

**THE IMPACT OF BUSINESS PLANNING ON THE COMPETITIVENESS OF  
MANUFACTURING FIRMS IN PLATEAU STATE**

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**Abstract**

The study examines the impact of business planning on the competitiveness of manufacturing firms. The study adopts a descriptive survey in which quantitative data were employed and the Sample size was drawn from the Plateau State Micro-finance development Agency a total of 627 data was collected from 203 manufacturing firms. The hypotheses were tested through the Multiple Regression Method, also Multi-Collinearity Coefficients, Kolmogorov-Smirnov and Shapiro-Wilk test assesses the normality of the constructs and to ensure robust regression results. Findings revealed that financial planning and Marketing planning has a direct significant impact on manufacturing firms' competitiveness with a p-value= 0.000 (Hyp 1) and p-value=0.000 (Hyp 3) respectively, while Production planning has an insignificant impact on manufacturing firms' competitiveness with a p-value = 0.276. This finding shows that business planning significantly impacts the Competitiveness of manufacturing firms in Plateau State.

**Keywords:** Business Planning, Competitiveness.

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**1. Background**

Industrialization is perceived to be a major force that drives the modern economy. Hence, the sector is often described as the hub of every economy (Cho, Leem & Shin, 2008). The manufacturing industry is characterized into; engineering, creation, integrated circuit technology, chemicals, energy, fabric, food and beverage, metalworking, plastic, woodwork, carriage, and telecommunication sector e.t.c (Umoh, Ify, & Edwinah 2013), these sectors contribute to the growth of a nation's growth in most developed countries in Europe, Asia and America, (Akeem, Terer, Kiyanjui, & Kayode, 2014).

In Africa, there has been an growing anxiety over the gouging out of the local manufacturing sector, these persistent failures to meet the competitiveness of the sector in the global economy has been a serious concern as domestic manufacturing

is migrating to Asia at an augmented pace, (Muogbo, 2013; Amin & Majid (2011). Although recently, Africa is struggling to find its way into the world table of production with countries like South Africa, Rwanda, Kenya, Ghana, Egypt, and a few others distinguishing themselves (Adelegan, 2011; Patrick, 2012; Hassan & Ahmed, 2012).

In Nigeria unfortunately, findings from different scholars have revealed that the story is different, the country stands at 116 positions in the global ranking of contributions of the manufacturing sector to total gross domestic product (GDP). Onuoha, (2013) reveals that the situation has been relatively fragile when related to the other sectors of the economy.

To address these lapses, Several policies and programs targeted at projecting the productivity of the manufacturing sector

towards the growth of the economy have been initiated by the government with the introduction of policy programs such as the Structural Adjustment Programme (SAP), the Financial Sector Reforms in 1986, and of recent, the concentration of efforts on Small and Medium Scale Industries through the introduction of policies and programs which include; establishment of the Small and Medium Scale Development Agency, (SMEDAN), the provision of grants to encourage youths with innovative ideas through “YOUWIN”, “Sure P” and others, however, these interventions have not yielded any positive change in the sector.

Despite these policy interventions, the manufacturing sector has continued to witness collapse and persistent over dependant on foreign goods, factories have closed down and moved to other African countries, job loss has skyrocketed bringing the unemployment rate to about 53% in 2020 (NBS), prompting the need to investigate the reason for this persistence, researchers have carried out studies in different areas within the sector to investigate the effect of strategy on perceived performance of manufacturing companies and found out that strategy sensitivity, shared commitment or management unity and resource variability may have a substantial effect on the competitiveness of firms in the sector. A study by Söderbom & Teal (2002) pointed to the fact the performance of the sector in Nigeria is frail, while Kuye & Sulaimon (2011) focused on decision making. Other studies focussed on infrastructure deficiencies, corporate governance, and Product diversification as key factor that impedes the development of the manufacturing sector. Adelegan, (2011; Patrick 2012; Hassan & Ahmed 2012; Muogbo 2013; Akeem, Terer, Kiyanjui & Kayode (2014).

The objective of the paper is to investigate the impact of business planning on the Nigerian manufacturing firm’s competitiveness. The specific aims are to

evaluate the linkage between financial planning and firm competitiveness, determine the impact of production planning on the competitiveness of manufacturing firms, and evaluate the significance of marketing planning on the firm’s competitiveness of manufacturing firms. The above objectives are guided by the research questions.

## **2.0 Empirical Review**

### **2.1 Business Planning**

In a dynamic business world, it is imperative to ensure the sustenance of a firm’s performance (Swamidass & Newell, 1987). The concept of Business planning suffered a serious decline in popularity and encouragement since the 1980s. Nevertheless, during the 1990s, the theory regained its momentum (Shane & Delmar, 2004). Business planning according to Anderson et al, (1991); Mededith and Vineyard, (1993) contributes significantly not just to firm performance but also to the firm strategy, it measures production components on market share, growth, and turnover profit (Ramanujam & Venkatraman, 1987). Business planning in the manufacturing sector determines how manufacturing resources and skills are organized (Hayes & Wheelwright, 1984; Faith, 2010; Barsan et al 2012; Stroh 2014). To complement the business strategy, Swamidass & Newell, (1987) opined that if appropriately applied, it provides the competitive defense in the firm’s strategy. Business planning has been identified in many studies as a serious management tool that businesses utilize to gain competitive advantage (Sadudin, 2014; Fatih 2010; Wheelen & Hunger 2004).

### **2.2 Firm’s Competitiveness**

Porter (1987) and Gabčanová (2012), assert that competitiveness is the source of national development, which is determined by the economic, political, legal, and social context. i.e. the policies employed by different establishments. A firm’s competitiveness has significant consequences, positive or negative in an

economy. "The success or failure of a firm has implications on the well-being of people" (Arroyo & Berumen, 2003; (Akinyomi & Olagunju, 2013; Alejandra, Ricardo & Rafael, 2012). Porter's theory of generic strategies has to remain unquestionable in the field of strategy and organizational research over the years. The theory can be recognized as the dominant paradigm of competitive strategy.

### **2.3 Financial Planning and Firm Competitiveness**

Financial planning represents basic features that support a firm's path to achieve and maintain business competitiveness. According to Chen & Yu, (2011); Leyira & Okeoma, (2014); Lazaridis (2002), financial strategies are goals, patterns, or alternatives designed to optimize financial management to achieve corporate results it consists of three interconnected types of decisions: investment, funding and working capital decisions. Jog & Srivastava (1994) investigated financial decision-making processes, capital budget, financing costs, and dividends, the study reveals a positive relationship between investment decisions and funding opportunities. Financial planning has also been articulated by the different scholars who confirm its significant impact on resources and the Return on Investments (ROI). Financial planning must be taken seriously (Mallette 2006; Valencia, Nava, Dubcovsky & Gomez 2006; Lazardis 2002; Kamath 1997; Zopounidis & Doumpos 2002; Alejandra et al, 2012; Jog & Srivastava, 1994).

