

TAX AUDIT AND VALUE ADDED TAX (VAT) COMPLIANCE IN DEVELOPING COUNTRIES

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ABSTRACT

Value added tax around the world has shown great level of homogeneity. However, irrespective of these commonalities, there are differences in the administration of VAT. Nigeria like many other developing countries often place much focus on the dissemination of tax revenue, while undermining the sternness of VAT audit in enhancing favorable VAT compliance. It is equally preposterous that country like Bangladesh and others that are less developed than Nigeria are performing better in the area of VAT audit and compliance. The study therefore compares the impact of tax audit and VAT compliance between Nigeria and Bangladesh. The OLS and independent t-test analytical tools were employed. The study has also shown that there is a significant difference in level of VAT compliance between Nigeria and Bangladesh. Also VAT significantly affect VAT proceeds in Nigeria and Bangladesh. Although, unremitted VAT and VAT proceeds are high in Bangladesh; neither does Nigeria nor Bangladesh has a better VAT compliance compared to each other for the period under review. It is recommended that the scope of tax audit should be widened in such a way that will ensure proper submission of accurate and current returns for proper computation, and sanctions should be applied when necessary.

Key Words: Tax, Tax audit, VAT audit, VAT compliance, Nigeria, Bangladesh, VAT proceeds.

1.0 INTRODUCTION:

Value added taxes have a high degree of uniformity and homogeneity worldwide. Although there are many similarities, there are variances in how VAT is administered (Thuronyi, 2003). VAT-adopting nations, including Nigeria, have been compelled to adapt to local conditions and deviate from international norms and best practices due to a number of factors, including the economy structure of a nation, the tax culture, administrative dimensions, and politicization of VAT operations, etc (Igbeng, Beredugo & Adu, 2015).

The primary goal of the majority of developing nations has always been to maximize tax income, while accidentally ignoring the fundamentals of a sound tax system and lowering the rigor of tax audits in order to improve favorable VAT compliance.

An inspection of tax returns by the revenue agency to ensure that income and deductions are precise and accurate is known as a tax audit. It is beneficial to check that the financial data is being reported accurately. A tax audit, according to Goodrich (2013), is a review of a company's or an individual's tax return. Taxes are a significant source of income in many developing

nations, including Bangladesh and Nigeria. According to Modugu and Anyaduba (2014), a tax is a mandatory levy placed by the government on an individual's income, profit, or wealth as well as the wealth of their family, community, corporation, or unincorporated bodies in order to finance public expenditures. The VAT is one of the most dependable and significant taxes from which the government can generate cash.

VAT is a tax imposed on the consumption of goods and services (Fowler, 2016). The Federal Inland Revenue Service and the Federal Government view VAT as a reliable source of government revenue (Fowler, 2016). VAT is a positive development for Bangladesh and Nigeria. It is intended to be paid for in the end by the people who really use the products and services. As a result, the operational mechanism enables output-input adjustments to care for taxpayers in the supply chain who are not buyers of the items they deal in. The decision to implement a VAT has frequently been made for these reasons since it is commonly acknowledged that a well-designed VAT may raise considerable sums of income on a stable and sustainable basis (Smith, Islam & Moniruzzaman, 2011)

Effective tax compliance is hampered in nations like Nigeria and Bangladesh by a number of issues, such as tax evasion and avoidance, failure to report income subject to taxation, inadequate account-keeping, etc. Therefore, tax compliance refers to a tax-liable body's capacity to provide accurate, full, and satisfying returns in accordance with state tax rules and regulations to the authority for the purpose of tax assessment (Kircher, 2008).

According to Smith, Islam, and Moniruzzaman (2011), many developing nations consider the introduction of a VAT as an opportunity to modernize their tax systems, which may indicate that international financial organizations (such as the IMF and World Bank) had a say in the choice to do so. However, a lot of developing nations discover the VAT.

Several nations have incorporated tax audit into their tax systems to address the aforementioned

issues. Tax audits assist in ensuring that financial data is recorded accurately (Goodrich, 2013)

1.1 Statement of the problem

The government's inability to sufficiently and successfully recoup the VAT proceeds from businesses continues to be a problem.

