INFORMATION COMMUNICATION TECHNOLOGY TAXATION AND TAX EARNINGS IN A LOW-INCOME ECONOMY

Cordelia Onyinyechi Omodero[1]

[1]*Department of Accounting, College of Management and Social Sciences, Covenant University Ota, Ogun State, Nigeria*
E-mail: *onyinyechi.omodero@covenantuniversity.edu.ng*

Abstract: Over the years, information and communication technology has made its way into industrialized countries, and through technology transfer, it is also rapidly expanding in less developed ones. These technology advances provide distinct economic benefits to emerging countries such as Nigeria. Aside from market expansion, the advancement of information and communication technology has raised government revenue through the establishment of a specific fee on the revenues of corporations involved in broad technologically based operations. The primary goal of this research is to investigate the influence of national information communication technology development taxation on general tax income in Nigeria. This study covers a period from 2010 to 2019 using data gathered from OECD and FIRS statistics. The dependent variable is the total tax revenue and the predictor variables are the national information technology development levy (NITDL) or tax and trade openness. Using the regression analysis tool, the study finds that NITDL contributes positively and significantly to total tax income at 1% level of significance while trade openness contributes to tax revenue at 10% significance level. Both outcomes are significant and commendable. The policy implication is that the government should support all information communication technology growth in the country for more inflow of international business links and for tax revenue growth in the country. The study recommends stable power supply for effective application of information communication technologies such internet network, website developments and effective operations.

Keywords: Taxation, ICT, telecommunications, information and technology development

* * *

1. Introduction

National Information Technology Development Levy (NITDL) in Nigeria, is the sort of tax charged on a company's earnings before tax. GSM Service Providers, Telecommunication Firms, Internet Providers, Banks, insurance companies and other companies having a turnover of N100 million or more are required to pay NITDL. The National Information Technology Development Agency Act, CAP N156 LFN 2004 (as amended), governs NITDL. It is 1% of earnings before taxes. The NITDL filing method is the same as for Companies Income Tax. When submitting Company Income Tax returns for self-assessment, the levy is determined and presented simultaneously (Igweonu & Akintola, 2019). In reality, the NITDA Act imposes the requirement to conduct an NITD levy assessments on the FIRS rather than the taxpayers. Section 16 of the NITDA Act mandates that the FIRS assesses firms for the NITD charge in addition to corporate income tax (CIT) and/or petroleum profits tax (PPT). The FIRS normally depends on taxpayers to provide self-assessment CIT/PPT filings; hence, in order to conform with the NITDA Act, the FIRS is required to evaluate pertinent firms for the NITD levy at the earliest of when such firms present their CIT/PPT returns or the due date of such returns (Yusuf, 2021). Refusing to pay by the due date results in a 10% fine. That is, the sanction for failing to pay the levy within 30 days after receiving a demand notice from NITD Agency includes the outstanding sum + 10% of the unpaid balance plus interest at the Central Bank of Nigeria's current minimum rediscount rate.

Information technology (IT) industry does not only represent a massive tax base in the industrialized world, but IT itself has become more important in a state's economy, security, and general well-being (Abdulkarim, 2020). These are maybe some of the reasons why the Federal Government of Nigeria chose to levy the National Information Technology Development Levy (NITDL) to assist in providing some fund needed to realign Nigeria to better reap the benefits of IT and the IT sector (Abdulkarim, 2020). Because the NITDA Act does not explicitly or implicitly exempt foreign enterprises from the NITD tax,

foreign companies must comply with the need to remit the NITD tax (Delloit, 2021). If a company's categorization is unclear, it may resort to the law governing the types of enterprises subject to the NITDA fee. The Banks and Other Financial Institutions Act, the Insurance Act, the Pension Reform Act, and the Nigerian Communications Act are all part of this law. If a corporation is governed by the authorities formed to implement the aforementioned statutes, such company is almost certainly subject to the NITD levy (Yusuf, 2021). A corporation may also contact the NITDA and/or the FIRS to explain its responsibility to the tax levied. It would also be a great move for the NITDA to draft guidelines outlining a comprehensive list of enterprises subject to the fee (Yusuf, 2021).

