

EFFECTS OF VALUE ADDED TAX AND CUSTOM DUTIES ON REVENUE GENERATION IN NIGERIA (2000-2016)

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ABSTRACT: *The study examined value added tax and customs duties on revenue generation in Nigeria. Secondary data was sourced from Federal Inland Revenue Service (FIRS) ranging from 2000 to 2016. Autoregressive Distributed Lag (ARDL) and Granger causality tests were used as the estimation techniques. The findings of the study revealed that the F-statistics value was 2.883868 which is lesser than both the lower bound and the upper bound values of 3.79 and 4.85 respectively at the 5percent level of significance which implies that there is no long-run relationship among value-added tax, customs duties and revenue generation. It was equally revealed that there is no causality among value-added tax, customs duties, and revenue generation. The study concluded that value-added tax and customs duties no significant effect on revenue generation and there is no long-run relationship among value-added tax, customs duties and revenue generation in Nigeria during the study period. Thus, it is recommended that the fiscal policy should discourage tax avoidance by emulating measures for compliance of value added tax and customs duties.*

KEYWORDS: Tax, Value Added Tax, Custom and Excise Duties, Revenue Generation

INTRODUCTION

Taxation is one of the sources of revenue generation to the government for the social welfare of its citizens. The social welfare can be the provision of the power supply, free education, social amenities, stipends for her citizen, infrastructure. However, taxation can be defined as the system of imposing a compulsory levy on all income, goods, services, and properties of individuals, partnership, trustees, executorships and companies by the government (Samuel and Simon 2011) as cited by (Samuel and Tyokoso, 2014). (Inyama and Ubesre, 2016) the view that taxes measured on persons or properties based on the profits/income or gain, the benefit conferred on the citizens is without reference to the contributions of individual taxpayers. Nightingale (2001) opined that “a tax is a compulsory contribution, imposed by the government, and while taxpayers may receive nothing identifiable in return for their contribution, they nevertheless have the benefit of living in a relatively educated, healthy and safe society”.

Tax is broadly divided into two: direct tax and indirect tax. A direct tax is imposed on the income of individuals and corporate bodies while the indirect tax is charged on goods and services at a specific period of time. Meanwhile, Onaolapo, Aworemi, and Ajala (2013) stated that revenue generated from consumption taxes that is an indirect taxes can help to increase the financial base of any economy. Consumption taxes, however, involves manipulating the potential taxpayers against avoidance behavior. Inadequate tax personnel, fraudulent activities, lack of understanding of the importance to pay tax by taxpayers to mention a few are some of the problems affecting revenue from indirect taxes (Afubero & Okoye, 2014). However, this

study surveyed the effects of value added tax and customs duties on revenue generation in Nigeria.