### **2.4 Production Planning and Firm Competitiveness.**

Production plays a critical role in product commercialization Production planning involves the procedure of handling system, records/build-ups, and altering stages of processes to quicken production to ensure goods and services find an appropriate market (Winston, 2004; Jain & Aggarwal, 2008; Vlachvei, Notta & Demiri 2010). Capabilities relating to production are important in manufacturing firms. Firms

that have clearly defined product capabilities will achieve a highly competitive advantage over firms that do not (Brown & Eisenhardt, 1995). Works of literature on strategy according to Bestwick & Lockyer, (2008); Johnson & Montgomery (2009), have three essential sets to describe a firm's success. First, the firm must develop and implement a consistent set of internal goals and practical strategies that mutually define its position in the industry, secondly, firms must consistently set goals that align with the firm's assets and the opportunities within the outside setting. Lastly, the business's approach should be centrally concerned with the conception and manipulation of its discrete capabilities. These are unique strengths that set the groundwork for the competitive feat.

### **2.5 Marketing Planning and Firm Competitiveness**

The concept of strategic planning has been widely studied by scholars in the area of business and has been widely utilized both in the private and public sectors (Theodore 2007). Several authors including Kotler, Rein & Haider, (1993, 1999); Krallinger & Hellebust, (1993) (1993); Charney, (1995); and McClamrock et al, (2001), define marketing planning as the formulation of strategic goals and objectives, with a choice of proper approaches to attain these marketing objectives (Pulendran, & Widing 2003; Venkataraman, 1997). This includes rapid initiation of marketing and early contact with potential customers to allow the new product launch (Schoonhoven, Eisenhardt & Lyman 1990). It fosters the creation of customer relations and enhances access to capital (Venkataraman Van de Ven, Buckeye & Hudson, 1990).

### **3.0 Hypotheses**

**H1:** Financial Planning has a significant impact on a manufacturing firm's competitiveness.

**H2:** Production Planning has a significant impact on a manufacturing firm's competitiveness.

**H3:** Marketing Planning has a significant impact on a manufacturing firm's competitiveness.

#### 4.0 Theoretical Framework

##### Porter's Five Forces Competitive Based Theory

Michael Porter (1979) developed the five forces competitive-based theory which draws its foundation from a framework for evaluating the competitive position of a firm. The theory was initiated based on the notion that there are five forces that determine the competitive force and attractiveness of a market. Porter's five forces help to identify where the influence lies in a business condition. This is important in understanding the strength of a firm's current competitive position, and the strength of a place that a firm may look to move into. By understanding where power lies, the model is key to efficiently planning the resources and processes of the firms, it is also used to recognize areas of competitive advantage and to avoid mistakes. This theory is a powerful instrument for scientifically analyzing the major competitive pressure in the sector, this allows us to estimate how robust and significant each of the five components is (Porter 1985; 1996; Grant 2003; and Bateman & Snell 1996).

#### 5. Methodology

##### 5.1 Research Design and Sample

In line with the positivist line of thought, the research adopted a cross-sectional design

with a quantitative method using multiple regression analysis, the paper investigates the impact of business planning on the competitiveness of manufacturing firms, exploring the relationship amongst the two variables, thus, historical sources cannot be used to generate a sample for such an investigation (Aldrich, 1999; Carroll & Hannan, 2000; Scott & Frederic 2004). To answer the research hypotheses, the study undertook a comprehensive survey taking a sample from the entire population of about 203 manufacturing firms in Jos the Plateau State Capital.

A sample of 127 manufacturing firms was drawn from the population of firms and to achieve uniformity, respondents consist of 5 management staff in each firm to include; thus, 635 questionnaires were administered, and 627 questionnaires were returned with a response rate of 98

#### 6.0 Data Analysis

The researcher ran a number of pre-analysis tests such as diagnostic tests include; reliability test normality test and multi-Collinearity, Pearson correlation, and the ANOVA.

##### 6.2 Reliability Test

Each variable was measured separately according to Cronbach's alpha values. are 0.654, 0.614, 0.664, and 0.660 for the three variables respectively, these are above the threshold of 0.5 hence the constructs are highly reliable.

Table 3 **Multi-Collinearity Coefficients**

Model		Tolerance	VIF
1	Financial Planning	.211	4.748
	Production Planning	.524	1.908
	Marketing Planning	.216	4.624

**Source:** SPSS Output

a. Dependent Variable: Firm Competitiveness

The table above revealed that three independent variables are highly correlated. To check multicollinearity, the tolerance level was scrutinized using regression. The

study data conforms to both assumptions and it was concluded that there are no multicollinearity issues with the variables.

**Table 4 Pearson Correlation Analysis Result**

	1	2	3	4
Financial Planning	1			
Production Planning	0.674**	1		
Marketing Planning	0.880**	0.663**	1	
Firm Competitiveness	0.737**	0.493**	0.706**	1

**Source:** SPSS IBM 25 Output

Correlation is significant at the 0.05 level (2-tailed).

This result re-confirmed the absence of multi-Collinearity, a Pearson correlation was also employed. Results of the analysis, indicate that there is a positive correlation between the study constructs. The Pearson correlation coefficients between each of the

study independent variables (FP, PP, MP) and dependent variable (Firm Competitiveness) are between 0.493 to 0.880 with a p-value at .000 less than .05.

**Table 5 Model Summary**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.747 <sup>a</sup>	.559	.557	1.976	2.122

a. Predictors: (Constant), MP, PP, FP

b. Dependent Variable: FC.

The quality of Predictors (R) value at 0.747<sup>a</sup> indicates the existence of a strong positive relationship between Financial Planning, Production Planning, Marketing Planning, and Firm competitiveness. The co-efficient of Determination (R<sup>2</sup>) value of .559 explains the proportion of the total variations in firm competitiveness that is attributed to variations in Financial Planning, Production Planning, and

Marketing Planning by 55.9 percent. This indicates a moderate overall contribution of Financial Planning, Production Planning, and Marketing Planning on firm competitiveness but the Durbin Watson coefficient of 2.122 verifies that the estimates are unbiased and can be relied upon for sound policy decisions.

**Table 6 ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3080.209	3	1026.736	262.863	.000 <sup>b</sup>
	Residual	2433.418	623	3.906		
	Total	5513.627	626			

a. Dependent Variable: FCOM

b. Predictors: (Constant), MP, PP, FP

The ANOVA results above indicate that, Financial Planning, Production Planning, and Marketing Planning significantly at

(.000<sup>b</sup>) predict the dependent variable (Firm competitiveness), implying that the model is fit for further analysis.

### 6.3 Test of Hypotheses

To ascertain, the validity of the variables, the researcher ran a Multiple Linear

Regression analysis. The outcomes are shown in the table below.