The National Information Technology Development Agency (NITDA) is a governmental entity formed by the NITDA Act 2007 as the Federal Ministry of Communication of the Federal Republic of Nigeria's ICT policy implementing arm. It is solely responsible for establishing programs that support the country's ICT-related operations. NITDA is also tasked with implementing policies and guidelines for pushing ICT in Nigeria. The Agency is responsible for facilitating the implementation of information communication technologies and supervising the use of telecommunications networks as well as other types of digital information exchange transactions as a replacement for parchment techniques in authorities, trade, public schooling, the personal and public sectors, labor, and other fields where online communication may strengthen data and information transmission. The Agency implements steps to encourage the use of information technology in all parts of Nigerian life, such as the development of principles for the building of network infrastructure and intellectual centers. Implement appropriate regulatory regulations and incentives to encourage private-sector investment in information technology. Ascertain crucial areas of information technology that require research involvement and development; to improve public safety and the dynamism of the sector; to advise the government on methods to promote the growth of information technology in Nigeria, including the introduction of suitable information technology laws; to promote internet and intranet accessibility in Nigeria and encourage better Internet governance by putting the Second Schedule of this Act into action.

According to NITDA Act 2007, The Board shall have the authority to: (a) operationalize overall strategy for the administration of the Agency's matters; (b) organize the National Information Technology Development Fund established under Section 12 of this Act; (c) hire, promote, revoke, remove, and workout disciplinary control over the Agency's cabinet members and top staff; and (d) configure the Agency into as many business units as it deems necessary for the successful discharge of the role. In other words, the NITDA's Board

possesses the right to develop general policy for the administration of the Agency's activities, as well as to administer the National Information Technology Development Fund created under Section 12 of the Act, consisting; offer opportunities to motivate the use of information technology in all aspects of Nigerian life, including the establishment of information technology centers.

Some scientific investigations have shown a keen interest in testing the impact of ICT absorption on the economic growth of developing countries in the Middle East and North Africa (MENA) geographical area (Hassan, 2005; Sassi & Goaied, 2013) and Sub-Saharan Africa (SSA) province (Albiman & Sulong, 2016; Andrianaivo & Kangni, 2011; Lee, Levendis, & Gutierrez, 2012; Wamboye, Tochkov, & Sergi, 2015). While a growing body of research have confirmed that ICT dissemination has a positive and significant role in enhancing economic growth, particularly in developed countries (Inklaar, O'Mahony, & Timmer, 2005; Koutroumpis, 2009; Roller & Waverman, 2001), some other empirical research on this link have shown conflicting findings (Sassi & Goaied, 2013; Vu, 2011). Numerous other studies have found that ICT dispersion has a negative impact on economic growth in many nations and regions around the world (Dewan & Kraemer, 2000; Papaioannou & Dimelis, 2007; Pohjola, 2002; Pradhan, Arvin, & Norman, 2015; Yousefi, 2011). On the same note many earlier research have focused on developing nations and used different econometric models and cross-country data to explore the link between ICT spread and economic growth (Aghaei & Rezagholizadeh, 2020; Andrianaivo & Kpodar, 2011; Nasab & Aghaei, 2009; Pradhan et al., 2015, Pradhan, Mallik, & Bagchi, 2018; Sassi & Goaied, 2013). These studies yielded equivocal results, and there was much dispute among experts over the topic of a large economic expansion effect of ICT penetration in poor nations. As a result, this matter is currently under investigation and has motivated this present study. The study examines the contribution of national information technology development tax to general tax revenue collections in Nigeria. The issue addressed in this present study has been omitted in the previous studies.

2. Literature review

Yuda (2013) reconnoitered the power of ICT on updated tax administration operations and revenue collection in Tanzania's Taxpayer Department of Revenue Authority. In 2001, the department implemented ICT to speed up administration and provide timely access to documents. After conducting descriptive research, the study's findings revealed that ICT had an impact on updated tax administration methods and revenue collection in Tanzania's Taxpayer Department of Revenue Authority. ICT reduced operating expenses,

eliminated mail delays, plugged income gaps, and reduced cheating. The empirical assessment of the impact of ICT on accounting practice (AP) Efunboade (2014) also investigated the impression of ICT on tax management in Nigeria. The study investigated the usefulness of ICT in tax running in detail. The study included a questionnaire and a personal interview, which were evaluated using descriptive analysis. The research findings highlighted the degree of utility of ICT to the fundamental activities of tax administration in Nigeria, but did not remark on other critical variables such as Digital literacy and facilities. The findings indicated that ICT had a positive influence on tax management.

