FISCAL POLICY, AUTOMATIC STABILIZERS, AND MANUFACTURING SECTOR PERFORMANCE IN NIGERIA

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ABSTRACT

The study investigated fiscal policy, automatic stabilizers and manufacturing sector performance in Nigeria for the period 1981-2022 as the scope of the study. The ARDL estimation technique was used for estimation while E-views 12 statistical software was employed in computing the result, time series data were obtained from World Development Indicators (WDI). Results showed that total government expenditure had negative relationship with manufacturing sector output in the short-run while in the long-run, it had positive relationship with manufacturing sector output; Tax revenue had negative relationship with manufacturing sector output in the current year and significantly contributed to manufacturing sector performance in Nigeria in the previous years; gross fixed capital formation had positive and insignificant relationship with manufacturing sector output in the current year at 5% level of significance. Based on these findings, the study recommends among others that government should increase and channel spending to capital projects and social overheads that will encourage private sector investment.
Keywords: Automatic stabilizers, fiscal policy, manufacturing sector performance, tax revenue

INTRODUCTION

Traditionally, fiscal policy has been understood as the actions taken by government in relation to its spending, borrowing and taxation methods with the intention of managing the economy. In support of this, Alimi et al. (2015) noted that fiscal policy is expected to play a significant roles in Nigeria's stabilization process, particularly in the short to medium term. Thus, the importance of tax revenue that supports government spending to ensure stable macroeconomic performance cannot be ignored.

Numerous dictated and non-dictated factors makes fiscal policy implementation in Nigeria difficult, and this has prevented the nation from achieving its main macroeconomic goals of promoting sustainable growth and stability, creating jobs, reducing poverty, and providing basic infrastructure. The efficiency and efficacy of fiscal policy operations in the macroeconomic management of Nigeria's economy have throughout time, been affected by a number of variables. At all levels of government in Nigeria, fiscal policy operations are primarily characterized by ongoing expenditure increases and variable tax income rates.

The Nigerian economy continues to experience rising inflation and higher deficits, which are putting all other macroeconomic indicators in a general state of disequilibrium. This is true despite the federal

government's numerous efforts through the Central Bank of Nigeria (CBN) to ensure price stability in the domestic economy.

The fact that the executive and legislature jointly decide on fiscal policy and use it to modify revenue and spending levels to affect the economy is now a source of concern. This shows that the Nigerian system has changed from one in which the government received policy recommendations from economic consultants to one in which the executive and legislature fix whatever they "feel is good" for the economy. This in part, explains why the market economy has suffered rising inflation, significant economic hardship and a difficult business climate.
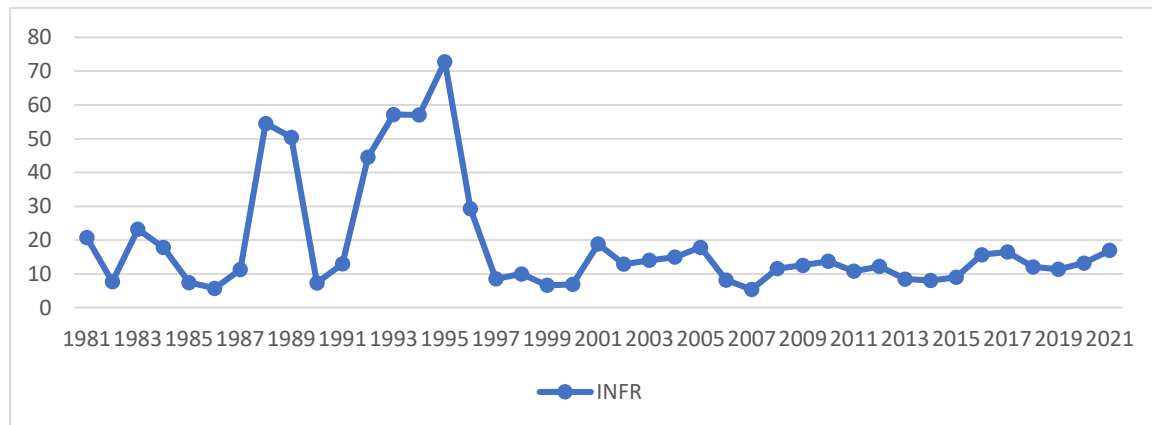

Fig. 1: Trend movement of inflation rate in Nigeria for the period 1981-2021.
Researcher's Compilation, 2023

For instance, a 40-year analysis of inflation data starting in 1981 revealed that the inflation rate reached its lowest point in 2007 at 5.4 percent and its highest peak in 1995 at 73.8 percent, with a sharp decline from that peak to 29.3 percent in 1996, where it continued to rise steadily until it reached its current level of 22.04 percent in 2023.

