

Tax Policy and Investment Decisions in Nigeria: Evidence from Time-Series Analysis

Baanu Olayinka Babatunde*

Department of Accountancy Oyo State College of Agriculture and Technology, Igboora, Oyo, Nigeria

**Corresponding author: Baanu Olayinka Babatunde*

ABSTRACT

This study investigates the impact of tax policies on investment decisions in Nigeria between 2014 and 2024, using the Fully Modified Ordinary Least Squares (FMOLS) technique. Results indicate that personal income tax significantly and negatively affects domestic investment, while company income tax and value-added tax show positive but statistically insignificant impacts. These findings underscore the need for institutional reforms and improved tax administration to foster an investment-conducive environment.

Keywords: Tax policy, Investment, FMOLS, Nigeria, Fiscal policy

1. Introduction

Tax policy remains a vital instrument for revenue generation and economic regulation, particularly in developing economies such as Nigeria. Despite several tax reforms aimed at boosting public revenue and supporting macroeconomic stability, investment performance in Nigeria has remained suboptimal. Key constraints—such as tax evasion, administrative bottlenecks, and dependency on volatile oil revenues—raise concerns about the alignment of tax policy with investment-led growth objectives.

Investment is critical to economic development, contributing to capital accumulation, employment generation, and technological advancement. However, the design and implementation of tax policies can influence investment behavior. Excessive taxation or inefficiencies in tax systems can discourage private sector investment by increasing the cost of doing business and creating uncertainty. Conversely, a well-structured, predictable tax regime can enhance investor confidence and encourage both domestic and foreign investment.

While extensive literature exists on taxation and economic growth in Nigeria, limited attention has been given to the specific effects of individual tax components on investment decisions. This study bridges that gap by empirically examining the influence of company income tax (CIT), personal income tax (PIT),

value-added tax (captured as net tax on products—NTP), and petroleum profit tax (PPT) on domestic investment over the 2014–2024 period.

2. Literature Review

The nexus between tax policy and investment is grounded in multiple economic theories. The accelerator theory posits that investment is driven by output growth, with taxation modifying the cost-benefit framework within which firms operate. In endogenous growth models, taxation not only affects capital accumulation but also long-term technological progress.

Empirical studies have produced mixed results. Some indicate that high tax burdens reduce investment incentives, particularly in developing economies with weak institutional frameworks. Others highlight that when tax revenues are efficiently allocated, particularly toward infrastructure and human capital, they can indirectly support investment growth.

In the Nigerian context, studies such as Adereti et al. (2011) and Etim et al. (2020) have examined broad tax impacts on growth, but few have isolated the specific effects of PIT, CIT, VAT, and PPT on investment. This study contributes to filling that empirical void.

3. Methodology

3.1 Model Specification

To assess the effects of tax policy on investment, the following model is estimated:

$$INV_t = \beta_0 + \beta_1 CIT_t + \beta_2 PIT_t + \beta_3 NTP_t + \beta_4 PPT_t + \beta_5 RINT_t + \beta_6 EXCH_t + \epsilon_t$$

Where:

- **INV:** Domestic investment
- **CIT:** Company Income Tax
- **PIT:** Personal Income Tax
- **NTP:** Net Tax on Products (VAT and excise duties net of subsidies)
- **PPT:** Petroleum Profit Tax
- **RINT:** Real interest rate
- **EXCH:** Exchange rate

3.2 Data and Estimation Technique

- **Time Frame:** 2014–2024
- **Sources:** Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS)
- **Estimation Method:** Fully Modified Ordinary Least Squares (FMOLS), suitable for correcting serial correlation and endogeneity in time-series regressions.

4. Results

The empirical results reveal the following:

- **PIT:** Has a statistically significant negative effect on investment ($\beta = -0.023$, $p < 0.01$), indicating that higher personal income taxes reduce disposable income, thereby suppressing private investment.
- **CIT and NTP:** Exhibit positive but statistically insignificant relationships with investment. These findings suggest that while these taxes may enhance revenue, their direct influence on investment decisions is limited during the study period.
- **PPT:** Displays an inconsistent and statistically insignificant effect on investment.

Diagnostic tests confirm the model's reliability and the absence of multicollinearity and serial correlation.

5. Discussion

The significant negative coefficient on personal income tax aligns with existing theoretical frameworks, affirming that elevated tax burdens on individuals can depress savings and investment levels. In contrast, the neutral effect of company income tax and VAT suggests the possibility of offsetting effects: while they generate

essential public revenues, their structural design or administrative implementation may not effectively stimulate investment.

Additionally, macroeconomic factors such as exchange rate volatility and interest rate fluctuations may moderate the effectiveness of tax policy in stimulating investment. Institutional quality, corruption, and infrastructure deficits are also important mediators not directly captured in the regression model but relevant in interpreting the results.

6. Conclusion and Policy Implications

This study offers robust empirical evidence that tax policy—especially personal income taxation—significantly influences investment decisions in Nigeria. While CIT and VAT appear to have a neutral or marginally positive role, they are not statistically decisive in shaping investment trends. These findings suggest that Nigerian fiscal authorities should prioritize reforms that simplify tax administration, reduce compliance costs, and focus on incentive-driven policies to attract private investment.

Key recommendations include:

- Reducing excessive reliance on personal income tax for revenue mobilization
- Broadening the tax base while lowering rates
- Improving tax transparency and enforcement
- Providing targeted tax incentives for key productive sectors

Such reforms can enhance investor confidence and support the country's long-term development goals.

References

1. Abata, M. A. (2014). The Impact of Tax Revenue on Nigerian Economy. *Journal of Policy and Development Studies*, 9(1), 109–121.
2. Adereti, S. A., Sanni, M. R., & Adesina, J. A. (2011). Value Added Tax and Economic Growth in Nigeria. *European Journal of Humanities and Social Sciences*, 10(1), 456–471.
3. Ahmed, H., & Miller, S. M. (2000). Crowding-out and Crowding-in Effects of Government Expenditure. *Contemporary Economic Policy*, 18(1), 124–133. Central Bank of Nigeria. (Various years). *Statistical Bulletin*.
4. Etim, E., Nweze, A., & Umoffong, U. (2020). Taxation and Economic Growth in Nigeria.

- African Journal of Economic Policy*, 27(2), 34–49.
5. Feldstein, M. (2006). The Effects of Taxes on Economic Behavior. *National Tax Journal*, 59(4), 591–610.
 6. Gurdal, T., Aydin, E., & Inal, V. (2021). Taxation and Growth in Developing Economies. *Economic Modelling*, 98, 356–368.
 7. Jhingan, M. L. (2003). *Macroeconomic Theory*. Vrinda Publications.
 8. Mankiw, N. G. (2002). *Macroeconomics* (5th ed.). Worth Publishers.
 9. Musgrave, R. A., & Musgrave, P. B. (2004). *Public Finance in Theory and Practice*. McGraw-Hill.
 - National Bureau of Statistics. (Various years). *Annual Abstract of Statistics*.
 10. Ogbonna, G. N. (2010). Petroleum Profit Tax and Economic Development of Nigeria. *Current Research Journal of Social Sciences*, 2(1), 20–25.
 11. Ojo, S. (2008). *Fundamental Principles of Nigerian Tax*. Sagibra Tax Publications.
 12. Romer, C., & Romer, D. (2010). The Macroeconomic Effects of Tax Changes. *American Economic Review*, 100(3), 763–801.
 13. Tejvan, P. (2015). Economic Growth vs. Economic Development. *Economics Help*. Retrieved from <https://www.economicshelp.org/blog/14484/economics/growth-vs-development>