Olatunji and Ayodele (2017) evaluated the impact of digital technologies on tax system in Nigeria's south-western region. A qualitative descriptive design was utilized, with questionnaires used to gather data that was then processed using multiple linear regressions and Pearson's product - moment interaction. The paper discovered that information know-how which included: online tax filing (OTF), online tax registering (OTR), and online tax transmittal (OTT) decreased tax yield by -1.9 percent, 7.3 percent, and 31.5 percent (p=0.85, 0.526, and 0.00) respective. The findings also revealed that, there was a relationship between OTF, OTR, OTRE and Tax productivity of -5.9 percent (p=0.520), 9.7 percent (p=0.290), and 0.344 (p=0.000). Thus, the study established that information technology improved tax output and organization. By means of a board General Scheme of Instant progress classic, Bahrini and Qaffas (2018) analysed the influence of gen and communication know-how on the economic rise in developing evolving regions and North Africa (MENA) and Sub-Saharan Africa (SSA) territories from 2007 to 2016. The econometric model results suggest that, aside from fixed telephones, other information and communication technologies such as mobile phones, Internet usage, and broadband adoption have been the primary drivers of economic development in MENA and SSA emerging nations throughout the recent period 2007–2016.

Using panel data from 40 countries, Haftu (2019) empirically examined the influence of mobile phones and the Internet on Sub-Saharan Africa's per capita income from 2006 to 2015. The GMM resilient two-step approach was involved in the analysis. After controlling for a number of other factors, the results showed that the increase in mobile phone use contributed significantly to the region's GDP per capita. A 10% increase in mobile phone penetration resulted in a 1.2 percent rise in GDP per capita. As a result, expanding access to a smartphone played a critical part in reducing inequality in the territory by raising inhabitants' per capita terms. During the research period, however, the Internet had no impact on per capita GDP. Adegbite, Bojuwon, and Adegbite (2019) evaluated the influence of ICT on tax income in Oyo State. Primary data were gathered through a questionnaire provided to workers of the Oyo State

Board of Internal Revenue Service and other taxpayers. Three hundred and fifty (350) questionnaires were issued and delivered to state board of internal revenue service workers and tax payers, of which 300 were received. To confirm the assumption, data were examined using summary analysis, chi-square, ANOVA, and Multivariate Analysis of Variance and Covariance (MANOVA). It has been established that ICT has a large and statistically significant influence on tax revenue generation in Oyo State. ICT is a particularly successful technique for increasing the state's taxes cash intake.

Umaru, Nasiru and Yusuf (2019) used a survey research approach to collect data from a sample of respondents. The research's population included both senior and junior workers from the Adamawa State Board of Internal Revenue in Yola, totaling 483 employees and a sample size of 210. Both primary and secondary data were used while the hypothesis was investigated using regression analysis with a 0.05 significance level. Individual variable contributions in the model demonstrated that the t – statistic was positively signed (1.770, 0.844, 7.445) and statistically significant at 5%. The F - statistics 264.448 additionally revealed that the trend lines jointly represented the response variable. The statistically significant result (P 0.05) indicated that information innovation had a substantial influence on tax administration at the Adamawa State Board of Internal Revenue, Yola. It was also unearthed that IT facilities (digital devices, internet facility) were not consistently maintained; there was no web interface platform for e-filing of tax for companies to conveniently send money for their taxes; and there was no adequate online facility on work station to support with collection of taxes.