### Financial Planning, Production Planning, and Marketing Planning on Firm Competitiveness.

Table 7

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5.023	.602		8.346	.000		
	FP	.532	.058	.530	9.139	.000	.211	4.748
	PP	-.039	.036	-.040	-1.089	.276	.524	1.908
	MP	.263	.057	.266	4.646	.000	.216	4.624

a. Dependent Variable: FCOM

The above result revealed the impact of Financial Planning, Production Planning, and Marketing Planning on Firm Competitiveness. Using the results, we have the regression equation model as  $FC = 5.023 + 0.532FP_1 + (-0.039) PP_2 + 0.263MP_3$ , where FC is the Firm Competitiveness. According to the regression equation established, taking  $FP_1$ ,  $PP_2$  and  $MP_3$  into account at zero, Firm Competitiveness (FC) would be 5.023.

#### Hi1: Financial Planning has a significant impact on manufacturing firm's competitiveness

Hypothesis H1 ( $\beta = 0.530$ ,  $t$  value = 0.000,  $p < 0.05$ ), hence, we do not accept the null. This means that there is a positive change in competitiveness if financial planning is maintained among the manufacturing firms in Plateau State.

#### Hypothesis 2 Production Planning has a significant impact on manufacturing firm's competitiveness

Hypothesis H2 ( $\beta = -0.040$ ,  $t$ -value = 0.276,  $p > 0.05$ ), and thus, we accept the null, meaning that a change in production planning has a negative impact on the competitiveness of manufacturing firms in Plateau State.

#### Hypothesis 3: Marketing Planning has a significant impact on manufacturing firm's competitiveness

Hypothesis H3 ( $\beta = 0.263$ ,  $t$ -value = 0.000,  $p < 0.05$ ), and thus the hypothesis was supported. This suggests marketing planning has a significant impact on firm's competitiveness of manufacturing firms in Plateau State.

### 7.0 Discussion and Conclusion

In this paper, we establish the relationships between the construct taking Financial Planning, Production Planning, and Marketing planning. The result of hypothesis 1 was supported. This means that financial planning plays a crucial part in the competitiveness of manufacturing firms. The result supports the findings of scholars such as (Sunday & Akpomiemie, 2016 Adeyefa & Obamuyi, 2018) who affirmed that effective implementation of financial planning is imperative to a firm's performance in a competitive environment.

The result for H2 suggests that production planning and a firm's competitiveness are negatively related. This implies that production planning does not in itself improve a firm's competitiveness but requires other activities. This finding is in line with Ikon & Nwankwo (2016) who concluded that production planning requires

effective marketing planning for the distribution of the goods produced.

For hypothesis (H3) Marketing planning, finding aligned with (Patrick 2012 Onuoha (2013) and Porter (1980) who suggested that there is a positive relationship between marketing planning and competitiveness of firms.

### Recommendations

The following recommendations are hereby suggested;

1) Because financial planning improves a firm's competitiveness, Nigerian manufacturing firms must employ professionals and financial experts to ensure effective financial planning of their activities, irrespective of the size and age of the firm.

2) Planning of production in itself does not reflect a direct impact on a firm's competitiveness possibly because another important aspect of the organization needs to be put in place, firms within the manufacturing sector should embrace advanced technology such as computerized invention, computer-assisted strategy, automation, and flexible systems because the present production processes do not impact its competitiveness.

3) In order to ensure efficient utilization of innovative marketing in the industry, marketing experts should be hired while workshops and training programs are organized for staff members who have customer contacts in their lines of duties.

### 9.0 The Limitations of the Study

The study is restricted to Plateau State Nigeria. Further research could be conducted to cover other States in Nigeria. Also, this study employed a cross-sectional approach, therefore, for more robust decision making, a longitudinal method should be adopted. Finally, focusing on business planning in predicting manufacturing firm's competitiveness

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## IMPACT OF FEDERAL TAX HEADS ON ECONOMIC GROWTH OF NIGERIA

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### **Abstract**

This study examined the impact of tax revenue on Nigeria economic growth. Specifically, the study examined among others, the impact of company income tax, value added tax and petroleum profit tax on Nigeria economic growth. Thus, empirical models were estimated using the error correction technique for 2011Q1 - 2021Q4. The results show that company income tax and value added tax have adverse impact on the Nigerian Economy. From the theoretical stance, they are leakage to the economy. While petroleum profit tax exhibited a positive and significant impact on Nigeria economic growth. The coefficient of the error correction term suggests that almost one percent of the discrepancy between the long run and short run is corrected within a quarter. Thus, this study among other things, recommends that the tax revenue should be expended on economic growth enhancing social amenities and physical infrastructural facilities like power supply and good road/railway networks that will boost the real sector and distribution respectively. This recommendation is supported by the evidence from FIRS which disclosed that Nigerian government made N1.08 trillion from value added tax in first nine months of year 2020 despite lockdown in the amid of covid'19 and the government should also licensed additional modular refineries and other oil operational companies in order to generate more oil tax revenue and this revenue should be invested in economic growth enhancing sectors.

**Keywords:** Tax Head, Economic Growth, Value Added, Company Income, Petroleum Profit Taxes.

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### **1. Introduction**

In both developed and developing economies, the government has to play an active role in achieving economic growth (Edame & Okoi, 2014). In this way, countercyclical policy becomes a vital mechanism of government in driving growth. The most essential aspect of the counter cyclical policy is tax. Many economists believe that tax revenue is one of the most significant factors that contribute to a country's growth (Myles, 2000).

It is widely observed that, transversely the globe, there are continuous efforts by different tiers government to carry out their responsibilities and achieve policy agenda of government in power. This observation is

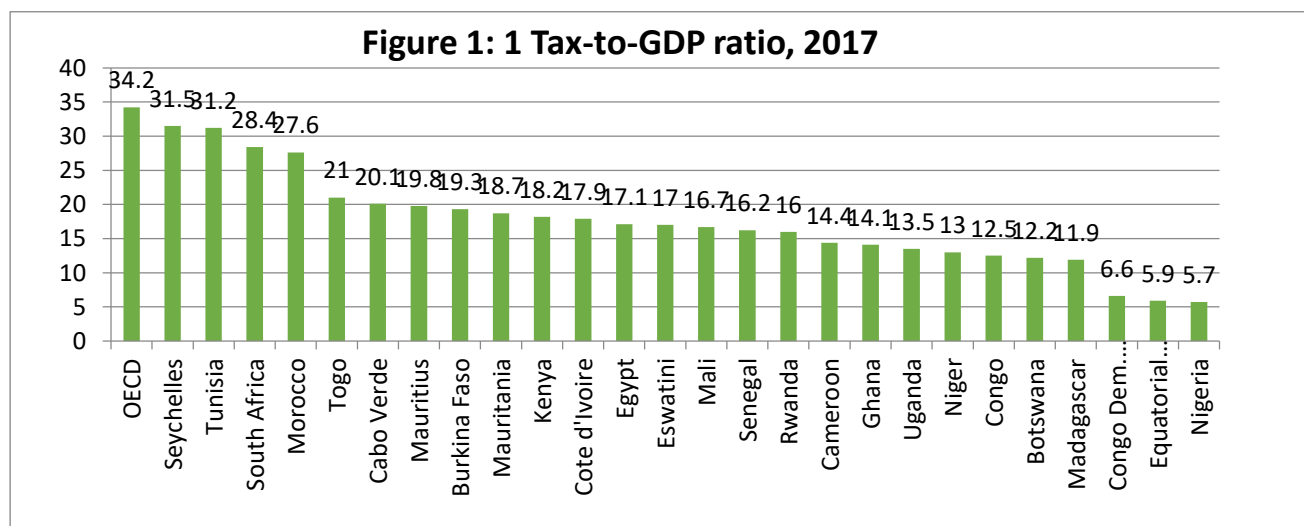
supported by James and Moses (2012), who opined that most developed countries such as United Kingdom, United State of America, Japan and Germany who are not richly endowed with natural resources as African countries have been able to reach heights through perfectly organized tax system. Garba (2014), study revealed that a country's tax system is a major determinant of other macroeconomic indexes. Haji and Esfandiar (2016), stated that countries that are highly developed today have been able to utilize judicious tax proceeds to develop their economy, which has improved the wellbeing of the highly vulnerable and the less privileged citizens.

