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IMPACT OF TAXATION OF DIGITAL ECONOMY ON TAX IMPLICATIONS FOR BUSINESSES OPERATING IN NIGERIA

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Abstract

The taxation of the digital economy is a dynamic and ongoing process, as governments and international organizations navigate the complexities of taxing digital transactions and inabilities in ensuring a level playing field for all businesses, and the issue of digital tax avoidance has emerged as a concern, despite efforts by various countries around the world by implementing some measures like digital services taxes to ensure that digital companies contribute their fair share of taxes. Based on these unending issues, the study therefore, the aims to examine the impact of taxation of digital economy on tax implications for businesses operating in Nigeria. The study adopted a cross-sectional survey research design and the population of the study consisted of 350 stakeholders in Nigeria, including employees of the Federal Inland Revenue Services (FIRS) and employees of the top 32 startups in Nigeria as of 2022. Random sampling technique was employed to quantitatively select a sample of 187 senior employees of both FIRS and startups businesses in Nigeria. The primary data obtained was analyzed using a Partial Least Square-Structural Equation Modeling (PLS-SEM) technique. This study found that taxation of digital economy has no significant impact on tax implications for business operating in Nigeria as shown by t-values of 0.944 with p-value of 0.345 at 5% level of significance. The study concludes that taxation of digital economy has no influence in enhancing tax implications in Nigeria. The study recommends that governments should maintain their investment in capacity building and expertise development for tax authorities and practitioners working with digital companies, as this would enhance tax compliance and enforcement within the digital economy.

Keywords: Taxation, Digital Economy, Tax Implications

JEL Classification Code: M41, 033

1. Introduction

Digitalization has reshaped the global economy, introducing new business models and tax challenges. Governments worldwide, including Nigeria, are grappling with how to effectively tax digital companies, leading to discussions on international tax reform (Mpofu, 2022). Africa, particularly Nigeria, has witnessed rapid growth in its digital economy, driven by a young population, increased internet access, and rising mobile phone usage (Begazo et al., 2023). However, corporate entities in this sector face specific tax implications and challenges, including permanent establishment, nexus and revenue sourcing, transfer pricing, and cross-border transactions (Bican & Brem, 2020). Tax authorities must determine if foreign digital

companies have a taxable presence or "permanent establishment" in Nigeria, which is challenging due to the intangible nature of digital services. Additionally, determining the appropriate nexus for taxation and accurately sourcing revenue generated by digital companies are complex, often leading to disputes (Legner et al., 2017; Stonehouse & Konina, 2020).

Be that as it may, there are different taxes challenges are associate with digital economy in Nigeria which include lack of clear regulations, double taxation and tax avoidance and data localization. The rapid growth of the digital economy has outpaced the development of clear tax regulations, resulting in uncertainty for companies and tax authorities. There is a risk of double taxation when digital companies are subject to taxation in multiple jurisdictions. At the same time, some companies may engage in aggressive tax planning to minimize their tax obligations. Some countries, including Nigeria, have considered imposing data localization requirements for digital companies. This can add complexity to tax compliance and increase operational costs (Priyono et al., 2020; Bouncken et al., 2021).

In 2020, Nigeria's digital economy contributed approximately 17.92% to the country's GDP, underscoring its substantial economic significance (Kano-Focus, 2022). The country also boasts over 148 million active internet subscriptions as of May 2021, highlighting its extensive digital reach (Moses & Chukwuemeka, 2021). To address digital taxation challenges, the Nigerian government is implementing tax reforms, including proposals to tax significant economic presence and digital transactions.

The growth of e-commerce, online services, and digital platforms in Nigeria has created specific tax implications unique to the digital landscape. Many Nigerians engage in daily digital activities, accessing news and information through platforms like Google, Facebook, and Twitter. Additionally, numerous digital non-resident companies conduct electronic transactions with Nigerian residents, such as Amazon, Walmart, and Alibaba Group Holding Ltd. These transactions often involve electronic payments through platforms like PayPal, Interswitch, and Google Pay (Umenweke et al., 2023).

However, challenges persist in taxing the digital economy in Nigeria. These include identifying non-resident companies, determining their income and profits, and understanding their digital activities. Other challenges include a lack of accurate data, a specialized court, and IT experts, as well as issues related to the distribution of taxing powers between source and resident jurisdictions. Moreover, there is a lack of effective tax enforcement and collection mechanisms for vatable businesses in online transactions (Adepoju, 2022; Umenweke et al., 2023). Given Nigeria's over-reliance on oil revenue, it is crucial for the government to address these challenges and transition to a tax-based economy and addressing these tax implications and challenges require a comprehensive approach from both corporate entities and the Nigerian government (Umenweke et al., 2023).

However, various studies (Ezeani, 2020; Itodo & Osabuohien, 2020; Nwosu, 2021; Oyebode, 2021; Adebayo & Adejuwon, 2021; Aduloju, 2022; Umenweke, et al., 2023) have dogged into taxation of digital economy in Nigeria in terms of its prospects, challenges, finance Act 2020 and recommendation. This current study is quite different as it aims to investigate the impact of taxation of digital economy on tax implications for corporate entities in Nigeria. A study in this nature has not been explored to the best of researchers' knowledge.

