

# The Impact of Value Added Tax on Private Investment in Nigeria

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## ARTICLE INFO

## ABSTRACT

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The study examined the impact of value added tax on private investment in Nigeria. Data were obtained from CBN statistical Bulletin from 1994 to 2015. Pearson product moment correlation and multiple regressions were employed to analyze the relationship between the dependent variable (Private Investment) and independent variables (Value Added tax, interest rate, inflation rate and exchange rate.). Findings show that there is a positive significant relationship between Private Investment and the Value Added tax, interest rate, inflation rate and exchange rate with the adjusted  $R^2 @ 75\%$ . Therefore, Value Added tax, interest rate, and exchange rate have strong and positive statistical impact on Private Investment in Nigeria. It is now recommended that government should increase the rate of value added tax in Nigeria so that the funds realized from value added tax will be expended on the provision of social and infrastructural facilities which ultimately will boost the economy by way of enhance the level of investment ( encourage investors) which invariably create employment opportunity in the country.

**KEY WORDS:** VAT, investment, Correlation; Nigeria; impact

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## INTRODUCTION

### Background to the Study

To economist, investment usually has positively impacts on economic, social and political growth and development of a country. Any type of investment is a good source of employment opportunity in the country through capital accumulation for productive endeavors. It is able to enhance economic activity and long-term economic growth by expanding the capacity for production of goods and services (Ahuja, 2007). To create and sustain economic growth, developing countries need to maintain private investment at a sizeable proportion of Gross Domestic Product (GDP). Taxes can be used in promoting investment in certain economic zones

initially not very popular to investors. This is applicable in a country where the government extends tax holidays, tax exemptions, remissions and other tax benefits to the investors in specified sectors of the economy or regions. Taxation is central to the current economic development agenda. It provides a stable flow of revenue to finance development priorities, such as strengthening physical infrastructure, and is interwoven with numerous other policy areas, from good governance and formalizing the economy, to spurring growth. Fundamentally, tax policy shapes the environment in which international trade and investment take place. Thus, a core challenge for African countries is finding the optimal balance between a tax regime

that is business and investment friendly, and one which can leverage enough revenue for public service delivery to enhance the attractiveness of the economy (Mike, 2009).

Governments have at their disposal many tax instruments that can be used singularly or jointly to finance their activities. These tax alternatives include personal and corporate income taxes, sales taxes, value added taxes, capital gains taxes and numerous others. In choosing what tax instruments to use and what rates to impose, governments are typically influenced by their expectations of the effects of taxation on investment and economic activities (Desai, Foley and Hines 2004). According to Joseph and Mathew (2013), there has been a growing recognition among developing and emerging economies of the vital role of VAT revenue in stimulating economic development. VAT revenues are increasingly accounting for significant proportion of government revenue to finance the required level of expenditure at the three tiers of government viz; federal, state and local government. Most researchers exhibited that VAT and investment has inverse relationship, in another opinion, VAT geared up the level of investment in any country. With the differences in the assertion of the previous researchers, the study will examine the effect of VAT on private investment in Nigeria from 1994 to 2015.

### Research Objective

The main objective of this paper is to assess the impact of VAT on private investment in Nigeria. The specific objectives of the study are:

- i. To examine the impact of VAT on the private investment in Nigeria.
- ii. To trace whether there is a relationship between VAT and private investment in Nigeria

### Research Hypotheses

The hypotheses of the study are:

- i. VAT has no significant impact on the private investment in Nigeria.
- ii. VAT has no relationship with private investment in Nigeria.

