



Economic Growth stimulant in Nigeria: Components and combined analysis

Francis E. Andem*¹ Weniebi Zibigha², Francis I. Ogosi³

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ABSTRACT

Economic growth stimulus in developing countries such as Nigeria is still an important discussion in economics and business literature. This study sought to examine the stimulus of economic growth in Nigeria, analyzing components and combined effects. Secondary data were collected from the Central Bank of Nigeria Statistical Bulletin, which reported data between 1980 and 2019. To analyze the data collected, simple and multiple linear regression models were used. The findings revealed that four components—the exchange rate, money supply, interest rate, and export—were statistically significant in stimulating the growth of the economy. The inflation rate as a component was not statistically significant in creating favorable stimulation for economic growth.

The combined effect of these factors showed a statistically significant effect on stimulating economic growth. Interest rate and inflation showed a negative relationship with real GDP (an indicator of economic growth), while the other three indicators showed a positive relationship. Therefore, we recommend that the government, firms, and individuals always consider actions that will reduce the negative effects of inflation and interest rates on the economy.


Keywords: Economy, Growth, Factors, Inflation, Interest Rate


JEL Codes: B22, B23.


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* Corresponding author

¹  PhD Candidates, Department of Business Management, University of Uyo, Nigeria, francisandem.pgs.phd@uniuyo.edu.ng

²  PhD Candidates, Department of Business Management, University of Uyo, Nigeria, zibighaizon-ama.pgs.phd@uniuyo.edu.ng

³  PhD Candidates, Department of Business Management, University of Uyo, Nigeria, francisogosi.pgs.phd@uniuyo.edu.ng

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1. INTRODUCTION

In a developing economy of about two hundred (200) million people, such as Nigeria, the "economy" is a concern for the populace, businesses, and government. It is also of great interest to economic and business researchers who are interested in dissecting, analyzing, modeling, and simply describing it in simple terms. An economy is the production, distribution, and trade, as well as the consumption, of goods and services by different individuals (households), businesses, and governments in a geographical area such as Nigeria. It is a wide range of interrelated economic production, distribution, and consumption activities that determine and show the allocation of scarce resources in an area. The pattern of behavior of the agents shapes and determines the outlook of the interrelated elements. Elements' outlook also shapes the behavior of the agents in an economy. It therefore forms a web of complex relationships, such as the behavior of an agent that affects the behavior of another and sometimes the whole. The aggregate of the behavior of agents, elements, and tools of analysis is of macroeconomic interest.

Economists and business researchers are interested in the analysis, modeling, and explanation of the economy, which has stirred numerous types of research (Nyoni and Bonga, 2018; Oyedokun and Ajose, 2018). This research's interest is either to determine or offer useful explanations of how the behavior of an agent or element leads to changes in the economy. The value of these changes over a period of time will increase or decrease the value of the economy, and the elements that cause these changes are seen as the determinants of economic growth (Inam and Etim, 2020; Mubarak, Owolabi, and Ogunleye, 2018). Simply put, determinants are seen as factors that will decisively influence the nature or outcome of an event. It is also the function of these factors to create an outcome and alter the nature of an agent (Mathai, 2016). Economic growth, simplistically, is a country's capability to create wealth (Haller, 2012). It is the consistent increase in production volume in a country and an increase in Gross Domestic Product (Ivic, 2015). Therefore, GDP is the quantitative measure of economic growth in Nigeria (Inam, 2020; Mubarak, Owolabi, and Ogunleye, 2018; Nyoni and Bonga, 2018; Oyedokun and Ajose, 2018). In essence, the factors that influence change in the GDP are seen as the determinants of the economy in a country, in this case, Nigeria.