Ubi-Abai and Ekere (2018) states governments of nations strive to institute effective macroeconomic policies that have significant and tolerable level of justice or fairness. These actions boost their economies and also carry enhance the quality of life citizens. Idris and Bakar (2017) noted that fiscal policy has been a tool of macroeconomic management that has been crucial to the health of an economy because tax and expenditure policy of the public sector affects disposable income of people and business organizations.

This further suggests that when fiscal policy does not align with an economy's needs, the entire economy suffers. This in turn cause poor performances in other sectors of the economy, and result in a decline in economic indices over time. According to Nagayasu (2003), the Nigerian economy experienced the effects of recession for the first time in the 1980s, and by the middle of the decade, the country was experiencing a depression. The 1980s economic experience in Nigeria was a direct result of failed policies that were improperly implemented, largely by military regimes who had successively controlled the economy without using the appropriate economic knowledge.

Over time, macroeconomic instability has affected the manufacturing sector in Nigeria. Bakare-Aremu and Osobase (2015) noting that the manufacturing sector's decline has led many academics to label the nation as economically sick. They referred to Nigeria's manufacturing industry as "SICK" as its average contribution to the country's Gross Domestic Product (GDP) over the past few years has barely exceeded 5%, which indicates that the productive sector is in crisis.
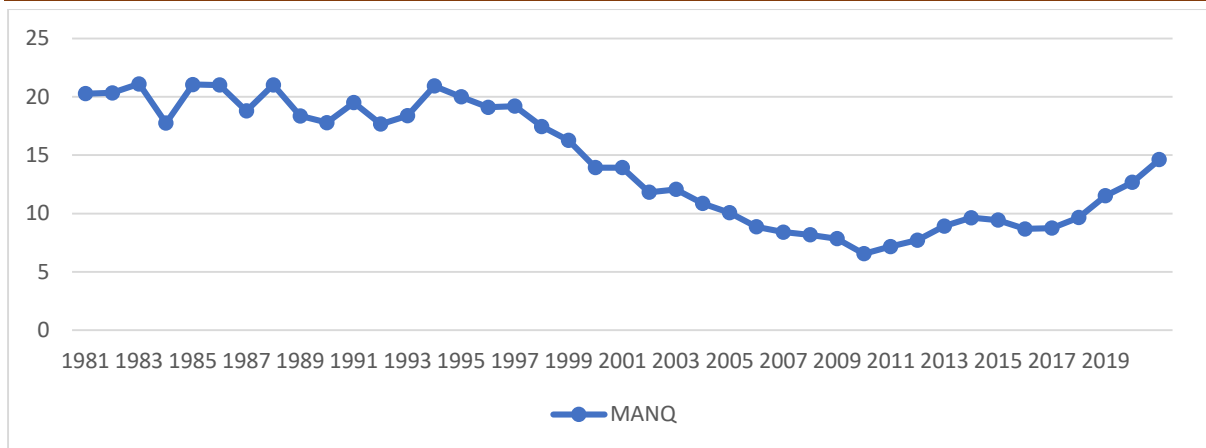
Fig. 2: Trend Movement of Manufacturing Sector Output in Nigeria for Period 1981-2021
Researcher's Compilation, 2023

It has been argued, that the quickest way for an economy to achieve rapid, sustainable growth and development is through industrial capacity, technological innovation, and business development rather than vast human resources and a high level of endowed material resources (Olumuyiwa et al., 2014). Modern industrial processes result in the application of managerial and entrepreneurial abilities as well as high-tech advancements that contribute to productivity and better living conditions on a broad scale (Afolabi & Laseinde, 2019).

In Nigeria however, over reliance on the oil industry and neglect of the manufacturing sector has led to constant decline in output, leading to shocks to economic development. Despite Nigeria's wealth of natural resources, the World Bank states that a greater proportion of its citizens live in extreme poverty and make less than $2 per day. Nigeria is among the least developed nations, coming in at 161st out of 186 on the Human Development Index (HDI).