Following the importance attached to ICT in the recent times, Ajala and Adegbie (2020) looked into the impact of information technology on operative tax valuation in Nigeria. The appraisal exploration strategy was used in the study. The population consisted of 2,857 managerial and administrative personnel from six chosen multinational corporations in Lagos State, as well as the Federal Inland Revenue Service in Lagos offices and the Lagos State Internal Revenue Service. The stratified sampling approach was used to determine the sample size of 641 using Krejcie and Morgan's formula. Cronbach's alpha reliability values were in the 0.88 to 0.96 range. Data study using descriptive statistics and inferential statistics demonstrated that information technology had a statistically significant beneficial influence on operational tax calculation. Mallick (2021) evaluated the effect of information and communication technology infrastructure and systematic review in direct and indirect tax resource mobilization for India's integrated governments of the Centre, States, and Union Territories from 1990–1991 to 2017–2018. Given that the newly introduced Goods and Services Tax (GST) regime was not completely unlike from the former value added tax (VAT) administration in relations to

income gatherings at each stage on the worth additional of production and trading, but rather an extension of VAT (which existed since 2005 by most states and Union Territories until 1st July 2017) by conveying services into the tax net, the study tried to examine the responsibility of institutions/governance and use of modern ICT infrastructure. The findings showed that ICT infrastructure and governance quality had no substantial beneficial influence on the overall tax income inflows.

3. Approach

Multiple regression model was used as the quantitative basis for this study. The research looks on the impact of an information and communication technology tax on conventional overall tax inflows in Nigeria. The data received from the sources listed in Table 1 were analyzed using the Statistical Package for the Social Sciences (SPSS). The statistics ranged from 2010 to 2019.

Table 1.

Variables description and sources

Variable	Description	Source
TXRVN	Total Tax Revenue	Federal Inland Revenue Service (FIRS) https://www.firs.gov.ng/tax-statistics-report/
NITDL	National Information Technology Development Levy	Federal Inland Revenue Service and OECD https://www.firs.gov.ng/tax-statistics-report/ and https://stats.oecd.org/Index.aspx?DataSetCode=REVNGA
TOPNS	Trade openness	World Bank Development Indicators & CBN Statistical Bulletin https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?locations=NG

Source: Compilation by Author, 2022

The archetypal quantified for this research is as follows:

$Y = \beta_0 + \beta X_1 + \beta X_2 + \ldots \mu_{it}$

Where,

Y = Total Tax Revenue (reliant variable);

X = National Information Technology Development Levy (autonomous variable)

β = Constant

μ_{it} = Fault span

The stated prototypical can be accurately functional to this study as indicated below:

$$LOGTXRVN = \beta_0 + \beta_1 LOGNITDL + \beta_2 LOGTOPNS + \mu_{it}$$

Where:

TXRVN = Total Tax Revenue; NITDL = National Information Technology Development Levy; TOPNS = Trade Openness [(Export – Import)/GDP].

β_0 = Measurement of the constraint estimation

β_1-β_2 = interrupt; μ_{it} = Fault stint.

4. Results and discussion

Table 2.

Descriptive statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
TXRVN	10	3.45317	3.72599	3.6318474	.02896475	.09159458
NITDL	10	3.76982	4.08810	3.9733397	.03329323	.10528243
TOPNS	10	5.32424	5.66908	5.5157854	.03424311	.10828622
Valid N (listwise)	10					

Author's calculation, 2022

Table 2 statistically explains all of the factors utilized in this investigation. The minimal values for TXRVN, NITDL, and TOPNS in Table 2 are 3.45, 3.77, and 5.32, respectively. The maximum values for TXRVN, NITDL, and TOPNS are 3.72, 4.09, and 5.67, respectively. The mean values for TXRVN, NITDL, and TOPNS are 3.63, 3.97, and 5.51, respectively, in the same order.

Despite the fact that the standard deviations of TXRVN, NITDL, and TOPNS (with values of 0.09, 0.10, and 0.11, respectively) demonstrate a lower spread. These descriptive values, however, do not imply anything bad and instead aid to corroborate the validity and normalcy of the data sets employed in this investigation. As a result, the standard deviation of all variables shows that the data distribution has a reduced spread.

Table 3.