Change in the GDP is dynamic (Bartolucci, Marelli, Signorelli, and Tanveer, 2018). This dynamic nature of the GDP is a result of the dynamics and volatile nature of the factors affecting GDP and agents' actions in the economy. The Nigerian economy, due to various factors as well as dynamic policy inconsistencies, experiences these dynamic changes in factors and hence GDP (Anwana and Affia, 2018). In literature, various factors affect GDP that have been researched, such as interest rate (Inam, 2020), population, inflation, and exchange rate (Esu and Udonwa, 2018), money supply (Inam, 2014), government expenditure (Udejaja and Onyebuchi, 2015), import and export (Ndambiri et al., 2012), among many other factors. These factors are themselves very dynamic, and changes in one factor can cause changes in various other factors that disrupt GDP. The fact remains that the changes in these factors are not only dynamic but continuous, as seen in the avalanche of studies carried out in this area of economics (Nyoni and Bonga, 2018).

Faced with these rapid and dynamic changes in the factors that affect GDP and the need to have insight into their behavior for informed decisions and policy-making, there is a need to

examine the determinants of economic growth in Nigeria. It is even more important because of the growing discussion of other factors such as political stability, political freedom, and the rule of law index's effect on economic growth in Nigeria (Anwan and Affia, 2018).

1.1.Statement of Problem

The dynamic and volatile nature of the economy in Nigeria creates difficulty in dissecting, analyzing, and modeling. A useful insight into the behavior of the Nigerian economy is still of great importance, and even the diverse behavior of factors affecting GDP and the GDP report itself is also of concern. For instance, the growth in GDP and the growth in unemployment and poverty in the country give reasons to search for understanding because of some assertions that an increase in GDP is a result of an increase in production or productive ventures in the economy. An increase in production should cause an increase in employment and a reduction in unemployment; therefore, an increase in Nigeria's GDP and also an increase in unemployment is a deviation from the assertion in the literature.

The broad spectrum of factors affecting GDP also makes it important to gain insight on the factors that show the most growth in terms of GDP growth, which will result in economic growth in Nigeria. Such factors include government expenditure, inflation, the exchange rate, the money supply, interest rates, imports, and exports, among many other factors. These factors are interrelated and dynamic. They experience rapid changes that also cause rapid changes in the GDP. It is also important for policymakers and researchers to determine which factor or factors offer the most benefit and will stimulate rapid economic growth. The need to enjoy sustainable growth in the economy benefits everyone and is the utmost desire of the agents—households, business firms, and the government. In a situation like this, it is still very important to seek to find out and study the behavior of the factors that determine economic growth in Nigeria; hence, this study seeks to examine the economic growth stimulus in Nigeria.

1.2.Objective of the Study

The main aim of this study is to examine economic growth stimuli in Nigeria. Economic growth was measured through real GDP, and seven determinants from the literature were selected for the study. These factors are government expenditure, inflation, exchange rate, money supply, interest rates, imports, and exports. The specific objectives were to:

- Ascertain the component effect of determinants of economic growth on Real GDP
- Assess the joint effect of determinants of economic growth on Real GDP.

1.3. Research Questions

The following research questions was used for the study:

- How do determinants of economic growth independently affect Real GDP?
- What is the joint effect of determinants of economic growth on Real GDP?

1.4 Research Hypotheses

The null form of the research hypotheses used in this study is stated thus:

- Ho₁. There are no significant effect determinants of economic growth on Real GDP independently
- Ho₂. There are no significant joint effect determinants of economic growth on Real GDP

2. LITERATURE REVIEW

2.1. Concepts of Economic Growth Stimulants in Nigeria

Stimulants are elements, agents, or components that decisively influence the character of an event or outcome. Economic growth, simplistically, is a country's capability to create wealth (Haller, 2012). The extent or level of utilization of the ability or capabilities to create wealth in an economy is the differentiating factor between economies, be they developed or developing (Bartik, 2012). Economic growth can also be defined as a consistent increase in production volume in a country and an increase in Gross Domestic Product (Ivic, 2015).