In Nigeria, taxation is a key instrument of fiscal policy that is used to achieve macroeconomic objectives, impact the operation of the financial system, and achieve the required level of investment for economic growth and development. The development of the industrial sector has been greatly hampered by taxes, which, along with oil, are the main source of government revenue. It becomes more difficult for the company to raise enough capital on the capital market as the government taxes investment earnings. When retained gains are taxed, businesses no longer rely on their internal resources for growth but instead, if they can get such loans, turn to borrowing. The overall ability to invest will therefore probably decline.

The annual budget includes a number of incentives that the government introduces in an effort to attain the economic goals specified. These investments are occasionally made to attract foreign exchange to supplement domestic resources for quick development in certain favoured economic sectors. As a result, for a number of years, tax breaks have been provided to pioneering or recently founded industries in the form of tax exemptions, tax rate reductions, and lower import taxes on raw materials.
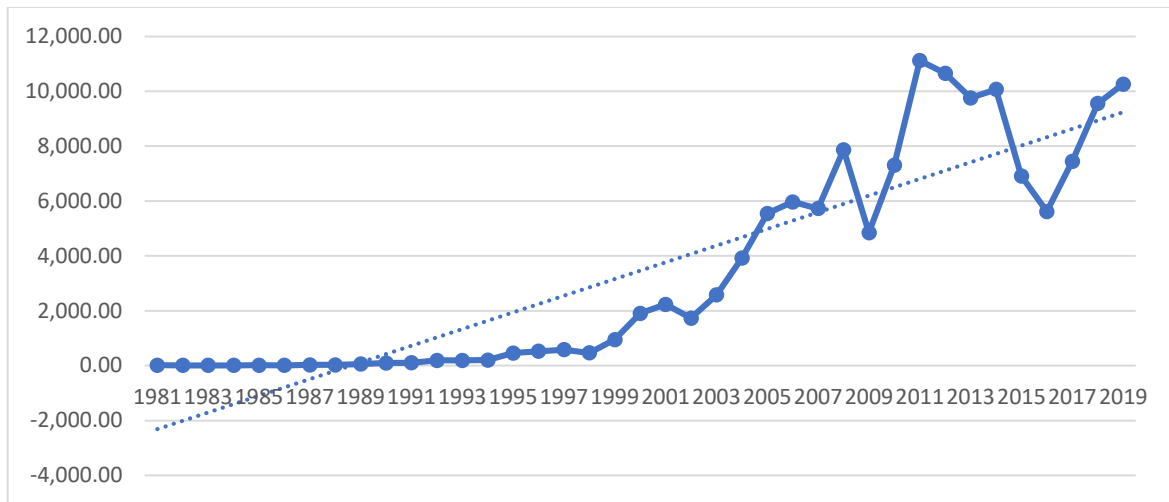
Fig. 3: Trend movement of tax revenue in Nigeria for the period 1981-2021
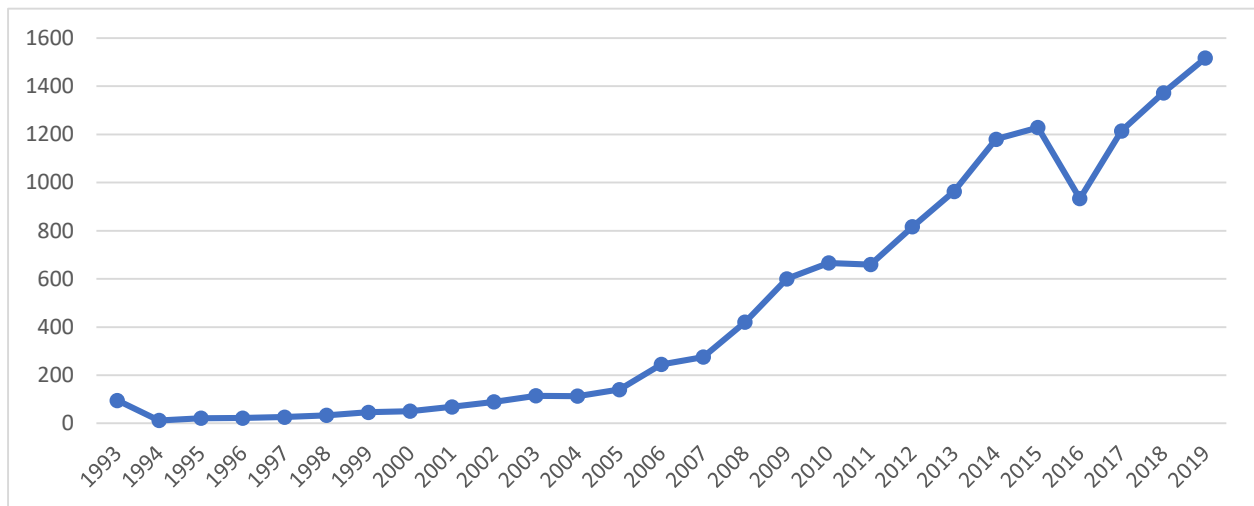Source: Researcher's compilation 2023

Fig. 4: Trend movement of company income tax in Nigeria
Source: Researcher's compilation 2023.