Correlations

		LOG TXRVN	LOG NITDL	LOG TOPNS
LOGTXRVN	Pearson Correlation	1	.734[*]	.337
	Sig. (2-tailed)		.016	.340
	N	10	10	10
LOGNITDL	Pearson Correlation	.734[*]	1	-.079
	Sig. (2-tailed)	.016		.828
	N	10	10	10
LOGTOPNS	Pearson Correlation	.337	-.079	1
	Sig. (2-tailed)	.340	.828	
	N	10	10	10

*. Correlation is significant at the 0.05 level (2-tailed).
Author's calculation, 2022

The association matrix for this study is shown in Table 3. According to Table 3, LOGTXRVN has a substantial and positive association with LOGNITDL at a 5% level, with a correlation value of 73.4 percent. The inference is that, despite its recent introduction in Nigeria, the information and communication technology tax has a favorable impact on the government's tax income base. It contributes positively to Nigeria's overall economic growth. Apart from increasing government income, it also helps the country keep up with the worldwide trend of technical economic advancement. With the advancement of information and communication technologies, the globe is rapidly becoming a global village. The association between LOGTXRVN and LOGTOPNS is weak, but the relationship between LOGNITDL and LOGTOPNS is strong and negative.

Table 4.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin - Watson
1	.834	.696	.609	.05727596	2.341

Predictors: (Constant), LOGNITDL, LOGTOPNS
Dependent Variable: LOGTXRVN
Author's calculation, 2022

Table 4 summarizes the general association between the independent factors and the dependent variable. R = 83.4 percent, indicating that the dependent variable has a significant connection with the independent variables.

The coefficient of determination, R Square, indicates that the independent variables account for 69.6 percent of the fluctuations in tax revenue in Nigeria. The estimate's standard error is 0.05 which is less than 1, indicating that there is no inaccuracy in our forecast for this study. The Durbin-Watson is close to 2, indicating that the model is devoid of autocorrelation.

Table 5.

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.053	2	.026	8.008	.016
	Residual	.023	7	.003		
	Total	.076	9			

Dependent Variable: LOGTXRVN
Predictors: (Constant), LOGNITDL, LOGTOPNS
Author's calculation, 2022

Table 5 is the ANOVA result which reveals that the F-statistic is 8.008 with a p-value of 0.01 indicating a significance level of 1%. The result also suggests that the predictor factors impact tax revenue generation collectively, and the model for this study is adequate. According to the data in Table 6, there is no multicollinearity, as evidenced by the variance inflation factor (VIF) of 1, which is less than the value of 10.

Table 6.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.87	1.25		-.69	.512		
	LOGNITDL	.66	.18	.765	3.66	.008***	.994	1.006
	LOGTOPNS	.34	.18	.398	1.90	.099**	.994	1.006

Dependent Variable: LOGTXRVN
*** Significant @ 1%; **Significant @ 10%
Author's calculation, 2022

Table 6 shows the individual outcomes of the predictor factors. According to Table 6, LOGNITDL has a large beneficial impact on total tax income collected in Nigeria. Trade openness has a favorable effect on tax

revenue, and it is substantial at the 10% level of significance. This finding agrees with (Adegbite et al., 2019; Ajala and Adegbie, 2020; Bahrini and Qaffas, 2018; Efunboade, 2014; Olatunji and Ayodele, 2017; Yuda, 2013) but disagrees with Mallick, 2021 who discovered that ICT infrastructure and governance quality had no significant beneficial influence on overall tax income inflows in India.

Conclusion and recommendation

The major purpose of this study is to look at the impact of national information and communication technology development taxation on general tax income in Nigeria. This analysis spans the years 2010 through 2019, utilizing data from OECE and FIRS statistics. Total tax revenue is the dependent variable, and the key predictor variable is the national information technology development levy (NITDL) or tax, with trade openness acting as a moderator. Using the regression analysis technique, the study discovers that NITDL contributes favorably and significantly to overall tax income at the 1% level of significance, whereas trade openness adds to tax revenue at the 10% level of significance. Both conclusions are substantial and worthy of mention. The policy consequence is that the government should promote all information and communication technology growth in the country in order to increase the inflow of international business linkages and the country's tax revenue growth. Following that the landline infrastructure's communications linkages, comprising backup for mobile networks, were mostly made up of airborne multimode fiber, this type of connection is more vulnerable to severe weather than underground fiber link since it is released to the environment (Amado *et al*., 2021). The study suggests that a consistent power supply be used for the successful use of information communication technologies such as internet networks, website creation, and efficient operations.

References

Abdulkarim, A. (2020). *The National Information Technology Development Levy (NITDL)*. Extracted on December 31, 2021 from: https://unilo rintaxclub.com.ng/2020/05/14/the-national-information-technology-development-levy-nitdl-by-abeeb-abdulkarim/.