Todaro and Smith (2006), describe economic growth as the steady process by

which the productive capacity of the economy is increased over time to bring about rising levels of national output and income. Growth is a long-term increase in an economy's productive capability. This highlights an important distinction: the distinction between growth, long-term change, and the business cycle; these short run economic changes typically characterized by blasts and burst are usually within monthly or quarterly periods. The economic growth rate most time is affected by macroeconomic policies, such as tax revenue, consumption, and investment. Tax is a compulsory payment from firms and household to fund economic growth policies and program of government (Goode, 1984). The major fiscal tool put in place by most developed government without natural resources endowment to make money to finance the government expenditure and grow the economy is tax. However, Oyewo (2013), opined that many nations often have other revenue streams like: oil, revenue from the services rendered to the public by government ministries, departments and agencies and revenue from

disposal of government assets to augment tax revenue. Nigeria has realized the need to diversify her revenue base from oil to tax as a result of the crash in the world oil price which threw the Nigeria economy into recession (Inyiama & Ubesie, 2018).

The extent to which tax revenue can stimulate economic growth especially in sub-Saharan African countries has continued to attract empirical debate (Babatunde, Ibukun, & Oyeyemi, 2017; Garba, 2014). An effect of tax revenue on the performance of an economy is measured by tax to gross domestic product ratio; so far the ratio vis-à-vis Nigeria is very low. Nigeria's highest tax-to-GDP ratio was 09.6 percent in 2011 and the lowest was 05.3 percent in 2016. The ratio of tax to gross domestic product in Nigeria only rise to 5.7 percent by 2017 from 5.3 percent in 2016. It is far less impressive if compared to other Africa countries with or without the same socioeconomic parameters; where the ratio could be as high as 31.5 percent (OECD, 2019). percent (OECD, 2019).



Source: [oe.cd/revenue-statistics-in-africa](http://oe.cd/revenue-statistics-in-africa)

As revealed in the figure above, Nigeria's tax-to-GDP Ratio in 2017 (5.7 percent) was lower than the mean of the 26 African countries in Revenue Statistics in Africa for 2019 (17.2 percent) with a differential of 11.5 percentage points. According to

Taiwo, Samson and James (2015), Nigeria has a very low tax-to-GDP ratio which is attributable to narrow tax base and inelastic tax system couple with multifaceted system of exemptions and compounded tax laws. The low tax- to-GDP ratio is also as a result

of dependent on oil revenue which accounts for almost 80 percent of government earnings (CBN, 2020). The enormous tax revenue gap suggests that a reform of the entire tax structure is required to broaden Nigeria's tax system in a fair and competent manner.

Between the year 2000 and 2014 democratic years of Nigeria, the economy grew at average of 7.2 percent, thus Nigeria became Africa's largest economy in 2014. As a country's economy grows, as measured by indicators like Gross Domestic Product (GDP), scholars hypothesize that individual-level income will increase and poverty will be reduced. But suddenly, the growth rate declined to 2.7 percent in 2015 and deteriorated to -1.6 percent in 2016. But by 2017 there was marginal growth rate which stood at 0.81 percent. Then 1.9 percent and 2.3 percent growth rate were recorded by Nigeria in 2018 and 2019 respectively (NBS, 2020). Within the same period average tax revenue between year 2000 and 2014 was 2.4 trillion naira. According to Federal Inland Revenue Service (FIRS) (2020), the country's total tax collection in 2019 was 5.26 trillion naira (\$13.5 billion) with value added tax as the largest contributor. This progress in tax revenue generation is due to a well-defined tax structure designed by FIRS. Tax structure refers to the portion of each tax in total tax-revenues. The highest share of tax revenues in Nigeria in 2018 was attributed to corporate income tax which stood at fifty percent of the total tax revenue. The second highest contribution of tax revenues in 2018 was generated from value added tax which is fourteen percent.

The extent to which tax revenue can stimulate performance in an economy especially in developing nations has continued to attract empirical debate (Babatunde *et al.*, 2017; Garba, 2014). Previous studies have investigated the effect of tax revenue on the economic growth. However, these studies in literature present varied findings. Ugwuanta and

Ugwuanyi (2015); and Dasalegn (2014) found a positive relationship between tax revenue and economic growth. Besides that, there is some studies that found a negative relationship such as Saibu (2015), Delessa (2014), Keho (2013), Marire and Sunde (2010). The study by Bonu and Pedro (2009) found no significant impact of income tax on the economic growth of Botswana, which is also a developing nation.

Taking a cursory look at literature, company income taxes do negatively affect economic growth using cross-country panel data analysis. Price Waterhouse Coopers (2010) do not only confirmed this findings, but organization also find that company income tax is the most destructive type of tax to an economy based on proof from research findings of Joint Committee on Tax study (2005). Lee and Roger (2005) too find similar results using cross-country data. Engen and Skinner (1996) corroborate this too, using cross-country panel data analysis, but they strongly noted that this viewpoint is not necessarily evident from both theory and data. Gravelle and Hungerford (2007) find no compelling evidence from theory and historical data for a negative correlation between corporate tax and economic growth. Romer and Romer (2007) find a negative effect using time series data for the US economy, though they strongly emphasize that disregarding the causes of tax changes can result in significantly biased estimates of the macroeconomic effects of fiscal action.

Thus, Adegbe and Fakile (2011) called for the need to investigate empirically, the impact of all tax heads on the economy growth of Nigeria. Owolabi and Okwu (2011) remarked that there is scanty comprehensive empirical research on the effect of tax instruments on economic growth for Nigeria. Instead, most studies focused only on the gross tax revenue and tax instruments that have no much contribution to tax revenue in Nigeria.

As a matter of fact, there is no compelling evidence regarding the impact of different tax instruments for Nigeria. In addition, not much research has been carried out on the structural composition of tax systems in Nigeria and its consequence in relation to the inclusive economic growth. This form the motivation for this study and in analysis of these gaps in literature, this research seeks to further examine both the short-run dynamic and evaluate the long-run association between federal tax-revenue and economic growth in Nigeria. More specifically, using a novel dataset, this study evaluates the impact of the most conventional tax instruments such as: company income tax (cit), value added tax (vat), and petroleum profit tax (ppt) on economic growth in Nigeria.