2. Literature Review

2.1 Conceptual Review

Taxation of Digital Economy

Taxation is the process by which a government levies and collects taxes from individuals, businesses, or other entities to fund public expenditures and government functions (Stewart, 2022). Adelusi (2022) demonstrates that taxes are compulsory payments imposed by the government on income, profits, property, goods, services, and transactions. The primary purposes of taxation are to raise revenue for public spending,

redistribute wealth, influence economic behavior, and achieve social and economic objectives (Simbolon et al., 2023). Taxation in the context of the digital economy implies the application of tax laws to transactions and activities that occur through digital means (Hodžić, S. (2022). As the digital economy expands, traditional tax structures are challenged because businesses can operate globally without a physical presence, sell goods and services online, and generate revenue from intangible assets like intellectual property (Anomah et al., 2024).

The concept of the digital economy refers to an economy that is based on digital computing technologies (Rosário & Dias, 2023). In another view, it encompasses all economic activities that use digital technologies to create, store, and manage information, as well as to deliver goods and services (Sun et al., 2024). The digital economy includes activities such as e-commerce, digital marketing, online banking, digital entertainment, and the use of digital platforms and services (Kovács et al., 2023). Similarly, the digital economy encompasses sectors that rely on digital tools, internet connectivity, and data exchange (Viriyasitavat et al., 2019; Sturgeon, 2021). Businesses and individuals in this sphere use digital platforms for various purposes, such as e-commerce, digital services, the sharing economy, digital payments, data-driven innovation, remote work, and freelancing (Luo et al., 2023). E-commerce has transformed global trade by providing convenient access to a large customer base, while digital services like SaaS and cloud computing enhance operational efficiency. Participating in sharing economy models optimizes resources, and digital payments ensure secure and fast transactions.

Taxation of the digital economy involves imposing taxes on economic activities conducted through digital means or involving digital products and services (Fedirko & Fedirko, 2023). The complexity of this taxation poses ongoing challenges, particularly as traditional tax rules grapple with digital transactions and evolving business models (Harpaz, 2021). Determining the threshold for foreign companies to be taxed in a specific country, known as "digital presence" or "digital permanent establishment," varies among countries and contributes to challenges in fairly taxing digital businesses (Ziemele, et al., 2021; Philip et al., 2021). The borderless nature of the digital economy further complicates taxation of digital goods and services, making jurisdiction determination challenging (Rivaldi, 2021). Tax authorities are collaborating internationally to develop frameworks for fair and effective taxation, responding to concerns about digital tax avoidance. Some countries have implemented measures like digital services taxes, but these actions have sparked debates over potential double taxation and trade disputes (EY, 2023). Despite these challenges, the taxation of the digital economy remains dynamic, aiming to ensure fairness among businesses (Adebiyi, 2023). Effectively implemented, digital taxation significantly boosts government revenues, supporting public services, healthcare, education, and infrastructure (Butarbutar, 2022). It levels the playing field between digital and traditional businesses, curbing unfair advantages. Digital levies ensure global tech giants pay their due taxes, supporting local businesses (Tom, 2023). Revenue from digital taxation fuels digital infrastructure development, innovation, and technological advancement. By promoting tax fairness and compliance, it establishes clear guidelines for digital transactions, reducing tax evasion. Additionally, discussions on digital taxation foster global cooperation and standards, curbing harmful tax competition and profit shifting by multinationals. Adapting tax policies to the digital realm acknowledges changing economic landscapes, ensuring governments can collect revenue amidst evolving online business trends (OECD, 2021).

Tax implications refer to the effects taxes have on individuals, businesses, or other entities (Contractscounsel, 2023). These implications arise from earning income, making investments, conducting business activities, or engaging in certain transactions (Devereux, et al., 2020). Examples include the amount of tax owed, timing of tax payments, availability of deductions or credits, and compliance with tax laws (OECD, 2021). Understanding tax implications is crucial for individuals and businesses to fulfill their tax obligations and make informed financial decisions (Translegal, 2023).

In Nigeria, tax reforms target Non-Resident Companies (NRCs) engaged in digital transactions originating outside Nigeria, aiming to regulate their tax obligations (Lixi & Zottel, 2019; 2021). Despite technological advancements and innovative business models, digital enterprises in Nigeria face tax challenges and employ intricate tax avoidance strategies (Philip et al., 2021). Nigeria's digital economy growth is driven by government initiatives, technological advancements, and substantial investments, facilitated by its tech-savvy youth and widespread internet access (Nnene, 2022). Recognizing the evolving landscape of Nigeria's digital economy is essential as it continues to evolve.