Therefore, Gross Domestic Product (GDP) is seen as the quantitative measure of economic growth in a country such as Nigeria (Inam, 2020; Mubarak, Owolabi, and Ogunleye, 2018; Nyoni and Bonga, 2018; Oyedokun and Ajose, 2018; Ivic, 2015; Bartik, 2012). In essence, the factors that cause changes in GDP are the factors that determine economic growth in Niger

Gross domestic product (GDP) is an excellent measure of the value of final goods and services produced by a country during a period or year, generated quarterly (OECD, 2009). It is also the market value of goods and services produced within a selected geographic area (such as a country) at a selected interval in time, such as quarterly or yearly (Learner, 2009). Despite arguments against GDP, it has become a standard measure of the size and health of an economy. The nature of changes experienced by the GDP of an economy is usually rapid, dynamic, and volatile. This is so because there are numerous factors seen in the literature that affect the changes in GDP (Nyoni and Bonga, 2018). These factors either cause a positive or negative change in GDP. The factors include government policies (Anwana and Affia, 2018), interest rates (Inam, 2020), population, inflation, and exchange rates (Esu and Udonwa, 2018), money supply (Inam, 2014), government expenditure (Udejaja and Onyebuchi, 2015), imports and exports (Ndambiri et al., 2012), among many other factors. The changes experienced by these factors impudently or jointly are dynamic, which explains why GDP is also dynamic. Even non-fiscal and monetary factors also influence the GDP, which includes political stability, political freedom, and the rule of law index (Anwan and Affia, 2018). Therefore, any factor that influences GDP (nominal or real) affects economic growth in Nigeria..

2.2. Theoretical Review of Economic Growth Stimulants

The Classical Theorist laid the foundation for discussion on the determinants of economic growth in Nigeria. The Classical Theory looks at economic growth from the perspective of industrial capitalism, which was the main problem at that time. The proponents of Classical Theory were the likes of Adam Smith, Thomas Malthus, and David Ricardo, who were interested in the development of the economic system from changes in the social system. They saw the political economy as the fulcrum for economic growth (Harris, 2007). Also, they saw economic growth as a result of the material basis of society. Progress was viewed by classical economists, particularly Smith, in terms of the growth of national wealth. As a result, the notion of national benefit was considered a crucial economic policy criterion. Progress was also conceived in terms of the necessity to protect private property and, as a result, the interests of the property-owning class. From this vantage point, they sought to demonstrate that exercising individual initiative in a free market to pursue personal goals would result in positive outcomes for society as a whole. The operation of competitive market forces and the limited participation

of a 'responsible' government could balance the conflicting economic interests of diverse groups. They believed that wealth accumulation by individuals, businesses, and nations was the essence of economic growth.

The Keynesian Theory of economic growth came in the 1930s with a different point of view from the classical school of thought. To achieve full employment and economic growth, Keynes and his supporters argued that people should save less and spend more, increasing their marginal propensity to consume. They insist on government spending as a way of getting the economy back on track after the effects of the Great Depression of 1930. Keynes and his supporters believed that by doing so, employment would be created, aggregate demand would increase, and the level of general economic activity would increase, which would lead to growth.

Schumpeter (1934) saw economic growth differently from Keynes, though to some extent his postulation is an enhancement of Keynes's thoughts. He brought in a new perspective of the entrepreneur-innovator as the means for driving economic growth in an economy. He argued that creativity and innovation from the agents and components of the economy are the main ways to enjoy economic growth. He further explained that this accounts for the reason why economies do experience differences in growth and the reason for fluctuations in the growth of an economy. In essence, the creativity and innovation of the agents or nations vary at various stages and times of their growth. Schumpeter's position is that when there is innovation in an individual, firm, or government, such an agent enjoys a high level of growth until competition in the economic system (national or global) erodes such innovative entrepreneurship. The existence of private property ownership, competition, and an efficient financial market capable of supporting creative inventions by individuals and enterprises are all fundamental assumptions in Schumpeter's theory. However, good administration and democracy are required for Schumpeter's theory to hold water..

These three theories were applicable for their times and are still applicable in the determinant of economic growth in Nigeria.