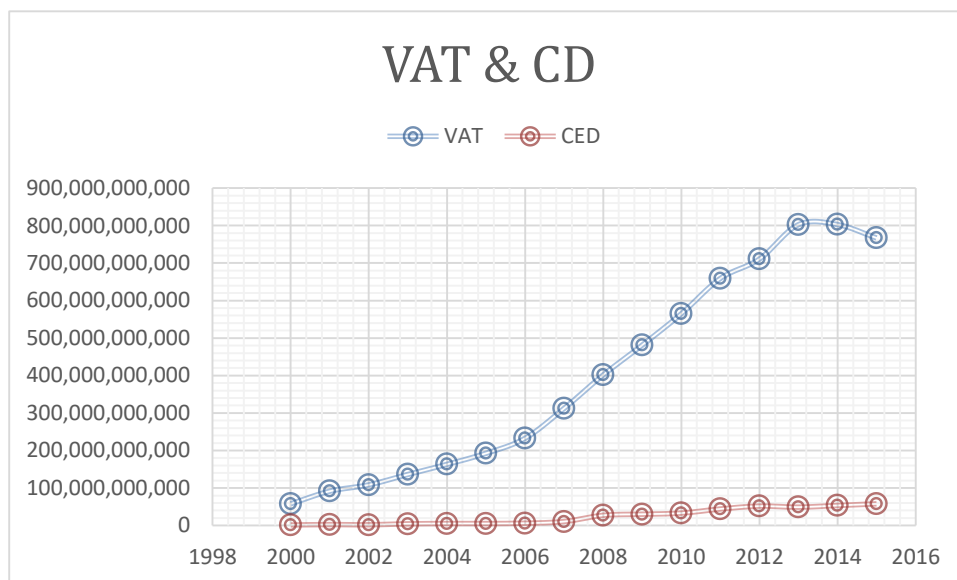
LITERATURE REVIEW

Indirect Tax

Indirect tax is a tax levied on goods and services rather than on income or profit. The consumer is ultimately paying the tax by paying more for the product. Indirect tax is one of the divisions of tax, imposed or levied by the government on her citizens for economic growth and development. VAT is an example of an indirect tax. VAT is taxed on the consumption of goods and services and its liability is determined by indirect assessment of the taxpayer's consuming ability.

Nigeria indirect taxes from 2000 to 2015 are stated below:

Figure 1: VAT & CD of Nigeria



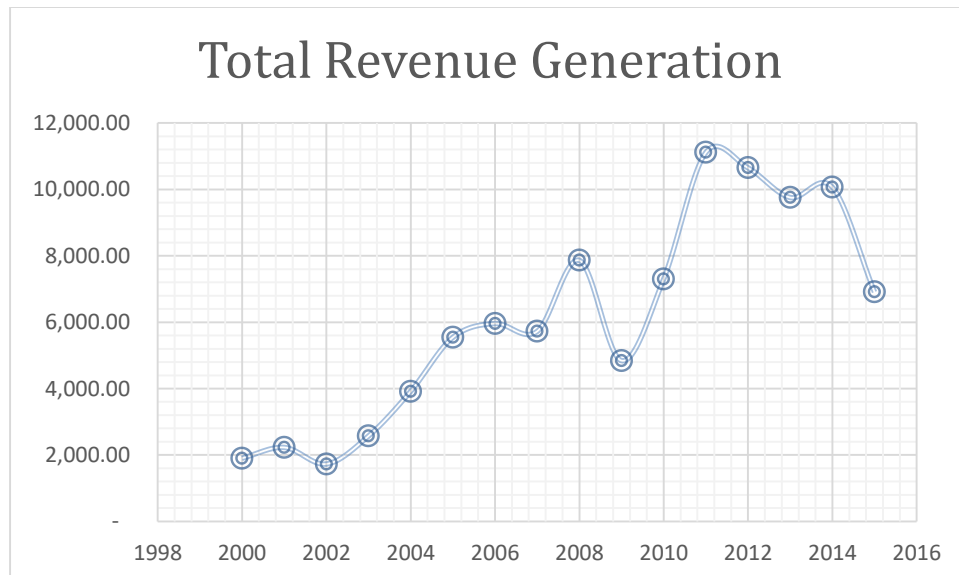
Source: Authors' computation (2018)

Figure 1 shows value-added tax and customs duty in Nigeria. From the graph, it was observed that value-added tax has been experiencing a significant increase from 2000 to 2014 which later decline in 2015. It could be as a result of different policies put in place by the government in curbing hike in prices of goods and services. Customs duty has been consistent in its return from 2000 to 2007 but later increases lightly in the subsequent years still 2015. The upward movement of indirect taxes such as value-added tax and customs duty in the recent year was due to the fall in oil prices which has led the government to diversify its revenue base in Nigeria.

Revenue Generation

Revenue generation serves as a prominent role in the growth of an economy. The government in all spheres of the world strategize to increase its revenue for the welfare of her citizen. More so, revenue generation is an amount of money generated during a specific period of time. Ahmed (2010) defined revenue generation as all amounts of money received by a government from all sources. Soyode and Kajola (2006) also opined that revenue generations are options available to the government for raising funds for building resources away from the other sectors of the economy. Revenue bases are not mainly limited to oil and non-oil bases but other means available to government in raising fund financing their activities. Revenue generation comprises taxes, gifts, fines, fees, grants, mining, license and internal revenue, interest and repayment, rent on government property, armed forces, and miscellaneous (Okwori & Sule, 2016). The tax revenue consists direct and indirect taxes. The direct taxes include; personal income tax, corporate tax, capital gain tax, petroleum profit tax while indirect taxes include; custom and excise duties, value-added tax (Chaudhry & Munir, 2010).