### Literature Review

#### Value Added Tax in Nigeria

Value added tax is only a tax on final consumption, so as long as the design is appropriate, VAT is a particularly efficient tax. From the respect that producers and the users in the production process face the same prices, Value added tax is in accordance with the neutral tax, can avoid the low efficiency of some other indirect tax. The enterprise will not castigate the output decision due to the change of VAT tax. This implicates the value-added tax is a powerful method to promote economic growth. Taxing on intermediate transactions, business tax will lead to the loss of the production efficiency. According to Ochei (2010), VAT is an indirect tax collected from someone other than the person who actually bears the cost of the tax. It was invented by a French Economist, Maurice Laure in 1954 and was first introduced in France on April 10, 1954. According to Usman and Adegbite (2013), Value added tax replaced the sales tax which had been in existence since 1986. Value added tax was introduced in Nigeria on 1st December, 1993, its effective take off date however, was 1st January, 1994. The value added tax presently application in Nigeria is at a flat rate of 5% levied on all vat able goods and services. Keen and Lockwood (2006) confirmed that VAT is a money machine, particularly in OECD member nations on which the study was based. Money machine suggests that VAT effectively generates revenue. Relationships that were considered in the study referred to included VAT and GDP, so also was

Lin (2007), on evaluating the VAT in china suggested a relationship between VAT and GDP exists.

Usman and Adegbite (2013) was supported by Okezie (2003) who brought out that Value added tax (VAT) is a tax introduced in Nigeria in 1993. It is imposed on goods and services at the rate of 5%. The main aim of this tax is to raise revenue to government and its incidence is borne by the final consumer. VAT is collectible from both imported and locally manufactured goods and services. Soyode and Kajola (2006) defined VAT as a consumption tax, charged at 5% on all vatable goods and services. Owolabi and Okwu, (2011), proclaimed that VAT rate in Nigeria has been determined in a way that minimizes disincentive efforts on economic activities. What is being emphasized here is that it has been done in a way that never discourages investment activities in the country. Musa (2009) pronounced that economic and social development laws and policies provide the basis for effective state action that lifts society from underdevelopment, improves the standard of living and facilities for the realization of the millennium development goals.

### Importance of Taxation

According to Mike (2009), taxation is an integral part of countries' development policies, interwoven with numerous other areas, from good governance and formalizing the economy, to spurring growth through, for example, promoting small and medium sized enterprises (SMEs) and stimulating export activities. Among other things, taxation:

- i. Provides governments with the funding required to build the infrastructure on which economic development and growth are based;
- ii. Creates an environment in which business is conducted and wealth is created;
- iii. Shapes the way government activities are undertaken; and

- iv. Plays a central role in domestic resource mobilization.

Taxation provides a predictable and stable flow of revenue to finance development objectives. Taxation shapes the environment in which international trade and investment take place. Certainty and consistency of tax treatment, the avoidance of double taxation, and efficient tax administration are all important considerations for business. But the role of taxation goes further than promoting economic growth. Tax evasion and the siphoning of funds to tax havens deprive African countries of the fiscal benefits of growth (Mike, 2009).

### Empirical Review

Jiating Yan and Qingchun Lu (2013) worked on whether the transformation of VAT increases the investment of enterprise fixed assets, whether to improve the benefit of investment, whether to accomplish the desired purpose. Using data of Jiang Su listed companies. Research shows that the transformation of VAT indeed to expand the scale of investment in fixed assets in Jiang Su. Overall the transformation of VAT has a positive effect on management and development of Jiang Su listed companies. Uwaoma and George (2015) studied the impact of value-added tax on corporate financial performance of quoted companies. Agribusinesses quoted in the Nigerian Stock Exchange Fact book of 2009 was used as the population. Frequencies, simple percentages and simple regression analysis with t-test were used to analyze the questionnaire designed in five-point Likert Scale. Their findings indicated that Value-Added Tax (VAT) impacted negatively on the financial performance of agribusinesses though the impactis of insignificant value. The study recommended that agribusinesses should endeavour to keep appropriate source documents of all transactions for efficient VAT operations and that the governments should ensure that

proper tax incentive scheme is designed and fully implemented to promote the growth of agribusinesses, in Nigeria.

Stephen et al (2013) assessed the impact of taxation on private investment in Kenya, using Vector auto-regression technique to achieve study objectives. covering period 1964-2010. The study found that VAT, income tax and establishment of Kenya Revenue Authority (KRA) had negative impact on private investment while excise tax, import tax and tax amnesty impacted positively on private investment. The study concludes appropriate tax system and progressive tax reforms are necessary to ensure that private investors are given enabling environment to establish.