2.2 Theoretical Framework

The incidence theory is a theory that seeks to explain the burden of taxation and who ultimately bears the cost of taxation (Mieszkowski, 1969). The theory assumes that the burden of taxation is ultimately borne by the person or group who cannot shift the tax burden to another party (Cooper, 1994). In other words, the incidence of taxation falls on the party who is unable to pass on the tax to someone else. The philosophical underpinnings of the incidence theory are rooted in the principles of economic efficiency and equity. The theory suggests that taxes should be levied in a way that minimizes the distortion of economic activity and promotes fairness in the distribution of the tax burden (Fleurbaey & Maniquet, 2018). The incidence theory is relevant to Nigeria's digital economy, clarifying tax burden distribution as digital business taxes grow complex (Fleurbaey & Maniquet, 2018). If Nigeria taxes digital transactions, the theory implies that businesses unable to shift the tax burden will bear it, likely affecting those in the digital economy unable to pass on the tax (Fleurbaey & Maniquet, 2018; LeFevre, 2016). Policymakers can use this theory to create fair and efficient tax policies (LeFevre, 2016).

2.3 Empirical Review

The various studies on taxation of the digital economy in Nigeria have contributed diverse perspectives, objectives, and findings, presenting a multifaceted understanding of this intricate subject matter. In Brasil, Campos (2022) examined the impacts of the economy's digitalization process on taxation have become the central theme of international tax law in recent years, causing several reactions among actors in this field. The result is a paradigm shift with the potential to affect not only the field's social practice but its very significance within an intellectual project for constructing the human dimension.

In China, Wang (2023) evaluated the effect of income tax preferences for digital economy enterprises based on the data of digital economy enterprises in Beijing, Tianjin and Hebei regions from 2017-2021. The research results show that corporate income tax incentives have a significant impact on R&D investment of digital economy enterprises and provide a better incentive for digital economy enterprises to increase their R&D investment efforts. Fedirko and Fedirko (2023) conducted an evaluation of the reform of public policy of digital economy taxation in Ukraine under conditions of military threats. The study's methodology was on the content analysis of the legal framework of state policy on taxation of digital economy services. The study found that the reforms in the taxation of digital economy services carried out in Ukraine are designed to create incentives for attracting foreign IT companies and can create an effective tax competitive advantage for our country.

Ezeani (2020) investigated on taxation of the digital economy in Nigeria: The need for a new tax regime. The study used a doctrinal research methodology and the study found that the taxation of the digital economy in Nigeria is a critical issue. The author argued that the government needs to develop a new tax regime to address the challenges posed by the digital economy. The author also recommended that the government should consider adopting a global minimum tax on digital services. In their view, Itodo and Osabuohien (2020) conducted a study on taxation of the digital economy in Nigeria: A review of the 2020 Finance Act. The study used a doctrinal research methodology. The authors reviewed statutes, case law, textbooks, journal articles, and internet materials to gather information on the taxation of the digital economy in Nigeria. The study found that the 2020 Finance Act introduced a new tax on digital services in Nigeria. The tax applies to

foreign companies with a significant economic presence in Nigeria. The tax rate is 6% of the company's turnover. The study also found that the new tax has been met with mixed reactions. Some people have praised the government for taking steps to tax the digital economy, while others have criticized the tax as being unfair and difficult to enforce. In a different angle, Nwosu (2021) evaluated the issues of taxation of the digital economy in Nigeria: Issues and challenges. The study found that the taxation of the digital economy in Nigeria is facing a number of challenges. These challenges include the difficulty of identifying and taxing digital transactions, the lack of international cooperation on taxation, and the risk of tax avoidance and evasion.

In analyzing the taxation of Nigeria's digital economy, Oyebode (2021) criticized the government's digital tax policy, highlighting its unfairness, enforcement challenges, and potential negative economic impacts. Adebayo and Adejuwon (2021) conducted a survey on the same topic, uncovering complexities in Nigeria's digital economy taxation and the inadequacy of traditional tax rules to address digital challenges, leading to issues like tax avoidance. Aduloju (2022) evaluated Nigeria's approach to taxing the digital economy under the 2019 and 2020 Finance Acts, revealing challenges and proposing solutions, particularly regarding the significant economic presence approach. Umenweke et al. (2023) focused on the challenges of taxing Nigeria's digital economy, suggesting that while it could boost government revenue, there are significant hurdles. Mpofu (2023) conducted a literature review, finding that while taxing the digital economy can increase government revenue and spur economic growth, it may also hinder digital transformation and entrepreneurship. These studies collectively highlight the complexities and challenges of taxing Nigeria's digital economy, emphasizing the need for careful policy consideration and implementation.

3. Methodology

The methodology employed in this study utilized a cross-sectional survey research design and a quantitative approach to gather the opinions and perspectives of respondents on the subject matter.

3.1 Data and Sources

The study utilizes primary data source, focusing on quantitative and survey methods. Data were gathered through questionnaires distributed to the target respondents. The questionnaire employed a 5-point Likert scale, ranging from "strongly agree (5)" to "strongly disagree (1)" or "very often (5)" to "never (1)", to score the responses from the participants based on their answers to the questions.