Like many other developing nations, Nigeria frequently places a lot of emphasis on the distribution of tax revenue while downplaying the severity of a VAT audit in order to improve favourable VAT compliance.

It is similarly absurd that nations less developed than Nigeria, such as Bangladesh, perform better in terms of VAT audit and compliance.

This was demonstrated by the startling discrepancy between expected VAT returns and actual value added tax returns.

The inability of revenue authorities to check and audit enterprises for VAT purposes has also occasionally reduced VAT collection. In the case of Nigeria, a number of companies charge a 5 percent VAT on sales without making sufficient payments to the tax authority, and most of the time, the whole amount of VAT deducted is not properly accounted for. Even though the Federal Inland Revenue Services (FIRS) has the authority to periodically audit Vatable Persons without a warrant in order to guarantee compliance with the VAT statute and regulations, these actions have continued uninterrupted.

2.0 Review of Related Literature

2.1 Conceptual Framework

A long-term method of income production is used to create and sustain the world's largest economies. The age of complete reliance on oil money is over, and revenue services are now considered to create government income through taxation to support government programs and initiatives (Fowler, 2010). One dependable tax that the Revenue Service uses to pay for government initiatives is the value added tax.

VAT is a positive development in nations like Bangladesh and Nigeria. Value Added Tax (VAT) is a tax assessed on the consumption of goods and services (Fowler, 2016). It is an indirect tax, which means that the onus of payment rests with the person who purchases the products or services in the end. By changing the taxpayer's behavior, auditing can significantly improve taxpayer compliance and tax administration (Kagina, Uganda commissioner of General Revenue Authority).

A tax audit, according to Kircher (2008), is a review of a person or organization's compliance with federal and state tax laws. According to Ola (2001), tax audits also contain tax returns that are chosen for audit based on a set of selection criteria. The construction of a strong and viable tax administration as well as the maintenance of a strong and viable mechanism to deal with the various organizations' access to tax evasion strategies are among the objectives of tax audit.

Value Added Tax in Nigeria

The VAT Act No. 102 of 1993 established the tax, and it went into effect in January 1994. In Nigeria, the VAT rate is 7.5% for all taxable products and services. Federal Inland Revenue Services also collects it. Proceeds from VAT should go into the VAT pool account, which then distributes money each month to the federal, state (including federal capital territory), and local governments in the proportions of 15%, 50%, and 35%, respectively. The VAT has proven to be a reliable source of revenue for the government since its inception (Flower, 2016).

How VAT is Computed and Paid

All taxable people must register with the board for VAT within six months after the start of the Act or within six months of the start of business, whichever comes first, in order for the tax to be collected. Furthermore, even those who engage in exempt goods must register for VAT, as are all taxable individuals. As a result, products and services, not people or organisations, are granted the exemption status outlined in the VAT statute. In Nigeria, 7.5% of the value of goods and services sold is referred to as the output

VAT, while 5% of the value of items purchased for resale is referred to as the input VAT in Nigeria, while a least developed nation like Bangladesh charges VAT at a uniform and regular rate of 15%. (Smith, Islam & Moniruzzaman, 2011). The computation must adhere to the following rules (Fowler, 2016):

1. The tax on goods purchased or imported directly for resale as well as products that make up the stock-on-trade utilized for the creation of any new product on which output tax is paid are the only items for which input VAT will be allowed as a deduction from the output tax.
2. VAT on administrative costs or overheads is not considered eligible input VAT. This VAT and any associated expenses are expensed in the profit and loss account.
3. Claims for input tax on services supplied are not permitted under the VAT Act.
4. VAT is deducted from profit and loss statements for input used to produce exempt goods.

Capital assets and purchases of capital goods are capitalized rather than eligible for input VAT (that is taken as part of the capital expenses of the business and capital allowance claimed). As in the case of Nigeria, VAT on inputs used to produce zero-rated products is claimed from FIRS through the submission of refund applications. VAT would not be applicable to reimbursable expenses (where applicable) that are not included in the fees and are reported explicitly and individually on the invoice. Invoice-based VAT is used. This means that the total invoices raised along with additional cash receipts are used to calculate and pay VAT rather than cash receipts alone. VAT is remitted and paid each month.

