**Effect of Company Income Tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries**

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**Abstract**

A tax is a compulsory charge on income, consumption and production imposed upon an individual, Partnership or companies by the government of a nation in order to fund various public expenditures. The success or failure of any tax system depends on the extent to which it is properly managed, as well as the extent to which the tax law is properly interpreted and implemented. The study therefore examines the tax revenue and government expenditure in Southwest, Nigeria. Therefore, this study examines tax revenue profile and economic growth in Sub-Saharan-African countries The study adopts *ex-post facto* research design while data was sourced secondarily from the audited annual financial reports and budgets of southwestern states governments for the period of Twenty two (22) years 2000-2022. The population of the study comprises of four (4) Sub-Sahara African countries. Analytical techniques used in the study involved time series regression analysis. The result of the panel regression analysis implies that the coefficient for D(VAT) is statistically significant at the 5% level (p-value < 0.05).). Also, the coefficient estimates of correlation shows 0.082301, 0.484761, 0.082941, and 0.046799 for operational CIT, PIT, PPT,& VAT respectively. The study concludes that company income tax has a negative insignificant impact on economic growth,

**Keyword:** **Company Income Tax, Gross Domestic Product (GDP) Sub-Saharan African**

**Introduction**

Taxation in developing countries is a strategic device for the government to realize revenue to cater to all government responsibilities. It also makes it feasible for the government to finance the availability of public items inclusive of infrastructure, education, health, and development, which are vital for growth. But beyond that, taxation influences financial savings, work and education selections, production, job creation, investment, and enterprise innovation. According to Adegbite (2022), these decisions are affected not only by the stage of taxes but also by the manner in wherein different economic devices are designed and combined to generate government revenues. Abiola and Asiweh (2012) also support tax as an instrument of social engineering that can be used to stimulate general or special economic development.

Taxation revenue is a significant tool for governments throughout the world and governments use income generated from it to render their conventional functions, such as the provision of good transport networking system, upkeep of peace, a barrier against outer animosity, regulations, and stimulation of trade and business to guarantee social and economic supports. Omesi and Appah (2022) describe taxation as the oldest means by which the expense of giving necessities to the generality of individuals living in a given geographical territory is achieved. Atsu *et al*. (2017) equally posited that tax is a mandatory payment fulfilled by individuals and organizations to the constituted authority (government) by foreordained criteria for which no immediate or explicit advantage is obtained by the taxpayer.

Therefore, Structures among the various tax revenue in the Nigerian economy are company income tax, personal income tax, value-added tax, petroleum product tax, education tax withholding tax, capital gain tax, and stamp duties embody direct and indirect tax. So by section 8 (1) of the Companies Income Tax Act (CITA) 1990, taxes are payable as specified upon profits of any company accruing in, derived from, brought into, or received in Nigeria in respect of amongst others, any trade or business for whatever period the trade or business may have been carried out. Currently, companies’ income tax is 30 percent of assessable income. According to Osho *et al.*(2013), deemed tax is primarily payable on profits at the company’s income tax rate of 30 percent. However, as foreign companies liable to such tax do not ordinarily operate in Nigeria, and thus account to the Federal Board of Inland Revenue (FBIR) with full accounts, the FBIR is permitted by law to deem a position of the foreign company’s turnover or gross income as profit. The deemed income of the company will be 20 percent of the turnover. Such deemed income so assessed will be liable to tax at the current company’s tax rate of 30 percent, which final assessment will amount to 6 percent of total income.

The impact of company income tax (CIT) on the Gross Domestic Product (GDP) of Sub-Saharan African countries is a critical issue that merits thorough investigation. In many Sub-Saharan African nations, CIT is a significant source of government revenue, essential for financing public services and infrastructure development (Adegbite et al., 2022). However, there is growing concern that the structure, administration, and rates of CIT may influence the overall economic growth in the region. Despite the importance of CIT, there is limited empirical evidence on how it affects GDP growth in these countries (Adejarea and Akandeb, 2018). Some argue that higher CIT rates could discourage private investment, reduce business expansion, and stifle economic growth. Conversely, efficient tax collection and administration could enhance government revenue, allowing for greater public investment and potentially fostering economic development. The problem is compounded by the diverse economic contexts, tax regimes, and levels of economic development across Sub-Saharan Africa, making it difficult to generalize the effects of CIT on GDP. Therefore, this study seeks to explore the relationship between company income tax and GDP in Sub-Saharan African countries, aiming to provide insights into how tax policies can be optimized to support sustainable economic growth in the region.

