from its calculations. They are a major source of government revenue which serves not only as a means for financing expenditure needs (Agbo and Nwadiolor, 2020). Tax revenues are generated from direct and indirect taxes.

2.1.2. The Concept of E- Commerce

E-Commerce or Electronic Commerce is defined by www.toppr.com (2020) as the purchase and sale of goods, products, or services over the internet. Basically, e-commerce describes the use of the internet to electronically conduct business transactions ([Wheelen and Hunger, 2012](#)). It is a business which is taking place over the internet and also known as internet commerce. E-commerce is the meeting of buyers and sellers on the internet. This involves the transaction of goods and services, the transfer of funds and the exchange of data.

Under the e-commerce platform, services are provided online over the internet network. Transactions of money, funds, and data are also regarded as E-commerce. The Organization of Economic Community for Development(OECD) defines an e-commerce transaction as *“the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders”*.OECD asserts that payment and delivery do not have to be conducted online for the transaction to qualify as e-commerce. The major parties involved in e-commerce are consumers, businesses or government, operating in a business-to-business, business-to-consumer or business-to-government combination ([United Nations Conference on Trade and Development. UNCTAD, 2001](#)).

Under e-commerce, business transactions can be done in four alternative ways, namely Business to Business (B2B), Business to Customer (B2C), Customer to Customer (C2C) and Customer to Business (C2B).

[Bristol \(2001\)](#) reports that the Forrester Research clearly showed that the largest estimates of e-commerce in the year 2000-global business-to-business (B2B) e-commerce alone was estimated to be US\$604 billion [United Nations Conference on Trade and Development. UNCTAD \(2001\)](#). According to www.toppr.com (2020), by 2020, the global retail e-commerce might move up to \$27 Trillion. Presently, e-commerce is one of the fastest moving industries in the world economy. It is estimated to grow by nearly 23% every year and projected to involve \$27 trillion by the end of this decade (www.toppr.com, 2020). According to [Duke et al. \(2013\)](#), the main facilities and instruments of e-commerce, particularly in Nigeria are On-line (Web-based or Internet) Purchasing , Point-of-Sale(POS), Automatic Teller Machines (ATM) and Mobile Phone (GSM) Payments. The electronic commerce has four basic models explained as follows,

(i) Business to Business

This refers to Business to Business transactions. Under this platform, companies do business with each other. This does not involve the final consumer but involves the manufacturers, wholesalers, retailers etc.

(ii) Business to Consumer

Under this model of e-commerce, companies sell their goods and/or services directly to the consumers. The consumers can browse their websites and see products and pictures as well as read reviews. After doing so, the consumers place their order and the company ships the goods directly to them. Amazon, Flipkart, Jabong, etc, are popular examples of companies involved in this kind of e-commerce.

(iii) Consumer to Consumer

Under this model, the consumers are in direct contact with each other. No firm is involved. This electronic platform assists merchants to sell their personal goods and assets directly to interested parties. Usually, the goods traded are cars, bikes, electronics etc.

(iv) Consumer to Business

This is the reverse of B2C. The consumer provides a good or some service to the company. Electronic commerce has the following advantages:-It

- (i) provides the sellers with a global reach,
- (ii) lowers the transaction cost substantially,
- (iii) provides quick delivery of goods with very little effort on part of the customer,
- (iv) allows the customer and the enterprise to be in touch directly, without any intermediaries and
- (v) allows a customer to shop round the clock.

The disadvantages of e-commerce are as follows:-It

- (i) has very high start-up costs,
- (ii) The e-commerce industry has a high risk of failure,
- (iii) lacks the warmth of an interpersonal relationship which is important for many brands and products- a disadvantage for many types of services and products like interior designing or the jewelry business,
- (iv) creates room for many security breaches where the information of the customers is stolen. [Credit card theft, identity theft etc. has remained big concerns with the customers]
- (v) can create some room for the problems with shipping, delivery, mix-ups, etc, which leaves the customers unhappy and dissatisfied and
- (vi) possesses some key attributes which have serious negative tax implications. see [Arinze et al. \(2018\)](#).

2.1.3 Tax Jurisdiction

Business income is usually taxable in a particular locality. The traditional principles of taxation require that when a business is conducted within a country it is normal for that country to have jurisdiction to tax the income of that business. However, when income is derived from international transactions, the ability to tax their incomes requires some extra steps of analysis ([Effiong, 2019](#)). Generally, countries follow two alternative approaches called source-based taxation and residence based taxation-also called origin and destination principle respectively.

A country may tax the income derived by a person probably because of a connection between the venue of the transaction and the income derived by that person (source jurisdiction. Source-based taxation makes the source country entitled to tax any income that originates within its boundaries, whether or not the recipient is a resident of that country or has a permanent establishment therein.