3.2. Population Size

The population of interest consisted of 350 stakeholders in Nigeria, including employees of the Federal Inland Revenue Services (FIRS) and employees of the top 32 startups in Nigeria as of 2022. These startups include Autochek, Chaka, CowryWise, Eden, Flutterwave, Flying Doctors Nigeria, Giga Layer, Gradely, Haulr, Hotels, Bamboo, Konga, Lifebank, Mines.io, Opay, Otrac, Overwood Capital, Paga, Paystack, PiggyVest, reQuid, Riby, Rise Vest, Roqqu, Safer Codes, Slatecube, TalentQL, Thrive Agric, uLesson, Vinsighte, Wealth.ng, and WeMove. The selection of these startups in Nigeria aligns with the focus on technology-driven solutions, addressing societal needs, and fostering innovation across various industries (logistics, finance, hospitality, investment, automobile, etc.), and also, they represent the entrepreneurial spirit and potential for economic development within Nigeria. Specifically, 10 corporate tax managers and 20 other senior staff from the FIRS were selected to provide insights into, tax implications including tax compliance and planning within corporations, as well as the challenges they face in navigating the tax landscape in the digital economy. Additionally, 10 senior management staff from each of the 32 startups was chosen, resulting in a total 350 sampling frame of the study.

3.3. Sample Size and Sampling techniques

The sample size of the study is 187 and was mathematically calculated using Taro Yamane's formula for estimating sample size: as: n = N/ (1 + N(e^2)), where: n = sample size, N = population size, e = margin

of error (expressed as a decimal), assuming a margin of error of 5% (0.05). The sample size is,

n = 350/ (1 + 350(0.05^2))
n = 350/ (1 + 0.875)
n = 350/1.875,
n = 186.67 ~187 approximately.

The sampling technique adopted for this study is stratified random sampling. Stratified random sampling involves dividing the population into subgroups or strata based on certain characteristics that are relevant to the research objectives. In this case, the population of interest consists of two main strata: employees of the Federal Inland Revenue Services (FIRS) and employees of the top 32 startups in Nigeria. Stratified random sampling is a suitable sampling technique for this study as it allows for a more comprehensive and representative analysis of the tax landscape in Nigeria's digital economy, taking into accounts the perspectives of both tax authorities and innovative startups.

3.4 Method of Data Analysis

The study employs both descriptive and inferential statistics. Descriptive statistics, such as mean, median, standard deviation, skewness, and kurtosis, were used to summarize the data and provide insights into the distribution and characteristics of the variables. These statistics helped in understanding the central tendency, dispersion, and shape of the data, which is crucial for interpreting the results of the PLS-SEM analysis. Meanwhile, the data collected from the target respondents were analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) estimation technique. PLS-SEM was chosen for its ability to handle complex relationships between variables, especially in cases where the sample size is relatively small compared to the number of variables, as is often the case in exploratory studies like this. This analysis was conducted after administering closed-ended questionnaires to the target respondents, and was done in alignment with the assessment of variables depicted in Table 1.

3.5 Definition of Variable.

This sub-section depicts the variables in table 1, so as to clarify the key concepts and measurements used in assessing various aspects of taxation in the digital economy and tax implications.

Table 1: Operationalization of Variables

S/N	Variables	Variable Type	Variable Acronyms	Measurement Indicators	Definitions	Sources
1	Taxation of digital economy	Independent Variable	TDE			Umenweke et al. 2023; Fedirko & Fedirko, 2023; Adepoju (2022); Harpaz, 2021; Rivaldi, 2021
			TDE1	Taxpayers' Identification	Easier identification of business/corporate taxpayers operating within the digital economy	
			TDE2	Tracking Methods	Analysis of Methods used to track income and profits generated by digital companies, are effective.	

			TDE3	Tax Assessment	Clear assessment of tax revenues obtained from companies operating in the digital economy.	
			TDE4	Precision of Profit Identification Processes	The accuracy of income and profit identification processes used by tax authorities	
			TDE5	Performance of Digital Activities	Performance of digital activities impact tax obligations and contributions	
			TDE6	Tax Contributions	Tax contributions correlated with specific digital activities i.e. such as e-commerce, digital advertising, or software development.	
			TDE7	Taxing Powers Allocation	The distribution of taxing powers between source and resident jurisdictions for digital transactions,	
			TDE8	Information Technology Experts Availability	The availability and adequacy of IT experts within tax authorities to effectively manage and administer tax systems related to the digital economy.	
2	Tax Implications	Dependent Variable	TAXIMP			Devereux et al., 2020; OECD, 2021; Contractscounsel, 2023; Oboloo, 2023.
			TAXIMP1	The actual monetary value of taxes.	The taxpayer has legally settled the actual monetary value of taxes owed, as	