**2.0 Literature review**

To examine the effect of company income tax on the economic growth of Sub-Sahara African countries, many studies have been done to investigate the association between tax revenue profile and economic growth in Sub-Saharan African countries.Egiyi (2022), examined the long-run relationship and dynamic interactions between company income tax and economic development in Nigeria for the period 2000-2020. Secondary data were collected from the Central Bank of Nigeria Statistical Bulletin, Federal Inland Revenue Service, and World Bank Development Indicators. Company income tax (CIT) and value-added tax (VAT) are the independent variables while Economic development (HDI) is the dependent variable. The Autoregressive Distributed Lag (ARDL) bound test as proposed by Egiyi (2021) was employed to empirically analyze the relationship between company income tax and economic development. From the results, it is evident that there is the existence of a long-run relationship between company income tax and economic development. The short-run dynamic model also uncovers that the speed of convergence to equilibrium is high suggesting that there is a short-run relationship between company income tax and economic development. The significant negative relationship between company income tax and economic development necessitates that tax authorities should further be braced up and strengthened to implement compliance by taxpayers for income to be properly redistributed within the economy.

According to Attah and Wamako (2023), examine the role of tax revenue in engineering economic growth in the Sub-Saharan Africa (SSA) region, analyzing data for 12 regional countries obtained from secondary sources such as the OECD database and World Bank World Development Indicators (WDI), covering the period 2005-2020, and analyzed using the fixed effect method,which accounts for possible heterogeneity among the SSA countries. Economic growth was measured using real gross domestic product, and tax revenue by ratio of tax revenue to GDP. The study controlled for other economic growth drivers such as trade openness, foreign direct investment, exchange rate, domestic investment, and money supply. The salient findings indicate that taxation hampers the economic growth of SSA countries and that domestic investment and favorable exchange rates promote economic growth in the SSA region, but domestic investment has a greater stimulating impact. Based on these findings, it was recommended that governments of the SSA countries should implement tax cuts or expand the tax base of the local economy to reduce the deadweight loss of increased taxation. Significantly Gbato (2017),also empirically tested the impact of taxation on the long-run growth of a sample of 32 countries in sub-Saharan Africa the results indicate a zero effect of taxation on the long-run growth of the economy moreover, the results suggest a significant negative effect of indirect taxes and taxes on individuals in short term.

Olatunji & Christiana,(2020) assessed the effect that Nigeria’s BEPS (Base-Erosion-and Profit-Shifting) has on revenue generation. By adopting an ex-post-facto design, efforts were made to collect quarterly data on GDP and tax revenue from the statistical bulletin and annual reports of the country’s central bank (CBN), Exchange Commission (SEC), and Inland Revenue Service (FIRS) respectively. The data were for 5 years (2013-2017) covering eighteen quarters. Simple regression with paired t-test alongside mean and other relevant statistics were computed and formed the basis of hypotheses testing. Results showed that revenue generated from tax after the adoption of BEPS significantly differs from what was gotten before BEPS adoption. Revenue from taxes was found to have exerted a significant effect on Nigeria’s economy. The conclusion was that BEPS exerts a significant positive effect on Nigeria’s economic growth.

According to Adegbite *et al*., (2022) examined the impact of direct taxes on internal security financing in Nigeria. The data are time series which were collected from the Central Bank of Nigeria (CBN) statistical bulletin, and Federal Inland Revenue Service (FIRS) Statistics bulletins from 1991 to 2020. The study made use of an econometric approach in estimating the effect of direct taxes on internal security financing. Unit root test, VECM, Co-integration analysis, and VECM Diagnostic Test such as Lagrange-Multiplier Test, Normality Test through Jarque -Bera, and stability test through Eigenvalue test of Stability Condition were adopted for analysis. The findings showed that PPT and Company income tax has a positive significant impact on internal security in Nigeria (β = 0.39048; 0.09308, P>|t| = 0.000; 0.003 < 0.005 respectively). Conclusively, direct taxes significantly impacted internal security financing in Nigeria. It is recommended that direct tax revenue allocation on internal security financing should be doubled so that the necessary equipment needed to face out insurgency in Nigeria would be acquired.

John & Dickson ([2020](https://www.tandfonline.com/doi/full/10.1080/23311975.2022.2115282)) using Error Correction Models analyzed the influence of tax revenue on economic growth using both unadjusted and adjusted Gross Domestic Product from 1984 to 2018. When GDP was not adjusted for inflation, PPT had a minor but beneficial effect on economic growth, whereas VAT and CIT had a large but negative impact on GDP. PPT had a .negative and insignificant impact on adjusted GDP, but VAT had a positive and considerable impact, and CIT had a negative and significant one.