Adegbite, T.A., Bojuwon, M., & Adegbite, A.F. (2019). The Impact of ICT on Taxation: Evidence from Oyo State. *Copernican Journal of Finance & Accounting*, 8(4), 7–25. http://dx.doi.org/10.12775/.

Aghaei, M., & Rezagholizadeh, M. (2020). The Impact of Information and Communication Technology (ICT) on Economic Growth in the OIC Countries. *Economic and Environmental Studies*, *17*(2 (42), 257-278. https://doi.org/10.25167/ees.2017.42.7.

Ajala, M.O.O., & Adegbie, F.F. (2020). Effects of information technology on Effective tax Assessment in Nigeria. *Journal of Accounting and Taxation*, 12(4), 126-134. DOI: 10.5897/JAT2020.0416.

Albiman, M.M., & Sulong, Z. (2016). The role of ICT use to the economic growth In Sub-Saharan African region (SSA). *Journal of Science and Technology Policy Management*, 7(3), 306-329. https://doi.org/10.1108/JSTPM-06-2016-0010.

Amado, C., Karlyn, S., Ajay, K., Ryan, C., & Justin, H. (2021). Building a resilient telecommunications Sector in Puerto Rico in the Aftermath of Huricanes Irma and Maria. *Journal of Critical Infrastructure Policy*, 2(1), 75-96. DOI: 10.18278/jcip.2.1.7.

Andrianaivo, M., & Kangni, K. (2011). *ICT, Financial Inclusion, and Growth: Evidence from African Countries.* Working Paper No. 11/73, International Monetary Fund, IMF Working Paper. Available online at: https://ww.imf.org/en/Publications/WP/Issues/2016/12/31/ICT-Financial-Inclusionand-Growth-Evidence-from-African-Countries-24771.

Bahrini, R., & Qaffas, A.A. (2018). Impact of information and communication Technology on Economic growth: Evidence from developing countries. *Economies*, 7(1), 1-13. https://doi.org/10.3390/economies7010021.

Delloitte (2021). *National Information Technology Development (NITD) Levy: What You should Know and Do About It.* https://www.proshareng.com/news/Taxes%20&%20Tariffs/National-Information-Technology-Development--NITD--Levy--What-You-Should-Know-and-Do-About-It/56448.

Dewan, S., & Kraemer, K.L. (2000). Information technology and productivity: Preliminary Evidence from country-level data. *Management Science,* 46(4), 548–62. https://doi.org/10.1287/mnsc.46.4.548.12057

Efunboade, A.O. (2014). Impact of ICT on tax administration in Nigeria. *Computer Engineering and Intelligent Systems*, 5(8), 26-29.

Haftu, G.G. (2019). Information communications technology and economic growth

In Sub-Saharan Africa: A panel data approach. *Telecommunications Policy*, 43(1), 88-99. https://doi.org/10.1016/j.telpol.2018.03.010.

Hassan, M. K. (2005). *FDI, Information Technology and Economic Growth in the* MENA Region. 10th ERF Paper. Available online at: http://www.mafhoum.com/press6/171T42.pdf.

Igweonu, T., & Akintola, S. (2019). *FIRS: National Information Technology Development Levy*. Retrieved on December 31, 2021 from: https://www.aluko-oyebode.com/insights/3732/.

Inklaar, R., O'Mahony, M., & Timmer, M. (2005). ICT and Europe's productivity Performance: Industry-level growth account comparisons with the United States. *Review of Income and Wealth*, 51(4), 505–36. https://doi.org/10.1111/j.1475-4991.2005.00166.x.

Koutroumpis, P. (2009). The economic impact of broadband on growth: A Simultaneous Approach. *Telecommunications Policy*, 33(9), 471–485. https://doi.org/10.1016/j.telpol.2009.07.004.

Lee, S. H., Levendis, J., & Gutierrez, L. (2012). Telecommunications and Economic growth: An Empirical analysis of Sub-Saharan Africa. *Applied Economics,* 44(4), 461– 69. https://doi.org/10.1080/0003684 6.2010.508730

Nasab, E. H., & Majid, A. (2009). The effect of ICT on economic growth: Further evidence. *International Bulletin of Business Administration,* 10(1), 46–56.