2.3. Empirical Review of Economic Growth Stimulants in Nigeria

Table 1. Government Expenditure, Interest Rates

Authors	Title	Variables Used	Findings	Method Used
Inam and Etim (2020)	Regulated Interest Rate, Deregulated Interest Rate and Economic Growth in Nigeria : A Disaggregated Analysis	Interest Rate, Real GDP	Negative and Significant relationship between deregulated interest rate and economic growth in Nigeria	Data from 1970 – 2016 Ordinary Least Square
Egbulonu and Ajudua (2017)	Determinants of Economic Growth in Nigeria : A	GDP, FDI, Openness, Gross Capital Formation,	FDI, Openness, GCF, MS, GE and Labour force have a positive and direct relationship	Data set from 1980 – 2014. Augmented

	Macro-Econometric Approach.	Money Supply, Interest Rate, Government Expenditure, Employed labour force	with economic growth. Interest rate showed and negative relationship. GCF was not statistically significant	Dickey-Fuller unit root test
Jelilov (2016)	The Impact of Interest Rate on Economic Growth: Example of Nigeria	Interest Rate, GDP	The interest rate has a slight impact on economic growth, however, growth can be improved by a lower interest rate	
Ismaila and Imoughele, (2015)	Macroeconomic Determinants of Economic Growth in Nigeria : a Co-integration Approach	Gross Fixed Capital Formation, FDI and total government expenditure.	Gross Fixed Capital Formation, FDI and total government expenditure are major determinants of economic growth in Nigeria.	26 years of data (1986 – 2012) Augmented Dickey-Fuller unit root test. Johansen’s Co-integration test

Table 2. Inflation, Export and Money Supply

Authors	Title	Variables Used	Findings	Method Used
Obayori, Robinson and Omekwe (2018)	Impact of Private Domestic Investment on Economic Growth in Nigeria	Money Supply, Inflation, GDP	Positive and Significant relationship between money supply, capital stock and growth. Inflation had a negative relationship with growth	Data from 1980 to 2016. Kwaiakowshi-Philips-Schmidt-Skin Johansen’s Co-integration test
Nyoni and Bonga (2018)	What Determines Economic Growth in Nigeria ?	Population growth, inflation, FDI, interest rates, export, investments	The main determinants of economic growth in Nigeria are : Population growth, inflation, FDI, interest rates, export, investments	Empirical Study
Doguwa (2012)	Inflation and Economic Growth in Nigeria : Detecting the	Inflation, GDP	Negative significant relationship	

	Threshold Level			
Shuaibu and Babatunde (2011)	Money Supply, Inflation and Economic Growth in Nigeria,	Money supply, Inflation and GDP	Inflation has a significant negative relationship while Money supply has a positive effect.	
Chimobi (2010)	Inflation and Economic Growth in Nigeria	CPI, Inflation, GDP	No co-integrating relationship between inflation and economic growth in Nigeria	

Table 3. Exchange Rate

Authors	Title	Variables Used	Findings	Method Used
Mubarak, Owolabi and Ogunleye (2018)	Population Growth and Economic Growth in Nigeria : An Appraisal	GDP, exchange rate, population growth rate, fertility rate and crude death rate	Population growth has significant positive effect on economic growth in Nigeria	1981 – 2015 data Ordinary Least Square
Esu and Udonwa (2016)	Determinants of Economic Growth in Nigeria : Population	Real GDP, Population, Investment, Exchange rate	Population has a role in fostering economic growth in Nigeria.	Time series data 1981 – 2013 Augmented Cobb-Douglas Production Model.

3. METHODOLOGY

3.1. Research Design

The event that created the data used for this study had already occurred, thus ex post facto research design was used.

3.2. Data Source

Secondary data were sourced from CBN Statistical Bulletin (2019) and World Bank Data Site. The literature used from the study was internet publications in selected journals.