It is also possible for countries to tax income wherever derived for the fact that the person earning the income is a resident of that country (residence or destination jurisdiction).The rationale for this may be resting on the necessity to finance its public goods and social infrastructure and the connection between consumption of such public goods and social infrastructure by resident persons that have an over-all capacity to pay ([Effiong, 2019](#)). This basis of taxation entitles the country of residence to assert tax on the worldwide income of its residents without any regard to the source of income.

According to [Effiong \(2019\)](#), under the OECD Model Treaty the country source entitled to collect tax on the business income of a non-resident corporation is the source country, provided the income is earned by a permanent establishment located in the taxing state. In addition, it is also the source country that ordinarily levies withholding taxes on dividends, which may be reduced by treaty. It is only the residence country that usually taxes royalties, except where they are related to a permanent establishment in the source country.

According to *Paragraph 7* of the First Schedule to the Personal Income Tax Act (PITA), where the incomes of non-resident individuals are derived from sources in Nigeria, the tax authorities are empowered to impose taxes on them. *Paragraph 9* of the First Schedule to the PITA subjects the income derived or accrued in Nigeria by companies not resident or incorporate in Nigeria to the imposition, assessment and collection of tax by the relevant tax authorities.

2.2.Theoretical Framework

This paper is anchored on the following theories of electronic commerce taxation:-

(i) **Garg (2000) model for electronic commerce taxation.**

This model, also adopted by [Duke et al. \(2013\)](#), postulates that a number of qualities have to be met by a tax system in an e-commerce dispensation. Those necessary qualities include neutrality, efficiency, simplicity, flexibility, effectiveness as well as split of revenue in case of clash of tax jurisdiction.

(ii) **Optimal Taxation theory**

This theory assumes that taxes should be configured in a way that offers the best outcomes in terms of social welfare. It features two models, namely the Ramsey Rule and the Laffer Curve Model. The Ramsey Rule postulates that the excess burden of taxation will be minimized by setting the ratio of taxation in an inverse proportion with the price elasticities of demand for tangible and intangible electronic products. This model presumes that public authorities would endeavor to minimize the excess burden (efficiency loss) of taxation subject to given revenue needs. Under the Ramsey rule, the optimal

taxation theory is the rate that minimizes the excess burden of taxation while at the same time generating the required revenue from tangible and intangible electronic business.

The Laffer Curve model on the other hand is based on the contention that government will make effort to generate as much revenue as possible, not minding the efficiency losses that might result from taxation. For this model, it is only constitutional constraints and other legislations that can curtail government's desire for increased revenue. It considers the inverse relationship between taxation and tangible and intangible electronic products and the effect that these relationships will have on tax revenues. Literature reveals that a higher tax is not always the maximizing rate since a lower tax rate may end up raising more tax revenues than a higher one in electronic commerce transactions (see [Emenyi \(2013\)](#)).

2.3. Empirical Review

Since the inception of electronic commerce taxation, a number of studies have been carried out worldwide to determine how e-commerce and taxation affect one another. Some of the literature reviewed by this study is summarized as follows.

[PWC \(1999\)](#) sought to ascertain the steps that would encourage e-commerce among small and medium sized enterprises in Asia-Pacific Economic Cooperation area. It found that fair taxation policies for online transactions, improving telecommunications infrastructure, building a new e-commerce strategy and mass-education to increase the usage of e-commerce and incentives were prominent.

Also, [Bayrakdar et al. \(2015\)](#) investigated the most effective barriers that e-commerce faced. The study found that the rate of regulations in the field of taxation and privacy was 8%. Even though 36% of businesses argued that effects of taxation barriers are strong, 4% of businesses claimed that taxation is not a barrier to development of e-commerce. The study concluded that the taxes with the most negative effect on the development of e-commerce are foreign taxes, local or state sales and consumption taxes.

In a related study, [Bristol \(2001\)](#) analysed the likely implications of electronic commerce on tax revenues in the Caribbean Community. The study employed a static microeconomic approach to determine the impacts. The analysis was carried out based on the assumption that current trends of external trade and growth of electronic commerce in the region would continue. The assumptions of the study were that tax revenues would increase due to expansion of export markets, tax and tariff revenues would move up as a result of some increase in the imports of traditional goods and services tax and that tariff revenues would be lost from digitized products. It was also assumed that tax revenues would be lost from the displacement of companies at the intermediate level.

After carrying out a survey among 2139 businesses chosen from production, distribution and finance sectors in ten countries, [Bayrakdar et al. \(2015\)](#) found that taxation barriers have 16.5% of significance. Those barriers affect distribution sector mostly and finance sector at the least.