NITDA (2007). *National Information Technology Development Agency Act 2007*. Act No. 28. Published in the Federal Republic of Nigeria official Gazette No. 99. Vol. 94, Lagos 5th October 2007.

Olatunji, O.C., & Ayodele, K.B. (2017). Impact of information technology on Tax Administration in Southwest, Nigeria. *Archives of Business Research*, 5(9), 139-150. DOI: 10.14738/abr.59.3549.

Papaioannou, S.K. & Dimelis, S.P. (2007). Information Technology as a Factor of Economic Development: Evidence from Developed and Developing Countries. *Economics of Innovation and New Technology,* 16(3), 179-194, https://doi.org/10.1080/10438590600661889.

Pohjola, M. (2002). The New Economy: facts, impacts and policies. *Information Economics and Policy*, 14(2), 133-144. https://doi.org/10.1016/S0167-6245(01)00063-4.

Pradhan, R.P., Arvin, M.B., & Norman, N.R. (2015). The dynamics of information And Communications technologies infrastructure, economic growth, and financial development: Evidence from Asian countries. *Technology in Society*, 42(1), 135-149. https://doi.org/10. 1016/j.techsoc.2015.04.002.

Pradhan, R.P., Mallik, G., Bagchi, T.P. (2018). Information communication Technology (ICT) Infrastructure and economic growth: A causality

evinced by cross-country panel data. *IIMB Management Review*, 30(1),
91-103. https://doi.org/10.1016/j.iimb.2018.01.001.

Roller, L., & Waverman, L. (2001). Telecommunications Infrastructure and
Economic Development: A Simultaneous Approach. *American
Economic Review*, 91 (4): 909-923. DOI: 10.1257/aer.91.4.909.

Sassi, S. & Goaied, M. (2013). Financial development, ICT diffusion and
economic Growth: Lessons from MENA region. *Telecommunications
Policy*, 37(4–5). 252-261. https://doi.org/10.1016/j.telpol.2012.12.004.

Umaru, A.F., Nasiru, M., & Yusuf, S.K. (2019). Information technology and
tax Administration in Adamawa State Board of Internal Revenue Yola
– Nigeria. *Dutse Journal of Economics and Development Studies,* 7(1),
13-22.

Vu, K.M. (2011). ICT as a source of economic growth in the information
age: Empirical Evidence from the 1996–2005 period. *Telecommuni-
cations Policy*, 35(4), 357-372. https://doi.org/10.1016/j.telpol.
2011.02.008.

Wamboye, E., Tochkov, K. & Sergi, B. (2015). Technology Adoption and
Growth In Sub-Saharan African Countries. *Comparative Economic
Studies*, 57(1), 136–167. https://doi.org/10.1057/ces.2014.38.

Yousefi, A. (2011). The impact of information and communication technology
on Economic Growth: evidence from developed and developing
countries. *Economics of Innovation and New Technology*, 20(6), 581-
596. https://doi.org/10.1080/10438599.2010.544470.

Yusuf, N. (2021). *Nigeria's National Information Technology Development
Levy*. Retrieved On December 31, 2021 from: https://news.bloomber
gtax.com/daily-tax-report-international/nigerias-national-information-
technology-development-levy.

Dr. Cordelia Onyinyechi Omodero is an accounting lecturer in the
department of accounting at Covenant University Ota in Ogun State,
Nigeria. She is an Associate Member of the Institute of Chartered
Accountants of Nigeria. She has a BSc in Accounting from Rivers State
University in Nigeria, an MSc in Accounting from Imo State University in
Nigeria, and a Ph.D in Accounting from Michael Okpara University of
Agriculture in Umudike, Umuahia, Abia State, Nigeria. Her **research
interests** include, among other things, taxation, fiscal federalism and
financial policies, and public sector accounting and finance.
ORCID ID: 0000-0002-8758-9756

Народностопански архив

година LXXVI книга 1 - 2023

Year LXXVI, Issi 1 - 2023

Economic Archive

ECONOMIC ARCHIVE

YEAR LXXVI, BOOK 1 – 2023

CONTENTS