			required to be paid to the government.
	TAXIMP2	Tax Obligations	Tax liabilities analysis across different tax brackets often examined
	TAXIMP3	Frequency of tax payments	Taxpayers are often required to make tax payments annually.
	TAXIMP4	Tax Penalties	Interest or penalties incurred due to late tax payments
	TAXIMP5	Cash Flow Implications	Cash flow implications due to the timing of tax payments.
	TAXIMP6	Tax Deductions and Credits	Tax deductions and credits utilized assist in reducing the overall tax liability.
	TAXIMP7	Tax Compliance	Tax filing compliance often meet the deadlines requirement
	TAXIMP8	Tax reporting Requirements.	Taxpayers often meet up with the information that required reporting to tax authorities, including income and expenses.
	TAXIMP9	Frequency and Nature of Compliance Incidents	Taxpayers often comply with tax laws and regulations.
	TAXIMP10	Fines, or Legal Actions	The penalties, fines, or legal actions that may be imposed on taxpayers for non-compliance with tax laws.

Source: Author's Conceptualization (2024)

4. Results and Discussions

4.1 Respondents' Rate and Descriptive Analysis

This section presents and discusses the participation rate of respondents and their demographic analysis. Out of the 187 questionnaires distributed for this study, 180 were deemed valid and usable, representing a participation rate of 96%.

4.2 Descriptive Statistics of the Variables

Dependent variable was proxy by tax implication while the independent variables were proxy by taxation of digital economy. The results are shown in Table 2.

Table 2: Descriptive Statistics

Latent Variables	Mean	median	Scale Min.	Scale Max.	Standard deviation	Excess Kurtosis	Kurtosis	Cramer-von mises p value
TDE1	4.281	4.000	1.000	5.000	0.572	-0.498	-0.092	0.000
TDE2	3.771	4.000	1.000	5.000	0.653	-0.712	0.278	0.000
TDE3	3.552	4.000	1.000	5.000	0.643	-0.125	-0.198	0.000
TDE4	3.385	4.000	1.000	5.000	0.834	1.902	-1.381	0.000
TDE5	3.667	4.000	1.000	5.000	0.773	0.447	-0.163	0.000
TDE6	3.729	4.000	1.000	5.000	0.930	0.886	-0.852	0.000
TDE7	3.562	4.000	1.000	5.000	0.998	0.775	-0.942	0.000
TDE8	3.490	3.000	1.000	5.000	1.061	-0.597	0.028	0.000
TAXIMP1	4.094	4.000	1.000	5.000	0.678	1.404	-0.729	0.000
TAXIMP2	3.917	4.000	1.000	5.000	0.607	-0.275	0.042	0.000
TAXIMP3	3.354	4.000	1.000	5.000	1.207	-0.787	-0.535	0.000
TAXIMP4	2.708	3.000	1.000	5.000	1.163	-0.151	0.552	0.000
TAXIMP5	2.552	2.000	1.000	5.000	1.098	-0.690	0.441	0.000
TAXIMP6	3.490	4.000	1.000	5.000	0.777	-0.377	-0.303	0.000
TAXIMP7	3.844	4.000	1.000	5.000	0.833	2.382	-1.013	0.000
TAXIMP8	3.146	3.000	1.000	5.000	1.010	0.151	0.132	0.000
TAXIMP9	4.323	5.000	1.000	5.000	0.884	0.745	-1.240	0.000
TAXIMP10	4.229	4.000	1.000	5.000	0.743	2.922	-1.177	0.000

Source: Author's computation (2024) using SmartPls4

Based on table 2 presented above, Descriptive statistics for Tax Implications (TAXIMP) and Taxation of the Digital Economy (TDE) among Nigerian corporate entities reveal moderate to high perceptions of TDE (mean range: 3.385 to 4.281) and varying perceptions of TAXIMP (mean range: 2.552 to 4.094). The median for both sets of variables is around 4.000, indicating central tendencies close to the scales' midpoints.

Standard deviations range from 0.572 to 1.207 for TDE and 0.607 to 1.207 for TAXIMP, showing varying degrees of dispersion around the means. Excess kurtosis values suggest some variables have heavier tails than a normal distribution. The Cramer-von Mises p-value of 0.000 indicates significant departures from normality for all variables.

4.4 Measurement Model

The measurement model was assessed for construct reliability and validity. The results of measurement model are presented in the Table 3 below.

Table 3: Construct Reliability and Validity Assessment

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
TAXIMP	0.807	0.791	0.839	0.644
TDE	0.905	0.953	0.916	0.779

Source: Author's computation (2024) using SmartPls4

Table 3 presents the results of the construct reliability and validity assessment for two constructs: Tax Implication (TAXIMP) and Taxation of the Digital Economy (TDE). The table displays various measures, including Cronbach's alpha, composite reliability (rho_a and rho_c), and average variance extracted (AVE). For the TAXIMP construct, Cronbach's alpha is 0.807, indicating a reasonably good level of internal consistency, which is supported by both composite reliability measures (rho_a = 0.791 and rho_c = 0.839), reflecting strong reliability. The AVE for TAXIMP is 0.644, surpassing the recommended threshold of 0.5, thereby confirming convergent validity. Similarly, the TDE construct displays robust reliability with a notably higher Cronbach's alpha of 0.905, denoting strong internal consistency. The composite reliability measures for TDE (rho_a = 0.953 and rho_c = 0.916) signify excellent reliability beyond the alpha value. Additionally, the AVE for TDE stands at 0.779, surpassing the threshold and affirming convergent validity

4.5 Structural Model

The assessment of structural model reflects the paths hypothesized in the research framework. In evaluating the structural model of the PLS-SEM path coefficient was involved and exhibited in Table 4.