Thus, the main objective of this research is to evaluate the effect of tax-revenue on the economic growth of Nigeria. Specifically, the study examined among others, the effect of company income tax, value added tax and petroleum profit tax on economic growth of Nigeria.

The rest of the paper is organized into four sections. Section 2 covers the literature review, while Section 3 focuses on the data and methodology, Section 4 contains results and discussion and Section 5 is the conclusion and recommendations.

## **2. Literature Review**

### **2.1 Theoretical Review**

Robert Barro's Endogenous Theory Understanding the effect of tax revenue on economic growth can be seen from two schools of thought: the traditional economic and the modern schools. In the traditional economic school, Robert Barro's views summarized in the work of (Slemond, 2003 cited in Oboh, Chinonyelum, & Edeme, 2018), is that while holding other determinants of growth constant, low tax rates and low government spending were associated with higher growth. It indicates that the higher the marginal tax rate, the greater the chances of higher income as such, taxpayers will divert extra time from

productive operations to leisure activities. On the other hand, the modern school revealed that higher marginal tax rates leads to greater economic development in the long-run because government would secure greater revenue when invested in social and physical infrastructure it will enhance economic growth. In economic theory, marginal tax rates are particularly important because they affect the incentives of individuals to earn more income. as a result, marginal tax rates increases, individual income earner tend to keep less of their additional earnings. Thus economic theory predicts a negative relationship between marginal tax rates and economic growth.

### **2.2. Empirical Literature**

At the federal level, several studies have looked into the impact of tax revenue on economic growth and the link between tax revenue and economic growth. The issue of Macroeconomic policies revolving around tax revenue and economic growth. Between 2000 and 2019, Ogbodo and Nweze (2021) used Granger causality and ordinary least square methodologies to analyze the effect of tax income on the economic growth using evidence from Nigeria. Their results indicate significant positive effect of company income tax and petroleum profit tax on per capita income of Nigeria.

Onwuzulumba and Okpata (2021), in the same vein evaluate the disaggregated effect of tax structure on economic growth in Nigeria using descriptive statistics, stationarity, cointegration, correlation analysis and error correction mechanism techniques and the results show that Value added tax, petroleum profit tax and company income tax have significant effects on economic growth while personal income tax has insignificant effects on economic growth in Nigeria.

Yadawananda and Achal (2020), carried out a study on tax structure and economic growth: A study of selected Indian States with Panel Pool mean group estimation

technique and The result indicates that income tax and commodity service tax have negative effects whilst property and capital transaction tax have a significant positive effect on state economic growth. The work finds 'U' shape relationship between tax structure and growth reaction.

Bingilar and Preye (2020), used ordinary least square, coefficient of determination, t-test, f-test, and durbin watson methodologies to examine the influence of Nigeria's value-added tax on economic development between 2009 and 2018 and the study revealed, the impact of both output and input taxes on economic growth is large and positive. Their study indicates that value added tax impact significantly on economic growth of Nigeria.

Onoja and Ibrahim (2020) investigated tax revenue and Nigeria economic growth and the study employed descriptive and inferential statistics such as ordinary least squares technique and Pearson correlation matrix. The study showed that oil tax revenue i.e. Petroleum profit tax is progressive but has no meaningful association with economic growth in Nigeria, whereas non-oil tax revenue, such as VAT and CIT, has a considerable link with Nigeria's economic growth.

Festus, Appolos and Olalekan (2020), conducted the study on non-oil tax revenue on economic growth and development in Nigeria using descriptive and inferential statistics employing multiple regressions. Customs and excise duties, corporate income tax, tertiary education tax, value added tax, and capital-gain tax all have a major impact on economic growth, according to their research.

Inimino, Otubu and Akpan (2020) carried out a study on petroleum profit tax and economic growth in Nigeria with the aid of generalized method of moments and Granger causality, and augmented dickey-Fuller techniques and the results showed that petroleum profit tax and economic

growth have positive and significant relationship. The study recommends that government should boost petroleum profit tax revenue. This can be achieved by establishing an efficient and effective tax administration to reduce the level of tax evasion.

Awa (2020), investigated the relevance of tax revenue and economic growth (2008-2018) with auto-regressive estimation model, Granger causality and augmented dickey fuller. The results of this study reveal that petroleum profit tax, company income tax, valued added tax, and custom and excise duties with one year lag have significant effect on the economic growth of Nigeria. Their study therefore, recommends a strong institutional reform is panacea to prevent leakages of custom and excise duty. Agunbiade and Idebi (2020), conducted a study on the relationship between tax revenue and economic growth in Nigeria over 1981–2019 period, with special focus on Companies Income Tax, Value Added Tax and Petroleum Profits Tax. The data were sourced from the National Bureau of Statistics (NBS) and the Federal Inland Revenue Service (FIRS). Thus, their study discovered as indirect and direct tax revenue has negative influence on economic growth of Nigeria. This result may be spurious because GDP growth rate is a true measure of economic growth of the country.

### **3. Methodology**

#### **3.1. Theoretical Framework**

To provide a background for the empirical analysis, we examine some theoretical reasons and models for tax revenue and economic growth. However, this study adopts and builds on the theoretical model developed by Romer (1986), he stated that models that allow both sustained growth and explain its source are said to generate endogenous growth. Simple approach to modeling endogenous economic growth is the AK model. It states capital is the only input into production process and that there are constant returns to scale.

The production function for the AK model is given as:

$$Y_t = AK_t \tag{1}$$

To indicate that this model can generate continuous economic growth, it is simple to return to the assumption of a constant saving rate. With a saving rate  $s$  the level of investment in time period  $t$  becomes  $I_t = sAK_t$ . Since there is no labor, the capital accumulation condition is given.

$$K_{t+1} = sAK_t + (1 - \delta)K_t \tag{2}$$

$$K_{t+1} = (1 + sA - \delta)K_t$$

Provided that  $sA > \delta$ , so investment is in excess of depreciation, the level of capital will grow linearly over time at rate  $sA - \delta$ . Output will grow at the same rate and also consumption.

When human capital variable entered into standard form of production function for such a model would become as:

$$Y_t = F(K_t, H_t) \tag{3}$$

Thus, the ratio  $H_t/K_t$  is constant for all  $t$ . Denoting this constant value by  $H/K$ , the production function becomes

$$Y_t = K_t F\left(\frac{H}{K}\right) = AK \tag{4}$$

Where  $A \equiv F(H / K)$ . This reduces the production function to the AK form. The second way is to consider human capital as a distinct variable to labor time. This gives a production function of the form

$$Y_t = (K_t, H_t, L_t) \tag{5}$$

The accumulation of human capital can be seen as the outcome of an educational process. This put the attention on how the tax system affects the decision to undertake investments in education.

A public element can be introduced by assuming that the production function for the representative firm at time  $t$  takes the form

$$Y_t = AL_t^{1-\alpha} K_t^\alpha G_t^{1-\alpha} \tag{6}$$

Where:

$A$  = positive constant;

$G_t$  = quantity of the public input.