Figure 2: Total Revenue Generation



Source: Authors' computation (2018)

Figure 2 reveals the total revenue generated in Nigeria from oil revenue and non-oil revenue from 2000 to 2015. Thus, oil revenue has been the major source of revenue generation since its discovery in 1956. From the graph, it can be observed that the revenue generated has been fluctuating from 2000 to 2015. However, the year 2008 – 2009 and 2014 – 2016 experience significant fall in total revenue generated in Nigeria due to many factors where oil sources of revenue have accounted for the major issue. This then urges the government to diversify its revenue base to other sectors of the economy.

Empirical Review

In the study of Gatawa, Aliero and Aishatu (2016) examined the impact of value-added tax (VAT) on the level of economic activities in Nigeria from 1994 to 2014. The study used Quarterly data ranged from 1994 Q4 to 2014 Q4 which was analyzed using co-integration test. The study found evidence of a significant positive impact of VAT on economic growth. In the

same vein, other government revenues, which include all oil receipts and other receipts into the federation account other than VAT were also found to be positively related to economic growth during the study period. Nevertheless, Apere and Durojaiye (2016) investigated relationship between value-added tax, government total revenue and gross domestic product between 1994 and 2014 using secondary data obtained from the Central Bank of Nigeria (CBN) statistical bulletin. It was observed that all the variables were stationary at their first differences, using the Phillip-Perron unit root test; Correlation test was also conducted to ascertain the strength of their relationship. The study revealed that there is a long-run significant positive relationship between value-added tax and each of government total revenue and gross domestic product in Nigeria over the period under review. Meanwhile, Onaolapo, Aworemi, and Ajala (2013) examined the impact of the value-added tax on revenue generation in Nigeria. Secondary Source of data was sought from Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Service Annual Reports and Chartered Institute of Taxation of Nigeria News. Data analysis was performed with the use of stepwise regression analysis. The results showed that Value Added Tax has a statistically significant effect on revenue generation in Nigeria.

In the same vein, Izedonmi and Okunbor (2014) examined the contribution of the VAT to the development of the Nigerian economy. Time series data was employed from 1994 to 2010 which was sourced from Central Bank of Nigeria (CBN) using both simple regression analysis and descriptive statistical method. Findings showed that VAT Revenue and total revenue account for as much as 92% significant variations in GDP in Nigeria. A positive and insignificant correlation exists between VAT Revenue and GDP. Both economic variables fluctuated greatly over the period though VAT Revenue was more stable. Akhor and Ekundayo (2016) investigated the impact of indirect tax revenue on economic growth in Nigeria. The study employed secondary data collected from Central Bank of Nigeria statistical bulletin for the period covering 1993 to 2013. The research design was time series and the data were analyzed using descriptive statistics, correlation, unit root test, co-integration test and error correction model regression. The result revealed that value-added tax had a negative and significant impact on the real gross domestic product. Custom and excise duties had a negative and weakly significant impact on the real gross domestic product. The Error Correction Model (ECM (-1)) coefficient had a correct negative and statistically significant sign. This shows that short-run deviation can be quickly corrected. The Durbin-Watson positive value indicated the absence of autocorrelation in the model. To buttress previous studies, Inyama and Ubesie (2016) examined the effect of the value-added tax, customs and excise duties on Nigeria economic growth. Secondary sources were explored in data gathering while simple regression technique was employed in data analysis. Correlation analysis was applied in the assessment of the relationship between the non-oil revenue sources and Nigeria Gross Domestic Product. The outcome reveals that all the non-oil tax revenue affects Nigeria Gross Domestic Product. On the side of the relationship among the variables studied, the strength of their relationship is very high for all the variables. The study concluded that Value Added Tax and Customs and Excise Duties are some of the major contributors to Nigeria Gross Domestic Product.