**3.0 Methodology**

The study adopts *ex-post facto* research design while data was sourced secondarily from the audited annual reports and budgets of four (4) Sub-Sahara countries for the period of 22 years (2000-2022). The population of the study was six (6) Sub Saharah countries. Analytical techniques used in the study involved both descriptive and inferential statistics. Descriptive statistics include minimum, maximum, mean and standard deviation values. Variance Decomposition Analysis (VDA) and Impulse Response Function (IRF) as components of time series regression analysis was used in assessing all the study variables at 5% significant level. Panel regression analysis was used to examine the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries.

**4.0 Results and Discussion**

**Short-Run** **panel regression** **analysis of the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries**

In Table 1, shows the short-run panel regression analysis of the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries

The coefficient represents the error correction term. It is statistically significant at the 1% level (p-value < 0.01). The negative sign indicates that deviations from the long-run equilibrium are corrected at a rate of 47.43% per period. This means that when GDP deviates from its long-run equilibrium, it adjusts back towards equilibrium at this rate in the short run. The coefficient for D(CIT) is not statistically significant (p-value > 0.05), indicating that in the short run, changes in company income tax do not have a statistically significant effect on GDP in Sub-Saharan African countries. The coefficient for D(PIT) is not statistically significant (p-value > 0.05), indicating that changes in personal income tax do not have a significant short-run impact on GDP. The coefficient for D(PPT) is also not statistically significant (p-value > 0.05), suggesting that changes in personal property tax do not significantly affect GDP in the short run. The coefficient for D(VAT) is statistically significant at the 5% level (p-value < 0.05). The negative coefficient indicates that increases in VAT have a significant negative effect on GDP in the short run. Specifically, a one-unit increase in VAT leads to a decrease in GDP, holding other factors constant.

The error correction term suggests that GDP adjusts back to its long-run equilibrium at a rate of 47.43% per period when deviated. In the short run, changes in company income tax (CIT), personal income tax (PIT), and personal property tax (PPT) do not have statistically significant effects on GDP. Changes in value-added tax (VAT) have a significant negative impact on GDP in the short run. The model indicates a significant constant baseline GDP level.

**Table 1: Short-Run panel regression analysis of the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
| COINTEQ01 | -0.474292 | 0.165115 | -2.872501 | 0.0055 |
| D(CIT) | -5.28E-09 | 2.20E-08 | -0.240253 | 0.8109 |
| D(PIT) | 9.89E-09 | 7.06E-08 | 0.140089 | 0.8890 |
| D(PPT) | 3.78E-09 | 5.36E-08 | 0.070552 | 0.9440 |
| D(VAT) | -2.12E-08 | 1.06E-08 | -2.003207 | 0.0494 |
| C | 5.730673 | 1.741321 | 3.290991 | 0.0016 |
|  |  |  |  |  |
|  |  |  |  |  |

**Source: Researcher’s Computation, 2024**

**Long-Run panel regression analysis of the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries**

The coefficient for CIT is negative and statistically significant at the 1% level (p-value < 0.01). This indicates that in the long run, an increase in company income tax has a significant negative effect on GDP. Specifically, a one-unit increase in CIT is associated with a decrease in GDP by 6.51E-08 units, holding other factors constant. This finding suggests that higher corporate taxes may reduce investment and economic growth over the long term. The coefficient for PIT is negative but not statistically significant (p-value > 0.05). This suggests that changes in personal income tax rates do not have a significant long-term effect on GDP in Sub-Saharan African countries. The lack of significance might be due to the relatively low levels of PIT collection or the large informal sectors in these economies. The coefficient for PPT is positive but not statistically significant (p-value > 0.05). This indicates that changes in personal property tax do not have a significant impact on GDP in the long run. This could be due to ineffective property tax administration or the minor role that property taxes play in these countries' overall tax systems. The coefficient for VAT is positive and statistically significant at the 1% level (p-value < 0.01). This indicates that an increase in VAT has a significant positive effect on GDP in the long run. Specifically, a one-unit increase in VAT is associated with an increase in GDP by 1.07E-07 units, holding other factors constant. This positive relationship suggests that VAT, as a consumption tax, can be an effective tool for raising revenue without significantly hampering economic growth, and it may even enhance growth by funding public investments.