Fredric and Okeke (2013) examined the impact of value added tax on investment growth in Nigeria. Time series data on investment, government expenditure, real exchange rate, real interest rate and trade openness from the central bank of Nigeria statistical Bulletin (CBN) were analyzed, using multiple regression analysis. The results show that Value Added Tax has significant effect on investment growth in Nigeria. The study recommended that there should be dedicated and apparent honest on the parts of all agents of VAT with respect to the collection and government should try as much as possible to improve on the way of collecting value added tax.

Joseph and Mathew (2013) determined the long-run equilibrium relationship and direction of causality between VAT revenue and state investment spending in Nigeria between 1994 and 2010.. Times series data on variables (state investment expenditure and VAT revenue) covering the period (1994-2010) were used. The data were sourced from CBN Statistical Bulletin 2010 edition and CBN Annual Reports (various years). The unit root property of each of the variables was investigated using ADF and PP unit

root tests. The study also employed Johansen co integration technique to find out if group of I(1) variables converge to a long-run equilibrium, Vector Error Correction Mechanism (VECM) was used to find out the causal link between the two variables. The result showed that both variables were I(1) process. Also, the two I(1) variables were found to converge to a long-run equilibrium. Also, the VECM results indicate that long-run bidirectional causality existed between VAT revenue and state investment spending. The result also revealed short-run causal evidence between VAT revenue and state investment spending. This implies that VAT revenue influenced state investment spending and state investment spending also influenced VAT revenue. The study concluded that both short-run and long-run bidirectional causality existed between VAT revenue and state investment spending in Nigeria during the period under investigation.

Usman and Adegbite (2013) examined the effect of value added tax (VAT) on Nigeria economy, in line with the objectives of their study, secondary data were obtained from central bank of Nigeria statistical bulletin covering the period of 1994 to 2010. In concluding the analysis, multiple regressions were employed to analyze data on such variables Gross Domestic Product (GDP), value added tax, inflation, interest rate, exchange rate and export were all found to have significant effects on the Economics Growth with the Adjusted R2 of 96.7%. Following the outcome of this study, it is therefore concluded that the income effect on the aggregate consumption is clearly negative because the rise in the VAT rate decreases people's dispensable income. In addition to income effects, a change in the VAT rate has a substitution effect, which means even if the government reduces the income tax rate in order to offset the decrease in people's income due to the rise of the VAT rate, aggregate consumption will change. To uphold VAT's

revenue role in the government’s finance, it is recommended that the government should supervise the collection of VAT to ensure orderly, fair and equitable dealings in collecting VAT revenue and to forestall illegal deals by privilege insiders in order to raise the revenue generated by this tax as effectively and efficiently as possible.

**METHODOLOGY**

Data were sourced from Central bank Statistical bulletin from 1994 to 2015. This Model assessed the impact of Value added Tax on private investment in Nigeria. Secondary data were used

in this study which were gathered from Central bank of Nigeria statistical bulletin from 1990 to 2015. Regression analysis technique was used to examine the effects of independent variables on dependent variable, and Pearson product moment correlation was used to examine the significant relationship among the variables.

**MODEL SPECIFICATION**

Private investment in Nigeria is the dependent variable while value added tax (VAT), value of inflation rate, exchange rate and interest rate are independent variable.

$$PINV = f(VATIMP, EXCH, INTR) \tag{1}$$

$$\sum_{i=1}^n PINV = a_0 + \sum_{i=1}^n a_1VAT + \sum_{i=1}^n a_2INF + \sum_{i=1}^n a_3EXCH + \sum_{i=1}^n a_4INTR + \mu_1 \tag{2}$$

$$\sum_{i=1}^n LOGPINV = a_0 + \sum_{i=1}^n a_1LOGVAT + \sum_{i=1}^n a_2LOGINF + \sum_{i=1}^n a_3LOGEXCH + \sum_{i=1}^n a_4LOGINTR + \mu_1 \tag{3}$$

$$r = \frac{n\sum wc.sf - \sum wc \sum sf}{\sqrt{(n\sum wc^2) - (\sum wc)^2} \cdot \sqrt{(n\sum sf^2) - (\sum sf)^2}} \tag{4}$$

Where n = no of observations

r = Coefficient of correlation showing the degree of relationship between the dependent variable and independent variable.