Further, [Scupola \(2003\)](#) examined the e-commerce adaptation of small and medium sized enterprises in South Italy. The author found that tax reduction, financial incentive, informing processes rising rate of speaking English enable adaptation to e-commerce.

[Cmat and Deirmenci \(2003\)](#) examined fiscal liabilities on telecommunication sector and found that the biggest problems that prevented development of e-commerce are uncertainty in taxation and lack of other legal regulations.

Going forward, [Tigre and Dedrick \(2004\)](#) examined Brazilian firms and found that the concerns about taxation among e-commerce barriers have 26.8% significance. This barrier was seen to be having further effect upon small and medium sized enterprises.

[Bayrakdar et al. \(2015\)](#) also investigated the barriers and opportunities of e-commerce. This study was conducted in the countries of the European Union. The outcome of the study shows that special payment methods and differences of tax regulations among countries have brought about some extra costs and administrative problems and that those are barriers to e-commerce.

In a more recent study, [Duke et al. \(2013\)](#) estimated the contributions of e-commerce activities to the national tax revenues in Nigeria, against the background of some country-specific problems. The study used a data set covering the period between 2008 and 2011. A model was developed that measured the statistical significance of indirect taxes sourced from four proxies of e-commerce, namely Automatic Teller Machines (ATM), Point-of-Sale (POS), On-line Purchasing (Internet Purchasing) and Mobile Phone Payment (GSM). The results obtained show that e-commerce transactions have a very low overall contribution to Nigeria's tax revenue. Further, the study found that while tax revenue contributions from ATM and POS are relatively significant, those from Internet Purchasing and GSM are insignificant.

Simkin *et al.* (2017) explored some of the issues concerning both domestic and international internet taxation and reviewed the Internet Tax Freedom Act,. It also analyzed e-commerce and its effects on taxing systems throughout the universe and highlighted the arguments for and against e-commerce taxation and regulation.

Arinze *et al.* (2018) sought to ascertain whether or not e-commerce business segment should be taxed. Secondary data which were obtained through archival documents, electronic books and journal publications, online research publications by authoritative research firms and textbooks on law and taxation studies were the major source of information employed for the empirical work. The study found that E-commerce poses a lot of questions to tax administrators and governments on how to protect their revenue base. At one extreme, it is contended that e-commerce should in some sense be allowed to take place in a tax-free environment. At the other extreme, some speculate that new taxes should be specifically designed to tax e-commerce. The study found that neither of these views proves acceptable to governments as the first would lead to governments being unable to meet the legitimate demands of their citizens for public services and induce tax distortions in trade patterns, while the second approach could obstruct the development of e-commerce and lead to the technology being driven by taxation.

After observing that the Nigerian tax system had witnessed various policy changes such as the introduction of the Treasury Single Account, the 2017 National Tax Policy, Bank Verification Number, the Taxpayer's Identification Number (TIN), the automated tax system and e-payment system procedures all geared at a more effective and efficient system of tax administration, Effiong (2019) examined the Nigeria Tax System. The study suggested strategies that would enable the nation benefit from the phenomena of globalization and technological advancement through electronic commerce taxation.

3. THE ORIGIN AND GROWTH OF E-COMMERCE AND ITS TAXATION GLOBALLY

3.1. Origin and progress of E- commerce

According to Life Learners (2018), the origin of e-commerce is traceable to the 1960s when businesses started employing Electronic Data Interchange (EDI) to share business documents with other companies. In 1979, the American National Standard Institute, a universal standard called ASCX 12, was set up to enable enterprises to share documents through an electronic network.

In the early days of e-commerce, there was some significant reluctance by some developed and developing countries to adopt e-commerce taxation. For instance, in October of 1998, the US Congress passed the Internet Tax Freedom Act, which restricted *new* internet-related taxes (see Simkin *et al.* (2017). The Tax Freedom Act contained some moratorium which stated that (i) there should be no new taxes on Internet access, unless such tax was imposed and actually enforced prior to October 1, 1998 and (2) there should be no multiple or discriminatory taxes on e-commerce. Due to the complexity of Internet taxation, Congress also passed this Act to give legislators time to de-fine "good public policy" with respect to this issue. The Internet Tax Freedom Act also contains some provisions with respect to (i) a 3-year moratorium of taxes on Internet access. (ii) a 3-year moratorium on multiple taxes on e-commerce and (iii) a 3-year moratorium on discriminatory taxes on e-commerce. It also established the Advisory Commission on Electronic Commerce (ACEC) in collaboration with countries from around the world and declared that the Internet should be free of new federal taxes.

Straightforward as the Internet Tax Freedom Act appeared to be, it raised several questions.