3.3. Model Specification

The analysis for this study was done using simple and multiple linear regressions. The linear regressions are suitable for testing the causal relationship between variables. Thus, the model used is specified as follows:

Component Effect of Factors:

RealGDP = f(Government Expenditure)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Govt.Exp} \quad - \quad - \quad - \quad (1)$$

RealGDP = f(Inflation)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Inflation} \quad - \quad - \quad - \quad (2)$$

RealGDP = f(Exchange)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Exchange} \quad - \quad - \quad - \quad (3)$$

RealGDP = f(Money Supply)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{MoneySupply} \quad - \quad - \quad - \quad (4)$$

RealGDP = f(Interest)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Interest} \quad - \quad - \quad - \quad (5)$$

RealGDP = f(Export)

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Export} \quad - \quad - \quad - \quad (6)$$

Joint Effect of Factors:

RealGDP = f(Government Expenditure, Inflation, Exchange, Money Supply, Interest rate, Export)

$$\text{ReaGDP} = \beta_0 + \beta_1.\text{Govt.Exp} + \beta_2.\text{Inflation} + \beta_3.\text{Exchange} + \beta_4.\text{MoneySupply} + \beta_5.\text{Interest} + \beta_6.\text{Export} + e$$

4. FINDINGS AND DISCUSSION

To reduce inconsistency, the logarithm of the data collected was carried out and presented in Table 4.

Table 4. Collected Data for Determinants of Economic Growth in Nigeria

		Government			Money		
Year	Real GDP	Expenditure	Inflation	Exchange	Supply	Interest	EXPORT (cif)
1990	4.29	1.78	0.87	0.89	1.59	1.36	2.04
1991	4.28	1.82	1.11	0.80	1.70	1.30	2.08
1992	4.29	1.97	1.65	0.57	1.88	1.31	2.31
1993	4.30	2.28	1.76	0.47	2.07	1.45	2.34
1994	4.30	2.21	1.76	0.47	2.23	1.18	2.31
1995	4.31	2.40	1.86	-0.13	2.30	1.15	2.98
1996	4.33	2.53	1.47	1.48	2.36	1.13	3.12
1997	4.34	2.63	0.93	1.46	2.43	0.87	3.09
1998	4.35	2.69	1.00	1.45	2.50	1.00	2.88
1999	4.35	2.98	0.82	1.87	2.59	1.16	3.08
2000	4.37	2.85	0.84	1.89	2.80	1.02	3.29
2001	4.40	3.01	1.28	1.91	2.91	1.00	3.27
2002	4.46	3.01	1.11	1.95	2.98	1.19	3.24
2003	4.50	3.09	1.15	2.00	3.09	1.07	3.49
2004	4.54	3.15	1.18	2.03	3.12	1.09	3.66
2005	4.57	3.26	1.25	2.03	3.24	0.94	3.86
2006	4.60	3.29	0.92	2.02	3.36	0.92	3.86
2007	4.63	3.39	0.73	2.03	3.49	0.98	3.92

2008	4.66	3.51	1.06	1.90	3.69	1.08	4.02
2009	4.70	3.54	1.06	1.98	3.70	1.10	3.93
2010	4.74	3.62	1.14	1.99	3.75	0.86	4.08
2011	4.76	3.67	1.04	2.01	3.83	0.80	4.18
2012	4.78	3.66	1.09	1.99	3.87	0.88	4.18
2013	4.80	3.71	0.93	1.99	3.85	0.83	4.18
2014	4.83	3.66	0.91	1.98	3.84	1.00	4.11
2015	4.84	3.70	0.96	2.28	3.93	0.98	3.95
2016	4.83	3.77	1.19	2.40	4.05	0.91	3.95
2017	4.84	3.81	1.22	2.49	4.05	0.76	4.15
2018	4.84	3.89	1.08	2.49	4.04	0.78	4.27
2019	4.85	3.99	1.06	2.56	4.07	0.66	4.30

Source: Collated from CBN Statistical Bulletin, 2019.

RealGDP was used in a Simple Linear Regression Model to test the effect of the independent effect of determinants of economic growth in Nigeria and the findings are presented in the subsequent sections.

Government Expenditure

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Govt.Exp}$$

R Square	F-Statistics	t-Statistics	Significance
.882	209.468	14.473	.000 ^b

Source : SPSS Results, 2021.