**RESULTS AND DISCUSSION**

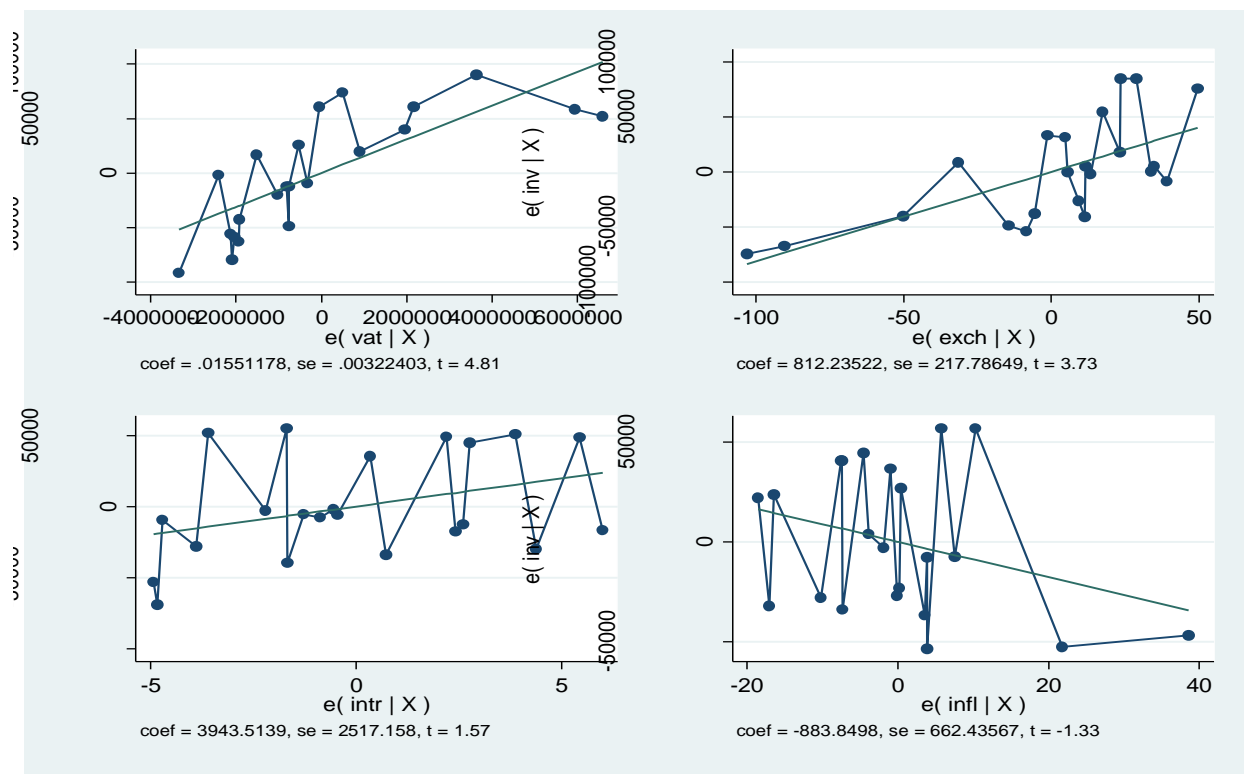
**Table 1: The Effect of Value Added Tax on Private Investment in Nigeria**

Dependent Variable	Independent Variables	Coefficient	Standard Error	T	P> t	[95% Conf. interval]
PINV	LOGVAT	.0155118	.003224	4.81	0.000	.0087097 .0223139
	LOGEXCH	812.2352	217.7865	3.73	0.002	352.7459 1271.725
	LOGINTR	3943.514	2517.158	1.57	0.136	-1367.225 9254.253
	LOGINFL	-883.8498	662.4357	-1.33	0.200	-2281.467 513.7673
	constant	73254.13	42661.13	1.72	0.104	-16752.99 163261.2
R-squared = 0.8007	Adj R-squared = 0.7538	Prob > F = 0.0000	F( 4, 20) = 17.07	Root MSE = 38756		