Table 4: Path Coefficient Analysis

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
TDE -> TAXIMP	0.197	0.225	0.209	0.944	0.345

Source: Author's computation (2024) using SmartPls4

Table 4 depicted the path coefficient analysis between Taxation of the Digital Economy (TDE) and Tax Implication (TAXIMP) reveals a path coefficient of 0.197 in the original sample (O), with a sample mean of 0.225 and a standard deviation of 0.209. The T-statistic of 0.944 (|O/STDEV|) corresponds to a p-value of 0.345. Consequently, based on the analysis, we fail to reject the null hypothesis (H0) as the p-value exceeds the conventional significance threshold of 0.05. Therefore, the findings suggest that there isn't sufficient evidence to support a significant relationship between TDE and TAXIMP in the examined data. Consequently,

this suggests that within the scope of this analysis, the Taxation of Digital Economic activities may not be significantly linked to the perceived Tax Implications among the entities studied.

4.6 Discussion of Findings

Based on the findings in Table 4, that there was a non-significant relationship between Taxation of the Digital Economy (TDE) and Tax Implication (TAXIMP) among businesses operating in Nigeria. This suggests that, within the examined dataset, the introduction of TDE policies may not be directly associated with perceived changes in tax burden for businesses. One potential indication for the discrepancy might be a time lag effect. Perhaps the full impact of TDE policies on businesses' perceived tax implications has not yet materialized in the Nigerian context. Another possibility is that the specific design and implementation of TDE policies in Nigeria may differ from those in other countries where a significant relationship was found. Differences in policy complexity, transparency, or enforcement could contribute to varying perceptions of their impact**.** This finding aligns with similar results obtained by Nwosu (2020), Adebayo and Adejuwon (2021), and Mpofu (2023), who also found limited evidence of a direct connection between TDE and TAXIMP in their respective contexts.

However, this evidence contradicts the findings reported by Campos (2022), Umenweke et al. (2023), and Wang (2023). These studies found a significant association between TDE and TAXIMP, suggesting that TDE policies could indeed influence businesses' perceptions of their tax burden. The Theory of Incidence provides a valuable framework to understand the potential impact of TDE policies on tax implications. This theory suggests that the burden of a tax may not be borne solely by the entity it is initially levied upon but may be shifted to other actors in the economic chain. In the context of TDE, the incidence of the tax could fall on consumers, producers, or a combination of both, depending on factors like market competition, price elasticity, and production costs. Therefore, even if businesses do not perceive a direct increase in their own tax burden due to TDE, they may still experience indirect effects through changes in market dynamics or consumer behavior.

5. Conclusion and Recommendations

Based on findings from the analysis of the path coefficient between Taxation of the Digital Economy (TDE) and Tax Implication (TAXIMP) does not yield adequate evidence to support a significant relationship between these variables. It suggests that, within the confines of the examined dataset, the perceived tax implications among the entities studied are not notably influenced by or correlated with activities pertaining to the taxation of the digital economy. This outcome prompts a need for cautious interpretation, indicating that other unaccounted variables or complex interactions may be at play, contributing to the perceived tax implications among these entities, beyond the direct influence of digital economic activities. However, it also poses potential risks such as resistance from digital companies, difficulty in enforcement, lack of expertise, and double taxation. Based on the findings, the study made the following recommendations:

The study recommended that government should continue to invest in capacity building and expertise development among tax authorities and tax practitioners around the digital companies to improve tax compliance and enforcement in the digital economy. Moreso, Federal Inland Revenue Service and other revenue agencies should review and adapt tax policies to address the unique challenges and complexities of the digital economy, including issues related to double taxation and the enforcement of tax regulations. In addition, tax revenue agencies should continuously monitor and evaluate the effectiveness of tax policies and enforcement mechanisms in the digital economy, and make adjustments as necessary to ensure compliance and fairness.

References

Adebayo, S. O., & Adejuwon, A. (2021). Taxation of the digital economy in Nigeria: Challenges and prospects. *_Journal of African Studies and Development_, 13(3), 1-13. Doi:10.4314/jasd. v13i3.1*

Adebiyi, O. O. (2023). Taxation in the Digital Age: An Examination of the Necessity, Feasibility, and Implications of Taxing Virtual Infrastructures. *Asian Journal of Economics, Business and Accounting*, *23*(23), 13-35.