Value Added Tax in Bangladesh

The value Added Tax Act was passed on June 2, 1991 (Ordinance 26 of 1991), and it became effective on July 1, 1991. It superseded a number of previous sales and excise taxes. When it was originally put into practice in Bangladesh in 1991, a number of objectives were sought, including (a) enhancing tax transparency; (b)

reducing cascading (taxing on tax) of consumer taxes; (c) integrating tax administration; and (d) promoting economic growth (Rafiqul& Kumar, 2014). VAT is assessed on both commodities and services at the import, manufacture, wholesale and retail levels at a uniform rate of 15% at the moment of the provision of taxable items or services.

When determining the VAT owed, tax paid on inputs is taken into account. When the reduced rates or truncated rates apply, a predetermined amount is taken into account as the value contributed, and no specific credits are allowed.

The amount that is assessable for the application of VAT on taxable services is known as the "complete receipt," which is defined as the total amount of money, including commission or fee but excluding the VAT or advance income tax applied. A number of exemptions from the application of the Bangladeshi VAT on the supply of goods and services within Bangladesh are provided in the First and Second Schedules to the VAT Act.

The vast bulk of the excluded products are unprocessed agricultural goods.

Trade, nonmedical professional services, cultural and entertainment services, as well as other services that are not normally excluded under other VAT systems, are also exempt from VAT. The list of exempt services includes those that are regularly exempted (or subject to a low rate of VAT) in other nations, such as financial services, transportation, and medical, social, and educational services (Rafiqul& Kumar, 2014). Nonregistered VAT payers must pay a turnover tax equal to 4% of their gross annual revenue rather than paying VAT without any input credits. Any sums paid as turnover tax on inputs purchased by VAT registered taxpayers, however, cannot be offset against VAT because turnover tax is not a type of VAT. Trade, nonmedical professional services, cultural and entertainment services, as well as other services that are not normally excluded under other VAT systems, are also exempt from VAT.

The list of exempt services includes those that are regularly exempted (or subject to a low rate of VAT) in other nations, such as financial service

s, transportation, and medical, social, and educational services (Rafiqul& Kumar, 2014). Instead of paying VAT without any input credits, nonregistered VAT payers must instead pay a turnover tax equal to 4% of their gross annual income. Turnover tax is not a kind of VAT, hence any amounts paid as turnover tax on inputs bought by VAT registered taxpayers cannot be deducted from VAT. The VAT system in Bangladesh imposes a separate tax known as "supplementary duty," which is essentially an excise tax, in addition to VAT and the turnover tax. The goods covered by the duty are listed in the Third Schedule of the Act, together with the rates levied (Scott, 1999).

Keeping in mind that capital goods are exempt from Bangladesh's VAT, the standard Trade, nonmedical professional services, cultural and entertainment services, as well as other services that are not normally excluded under other VAT systems, are also exempt from VAT. The list of exempt services includes those that are regularly exempted (or subject to a low rate of VAT) in other nations, such as financial services, transportation, and medical, social, and educational services (Rafiqul& Kumar, 2014).

The VAT Rate

Bangladesh only uses one VAT rate of 15%. The effective VAT rates with the turnover tax and truncated VAT rates will differ from the standard 15% rate since the real amounts of value-added and the amounts assumed with the truncated rates will not be the same. Although it is not quite a VAT, the extensive list of exclusions and the extra duty assist in partially offsetting the progressivity of the single rate VAT (Bangladesh, 2016).

Reasons for Tax Audit

According to Erard (1994), there are a number of reasons for tax audits, including: 1. assisting the government in obtaining the proper tax income, which is essential for funding the budget and preserving the stability of the economy and financial system.

2. To make certain that tax payers submit accurate returns.

3. To reduce the level of tax evasion and avoidance.
4. To make certain that the payers strictly adhere to the tax legislation
5. To put non-compliant taxpayers within the tax authorities' scrutiny.
6. To demonstrate the accuracy, timeliness, and completeness of tax returns submitted by tax payers.