A simple regression was carried out to examine the effect of government expenditure on stimulating economic growth in the Nigerian economy. The result of the simple regression model returned an R square value of 0.882. This implies that 88.2 percent of the changes in government expenditure can explain 88.2 percent of the changes in real GDP. The F-statistics are above 3.95; therefore, the model showed goodness of fit and returned a significant value of 0.000 ($p\text{-value} < 0.001$). This implies that government expenditure has a statistically significant relationship with real GDP. The t-statistics showed a positive relationship between government expenditure and real GDP. Thus, there is a statistically significant positive relationship between government expenditure and economic growth in Nigeria, which is in agreement with the works of Egbulonu and Ahuda (2017) and Isamaila and Imoughele (2015).

Inflation

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Inflation}$$

R Square	F-Statistics	t-Statistics	Significance
.152	5.037	-2.244	.033 ^b

Source : SPSS Results, 2021.

In testing the relationship between the inflation rate and real GDP, the model returned an R square value of 0.152, which is a weak relationship. It implies that 15.2 percent of the changes in the inflation rate will affect 15.2 percent of the changes in real GDP. The model was not statistically significant, but the t-statistics showed an inverse relationship between inflation and real GDP. This implies that an increase in inflation will lead to a decrease in real GDP, and the

inflation will cause a reduction in economic growth in Nigeria. In the literature, Mubarak et al. (2018), Shuaibu and Babatunde (2011), Doguwa (2012), and Chimobi (2010) found a negative relationship between inflation and economic growth in Nigeria. Mubarak et al. (2018) found that the relationship was statistically significant in a model with a money supply.

Exchange Rate

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Exchange}$$

R Square	F-Statistics	t-Statistics	Significance
.612	44.196	6.648	.000 ^b

Source : SPSS Results, 2021.

The result of the simple regression model returned an R square value of 0.612. This implies that 61.2 percent of the changes in the exchange rate can explain 61.2 percent of the changes in real GDP. The F-statistics of 44.196 showed goodness of fit and returned a significant value of 0.000 (p-value < 0.001). This implies that the exchange rate has a statistically significant relationship with real GDP. The t-statistics showed a positive relationship between the exchange rate and real GDP. Thus, there is a statistically significant positive relationship between the exchange rate and economic growth in Nigeria.

Money Supply

$$\text{RealGDP} = \beta_0 + \beta_1.\text{MoneySupply}$$

R Square	F-Statistics	t-Statistics	Significance
.931	380.742	19.513	.000 ^b

Source : SPSS Results, 2021.

The result of the simple regression model returned an R square value of 0.931. This implies that 93.1 percent of the changes in the money supply can explain 93.1 percent of the changes in real GDP. The F-statistics of 380.742 showed goodness of fit and returned a significant value of 0.000 (p-value < 0.001). This implies that the money supply has a statistically significant and strong relationship with real GDP. The t-statistics showed a positive relationship between the exchange rate and real GDP. Thus, there is a strong statistically significant positive relationship between money supply and economic growth in Nigeria, as also found out by Inam (2014).

Interest Rate

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Interest}$$

R Square	F-Statistics	t-Statistics	Significance
.579	38.580	-6.211	.000 ^b

Source : SPSS Results, 2021.

In testing the relationship between interest rates and real GDP, the model returned an R square value of 0.579. It implies that 57.9 percent of the changes in interest rates will affect 57.7 percent of the changes in real GDP. The model was statistically significant (p-value < 0.001). The t-statistics showed an inverse relationship between interest rates and real GDP. This implies that an increase in interest rates will lead to a decrease in real GDP, and the growth

in interest rates will cause a reduction in economic growth in Nigeria. Inam (2020) found a negative and significant relationship between interest rates and Real GDP.

Export

$$\text{RealGDP} = \beta_0 + \beta_1.\text{Export}$$

R Square	F-Statistics	t-Statistics	Significance
.839	145.433	12.060	.000 ^b

Source : SPSS Results, 2021.