In Kenya experience, Njogu (2015), investigated the effect of the value-added tax on economic growth from 1990 to 2014. The study concluded that there exists a significant negative relationship between VAT rates and GDP. The findings equally indicated that there exists an insignificant positive relationship between value-added tax rates and consumer price index. It also revealed that there exists a significant positive relationship between VAT rates and unemployment rate during the study period.

Conclusively, the empirical reviewed shows that indirect tax and revenue generation in Nigeria has been few in the literature. However, this necessitated the investigation of indirect tax and revenue generation in Nigeria and to extend the period covered by the previous researchers.

RESEARCH METHOD

This study modified the model used by Inyama and Ubesie (2016) in examining the effect of value added tax, customs and excise duties on Nigeria economic growth. The model is as stated below:

$$GDP = f(VAT, CUSEXC) \quad 1$$

Where:

GDP = Gross domestic Product

VAT = Value Added Tax

CD = Custom Duty

However, the dependent variable for this study was re-modified as total revenue generation while the independent variables continued as value added tax and custom and excise duties. The study's model is presented as:

$$TRG = f(VAT, CD) \quad 2$$

TRG = Total Revenue Generation

CD = Custom Duty

VAT = Value Added Tax

The equation 2 is presented in an econometric form as:

$$TRG = \mu_0 + \mu_1 VAT + \mu_2 CD + \gamma \quad 3$$

Thus, equation 3 above is express in time series form as:

$$TRG_t = \mu_0 + \mu_1 VAT_t + \mu_2 CD_t + \gamma_t \quad 4$$

Log-linearity form of equation is also presented below:

$$LTRG_t = \mu_0 + \mu_1 LVAT_t + \mu_2 LCD_t + \gamma_t \quad 5$$

RESULTS AND DISCUSSION OF FINDINGS**Table 1: Philips-Person Unit Root Test**

Variable	Pp-stat	Critical value at 5%	PP-stat	Critical value at 5%	Remarks
LTRG	-1.823723	-3.065585	-3.613651	-3.081002	1(1)
LCD	-4603834	-3.098896	-	-	1(0)
LVAT	-1.693300	-3.065585	-3.552154	-3.081002	1(1)

Source: Authors' computation (2018)

The Philip-person Unit root test presentation in table 1 above reveals that log of total revenue generation (LTRG) was not stationary at level but after converting to first difference, it became stationary, log of custom duty was stationary at level while log of value-added tax was not stationary at level but became stationary at first difference. This implies that LTRG and LVAT were stationary at first difference while LCD was stationary at a level that is the variables retained shock for a short period after which they let go. The combination of I(0) and I(1) stationarity necessitated the use of autoregressive distributed lag (ARDL) as the estimation technique. However, before estimating ARDL, Lag Length was firstly carried out to know the length of lag to apply.

Table 2: ARDL Result

R-squared	0.897782	F-statistic	10.24682
Adjusted R-squared	0.810166	Prob(F-statistic)	0.003582

Source: Authors' computation (2018)

From the result in table 2, the ARDL result through R-Squared, F-statistics, and probability of F-statistics revealed that the determinant of multiple coefficients (R^2) was 89.8% which implies that customs duty and value-added tax accounted for 89.8% variation in revenue generated while 10.2% is accounted for by other factors. The F-statistics was 10.24682 and its probability was 0.003582. This implies that customs duty and value-added tax can jointly influence the revenue generated. This is similar to the work of Onaolapo, Aworemi, and Ajala (2013).

Table 3: ARDL Bound Test

Test Statistic	Value	K
F-statistic	2.883868	2
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	5.15	6.36

Source: Authors' computation 2018)

The result from Table 3 showed that the F-statistics value was 2.883868 and the critical bounds values at lower and upper bounds were 3.79 and 4.85 respectively at the 5percent level of

significance. This implies that there are no long-run relationships between custom duty and value-added tax.