The assumption is that, public input is financed by a tax upon output. Assuming that capital does not depreciate in order to simplify the derivation, the profit level of the firm at time  $t$  is

$$\Pi_t = (1 - \tau)AL_t^{1-\alpha} K_t^\alpha G_t^{1-\alpha} - r_t K_t - w_t L_t \tag{7}$$

From this specification of profit, the choice of capital and labor by the firm satisfy

$$(1 - \tau)\alpha AL_t^{1-\alpha} K_t^{1-\alpha} G_t^{1-\alpha} = r_t \tag{8}$$

And

$$(1 - \tau)(1 - \alpha)AL_t^{1-\alpha} K_t^{1-\alpha} G_t^{1-\alpha} = w_t \tag{9}$$

The government budget constraint requires that tax revenue equals the cost of the public good provided, so

$$G_t = \tau Y_t \tag{10}$$

Using equations (6) and (10), the level of public input can be written as

$$G_t = (\tau A)^{1/\alpha} L^{1-\alpha/\alpha} K_t \tag{11}$$

This result can be substituted into equation (8) to obtain an expression for the interest rate as a function of the tax rate

$$r_t = (1 - \tau)\alpha A^{1/\alpha} (L\tau)^{1-\alpha/\alpha} \tag{12}$$

The economy's representative consumer is assumed to have preferences described by the utility function

$$U = \sum_{t=1}^{\infty} \beta^t \frac{C_t^{1-\sigma} - 1}{1 - \sigma} \tag{13}$$

The standard condition for intertemporal choice must hold for the optimization, so the ratio of the marginal utilities of consuming at  $t$  and at  $t + 1$  must equal the gross interest rate. Hence

$$\frac{\partial U / \partial C_t}{\partial U / \partial C_{t+1}} \equiv \frac{C_t^{-\sigma}}{\beta C_{t+1}^{-\sigma}} = 1 + r_{t+1} \tag{14}$$

Solving for  $C_t/C_{t+1}$  and then subtracting  $C_t/C_t$  from both sides of the resulting equation allows this optimality condition to be written in terms of the growth rate of consumption

$$\frac{C_{t+1} - C_t}{C_t} = (\beta(1 + r_{t+1}))^{1/\sigma} - 1 \tag{15}$$

Finally, using equation (12) to substitute for the interest rate, the growth rate of consumption is related to the tax rate by

$$\frac{C_{t+1} - C_t}{C_t} = \beta^{1/\sigma} (1 + (1 - \tau)\alpha A^{1/\alpha} (L\tau)^{(1-\alpha/\alpha)})^{1/\sigma} - 1 \tag{16}$$



The result in equation (16) demonstrates the two channels through which the tax rate affects consumption growth. Firstly, taxation reduces the growth rate of consumption through the term  $(1-\tau)$  which represents the effect on the marginal return of capital reducing the amount of capital used. Secondly, the tax rate increases growth through the term  $\tau^{1-\alpha}$  which represents the gains through the provision of the public input.

Finally, there is a tax rate which maximizes the growth rate of consumption. Differentiating equation (16) with respect to  $\tau$ , the tax rate that maximizes consumption growth is

$$\tau = 1 - \alpha \quad [17]$$

When the value of this optimal tax rate is  $\tau = 0.5$ . To see what this tax rate implies, observe that

$$\frac{\partial Y_t}{\partial G_t} = (1 - \alpha) \frac{Y_t}{G_t} = 1 \quad [18]$$

using  $G_t = \tau Y_t$  and  $\tau = 1 - \alpha$ . Hence the tax rate that maximizes consumption growth ensures that the marginal product of the public input is equal to 1 which is also its marginal cost. This model reveals a positive role for government in enhancing growth through the provision of a public input.

### 3.2 Model Specification

However, this study adopts on Romer's AK endogenous growth model as an appropriate analytical framework to investigate the effect of federal tax revenue on economy growth in Nigeria and builds on the empirical model of (Kalaš, Mirović, & Milenković, 2018). The further development of this model shows that 'the long-run economic growth is a function of the tax rate (Davoody & Zou, 1998).

The study employed the error correction technique to test validity of the predictions made by Davoody and Zou, for the case of Nigeria. Therefore, this study estimates the long run relationship between economic growth and three components of the federal tax revenue selected for this study; with

particular reference to this model, this study modified Davoody and Zou model to include these three tax components specified to determine their impact on economic growth in Nigeria.

The model is built on the bases of the described theoretical framework. Its specification includes the per capita income as dependent variable and the three components of the federal tax revenue as independent variables. The equation expressing this relationship is as following:

$$pci = f(cit, vat, ppt) \quad [19]$$

Where:

Pci = per capita income as proxy for economic growth ;

Cit = Company Income Tax;

Vat = Value Added Tax;

Ppt = petroleum profit tax

The econometric form of the long-run model is stated as:

$$pci = \beta_0 + \beta_1 cit + \beta_2 vat + \beta_3 ppt + \mu_1 \quad [20]$$

The econometric form of Error Correction Model is stated as:

$$d(pci) = \beta_0 + \beta_1(cit) + \beta_2(vat) + \beta_3(ppt) + et(-1) + \mu_2$$

The *a priori* expectations are:

$$\beta_1 < 0, \beta_2 < 0, \beta_3 < 0$$

### 3.3 Model Estimation Technique

OLS estimator was employed to estimate the specified. This technique indicates the speed of adjustment from the short run equilibrium to the long-run equilibrium state. It belongs to a category of multiple time series models most commonly used for data where the underlying variables have a long-run common stochastic trend, also known as cointegration. It is a theoretically-driven approach useful for estimating both short-run and long-run impacts of one time series on another. This technique is applicable in cases of quarterly time series data for robust parameter estimates.

It is required that the variables of the model are cointegrated for the technique to be applied. The long-run relationship between the variables of the model must be

established to proceed with the model estimation. Before performing the cointegration test, the stationary test for unit root was conducted to ascertain whether the variables stationary and the study employed Augmented Dickey-Fuller (ADF) technique. Following the unit root test conducted with the aid of ADF it appears all the variable are order of integration i.e. I(1) for this study. Thus, this study used error correction technique and Johansen

cointegration test to check the long-run relationships for the variables of this study and the stability test was also ascertained.

#### 4. Results and Discussion

##### 4.1. Stationarity Test

The results of the unit root tests indicate that all variables are non-stationary at level. These results are given in table 4.1

**Table 4.1: The Results of Stationarity Test for Variables**

Variable	Level			1 <sup>st</sup> Difference			Integration Order
	ADF Statistics	Prob.	Inference	ADF Statistics	Prob.	Inference	
PCI	-0.865894	0.7892	NS	-4.646106	0.0011	S	I(1)
CIT	-0.960064	0.7581	NS	-13.44031	0.0000	S	I(1)
VAT	-0.771584	0.6534	NS	-5.705479	0.0001	S	I(1)
PPT	-1.871705	0.3421	NS	-4.364515	0.0012	S	I(1)

**Notes:** NS = Non-stationary; S = Stationary

**Source:** Authors Computation using EVIEWS

From the result in Table 4.1, all the study variables are non-stationary at level - they all have p-values greater than the 0.05 significant level, but become stationary after differencing once (p-values less than 5 percent significant level). This indicated that the variables were all integrated of order I(1). It is, therefore, worth concluding that all the variables are integrated of order one i.e. all the variables attain stationarity at their first difference.