In the 1990s, the rise of eBay and Amazon outfits gave a boost to the e-commerce industry. Through e-commerce, customers are now enabled to buy assorted items online. E-commerce has demonstrated to be a vibrant source of economic growth in developed countries such as America, Europe, Asia and is witnessing rapid growth in Nigeria and some other African countries including Egypt, South Africa, and Kenya (Life Learners, 2018), E-commerce is used presently by more than 332 million persons around the world and is perhaps the most advanced and useful medium of commerce and communications yet created (Simkin *et al.*, 2017). International Post Corporation (2017) provides some e-commerce figures at global and regional level, including forecasts up to 2021 and analyzes each region in terms of payment methods, preferred e-commerce platforms, m-commerce and cross-border e-commerce, E-commerce sales worldwide were expected to continue to grow in 2017, rising 23% to reach US\$2.3tn. As e-commerce in the US would be expected to grow by 15% in 2017, the Asia-Pacific region would have a 30% growth rate in 2017, thereby becoming a clear leader in global e-commerce development. The eMarketer's estimates show that e-commerce sales would account for one-tenth of total retail sales worldwide in 2017. Based on the former's estimates, double-digit growth will continue until 2021. Mobile is a key driver of e-commerce growth in North America. In 2017, m-commerce will account for 34% of e-

commerce sales in the US, ahead of Canada's share of 29%. Consumers increasingly feel comfortable using a mobile device to shop; during Amazon's Prime Day in 2016, mobile app orders more than doubled compared to 2015. In the Western Europe, the e-commerce sales will increase by 12% to reach US\$337bn in 2017 and by 2021, e-commerce will represent 11% of retail sales by 2021. In Western Europe. According to [International Post Corporation \(2017\)](#), the 2016 cross-border e-commerce shopper survey, conducted in 26 countries, revealed that Amazon, eBay and Alibaba accounted for 65% of all cross-border purchases. According to [Callebaut \(2017\)](#), B2C e-commerce growing fast especially in developing countries.

3.2. E-Commerce Taxation Issues

Globally, the manner in which the income from a digital transaction should be characterized has not been settled, and is therefore a crucial subject of inquiry for tax purposes ([Effiong, 2019](#)). The increasing rate of international business-to-business and business-to-consumer transactions over the Internet raises questions about collecting taxes on sales. In addressing whether and how Internet commerce should be subject to taxes, countries face the onerous problem of respecting the laws of other countries. Consequently, deep concerns have been raised about the administrative feasibility of effectively taxing commercial transactions conducted on the internet. Indeed, it presents for tax administration the dangers of inefficiency on the one hand, and mistreatment of the tenets of sound tax policy on the other, with concomitant loss of tax revenues for fiscal authorities ([Mikesell, 2001](#)). Specifically, the cardinal principles of taxation such as fairness, neutrality and avoidance of double taxation may have to be compromised, while the opportunities for tax avoidance and evasion would be inclined to increasing ([Krupsky, 2003](#)). Davis and Chan cited in [Hanefah et al. \(2008\)](#) had earlier argued that the potential for tax avoidance goes up as physical location becomes unclear. This situation often obtains in an e-commerce environment. Actually, there is some growing evidence that the internet is being exploited by consumers for the purpose of avoided taxes ([Alm and Melnik, 2005](#); [Goolsbee, 2000](#); [Scanlan, 2007](#)). Literature reveals that firms take advantage of the Internet to minimize VAT payments. Also, On-line transactions generally assist in the avoidance of consumption taxes, such as Goods and Services Tax. Furthermore, according to [Rosenberg \(2008\)](#), commercial activities carried out through the internet usually raise serious regulatory issues which carry with them the potential of international fiscal conflicts as it relates to the determination of the basis of the transactions, and therefore where taxation should take place.

According to [Bayrakdar et al. \(2015\)](#). The taxation policies put in place by countries based on territory and jurisdiction started to fail after improving electronic commerce. Concepts like permanent establishment, sale points, product and income classification employed in taxation process are no longer adequate. As a result of the difficulty in determining the location of the seller and consumer at transaction on internet, tax revenue loss has become unavoidable. Electronic commerce allows businesses to get their revenue without any physical presence ([Basu, 2008](#)).

The advent of e-commerce has practically removed the need for physical presence in the country receiving the goods or services. Under this situation, the determination of the right to tax profits that are derived from e-transactions becomes a challenge. With regard to indirect taxes, the major issue bothers on how tax administrators will track e-commerce transactions for purposes of collecting the accruing taxes. Apart from the issues of tax enforcement and administration, dealings on digitized products raise peculiar tax concerns for both the source and destination countries. For instance, in transactions of digitized products, it is difficult to establish a source country's power to tax the income or consumption derived from the exchange. Secondly, at the moment the Internet's architecture permits downloaded digitized products to move across border checkpoints unnoticed and be made anywhere in the world without any definite information regarding the physical location of a customer. This happens amidst the prevailing international tax rules that insist on accurate determination of the customer's physical location as a prerequisite for establishing the jurisdiction of the country of origin to tax the value of the sale or revenue therefrom. An alternative to source-based taxation is to base tax jurisdiction on the e-vendor's residence based on the destination principle - a solution that would be unacceptable to countries with relatively few resident e-vendors.