Adelusi, A. I. (2022). Assessment of Tax Administration in Local Governments in Ogun State, Nigeria (A Study of Selected Local Governments in Ogun State). *International Journal of Women in Technical Education and Employment (IJOWITED)*, *3*(1), 28-38.

Adeosun, F. (2023). Taxation of the Digital Economy: An Evaluation of the Nigerian Approach in the Global Context. *Available at SSRN 4504730*.

Aduloju, O. I. (2022). Taxation of the Nigerian Digital Economy in View of the 2019 and 2020 *Finance Act. Available at SSRN 4002469.*

Almeida, F., Santos, J. D., & Monteiro, J. A. (2020). The challenges and opportunities in the digitalization of companies in a post-COVID-19 World. *IEEE Engineering Management Review*, *48*(3), 97-103.

Anomah, S., Ayeboafo, B., Aduamoah, M., & Agyabeng, O. (2024). Blockchain Technology Integration in Tax Policy: Navigating Challenges and Unlocking Opportunities for Improving the Taxation of Ghana's Digital Economy. *Scientific African*, e02210.

Begazo, T., Blimpo, M., & Dutz, M. (2023). *Digital Africa: Technological Transformation for Jobs*. *World Bank Publications.*

Bican, P. M., & Brem, A. (2020). Digital business model, digital transformation, digital entrepreneurship: Is there a sustainable "digital"? *Sustainability*, *12*(13), 5239.

Bouncken, R. B., Kraus, S., & Roig-Tierno, N. (2021). Knowledge-and innovation-based business models for future growth: Digitalized business models and portfolio considerations. *Review of Managerial Science*, *15*(1), 1-14.

Butar Butar, S. (2022). Board of Commissioner Characteristics and Stock Price Synchronicity: Testing the Role of Insdustrial Complexity as a Moderating Variable.

Campos, M. A. P. D. S. (2022). Digital economy and international taxation: the digital revolution and its impact on the discourse of international tax law.

Contractscounsel. (2023). Tax Implications: Definition and Examples. Retrieved from https://www.contractscounsel.com/g/1507/us/tax-implications

Cooper, G. S. (1994). The benefit theory of taxation. *Austl. Tax F.*, *11*, 397.

Devereux, M. P., Auerbach, A. J., Keen, M., Oosterhuis, P., Schön, W., & Vella, J. (2020). *Taxing profit in a global economy. Oxford University Press*.

EY. (2023). Taxation of the digital economy: What's next. Retrieved from https://www.ey.com/en_gl/webcasts/2021/07/taxation-of-the-digital-economy-whats-next

Ezeani, C. C. (2020). Taxation of the digital economy in Nigeria: The need for a new tax regime. *_Journal of International Taxation and Development_, 10(1), 1-10. Doi:10.1108/JITD-08-2019-0017*

Fedirko, O., & Fedirko, N. (2023). Digital Economy Taxation Reform in Ukraine Under Conditions of Military Threats. In *Contemporary Studies of Risks in Emerging Technology, Part B* (pp. 257-274). *Emerald Publishing Limited.*

Fleurbaey, M., & Maniquet, F. (2018). Optimal income taxation theory and principles of fairness. *Journal of Economic Literature*, *56*(3), 1029-1079.

Harpaz, A. (2021). Taxation of the Digital Economy: Adapting a Twentieth-Century

Tax System to a Twenty-First-Century Economy. *Yale J. Int'l L.*, *46*, 57.

Hodžić, S. (2022). Tax challenges in the digital economy: EU perspective. In *The New Digital Era: Digitalisation, Emerging Risks and Opportunities* (Vol. 109, pp. 191-211). Emerald Publishing Limited.

Itodo, O., & Osabuohien, E. E. (2020). Taxation of the digital economy in Nigeria: A review of the 2020 *Finance Act. Journal of Tax Research_, 18(1), 1-22. Doi:10.1108/JTR-12-2019-0042*

Kano Focus. (2022, August 23). Pantami applauds ICT's 17.92% contributions to GDP. Retrieved from https://kanofocus.com/2022/08/23/pantami-applauds-icts-17-92-contributions-to-gdp/

Karimi, A., Mohammadi, N., & Sakhteh, S. (2022). Opportunities and threats facing early-stage digital startups during the COVID-19 pandemic. In *Socioeconomic Dynamics of the COVID-19 Crisis: Global, Regional, and Local Perspectives* (pp. 83-99). Cham: *Springer International Publishing.*

Kennedy, P. (2008). *A guide to econometrics* (6th ed.). Blackwell Publishing. Willey publication

Kovács, T. Z., Nábrádi, A., & Bittner, B. (2023). Digital Technology Integration Among Eastern European Companies, Based on Digital Economy and Society Index. *Interdisciplinary Description of Complex Systems: INDECS*, *21*(5), 421-440.

Legner, C., Eymann, T., Hess, T., Matt, C., Böhmann, T., Drews, P., ... & Ahlemann, F. (2017). Digitalization: opportunity and challenge for the business and information systems engineering community. *Business & information systems engineering*, *59*, 301-308.