##### 4.2 Cointegration Test

Johansen cointegration test is used to verify the long-run relationships between several non-stationary time series and it comes in two main forms i.e. Trace tests and Maximum Eigenvalue test. The results are presented in table 4.3 below.

**Table 4.2 Johansen Cointegration Results**

Sample (adjusted): 2011Q3- 2021Q4 Series: INPCI INCIT INVAT INPPT				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.750329	87.99947	47.85613	0.0000*
At most 1	0.457343	29.71974	29.79707	0.0510
At most 2	0.089384	4.046056	15.49471	0.8998
At most 3	0.002697	0.113430	3.841466	0.7363
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.750329	58.27974	27.58434	0.0000*
At most 1 *	0.457343	25.67368	21.13162	0.0107
At most 2	0.089384	3.932627	14.26460	0.8664
At most 3	0.002697	0.113430	3.841466	0.7363

**Source:** Authors Computation using EVIEWS

This is an important analysis that helps to test for a long run stable relationship among the variables of interest in a study. When a linear combination of variables that are integrated of the same order *i.e.* I (0) and I(1), produces a stationary series, then the variables may need to be co-integrated. This means that a long-run relationship may exist among them, implying that they may wander from one another in the short-run but in the long-run they will move together. Following the approach of Johansen and Juselius (1990), the Trace and Maximal Eigen values were utilized to determine the number of co-integration vectors. When the Max Eigen statistics is greater than the critical value at 5 percent level of significance or the p-value is less than or

equal 5 percent, we fail to accept the null hypothesis stating that “there is no co-integrating equation (or none)”, but if otherwise, we accept the null hypothesis. The result of the co-integration test between the dependent variable and the independent variables

The trace and max-eigen statistics in table 4.2 show that at most there is one cointegration equation *i.e.* all the variables have long-run relationship. Thus, we reject the null hypothesis and this confirmed the existence of a cointegration relationship in the sample. This is condition to employ error correction technique to estimate the equation of this study.

#### 4.3 Multicollinearity Test

**Table 4.3. The Variance Inflation Factor (VIF)**

Variance Inflation Factors		
Sample: 2011Q1- 2021Q4		
Variable	Coefficient Variance	Uncentered VIF
C	0.125613	1.401623**
INCIT	0.001376	1.443755**
INVAT	0.002285	1.512070**
INPPT	0.001125	1.091199**

**Notes:** \*\* indicate less than 5

**Source:** Authors Computation using EVIEWS

Table 4.3 showed in summary the variables of study, the coefficient variances, centered VIFs and remarks. The result showed VIF values for all the variables at less than 5 which was below a bench mark of 5-10 within which was a high value that became problematic. This, therefore, indicated that there was absence of multicollinearity among the variables.

**4.4 Serial Correlation LM Test**

The Breusch-Godfrey serial correlation LM test was carried out to detect the presence of autocorrelation. The null hypothesis in LM test was that there was no serial correlation. Table 4.6 was used to present the results of the test.

**Table 4.4: Summary of LM Test Result**

Breusch-Godfrey Serial Correlation LM Test				Remarks
F-stat	0.186158	P(F-stat)	0.6688	N Sig.**
Obs*R-squared	0.222207	P.Chi-Square(1)	0.6374	N Sig.**
<b>*Absence of Autocorrelation</b>				

Notes: \*\* and \*\*\* indicate significant level at 5% and 1% level respectively.

Source: Authors Computation using EViews

The results for the Breusch-Godfrey Serial Correlation LM test indicated in Table 4.4 showed the probability values of F-statistics and Chi-square of 0.6688 and 0.6374 respectively. Since the Probability value are greater than the probability of 0.05, the study do failed to accept the null hypothesis that there was no serial correlation (at 95 percent significance level) and concluded

that the errors in different observations were not correlated with each other.

**4.5. Stability Test**

The cumulative sum of recursive residuals tests was conducted to ascertain the parameter stability. The stability of the model is evidenced from the results of the stability test shown below in figure 1 and 2 respectively.

Figure 4.1

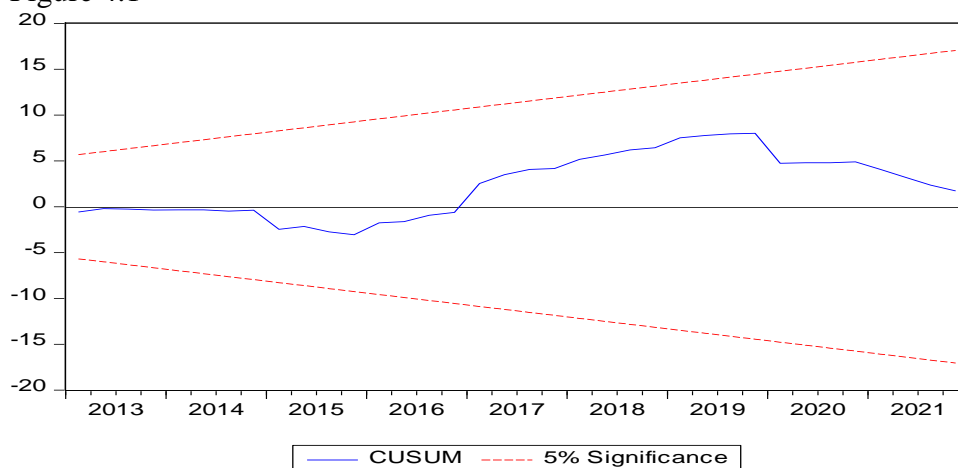
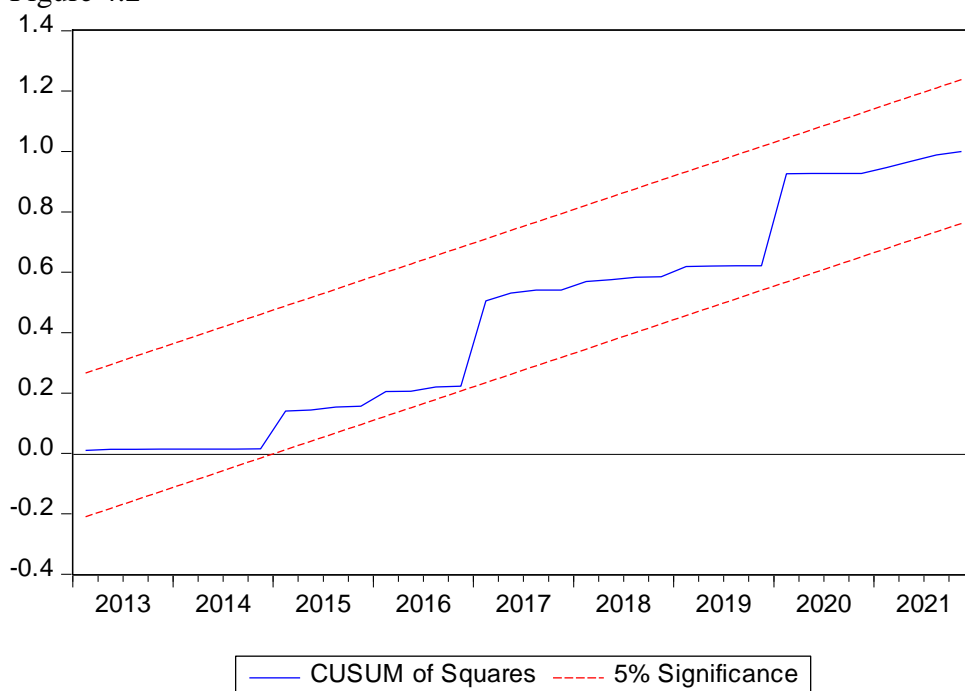