International perspective of Tax Audit

Domestic tax rules of the various countries are where international tax laws are based (Cremer, 1990). He claimed that nations create rules to allow their tax authorities to collect tax money for the benefit of the people and to encourage domestic investment and business. In light of the fact that international organizations were established to deal with the prevention and collection of tax evasion and avoidance, double taxation of multinational firms, etc., tax audit is crucial internationally.

2.2 Theoretical Framework

2.2.1 Economic Theories: This theory is based on economists constructing a theory that is based on the assumption about human behavior; saying that people typically act rationally in evaluating the cost and benefit of any chosen activity. According to Slemrod (2000), when modeling the choice individuals face when deciding whether to engage in tax evasion or not, their basic model assumes that people would commit to it. As a result, this theory is based on it in that it seeks to explain why tax rules and policies are not followed, which may be one of the causes of low tax revenue production.

2.3 Review of Empirical Studies

Some scholars conducted empirical investigations on the administration of taxes in both developed and developing nations, with a focus on tax audit. Smith and Stalans (1994) conducted research on the preferred bargaining tactics used by taxpayers and auditors to resolve tax audit disagreements in the USA. An open-

ended pre-audit interview with a randomly chosen sample of taxpayers and state tax auditors from four field offices of the Oregon department of revenue was used in the study. The findings showed that the nature of the disagreement, general taxpayer attitudes regarding tax administration and taxpaying, and perceived role obligations all have an impact on both taxpayers' and auditors' strategy preferences. The survey also revealed that taxpayers who advocated exploiting tax code inconsistencies and loopholes tended to favor the forceful approach.

Alm and McKee (2006) investigate the use of experimental methods to examine how people respond in terms of compliance to a specific probability of audit and come to the conclusion that people's compliance rates increase when they are aware they will be audited and decrease when they are aware they won't be. In addition, Mittone (2006) explores the idea that early audit experiences are more beneficial than later audits at increasing compliance. Although the effectiveness of audits and fines cannot be fully established, Kastlunger, Kircher, Mittone, and Pitters' (2009) study of experimental research reveals that early audit in taxpayers' tax lives have a favorable impact on compliance.

3.0 Methodology

3.1 Research design

The study adopts the *ex-post facto* research design. This was necessitated to elicit secondary data from relevant documents of CBN statistical Bulletins, National Board of Revenue (NBR) statistics and World Bank. The secondary data were collected through the quarterly review and detailed investigation of CBN Statistical bulletin, Federal Inland Revenue Services and Annual Report of Bangladesh's National Board of Revenue, Ministry of Finance, using quarterly data from 1994 to 2021. The formulated hypotheses were tested using the ordinary least square and the independent t-test analysis. Data on Value Added Tax (VAT) and Unremitted VAT discovered through the VAT audit were basically used. The independent t-test analysis was used to compare the effect of tax audit proxy as unremitted VAT discovered on VAT

compliance proxy as VAT proceeds between Nigeria and Bangladesh within the period.

3.2 Model Specification

This study examined Tax audit and value added tax (VAT) compliance in Nigeria and Bangladesh. In order to accomplish this, two variables were identified in the study and these are dependent and independent variables. The independent variable is tax audit. On the other hand, the dependent or response variable is Value Added Tax.

3.3 Functional Relationships

$$\text{VAT} = f(\text{VATA}) \quad (1)$$

Where:

VAT = Value Added Tax (VAT)

VATA = VAT Audit

In Econometric form;

$$\text{VAT} = \beta_0 + \beta_1 \text{VATAD} + \varepsilon_1 \quad (2)$$

Where: β_0 = the Intercepts; β_1 = Parameters to the explanatory variable; ε_1 = Error term

VAT = VAT compliance; VATAD = VAT Audit.

The a priori expectation for model is that $B_1 > 0$; implying that the higher the tax audit, the higher the tax compliance in Nigeria and Bangladesh.

The independent t-test is also implored to compare unremitted VAT differences in the case of Nigeria and Bangladesh.

4.0 Data Analysis and Discussion of findings

Data were obtained using United States dollars in billions after judicious conversion of local currencies for adequate comparison between Nigeria and Bangladesh. These data include Value Added Tax (VAT) proceed and unremitted VAT discovered through VAT audit (VATAD) for the period between 1994 and 2021.