Source: Researcher’s computation (2016) using STATA Version 12



The regression plots of table 1 is presented below



The effects of value added tax on private investment in Nigeria are shown in table 2 above. 1% increase in the Value Added Tax (VAT) increases Private investment (PINV) by .015%. This suggests a positive insignificant effect of VAT on PINV. 1% increase in Exchange Rate (EXCH) increase Private Investment (PINV) by 81 %.This means that the relationship between EXCH and PINV is positive suggesting that if EXCH increases PINV also increase. More so, 1% increase in the Interest Rate (INTR) increase Private Investment (PINV) by 39%. This also suggests a positive effect of INTR on PINV. Furthermore, 1% increase in Inflation (INFL) reduce Private Investment (PINV) by 88%. This reveals a negative significant effect of INFL on PINV. This is suggesting that if INFL in Nigeria

increases, Private Investment (PINV) will reduces..

Given coefficient of determination ( $R^2$ ) to the tune of 0.8007 (80.1%) with the adjusted  $R^2$  as 75.4%, it connotes that the independent variables incorporated into this model have been able to determine effects of value added tax on Private investment to 80.1%.The F and probability statistics also confirmed the significance of this model. This hypothesis is that Value added tax has no significant effect on Private investment in Nigeria. From the decision rule above, because the p-value is equals 0.0000 which is less than 0.05, therefore the null hypothesis is rejected while the alternative hypothesis is upheld that is Value added tax has positive significant effect on Private investment in Nigeria.

**Table 2 : The relationship between Value Added Tax and Private Investment in Nigeria**

	Inv	Vat	Exch	intr	Infl
INV	1.0000				
VAT	0.6654*	1.0000			
EXCH	0.5098*	-0.0825	1.0000		
INTR	0.1408	0.5198*	-0.5553*	1.0000	
INFL	-0.2157	0.3055	-0.6485*	0.6550*	1.0000

**Source:** Researcher's computation (2017) using STATA Version 12

The table 2 above shows the relationship between Private Investment and Value Added Tax in Nigeria. The table shows that Private investment in Nigeria (PINV) has positive relationship with value added tax (VAT) with the value 0.6654\*. Exchange rate (EXCH) also has positive significant relationship with Private investment in Nigeria with the value of 0.5098\*. This result implies that an increase in exchange rate (EXCH) leads to increase in Private in Nigeria. Interest rate (INTR) has no correlation with Private investment (0.1408) in Nigeria. There is negative relationship between Inflation (INFL) and Private investment (PINV) in Nigeria with the value of -0.2157. The table also revealed that all the predictor variables have a positive relationship with private investment in Nigeria. This hypothesis is that Value added tax has no significant relationship with private investment in Nigeria. Therefore the null hypothesis is rejected while the alternative hypothesis is advocated that is Value added tax has no significant relationship with private investment in Nigeria.

### SUMMARY AND CONCLUSION

This study assessed the effects of value added tax on private investment in Nigeria from 1994 to 2015. This study used Multiple regression analysis and Pearson product moment correlation technique. Multiple regression analysis technique was used to show the effects of value added tax on private investment in Nigeria. Though, based on the result of the study, there is a positive effect of

Value Added Tax (VAT) on Private Investment in Nigeria. All other variables have positive significant effect on Private Investment in Nigeria with the exception of Inflation which have negative significant effects on Private Investment in Nigeria. Likewise there is a positive significant relationship between Private investments with Value added tax and Exchange rate this means that when Value added tax and Exchange rate increase, Private Investment in Nigeria also increases. The higher the level of Value Added Tax and Exchange rate the higher the Private Investment in Nigeria. In conclusion, Value added tax has positive significant and statistical impact on Private Investment in Nigeria.

It is now recommended that government should increase the rate of value added tax in Nigeria so that the funds realized from value added tax will be expended on the provision of social and infrastructural facilities which ultimately will boost the economy by way of enhance the level of investment ( encourage investors) which invariably create employment opportunity in the country.

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