Figure 4.2



Figures 1 and 2 the results of the stability test indicate the absence of any instability of the coefficients because the plot of the two trend statistics fall inside the critical bands of the 5 percent confidence interval of parameter stability.

**4.6 Heteroskedasticity Test**

The Breusch-Pagen was constructed to test for heteroskedasticity in the OLS regression analysis, and the test was used to determine whether the variance in the residuals was constant. The null hypothesis was that residuals were homoscedastic. The findings are presented in Table 4.5 below:

**Table 4.5: Summary of Breush-Pagan-Godfrey Result**

Heteroskedasticity Test: Breusch-Pagan-Godfrey				Remarks
F-stat	1.539722	P(F-stat)	0.2021	N Sig.**
Obs*R-squared	7.399356	P(X <sup>2</sup> )	0.1926	N Sig.**

**Notes: \*\* and \*\*\* indicate significant level at 5% and 1% level respectively.**

**Source: Authors Computation using EVIEWS**

The summary result in table 4.5 showed the F-statistics probability value of 0.2021 with a corresponding observed R-square probability value of 0.1926, both greater than the 5% level of significance. Hence,

the study failed to reject the hypothesis of no heteroskedasticity. The results simply indicated that the data for analysis were all homoskedastic.

#### 4.7 Model Estimation Results

**Table 4.6 Error Correction Model Estimates**

Variable	Coefficient	t-Stat.	Prob.
D(INPCI(-1))	0.877697	11.77677	0.0000***
D(INCIT(-1))	-7.78E-05	-8.063808	0.0005***
D(INVAT(-1))	-0.008258	-5.120077	0.0001***
D(INPPT(-1))	0.001741	4.687121	0.0064***
ECM(-1)	-0.006282	-6.858793	0.0001***

$R^2 = 0.81$ ;  $R^{-2} = 0.78$ ; F-stat=30.47 p(0.000000); DW=1.85

**Notes:** \*\* and \*\*\* indicate significant level at 5% and 1% level respectively.

**Source:** Authors Computation using EVIEWS

#### 4.8. Discussion of Findings

The regression results presented in table 4.6 are short run equilibriums coefficients. The error correction estimate is a representation of long run equilibrium and adjustment coefficient is -0.0062 suggesting that almost 1 percent of the discrepancy between the long run and short run is corrected within a quarter i.e. it shows that there is a correction of previous errors in the subsequent quarter and it is negative and statistically significant at one percent level.

The above long run estimates in table 4.8 are credible in that the adjusted coefficient of determination ( $R^{-2}$ ) revealed that over 78 percent of the total variation in the economic growth proxied with per capita income is accounted for, by the independent variables of the model for the period under study. As a matter of fact, the result shows that economic growth changes by about 78 percent (0.78) for every one unit change in the three selected federal tax revenue used for this study. This means that as tax revenue most importantly the components of federal tax revenue changes all things be equal the economic growth of Nigeria also change in the same direction. The coefficient of determination and the adjusted coefficient of determination indicate that the model has a good fit and could be deployed for forecasting purpose. From individual coefficient of the variables in the model, the results presented indicate that, company income tax has negative effect on economic growth of Nigeria and it significant even at 1 percent. The estimate conformed to a priori theoretical

expectation. But this result is at variance with the findings of Ogbodo and Nweze (2021). The variance may largely be attributed to inappropriate proxy for economic growth by Ogbodo and Nweze. This is the motivation for this study.

The long run results revealed that value added tax exerts significant negative impact on economic growth. This corroborates with submissions of Bank-ola (2021) who found a significant negative relationship between value added tax and economic growth. Conversely, Onwuzulumba and Okpata (2021) results show positive significant relationship between value added tax and economic growth. Considering the magnitude of the volume of value added tax in Nigeria compared to other federal tax revenue, it is a sign that its impact will be felt when on the economic growth via a multiplier process. The result of this study also conformed to a priori theoretical expectation. Theoretically, value added tax has a negative relationship with the economic growth because it is a leakage to an economy.

Petroleum profit tax shows significant positive effect on economic growth of Nigeria. This entails that a unit rise in petroleum profit tax revenue will bring about 0.001741 increase in economic growth of Nigeria; if all thing being equal. Given the peculiarity of this tax revenue it negate a priori expectation that notwithstanding this result corroborates evidence from the study by Onwuzulumba and Okpata (2021) and Onoja and Ibrahim

(2020), which also found positive impact of petroleum profit tax on economic growth in Nigeria.

### 5. Conclusion and Recommendations

The coefficient of the error correction term suggests that almost one percent of the discrepancy between the long run and short run is corrected within a quarter, since time series that we are working with is quarterly data. The evidence provided by the long run error correction results for this study suggests that, in general, these selected components of federal tax revenue such as: company income tax and value added tax show a significant effect on economic growth in Nigeria. It is clear that, these two selected federal tax revenue distort the economic growth because they are leakage to economy; but in the case of petroleum profit tax due to its peculiarity, it enhances economic growth in Nigeria. Thus, federal tax revenue employed for this study such as: company income tax and value added tax were statistically significant and but have negative impact on the economic growth. More so, petroleum profit tax has a proportional direct relationship with the economic growth of Nigeria.

Based on the empirical evidence emanating from the study, the followings are recommended;

1. For Nigeria to achieve speedy economic growth from her tax revenue like other developed economies, emphases should be on company income tax and value added tax as their high volume of collection has shown significant impact on the Nigeria economic growth via a multiplier process. i.e. the tax revenue should be expended on social amenities and physical infrastructural facilities like power supply and good road/railway networks that will boost the real sector and distribution respectively. This suggestion is supported by the evidence from FIRS which disclosed that Nigerian government made N1.08 trillion from value added tax in first nine months of

year 2020 despite lockdown in the amid of covid'19.

2. Since oil tax revenue has direct impact on the Nigeria economic growth unlike other federal tax revenue. The government should also licensed additional modular refineries and other oil operational companies in order to generate more oil tax revenue and the revenue should be invested in economic growth enhancing sectors.

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