Higher CIT rates are associated with lower GDP, suggesting that high corporate taxes might deter investment and economic activity over the long term. Policymakers should consider balancing the need for revenue with the potential negative impact on economic growth. Changes in PIT rates do not significantly affect GDP. This could be due to the limited reach of income taxes in largely informal economies or ineffective tax collection systems. Efforts to improve tax administration and broaden the tax base could be more beneficial. PPT does not significantly affect GDP, possibly due to challenges in property valuation and collection. Enhancing property tax systems could provide a more stable revenue source without adverse effects on growth. VAT increases are associated with higher GDP, highlighting its effectiveness as a revenue tool that supports economic growth. This suggests that VAT can be a crucial component of tax policy, provided it is implemented efficiently and equitably.

**Table 2: Long-Run panel regression analysis of the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
| CIT | -6.51E-08 | 2.20E-08 | -2.965221 | 0.0042 |
| PIT | -9.93E-08 | 6.46E-08 | -1.537514 | 0.1291 |
| PPT | 5.45E-08 | 5.23E-08 | 1.042100 | 0.3013 |
| VAT | 1.07E-07 | 2.60E-08 | 4.136545 | 0.0001 |
|  |  |  |  |  |
|  |  |  |  |  |

**Source: Researcher’s Computation, 2024**

**Discussion of Findings**

The findings from the effect of company income tax on the Gross Domestic Product (GDP) of Sub-Saharan African countries, specifically concerning the impact of various taxes on Gross Domestic Product (GDP) The coefficient for the first difference of company income tax is negative but not statistically significant. This indicates that changes in company income tax do not have a significant short-term impact on GDP. This could suggest that businesses in Sub-Saharan Africa might not immediately adjust their investment and production levels in response to tax changes. Alternatively, it could imply that other factors or structural issues in these economies play a more substantial role in influencing GDP than corporate taxation. Similar to CIT, changes in personal income tax rates do not significantly affect GDP in the short run. This might be due to the relatively small share of personal income taxes in the overall tax revenue in these countries or because personal consumption patterns are not heavily influenced by short-term changes in income taxes. The lack of a significant impact of personal property tax changes on GDP could be attributed to the lower prevalence or enforcement of such taxes in Sub-Saharan African countries. Additionally, property taxes might not be a major consideration for most households and businesses, thus having a minimal direct effect on overall economic activity. This significant negative impact suggests that increases in VAT reduce GDP in the short run. VAT is a consumption tax, and higher VAT rates can reduce consumer spending power, leading to lower overall demand for goods and services. In economies where consumption is a primary driver of GDP, this can have a pronounced effect. Policymakers need to consider the trade-offs between raising revenue through VAT and its potential dampening effect on economic growth.

Arnold et al. (2011) found that corporate income taxes are particularly harmful to economic growth compared to other types of taxes. They argue that high CIT rates can deter investment, which is crucial for growth, especially in developing economies. Djankov et al. (2010) concluded that higher corporate taxes are associated with lower aggregate investment and entrepreneurial activity. This is because corporate taxes reduce the after-tax return on investment, discouraging both domestic and foreign investment. Sub-Saharan African countries often struggle with attracting and retaining investment due to perceived high-risk factors. High CIT rates could exacerbate this issue, making it harder for these economies to grow. However, as noted in the panel regression analysis, the short-run impact of CIT changes on GDP was not statistically significant, suggesting that other factors might overshadow the influence of CIT in the short term. Stokey and Rebelo (1995) showed that progressive income taxes could reduce the incentives for individuals to work and invest, leading to lower economic growth. Myles (2000) argued that while personal income taxes are necessary for revenue generation, their structure and rates can significantly influence labor supply and savings, and thus economic performance. Bahl and Wallace (2008) emphasized that property taxes are stable and efficient but often underutilized in developing countries due to administrative challenges. /Bird and Slack (2004) noted that property taxes can be a reliable revenue source, but their economic impact depends on effective valuation and collection systems.

**Conclusion and Recommendations**

According to the findings of this study, it is concluded that company income tax has a negative insignificant impact on economic growth. It study established based on the findings of this study that the proceeds from taxation in Sub-Sahara African countries have been contributory in supporting economic growth and an increase in the level of proceeds from taxation will substantially boost the economy. It is therefore recommended that Sub-Sahara African countries' government should increase tax revenue allocation to the critical sectors of the economy like agriculture and industry to improve the well-being of the citizenry

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