Table 4: Pairwise Granger Causality

Null Hypothesis:	Obs	F-Statistic	Prob.
LCED does not Granger Cause LTRG	12	0.38171	0.6961
LTRG does not Granger Cause LCED		3.95096	0.0710
LVAT does not Granger Cause LTRG	15	1.89865	0.2000
LTRG does not Granger Cause LVAT		0.98290	0.4077
LVAT does not Granger Cause LCED	12	0.46752	0.6448
LCED does not Granger Cause LVAT		0.13559	0.8754

Source: Authors' computation (2018)

Pairwise Granger causality test displayed in table 4 depicted that total revenue generated, custom and excise duties and value added tax freely move to each other. That is, there is no uni or bi-directional relationship among them. Meanwhile, the customs duty and value-added tax are expected to granger cause revenue generation as a result of LVAT and LCD are some of the sources of revenue generation. This could be due to tax avoidance.

CONCLUSION AND RECOMMENDATION

This study examined the effects of value added tax and custom on revenue generation in Nigeria where value added tax and custom and excise duties were used as the proxies and total revenue generated was used as the proxy for revenue generation. However, the result revealed that value-added tax and customs duty can jointly influence revenue generation. It also revealed that revenue generation, value-added tax and customs duty does not Granger cause each other, that is, they freely move to each other. The study concluded that value-added tax and customs duty have no significant effect on revenue generation in Nigeria. It further concludes that there is no long-run relationship among value-added tax, customs duty and revenue generation. Thus, it is recommended that the fiscal policy should discourage tax avoidance by emulating measures for compliance of value added tax and customs duty.

REFERENCES

- Afubero, D., & Okoye, E. (2014). The impact of taxation on revenue generation in Nigeria: A study of federal capital territory and selected states. *International Journal of Public Administration and Management Research*, 2(2), 22-47.
- Ahmed, Q.M. (2010). Determinants of Tax Buoyancy: Empirical Evidence from Developing Countries. *European Journal of Social Sciences*, 13(3), 408-414.
- Akhor, S. O., & Ekundayo, O. U. (2016). The impact of indirect tax revenue on economic growth: The Nigeria Experience. *Igbinedion University Journal of Accounting*, 2, 62-87.
- Apere, T. O., & Durojaiye, O. J. (2016). Impact of value-added tax (VAT) on government revenue and economic growth in Nigeria. *International Journal of Management and Applied Science*, 2(7), 92-97.

- Chaudhry, S. I. & Munir, F. (2010). Determinants of Low Tax Revenue in Pakistan. Pakistan, *Journal of Social Sciences*, 30(2), 439-452
- Gatawa, N. M., Aliero, H. M. & Aishatu, A. M. (2016). Evaluating the impact of value-added tax on the economic growth of Nigeria. *Journal of Accounting and Taxation*, 8(6), 59-65.
- Inyiama, O. I., & Ubesie, M. C. (2016). Effect of value added tax, customs and excise duties on Nigeria economic growth. *International Journal of Managerial Studies and Research (IJMSR)*, 4(10), 53-62.
- Izedonmi, F.I., & Okunbor, J.A. (2014). The roles of value added tax in the economic growth of Nigeria. *British Journal of Economics, Management & Trade*. 4(12). 1999-2007.
- Nightingale, K. (2001). *Taxation: Theory and practice*. London, Prentice Hall
- Njogu, L. K. (2015). The effect of value-added tax on economic growth in Kenya. *International Academic Journal of Economics and Finance* 1(5), 10-30.
- Okwori, J. & Sule, A. (2006). Revenue Sources and Economic Growth in Nigeria: An Appraisal. *Journal of Economics and Sustainable Development* 7(8), 113-123.
- Onaolapo, A. A., Aworemi, R. J., & Ajala, O. A. (2013). Assessment of value-added tax and effect on revenue generation in Nigeria of value added tax on revenue generation in Nigeria. *Pakistan J. Soc. Sci.* 10(1): 22-26.
- Samuel, S. E., & Tyokoso, G. (2014). Taxation and revenue generation: An empirical investigation of selected states in Nigeria. *Journal of Poverty, Investment, and Development*, 4.
- Samuel, S. E., & Simon, S. (2011). The effect of income tax on capital investment decisions of Banks in Nigeria. *Ikoji Journal of Management*, 4(1), 116-129
- Soyode, L. & Kajola, S.O. (2006). *Taxation Principals and Practice in Nigeria*. Ibadan, Nigeria; Solicon Publishers.