Thirdly, an e-commerce taxation challenge is the probability that some countries may characterize an income from transactions of digitized goods and services in a manner that is different from their physical analogs so as to gain jurisdiction to tax a digital exchange that they otherwise would have been incapable of taxing under the current tax rules.

Fourthly, with e-commerce taxation, there is the absence of a signally agreed framework for all the countries; each country has its own independence and separate legal taxation framework for e-commerce (Effiong, 2019).

Fifthly, many tax payers refuse paying taxes especially if the act and cost of compliance are extremely high and time consuming.

To find solution to the taxation problems of e-commerce, the Ottawa Conference was arranged. The latter resolved as follows:- (i) Conventional taxation principles should be applied to e-commerce, (ii) There should be collaboration between countries, (iii) Fair and neutral taxation should be generated for conventional commerce and e-commerce. (iv) An efficient taxation system should be provided to reduce compliance and administrative costs to businesses. (v) Tax rules should be clear and certain. (vi) Tax payers should be aware of how and in which situations they are taxed. (vii) Effectiveness and fairness should be ensured on taxation process. (viii) Tax systems should be flexible and adaptable to technological and commercial development. (ix) Taxation place for consumption tax should be where the consumption takes place (OECD, 2001) cited in (Bayrakdar *et al.*, 2015).

The practice of e-commerce around the world without any borders and under different applications of taxation on ecommerce brings about some double taxation risk which Countries overcome through double taxation avoidance agreements. However, the risk still exists when such business where is transacted between countries that do not have such agreements.

3.3. The Nigerian tax system

The taxation and growth of the economy of a country depends to a large extent on the revenue generated by its tax authorities. In Nigeria, the Federal Inland Revenue Services has the statutory responsibility to impose tax to its citizenry and corporate entity both in the public and private sector of the economy (Opara, 2014). According to Opara, the tax authority now has the autonomy to assess, collect and record taxes. The enabling environment which came into being on the basis of Section 8(q) of FIRS Establishment Act 2007) has led to an improvement in tax administration in the country.

Nigeria has a fairly developed three tier tax system that is mainly based on the Central, State and local governments (Effiong, 2019) Nigeria's 1999 Constitution provides that the government has the right to impose taxes on individuals and organizations. The Approved List for Taxes and Levies collection Act of 1998 spells out the taxes collectible by each of the three tiers of Government. This law has the objective of ensuring that there is no duplication of taxes or conflict among the three levels of Government, and avoiding the incidence of multiple taxation. The applicable taxes in Nigeria are classifiable as follows:

(i) Direct Taxes: These are taxes that cannot be shifted by the taxpayer to someone else. They include Corporate Income Tax, Education Tax, Personal Income Tax, Capital Gains Tax, Petroleum Profits Tax and Withholding Tax

(ii) Indirect Taxes: Indirect taxes are the taxes that are collected by intermediaries (such as a retail store) from the persons who bear their ultimate economic burden. It is the consumers that are actually paying the tax by paying more for the products they are attached to. Indirect taxes in Nigeria include Value Added Tax, Custom and Excise Duties and Stamp Duty.

Like is the case with most countries, Nigeria adopts the origin based taxation model for its tax system especially on income taxes of individuals and companies.

Under the Nigerian tax system, resident individuals and corporate bodies are liable to pay tax on their global incomes. Non-residents are subjected to Nigerian tax on activities they have carried out within Nigeria through a permanent establishment. The latter refers to the country within which the person receiving the income resides or operates from. Where a tax liability arises in more than one jurisdiction, the taxpayer is authorized to seek relief from double taxation under the existing double taxation treaties which Nigeria currently holds with countries like UK, France and Canada. These treaties are an adaptation of the OECD model for tax convention cited in (Emenyi, 2013). At present, a huge proportion of the Nigerian tax revenue is generated from Value Added Tax (VAT), which is imposed on the supply of all goods and services, other than those exempted by statute. With regard to VAT and other indirect taxes, the major issue is how Nigerian tax authorities can effectively monitor and track e-commerce transactions for the purpose of tax collection.

3.4 Contribution of e-commerce tax collection to the Nigerian economy

Just as e-commerce has demonstrated to be a vibrant source of economic growth in developed countries such as America, Europe, Asia, the same is happening in Nigeria and some other African countries including Egypt, South Africa, and Kenya (Life Learners, 2018),

According to the National Bureau of Statistics (NBS) cited in [Life Learners \(2018\)](#), over 20 million Nigerian youths are currently involved in e-commerce. The ICT industry had directly contributed 10.44 percent to Nigeria's Gross Domestic Product (GDP) in 2013.