Li, W. C., Nirei, M., & Yamana, K. (2019). *Value of data: there's no such thing as a free lunch in the digital economy*. RIETI.

Lixi, M. J. Y., Zottel, S., Neto, M. I. A., Boroffice, F. A., Karpinski, K., Lim, L. T., ... & Bra, P. (2019). *Nigeria Digital Economy Diagnostic Report.*

Luo, S., Yimamu, N., Li, Y., Wu, H., Irfan, M., & Hao, Y. (2023). Digitalization and sustainable development: How could digital economy development improve green innovation in China? *Business Strategy and the Environment*, *32*(4), 1847-1871.

Mieszkowski, P. (1969). Tax incidence theory: The effects of taxes on the distribution of income. *Journal of Economic literature*, *7*(4), 1103-1124.

Mpofu, F. Y. (2022). Taxation of the digital economy and direct digital service taxes: Opportunities, challenges, and implications for African countries. *Economies*, *10*(9), 219

Nnene, U. (2022). Mobile Commerce Innovation: a Case for Retailer Adoption and Consumer Acceptance in Nigeria.

Nwosu, C. U. (2021). Taxation of the digital economy in Nigeria: Issues and challenges. Journal of International Taxation and Development_, 11(1), 1-11. Doi:10.1108/JITD-09-2020-0023.

Oboloo. (2023, October 26). Tax implication. Retrieved from https://oboloo.com/glossary/tax-implication/

OECD. (2021). Tax challenges arising from digitalization – Report on Pillar One Blueprint. Retrieved from https://www.oecd.org/tax/beps/tax-challenges-arising-from-digitalisation-report-on-pillar-one-blueprint-beba0634-en.htm

Oyebode, A. O. (2021). Taxation of the digital economy in Nigeria: A critical analysis. Journal of Economics and Sustainable Development_, 12(1), 1-12. Doi:10.14454/2220-1333/JESD.12.1.1

Philip, K., Muthee, I., Ngala, B., Musa, N., Wanyeri, A., & Gathoni, E. (2021). Enforcement of the Digital Economy

Taxation. *African Tax and Customs Review*, *4*(1), 23-23.

Priyono, A., Moin, A., & Putri, V. N. A. O. (2020). Identifying digital transformation paths in the business model of SMEs during the COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 104.

Rivaldi, R. (2021). Global Digital Taxes in International Trade and Its Urgence for Indonesia. *Transnational Business Law Journal*, *2*(1), 35-49.

Rosário, A. T., & Dias, J. C. (2023). The new digital economy and sustainability: challenges and opportunities. *Sustainability*, *15*(14), 10902.

Simbolon, J. L., Daulay, K. S., & Nainggolan, S. C. (2023). Analysis of the Effect of Regional Taxes and Regional Levies on Increasing Regional Original Revenues of North Sumatra for 2016-2021. *International Journal of Business and Applied Economics*, *2*(1), 35-44.

Stewart, M. (2022). Tax and Government in the 21st Century. *Cambridge University Press.*

Stonehouse, G. H., & Konina, N. Y. (2020, February). Management challenges in the age of digital disruption. In *1st International Conference on Emerging Trends and Challenges in the Management Theory and Practice (ETCMTP 2019)* (pp. 1-6). Atlantis Press.

Sturgeon, T. J. (2021). Upgrading strategies for the digital economy. *Global strategy journal*, *11*(1), 34-57.

Sun, C., Khan, A., Xue, J., & Huang, X. (2024). Are digital economy and financial structure driving renewable energy technology innovations: A major eight countries perspective. *Applied Energy*, *362*, 122990.

Teece, D. J. (2018). Profiting from innovation in the digital economy: Enabling technologies, standards, and licensing models in the wireless world. *Research policy*, *47*(8), 1367-1387.

Tom, T. (2023). Challenges and Solutions to Global Digital Firms' Exploitation of Small Economies. *Technium Soc. Sci. J.*, *43*, 288.

Translegal. (2023). Tax implications meaning - Legal definition - World Law Dictionary – Retrieved from https://dictionary.translegal.com/en/tax-implications/noun

Umenweke, M. N., Nwabachili, C. O., & Anushiem, U. M. (2023). Appraisal Of the Challenges for Taxation of Digital Economy in Nigeria. *Unizik Law Journal*, *19*(1).

Viriyasitavat, W., Da Xu, L., Bi, Z., & Pungpapong, V. (2019). Blockchain and internet of things for modern business process in digital economy—the state of the art. *IEEE transactions on computational social systems*, *6*(6), 1420-1432.

Wang, S. X. (2023). Analysis of the Impact of Corporate Income Tax Incentives on Digital Economy Enterprises. *Journal of Risk Analysis and Crisis Response*, *13*(2).

Ziemele, S., Juruss, M., Hudenko, J., & Smite-Roke, B. (2021, October). The Tax Nexus in the Digital Economy. In *International Conference on Reliability and Statistics in Transportation and Communication* (pp. 501-512). *Cham: Springer International Publishing.*