Hypothesis 1

H_{0.1}: VAT audit does not significantly affect VAT proceeds in Nigeria and Bangladesh.

Table 1.1: Panel Regression of VAT Audit and VAT Proceed in Nigeria and Bangladesh

Dependent Variable: TAXPROCEED

Method: Panel Least Squares

Date: 29/04/22 Time: 14:05

Sample (adjusted): 1994 2021

Periods included: 112

Cross-sections included: 2

Total panel (unbalanced) observations: 224

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.78113	1.742040	7.336101	0.0000

TAXAUDIT	0.682987	0.257387	2.664001	0.0080
R-squared	0.819108	Mean dependent var	5.943321	
Adjusted R-squared	0.796912	S.D. dependent var	0.668143	
S.E. of regression	0.773426	Akaike info criterion	1.713021	
Sum squared resid	26.18776	Schwarz criterion	1.903201	
Log likelihood	-78.81101	Hannan-Quinn criter.	2.021547	
F-statistic	7.096012	Durbin-Watson stat	1.911012	
Prob(F-statistic)	0.000800			

Source: Researcher's E-views Computations 2022

The regression result presented in Table 1 shows that VAT audit is positive and significantly affects the VAT proceeds in Nigeria and Bangladesh. The coefficient of determination R^2 showed a favorable fit of 0.81 with an adjusted R^2 of 0.796. This adjusted R^2 shows that about 79.6% of the observed changes in VAT

compliance in Nigeria were explained by changes in VAT audit. The individual result shows that ($t\text{-stat.} = 2.664 > t_{0.05} = 1.96$) VAT audit significantly affects the VAT proceeds in Nigeria and Bangladesh. The null hypothesis is therefore rejected and the alternative hypothesis accepted.

Hypothesis 2

H₀₂: There is no significant difference in the VAT audited in Nigeria and that of Bangladesh.

Table 2a: Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Unremitted_tax	Nigeria	112	.5803	.37043	.03500
	Bangladesh	112	27.5592	30.45999	2.87820

Table 2b: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
VAT	Equal variances assumed	129.488	.000	-9.373	222	.000	-26.97891	2.87841	-32.65142	-21.30641
	Equal variances not assumed			-9.373	111.033	.000	-26.97891	2.87841	-32.68266	-21.27517

Source: SPSS output, 2022

Table 2 reports the mean difference between Nigeria and Bangladesh unremitted VAT. This unremitted VAT between the two countries shows a high mean difference of -26.97891. Despite this outcome, the result shows that there is a significant difference between the two countries with a t-value = -9.373, and a p-value of 0.000. Bangladesh has a better VAT compliance compared to Nigeria. Although both countries have their unique peculiarity in terms of volume of VAT proceed; Bangladesh's VAT proceeds and VAT rates are both higher compared to Nigeria. This was also conveyed in the Levene's test for equality of variances which gives a significant value of .000. This means that the data violates the assumption of equal variance between both countries, since it is lower than .05. However, the procedure of VAT audit was dissimilar between both countries. The null hypothesis is therefore rejected since the p-value is lesser when compared to the 0.05 level of significance. The test therefore shows that there is a significant difference in the VAT audited in Nigeria and that of Bangladesh.

5.0 Findings and Conclusion The result from the hypotheses tests show that VAT audit significantly affect VAT proceeds in Nigeria and Bangladesh and also, there is a significant difference in the VAT audited in Nigeria and that of Bangladesh. These results show that VAT audit assists the government in collecting appropriate VAT revenue which is necessary for budget, maintaining economic and financial order and stability. It is necessary in minimizing the degree of tax avoidance and by extension enforces strict compliance with VAT by the payers.

The study has also shown that there is a significant difference in level of VAT compliance between Nigeria and Bangladesh; and it is obvious from our data that there are disparities in the unremitted amounts between both countries, which is attributable to the uniqueness of the value added tax volume and the different VAT rate which tends to be higher in Bangladesh compare to Nigeria not until 2020. Based on our findings, it is recommended that the scope of tax audit should be widened in such a way that it will ensure proper submission of accurate and current returns for proper computation; and that there should be effective

sanctions by relevant tax authorities over the non-compliance tax payers with the tax rule and regulation in Nigeria.