According to [Agbata \(2019\)](#), reports from Mckinsey shows that the expenditure on e-commerce in Nigeria was estimated at \$12billion and projected to reach \$75 billion in revenue per annum by 2025.

The Nigerian Finance Bill 2019 was passed into law principally to modify the country's tax laws in order to enhance the taxes collectable by her from electronic commerce. For instance, the Finance Act 2019 which became operational in 2020 provides that taxable income derived by foreign companies now includes income from digital services, to the extent that such foreign companies have presence in Nigeria and profit can be attributed to such activities. Also, the profits arising from consultancy or professional services including technical and management services in relation to offshore services rendered by a person outside Nigeria to a person resident in Nigeria has become taxable under the Act to the extent that the company has significant economic presence in Nigeria and profit can be imputed to such activity. In addition, Nigeria planned to collect 5% value-added tax on online transactions for goods and services. Citing Federal Inland Revenue Service Chairman Tunde Fowler, [Onu \(2019\)](#) reported that the Nigerian government would ask banks to deduct the levy on purchases made using bank cards from year 2020. Further, the definition of stamp was expanded by the Finance Act 2019 to include an electronic stamp or electronic acknowledgement, while the meaning of instrument includes every written document including electronic documents. However, in spite the huge progress recorded in the Nigeria e-commerce an average Nigerian is yet to be conversant with e-commerce.

3.5. The problem with E-commerce taxation in Nigeria

As an emerging economy, Nigeria has a population that is fast accepting the internet as a tool for social interaction and business transactions. [Internet World Stats \(2012\)](#) has it that as at December 2011, there were 45,039,711 internet users. This represented 26.50 percent of the total population of Nigeria. By this, Nigeria currently ranked 10th among the highest Internet users in the world (see Moreno cited in [BrandCrunchng \(2013\)](#)). The increasing importance of the Internet as an emerging driver of growth for the Nigerian economy is additionally reflected in the local online shopping statistics stood at an annual sum of US\$1.8billion ([British Broadcasting Corporation, 2013](#)).

However, the nature of e-commerce poses serious challenge for the Nigerian tax system, like in most other countries, based on the fact that the country's extant national laws governing income taxation are premised on the assumptions of physical presence of the parties to business transactions ([Duke et al., 2013; Hanefah et al., 2008; Horn, 2003; Vohra, 2004](#)) argue that the Nigerian tax laws are incompatible with the taxing of e-commerce transactions. For instance, while physical presence justifies the concept of permanent establishment, as defined in the double tax treaties, there is no more need for physical presence in the country receiving the goods or services under the e-commerce platform. The problem that this situation creates is that it becomes difficult to determine the right to tax profits that are derived from electronic transactions – an exercise that has serious intrinsic implications for the full realization of income tax revenues and, hence, leads to revenue losses. Agreed that the recognition of the Internet as a major platform for communication has increased in recent times, the prevalent poor state of the infrastructures needed for e-commerce transactions presents another obstacle to the widespread use of the internet for commerce in Nigeria. Understandably e-commerce does not merely involve a consumer approaching the internet for his needs with his personal computer, but requires some interfaces between businesses if it has to be capable of serving the customer effectively. Consequently, success in electronic commerce demands that that all the players in the supply chain have to be fully equipped with the Internet and other facilities. Unfortunately, according to [United Nations Conference on Trade and Development. UNCTAD \(2001\)](#), the infrastructures required for this necessary business-to-business interface are often inadequate or lacking in developing countries like Nigeria. [Duke et al. \(2013\)](#) highlight other related challenges that are increasingly being experienced, especially by the users of electronic facilities for commercial transactions as (i) a lack of universal security mechanism that forms a first-line of defense for such users and (ii) some evidence of a relatively slow acceptability and adaptability of firms and individuals to the reality of carrying out commercial transactions electronically- this has manifested itself in the apathy or even resistance to use of e-payment for financial transactions see [Nwaolisa and Kasie \(2011\)](#) cited in [Duke et al. \(2013\)](#).

As asserted by [Duke et al. \(2013\)](#) the debate on the full implications of e-commerce for tax revenues is yet to be settled.

4. CONCLUSION AND RECOMMENDATIONS

Presently, e-commerce has become a vital part of people's lives. Technology has raised the level of e-commerce globally. This paper has examined the development of internet taxation as well as some of the issues concerning both domestic and international Internet taxation particularly on Nigeria using the content analysis research design. The study observed that the taxation of e-commerce has become a crucial issue for nations, businesses and consumers that engage in e-commerce. The issues such as tax loss and tax evasion are crucial. They tend to make parties of e-commerce sceptical and affect the development of e-commerce negatively. In this study, the role of taxation issues on the development of e-commerce has been examined.