The Simple Regression Model result returned an R square value of 0.839. This implies that 83.9 per cent of the changes in export can explain 83.9 per cent of the changes in real GDP. The F-statistics was 145.433, therefore the model showed goodness of fit and returned a significant value of 0.000 (p-value < 0.001). This implies that export has a statistically significant relationship with real GDP. The t-statistics showed a positive relationship between export and real GDP. Thus, there is a statistically significant positive relationship between export and economic growth in Nigeria.

Joint Effect of Factors:

The joint effect of the determinants was determined using the Multiple Regression Model below:

$$\text{ReaGDP} = \beta_0 + \beta_1.\text{Govt.Exp} + \beta_2.\text{Inflation} + \beta_3.\text{Exchange} + \beta_4.\text{MoneySupply} + \beta_5.\text{Interest} + \beta_6.\text{Export} + e$$

The results obtained from the combined model using the six selected stimulants are shown in Table 5, 6, 7.

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976 ^a	.952	.940	.05328

Table 6. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.301	6	.217	76.396	.000 ^b
	Residual	.065	23	.003		
	Total	1.366	29			

Table 7. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.046	.212		19.124	.000
	GovtExp	-.236	.143	-.706	-1.647	.113
	Inflation	-.070	.050	-.092	-1.390	.178
	ExchangeR	-.034	.040	-.108	-.867	.395
	MoneySupply	.537	.098	1.943	5.504	.000
	InterestR	-.027	.098	-.023	-.272	.788
	Export	-.076	.070	-.250	-1.088	.288

Source : SPSS Results, 2021.

The Multiple Regression Model result returned an R square value of 0.952. This implies that 95.2% of the changes in government expenditure can explain 95.2% of the changes in real GDP. The F-statistics was 76.396, therefore the model showed goodness of fit and returned a significant value of 0.000 (p-value < 0.001). This implies that all determinants have a statistically significant relationship with real GDP. Thus, there is a statistically significant relationship between the determinants and economic growth in Nigeria.

5. CONCLUSION

This study sought to examine the effect of economic stimulants on economic growth in Nigeria. The essence was to examine how changes in government expenditure, inflation, exchange rate, money supply, interest rate, and exports affect the growth of real GDP as a measure of economic growth. Three theories provided the theoretical foundation for the analysis. First, the classical theorist belief in industrial capitalism and social systems' changes still offered a useful foundation to explain economic growth, but a distortion such as war makes the classical thought ineffective (Ogosi, Andem, Nkanor, and Zibigha, 2022; Inam and Etim, 2020). Secondly, in situations of drastic economic change such as pandemics, stagflation, and depression, the Keynes theory of economic growth comes in handy with an emphasis that the government should intervene through spending to stimulate economic growth; and lastly, Schumpeter enhanced the two theories by bringing issues of creative destruction and entrepreneur-innovator. Thus, these three theories are still valid foundations for economic growth stimulation research and discussions.

The findings revealed that six components—government expenditure, inflation, exchange rate, money supply, interest rate, and export—were statistically significant in stimulating the growth of the economy. This implies that an improvement in these components leads to economic growth in Nigeria as a result of the increase in real GDP (Akalper, 2023; Ohwojero and Onyeoma, 2022; Inam and Etim, 2020; Obayori, Robinsson, and Omekwe, 2018). Government expenditure can stimulate economic growth in the Nigerian economy (Imoughele, 2015). The cost of u in the economy, characterized by the behavior of interest, can also stimulate economic growth (Ohwojero and Onyeoma, 2022; Inam and Etim, 2020; Igbulonu and Ajudua, 2017; Jelilov, 2016). The inflation rate as a component was not statistically significant in creating favorable stimulation for economic growth, but studies have shown that during the inflationary period, the creativity and innovation of entrepreneurs increase productivity and lead to economic growth (Nyoni and Bonga, 2018). The combined effect of these factors showed a statistically significant effect on stimulating economic growth. Interest rate and inflation showed a negative relationship with RealGDP (an indicator of economic growth), while the other three indicators showed a positive relationship.

Therefore, policymakers, economists, and business researchers must have a clear understanding of the situation in the economic cycle and tailor their decisions towards suitable solutions. We recommend a mix or combination of actions for the stimulation of economic growth in Nigeria.

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