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APPENDIX 1
VAT Proceeds and Unremitted VAT through VAT audit

YEAR	Quar terly	NIGERIA		Exch. Rate	NIGERIA		BANGLADESH	
		VAT (₦' b)	Tax Audit (₦' b) Unremitted VAT)	₦ = \$	VAT (\$' b)	Tax Audit (Unremitted VAT) (\$' b)	VAT (\$' b)	Tax Audit (Unremitted VAT) (\$' b)
1994	Q1	1.59742	0.2222	22.33	0.071536 9	0.0099507	2.2821678	0.2407124
	Q2	1.81525	0.2525	22.33	0.081292	0.0113077	18.508595	1.094086
	Q3	2.10569	0.2929	22.33	0.094298 7	0.0131169	21.512461	1.687419
	Q4	1.74264	0.2424	22.33	0.078040 3	0.0108554	16.4924376	1.563163
1995	Q1	4.56742	1.80664	21.89	0.208653 3	0.0825327	16.2875636	1.094086
	Q2	5.19025	2.053	21.89	0.237106	0.0937871	18.545225	1.687419
	Q3	6.02069	2.38148	21.89	0.275042 9	0.1087931	19.9283621	1.563163
	Q4	4.98264	1.97088	21.89	0.227621 7	0.0900356	15.138936	1.434878
1996	Q1	6.82	2.0262	21.89	0.311557 8	0.0925628	16.319798	1.687419
	Q2	7.75	2.3025	21.89	0.354042 9	0.105185	17.22	1.804
	Q3	8.99	2.6709	21.89	0.410689 8	0.1220146	19.9752	2.144
	Q4	7.44	2.2104	21.89	0.339881 2	0.1009776	16.5312	2.321
1997	Q1	7.48	0.66	75.89	0.098563 7	0.0086968	15.1180678	1.563163
	Q2	8.5	0.75	75.89	0.112004 2	0.0098827	21.555	8.644
	Q3	9.86	0.87	75.89	0.129924 9	0.011464	25.0038	8.644
	Q4	8.16	0.72	75.89	0.107524	0.0094874	20.6928	8.644
1998	Q1	7.92	1.8722	75.89	0.104361 6	0.0246699	13.877358	0.4322
	Q2	9.021	2.1275	75.89	0.118592 7	0.028034	16.0825	1.422
	Q3	10.44	2.4679	75.89	0.137567 5	0.0325194	18.3367	1.422
	Q4	8.64	2.0424	75.89	0.113849	0.0269126	14.2392	1.444
1999	Q1	10.362	2.53	75.89	0.136539 7	0.0333377	25.665376	0.953724
	Q2	11.775	2.875	75.89	0.155158	0.0378838	29.3575	0.965