As is the case with many other developing nations, Nigeria is gradually embracing e-commerce. However, the country's major challenge of e-commerce as it relates to its tax system has been that the laws that govern direct taxes are at the moment inadequate and out of date; they are premised on the concept of permanent establishment as defined in the double tax treaties. Based on the foregoing revelations, this study recommends as follows for the countries involved in e-commerce taxation:-

- (i) There should be Public-Private-Partnerships between government and firms in developing the infrastructures required for improving the current level and depth of Internet and telephone usage.
 - (ii) There should be consumer education in order to improve awareness on the benefits of e-commerce transactions.
 - (iii) The OECD model for the taxation of e-commerce should be adopted.
 - (iv) Efforts should be made to set up a tax intermediation body. This body ought to be relevant for the digital world, utilize Internet Service Providers (ISPs) as a responsible authority for the collection, calculation and payment of electronic tax. This is expected to put in place a uniform and fair system, which will reduce the burden imposed on retailers as well as preserve the sovereignty of the countries in case of cross-border e-commerce transactions.
 - (v) In order to be able to manage the problems posed by e-commerce Tax jurisdictions need to be globalized; wide scale agreements between trading countries and common tax policies should also be drawn.
 - (vi) The international institutions like OECD should evolve more equitable tenets for cross-border e-commerce transactions so that all countries can enjoy equitable distribution and tax revenue.
- Nigeria is advised to take the following additional steps:-
- (i) Since tax on e-commerce is an extension of the current tax laws, the Nigerian government should evolve an up-to-date and comprehensive legal framework as well as infrastructure for e-commerce so as to take advantage of her huge market.
 - (ii) In addressing the tax implications of e-commerce, Nigeria should consider the need to shift her taxing strategies drastically from the domestic to the international level, since e-commerce, via the internet, has no borders.
 - (iii) Nigeria should anticipate bilateral or multilateral disputes in respect of trade agreements or tax jurisdiction as they will become virtual and more difficult to settle. Also, she has to expect that, over time, many trading entities, especially multi-national companies, will be inclined to operating as virtual organizations with little or no physical presence in any particular taxing jurisdiction see [Lao-Araya \(2003\)](#).

REFERENCES

- Agbata, F. C. (2019). Proposed online tax will hinder e-commerce growth. ICT Clinic. The Punch. Available at: <https://punchng.com/proposed-online-tax-will-hinder-e-commerce-growth/>
- Agbo, E. I. and Nwadiolor, E. O. (2020). Increasing Tax-to-GDP ratios of sub-Saharan African Countries: Lessons from advanced economies. *International Journal of Research in Management Fields*, 4(1): 17-38.
- Alm, J. and Melnik, M. I. (2005). Sales taxes and the decision to purchase online. *Public Finance Review*, 33(2): 184-212.
- Arinze, C. U., Ebem, D. U., Eneh, A. and Ezugwu, O. A. (2018). E-Commerce and electronic taxation in Nigeria. The association of information professionals of Nigeria. *African Journals Online*, 15(1):
- Basu, S. (2008). International taxation of e-commerce: Persistent problems and possible developments. *Journal of Information, Law & Technology, JILT*, 1(1): 1-25.
- Bayrakdar, S., Yapar, B. K. and Yapar, M. (2015). The role of taxation problems on the development of E-commerce. *Social and Behavioral Sciences*:

- BrandCrunch (2013). Off to a good start in Nigeria, suits Nigerians better - Jamie. Available at: <http://www.brandcrunch.com.ng/bnrch/index.php/news/668-e-commerce-is-off-to-a-good-start-in-nigeria-suits-nigerians-bettejaime?format=pdf>.
- Bristol, M. A. (2001). The impact of electronic commerce on tax revenues in the Caribbean Community. Being a paper prepared as part of the Graduate Internship Program 2001, for the Regional Tax Policy and Administration Unit CARICOM Secretariat, Georgetown, Guyana, SA.
- British Broadcasting Corporation (2013). Online shopping in Nigeria. BBC Radio, London, 18th March.
- Callebaut, S. (2017). E-Commerce: Global trends and developments. eTrade Readiness Assessments Division on Technology and Logistics, UNCTAD UN.ESCAP/ITD/ARTNET Regional Workshop on E-Commerce and Emerging Digital Trade Agenda, Bangkok, Thailand, June, 15, 2017.
- Cmat, A. and Deirmenci, M. A. (2003). Financial Obligations on the Sector Financial Solution Magazine. 62: 153-75.
- Deloitte and Touche (1997). Tax in the Network Economy. London: Deloitte & Touche.:
- Doernberg, R. L., Hinnekens, L., Hellerstein, W. and Li, J. (2001). Electronic Commerce and Multijurisdictional Taxation. The Hague: Kluwer Law International.
- Duke, J., Efiok, S., Kankpang, K. and Emenyi, E. (2013). Impediments of electronic commerce as a tax revenue facilitator in Nigeria. *International Business Research*, 6(6): 152-61.
- Effiong, A. E. (2019). An appraisal of nigerian tax system and the implications of electronic-commerce taxation. Available at: <https://www.researchgate.net/publication/33214484>.
- Emenyi, E. O. (2013). The impact of e-commerce on tax revenue in Nigeria: A study of the Federal Inland Revenue Service in South-South States of Nigeria (Unpublished Master's thesis). University of Calabar, Calabar, Nigeria.
- Garg, E. (2000). E-Taxation. Available at: <http://ashokgarg.in/etax.htm>.
- Goolsbee, A. (2000). In a world without borders: The impact of taxes on internet commerce. *Quarterly Journal of Economics*, 115(2): 561-76.
- Hanefah, H. M. M., Hassan, H. and Othman, Z. (2008). E-commerce implications: Potential problems and challenges in Malaysia. *International Business Research*, 1(1): 43-57.
- Horn, P. (2003). Taxation of e-commerce. *Journal of American Academy of Business*, 2(2): 329.
- International Post Corporation (2017). State of e-commerce: global outlook 2016-21. Available at: <https://www.ipc.be/services/markets-and-regulations/e-commerce-market-insights/ecommercearticles/global-ecommerce-figures-2017>.
- Internet World Stats (2012). Nigeria: Internet usage and Telecommunications reports. Available at: <http://www.internetworldstats.com/af/ng.htm>.
- Krupsky, K. J. (2003). Tax administration in an electronic world. *Tax Management International Journal*, 32(11): 611-12.
- Lao-Araya, K. (2003). Emerging tax issues: Implications of globalization and technology. Manila: Asian Development Bank
- Life Learners (2018). E-commerce in Nigeria Economy. Available at: <https://lifelearners.ng/e-commerce-in-nigeria-economy/>
- Mikesell, J. L. (2001). The threat to state sales taxes from e-commerce: A review of the principal issues. 22, 3(*Municipal Finance Journal*): 48-60.
- Nwaolisa, E. F. and Kasie, E. G. (2011). Electronic retail payment systems: User acceptability and payment problems in Nigeria. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 1(5): 66-76.
- OECD (2001). Taxation and Electronic Commerce: Implementing The Ottawa Taxation Framework Conditions Implementing The Ottawa Taxation Framework Conditions.
- Onu, E. (2019). Nigeria to Introduce 5% Tax on E-Commerce Transactions, PT Says
- Opara, L. C. (2014). Tax challenges of E-commerce in Nigeria: The panacea for legal jurisprudence. *Global Journal of Policies and Law Research*, 2(4): 1-5.
- PWC (1999). SME Electronic Commerce Study (final report), Asia Pacific Economic Cooperation.
- Rosenberg, G. (2008). Direct taxation of e-commerce transactions in Israel.
- Scanlan, M. A. (2007). Tax sensitivity in electronic commerce. *Fiscal Studies*, 28(4): 417-36.
- Scupola, A. (2003). The adoption of internet commerce by SMEs in the south of Italy: An environmental, technological and organizational perspective. *Journal of Global Information Technology Management*, 6(1): 52-71.
- Simkin, M. G., Bartlett, G. W. and Shim, J. P. (2017). Pros and cons of E-commerce taxation. *International Business & Economics Research Journal*, 1(2): 61-71.

- Tanzi, V. (1998). The Impact of Economic Globalization on Taxation. International Bureau of Fiscal Documentation Bulletin, August/September, 338-43.
- Tigre, P. B. and Dedrick, J. (2004). E-commerce in Brazil: Local Adaptation of a Global Technology. *Electronic Markets*, 14(1): 36-47.
- United Nations Conference on Trade and Development. UNCTAD (2001). E-Commerce and Development Report 2001. Available at: http://unctad.org/en/Docs/ecdr2001_en.pdf
- Vohra, R. (2004). Taxing e-commerce problems and possible solutions. Available at: http://www.asianlaws.org/projects/taxing_ecom.htm
- Wheelen, T. L. and Hunger, J. D. (2012). Strategic management and business policy – Toward lobal sustainability (13th ed.). New Jersey: Prentice-Hall.
- www.toppr.com (2020). Electronic Commerce <https://www.toppr.com/guides/business-environment/emerging-trends-in-business/electronic-commerce/> (Accessed April 17,2020).