Figs. 3 and 4 shows that increase in Company Income Tax (CIT) has not resulted in any appreciable advancement in manufacturing. For instance, from 1994 to the present, CIT and Tax Revenue increased steadily, with SME contributions reaching 46.2 billion naira in 1999, 68.1 billion naira in 2001, 1229.02 billion in 2015, and a peak of 1517.51 billion naira in 2019. This increase is reflected in the Tax Revenue values. For instance, tax income in Nigerian naira was around 949.19 billion in 1999, 2,231.60 billion in 2001, 6,915.50 billion in 2015, and 10.262.30 billion in 2019. However, high taxes on SMEs have unfavorable effects on the country's economy and may cause gradual instability, periodic increase in unemployment and inflation (Ogu, 2020); and these factors have negative impact on a developing economy. Hence, this study opts to examine how Nigeria's fiscal policy and automatic stabilizers influence manufacturing sector performance.

Concept of Fiscal Policy and Automatic Stabilizers
Discretionary fiscal policy and built-in stabilizers are examples of fiscal policies. When the federal government enacts a new law to specifically alter tax rates or expenditure caps, this is referred to as discretionary fiscal policy. Non-discretionary spending, which consists pre-existing programmes known as automatic stabilizers, can cause changes in tax and spending levels without the need for congressional action. Instead, they keep aggregate demand from rising during a potential inflationary boom or from declining as much as it otherwise might during a recession. Let's check how these functions.

According to Idris and Bakar (2017), long-term growth impact level of social welfare. Unemployment insurance, food stamps, and personal and corporate income tax are examples of automatic stabilizers. Higher unemployment and lower aggregate demand drag down personal incomes and corporate profits, which then diminish consumer and investment expenditure. But think about how automatic stabilisers work. People who are laid off are eligible for welfare programmes such as food stamps, unemployment insurance, and others. Additionally, because of the decline in their income, they now owe less in taxes. These factors all help to support aggregate demand and keep it from declining as much as it otherwise might. Recessions are therefore a little gentler.

In general, increase in spending result in decrease in unemployment, but in Nigeria, the opposite is true: as overall spending rises, the unemployment rate rises. This is due to the fact that a rising share of overall spending is going into recurrent expenses. Recurrent expenses made up 66% of overall spending in 2000; by 2010, they made up 79% of total spending. According to Agu et al. (2015), unemployment rate rises because a smaller proportion of total spending is allocated to capital projects, which generate jobs in an economy.

According to Macek (2014), the manipulation of fiscal policy has an increasing impact on employment rates, total output, and sustainable economic growth, measured in real terms or in nominal terms. It is the presence of consistent long-term real GDP growth and living-standard improvements. Given that fiscal policies have an impact on economic development and growth, their interrelationship is not surprising.

EMPIRICAL REVIEW

Kanu et al (2022), examined Nigeria's economic growth and fiscal policy instruments and found that in the short run, deficit financing, domestic debt, and recurrent expenditures all had significant positive relationships with economic growth in Nigeria, while there is a significant negative relationship between external debts and real GDP. Similarly, Falade (2020), used an Autoregressive Distributive Lag (ARDL) and Error Correction Model (ECM) to examine the differences in the effects of fiscal policy factors on the performance of the industrial, agricultural, and service sectors between 1970 and 2018. The study found that government consumption spending and foreign debt have incremental effects on industrial sector production.

Andabai (2019) examined relationship between tax collection and growth of the manufacturing sector in Nigeria between 1990 and 2018. The study's findings showed that there is a long-term association between the relevant variables. Aziz and Sharifuddin (2019) discovered the effect of various government incentives on the operation of SMEs in the Malaysian food manufacturing industry. Ewubare and Ozo-Eson (2019) examined the effect of tax assessment on manufacturing sector's output in Nigeria between 1980 and 2017. The variables passed the parsimonious error correction model, the unit root test, and the Johansen co-integration test. According to the corporation tax coefficient, a rate increase in corporate tax will increase the manufacturing sector's production by 0.028585%. Furthermore, a rate increase in the fuel tax will increase the manufacturing sector's output by 0.023040%. But according to the coefficient of value added tax, an increase in the rate of value added tax will result in a 0.010024% decline in the manufacturing sector's production.