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					8			
	Q3	13.659	3.335	75.89	0.179984 2	0.0439452	34.0547	0.965
	Q4	11.304	2.76	75.89	0.148952 4	0.0363684	28.1832	0.965
2000	Q1	12.65	5.61	85.98	0.147127 2	0.0652477	4.4303512	0.899276
	Q2	14.375	6.375	85.98	0.16719	0.0741452	7.805	0.689
	Q3	16.675	7.395	85.98	0.193940 5	0.0860084	9.0538	0.689
	Q4	13.8	6.12	85.98	0.160502 4	0.0711793	7.4928	0.689
2001	Q1	20.196	3.3	104.2	0.193819 6	0.0316699	5.6107502	0.761537
	Q2	22.95	3.75	104.2	0.220249 5	0.0359885	6.4	0.765
	Q3	26.622	4.35	104.2	0.255489 4	0.0417466	7.424	0.765
	Q4	22.032	3.6	104.2	0.211439 5	0.0345489	6.144	0.765
2002	Q1	23.892	5.698	112.5	0.212373 3	0.0506489	2.8500494	0.514493
	Q2	27.15	6.475	112.5	0.241333 3	0.0575556	3.2225	0.5144
	Q3	31.494	7.511	112.5	0.279946 7	0.0667644	3.7381	0.5144
	Q4	26.064	6.216	112.5	0.23168	0.0552533	3.0936	0.5144
2003	Q1	30.008	3.388	119.4	0.251323 3	0.0283752	3.3727584	0.902181
	Q2	34.1	3.85	119.4	0.285594 6	0.0322446	3.835	0.502
	Q3	39.556	4.466	119.4	0.331289 8	0.0374037	4.4486	0.502
	Q4	32.736	3.696	119.4	0.274170 9	0.0309548	3.6816	0.502
2004	Q1	35.09	6.732	134.6	0.260698 4	0.0500149	3.498572	0.824325
	Q2	39.875	7.65	134.6	0.296248 1	0.0568351	3.975	0.823
	Q3	46.255	8.874	134.6	0.343647 8	0.0659287	4.611	0.823
	Q4	38.28	7.344	134.6	0.284398 2	0.0545617	3.816	0.823
2005	Q1	39.182	5.258	131.27	0.298484	0.0400548	4.0056566	0.783713
	Q2	44.525	5.975	131.27	0.339186 4	0.0455169	4.5	0.78
	Q3	51.649	6.931	131.27	0.393456	0.0527996	5.481	0.89

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					2			
	Q4	42.744	5.736	131.27	0.325619	0.0436962	4.536	0.89
2006	Q1	48.752	10.9835	128.65	0.378950 6	0.085375	5.0855178	0.890347
	Q2	55.4	12.48125	128.65	0.430625 7	0.0970171	5.86	0.89
	Q3	64.264	14.47825	128.65	0.499525 8	0.1125398	6.7976	0.89
	Q4	53.184	11.982	128.65	0.413400 7	0.0931364	5.6256	0.89
2007	Q1	63.712	19.888	125.81	0.506414 4	0.1580796	6.7960816	1.038648
	Q2	72.4	22.6	125.81	0.575470 9	0.179636	7.625	1.92
	Q3	83.984	26.216	125.81	0.667546 3	0.2083777	8.845	1.92
	Q4	69.504	21.696	125.81	0.552452 1	0.1724505	7.32	1.92
2008	Q1	88.374	17.5142	118.55	0.745457 6	0.1477368	10.0737736	1.140999
	Q2	100.425	19.9025	118.55	0.847110 9	0.1678827	11.3	1.15
	Q3	116.493	23.0869	118.55	0.982648 7	0.194744	13.108	1.15
	Q4	96.408	19.1064	118.55	0.813226 5	0.1611674	10.848	1.15
2009	Q1	105.908	19.899	148.9	0.711269 3	0.13364	9.020649	0.944461
	Q2	120.35	22.6125	148.9	0.808260 6	0.1518637	10.305	0.966
	Q3	139.606	26.2305	148.9	0.937582 3	0.1761619	11.9538	0.966
	Q4	115.536	21.708	148.9	0.775930 2	0.1457891	9.8928	0.966
2010	Q1	124.2758	13.5916	150.3	0.826851 6	0.0904298	12.7369814	1.142484
	Q2	141.2225	15.445	150.3	0.939604 1	0.1027611	6.25	8.9104
	Q3	163.8181	17.9162	150.3	1.089940 8	0.1192029	14.442	3.49743
	Q4	135.5736	14.8272	150.3	0.90202	0.0986507	62.208	7.8
2011	Q1	161.5558	27.71758	153.86	1.050018 2	0.1801481	34.276198	8.9104
	Q2	152.7777	31.49725	153.86	0.992965 7	0.2047137	38.506425	3.49743
	Q3	183.7391	36.53681	153.86	1.194196 7	0.2374679	15.747	91.872

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	Q4	161.081	30.23736	153.86	1.046932 3	0.1965252	8.832	12.7225
2012	Q1	175.8575	26.4022	161.8	1.086882	0.163178	33.885654	3.49743
	Q2	178.9823	30.0025	161.8	1.106194 7	0.1854295	38.61	4.322
	Q3	170.6902	34.8029	161.8	1.054945 6	0.2150983	44.7876	4.322
	Q4	185.0251	28.8024	161.8	1.143542	0.1780124	37.0656	4.322
2013	Q1	192.1964	39.57998	165.9	1.158507 5	0.2385773	15.048	9.1872
	Q2	180.6144	44.97725	165.9	1.088694 4	0.2711106	18.85	9.183
	Q3	207.0707	52.17361	165.9	1.248165 8	0.3144883	23.606	9.183
	Q4	222.802	43.17816	165.9	1.342989 8	0.2602662	19.008	9.183
2014	Q1	212.3854	23.12244	185.5	1.144934 8	0.1246493	17.908	1.27225
	Q2	197.2551	26.2755	185.5	1.063369 8	0.1416469	4.1	1.273
	Q3	192.0825	30.47958	185.5	1.035485 2	0.1643104	23.519	1.273
	Q4	201.2417	25.22448	185.5	1.084860 9	0.135981	19.536	1.273
2015	Q1	193.3893	22.53218	275	0.703233 8	0.0819352	22.913352	8.96347
	Q2	196.9737	25.60475	275	0.716268	0.0931082	26.0379	8.95632
	Q3	193.5206	29.70151	275	0.703711 3	0.1080055	30.203964	8.95632
	Q4	183.4499	24.58056	275	0.667090 5	0.0893839	24.996384	8.95632
2016	Q1	198.7343	24.6576	401	0.495596 8	0.0614903	17.037273	3.27058
	Q2	197.7765	28.02	401	0.493208 2	0.0698753	19.3605375	3.27058
	Q3	207.214	32.5032	401	0.516743 1	0.0810554	22.4582235	3.27058
	Q4	224.4743	26.8992	401	0.559786 3	0.0670803	18.586116	3.27058
2017	Q1	221.3805	44.2684	331	0.668823 3	0.1337414	39.83694	8.54576
	Q2	246.3033	50.305	331	0.744118 7	0.1519789	45.171425	8.54567
	Q3	250.5607	58.3538	331	0.756981	0.1762955	81.398853	8.54567
	Q4	254.1039	48.2928	331	0.767685 5	0.1458997	67.364568	8.54567

TAX AUDIT AND VALUE ADDED TAX (VAT) COMPLIANCE IN DEVELOPING COUNTRIES

2018	Q1	269.7938	26.4022	380	0.709983 7	0.0694795	66.48686	2.1466338
	Q2	266.7317	30.0025	385	0.692809 6	0.0779286	75.55325	2.3823067
	Q3	273.504	34.8029	385	0.7104	0.0903971	87.64177	2.7372679
	Q4	298.0105	28.8024	385	0.774053 2	0.0748114	72.53112	2.3010061
2019	Q1	293.0394	39.57998	385	0.761141 3	0.1028051	92.47062	2.1469269
	Q2	311.943	44.97725	385	0.810241 6	0.116824	55.08025	2.3826765
	Q3	275.1161	52.17361	385	0.714587 3	0.1355159	54.90309	2.7377607
	Q4	309.8826	43.17816	385	0.804889 9	0.1121511	91.27704	2.3013489
2020	Q1	324.5791	23.12244	385	0.843062 6	0.0600583	94.6506	2.4081922
	Q2	327.1954	26.2755	450	0.727100 9	0.05839	107.5575	2.7148131
	Q3	424.7081	30.47958	425	0.999313 2	0.0717167	124.7667	3.1852119
	Q4	454.6883	25.22448	427	1.064843 8	0.0590737	103.2552	2.608497
2021	Q1	531.04	22.53218	428	1.240747 7	0.0526453	96.426	2.5014509
	Q2	512.25	25.60475	429	1.194055 9	0.0596847	108.325	2.8345941
	Q3	500.49	29.70151	429	1.166643 4	0.0692343	128.528	3.3488016
	Q4	563.72	24.58056	430	1.310976 7	0.0571641	104.5032	2.7188875

SOURCE: CBN Statistical Bulletin; Federal Inland Revenue Service 2018; **National Board of Revenue (NBR)** statistics (NBR 2011, 2014, 2021)