Ubi and Daniel (2019) examined effects of fiscal and monetary policies on economic growth in a panel of 47 sub-Saharan African economies from 1996 to 2016. The results demonstrated that monetary and fiscal policies had a positive impact on economic growth in the sub-region. Jeff-Anyeneh et al. (2019) in their study discovered that government consumption has not significantly influenced industrial development in Nigeria either in the long or short term.

Kenny (2019) in another study evaluated factors influencing performance of Nigeria's manufacturing sector and its contribution to the country's gross domestic product. The study found positive long-term relationship between labour force, gross fixed capital formation, and exchange rate; and a negative long-

term relationship between average manufacturing capacity utilization, lending interest rates, and government spending.

THEORETICAL FOUNDATION

Keynesian Theory
Keynesian theory holds that the world is complex; and that the impact of money on pricing, output, and total demand is relevant. However, there are other elements to consider besides money, such as unambiguous proof that the velocity of money (V), which grows systematically with interest rates, means that maintaining a fixed money supply is insufficient to maintain a fixed nominal or real GDP. The Keynesians held that net export, taxes, and government spending all have a significant impact on prices and total demand. Additionally, Keynesian economists claimed that wages and prices are not flexible and that if they were, as monetarists contend, then overall output would be near to its potential. As a result, Keynesians think that fiscal policy, not monetary policy, has a stronger impact on economic activity. As a third group of economists arose with a justification for why these systematic policies (fiscal and monetary) were not likely to perform ideally (Ubi-Abai & Ekere 2018).

Savers-Spender
The Spenders-Savers Hypothesis Mankiw (2000) created the Savers-Spenders theory of fiscal policy, which Matsen et al. (2008) adopted. This theory was created to describe how fiscal policy behaves in the economy. Some propositions provide the foundation of the idea (Mankiw, 2000). The first idea focuses on how transitory tax adjustments can significantly impact consumer demand for products. According to this hypothesis, the higher take-home pay obtained by spenders will be countered by higher tax payments or by smaller tax refunds. The implication is that customers should understand their lifetime resources remained constant and should therefore set aside the additional take-home income to cover the increasing tax bill.

METHODOLOGY

This study focused on examining impact of fiscal policy and automatic stabilizers on manufacturing sector performance in Nigeria. The study adopted an ex post facto research design. Secondary on manufacturing sector performance in Nigeria from 1981-2022 was relied upon for analyses. The data was obtained from World Development Indicators (WDI). The ARDL estimation technique was used for estimation while E-views 12 statistical software was employed in computing the result.

The work of Israel (2019), where the followings were recorded, served as the basis for the model construct for this investigation.

IMS = f(GEX, CITR, FDDO)……………..…………………   eqn. (1)
Where:
IMS = Index of Manufacturing Sector, GEX = Government Expenditure, CITR = Company Income Tax Rate, FDDO = Federal Government Domestic Debt Outstanding.

Since the ARDL estimation technique is preferable when dealing with variables that are integrated of different orders, I(0), I(1), or a combination of the two, and robust when there is a single long run relationship between underlying variables in a relatively small sample size, the ARDL model specification was used in this study to demonstrate long-run relationships and dynamic interactions between fiscal policy, automatic stabilizers and manufacturing sector performance in Nigeria.

The ARDL bounds testing process consists of two parts. The first phase involves using OLS to test for long-term relationships, and the second involves using the unrestricted error correction model (UECM) to estimate short-term parameters. Through a straightforward linear transformation, a dynamic unconstrained error correction model (UECM) can be created from the ARDL bounds test. Without sacrificing any long-run knowledge, the UECM blends short-run dynamics with long-run equilibrium. As a result, the following is the ARDL-UECM specification in equation 3.2:

$\Delta(MOPT)_t = c_0 + \sum_{i=1}^{n} \phi_1 \Delta MOPT_{t-i} + \sum_{i=1}^{n} \phi_2 \Delta TGXP_{t-j} + \sum_{i=1}^{n} \phi_3 \Delta TXRV_{t-k} + \sum_{i=1}^{n} \phi_5 \Delta INFR_{t-m} + \sum_{i=1}^{n} \phi_6 \Delta GFCF_{t-1} + \delta_1 MOPT_{t-1} + \delta_2 TGXP_{t-1} + TXRV_{t-1} + \delta_4 GFCF_{t-1} + \delta_5 INFR_{t-1}$
……………………………   Eqn. 2

Where:
Log_MOPT= Natural Logarithm of Manufacturing Sector Output;
Log_LTGXP = Natural Logarithm of Total Government Expenditure
Log_TXRV = Natural Logarithm of Tax Revenue
Log_GFCF = Natural Logarithm of Gross Fixed Capital Formation
INFR = Inflation Rate
C_0 = Constant Variable or Intercept; Φ= Short Run Dynamic Coefficients of the Model's Convergence to Equilibrium; Δ = Long Run Dynamic Coefficients; $\mathcal{C}$ = Error Term

RESULTS

Table 1: Descriptive Analysis of fiscal policy and manufacturing sector output in Nigeria

	Log_MOPT	Log_GFCF	Log_TGXP	Log_TXRV	INFR
Std. Dev.	2.041511	1.884649	2.284722	2.480789	17.06283
Skewness	-0.292110	-0.264258	-0.415261	-0.488961	1.783591
Kurtosis	1.748049	1.674893	1.757839	1.753878	4.997668
Jarque-Bera	3.101625	3.307258	3.628187	4.077371	27.16262
Probability	0.212076	0.191354	0.162986	0.130200	0.000001

Source: Authors' compilation from EViews 12

The descriptive statistics in Table 1 revealed that manufacturing sector output (log_MOPT), total government expenditure (log_TGXP), taxation revenue (log_TXRV), and inflation rate (INFR) had the highest standard deviations in the series, with values of 2.041511, 2.284722, 2.480789, and 17.06283 respectively, while gross fixed capital formation (log_GFCF) had the lowest standard deviations, at 1.884649. While the skewness statistics value of INFR was positively skewed, indicating that its distribution have a long right tail, the calculated values for the skewness statistics values of Log_MOPT, Log_GFCF, Log_TGXP and Log_TXRV were negatively skewed, suggesting that their distributions have a long-left tail. These findings imply that the series has a unit root and is consequently non-stationary. The unit root test is therefore necessary because estimating these variables at level might not produce reliable results.

Unit Root Test
A unit root test was performed on the chosen time series data to assess whether they are stationary or non-stationary in level form, which then confirmed the validity of the time series data utilised for this study. The Augmented Dickey Fuller unit root test was used as the unit root test in this study. The ADF Test's results are shown below:

Table 2 Unit root test

Varaible	ADF(level)	5%critical Value	Adf1st Diff	5% critical Value	Remark
Log_MOPT	-1.569619	-2.948404	-3.495738	-2.951125	@I(1)
Log_TGXP	-0.423101	-3.536601	-7.708211	-3.536601	@I(1)
Log_TXRV	-1.289291	-2.941145	-6.200360	-2.943427	@I(1)
Log_GFCF	0.421573	-2.941145	-3.541330	-2.943427	@I(1)
INFR	-2.915636	-2.941145	-5.672638	-2.943427	@I(1)

Source: Researcher's compilation from Eviews 10 Regression Output 2023.

The stationarity test result on Table 2 showed that Log_MOPT, Log_TGXP, Log_GFCF, Log_TXRV and INFR were all stationary at first difference since their ADF Test statistics were greater than their tabulated ADF values at 5% level of significance. The application of unit root tests in autoregressive distributed lag (ARDL) technique is necessary in order to ensure that the variables are integrated of order one and none of the variables is integrated of order 2 because the computed F- statistic provided

by Pesaran MH and Y Shin (1995), are valid for only variables that are I(0) or I(1) and a combination of both. The outcome of the unit root test in Table 2 above indicated that the logged series for all the variables were integrated of order one. Therefore, the variables under study are of order of first difference and this justified the use of ARDL bounds test approach to co-integration over other conventional approaches that require the variables to be integrated of order 2.

Table 4: Result of ARDL bounds test for co-integration on the analysis of fiscal policy, automatic stabilizers and manufacturing sector performance in Nigeria

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	10.11512	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Researcher's compilation from Eviews 12

From the ARDL Bounds test and going by the decision rule of the Bounds Test, the study cannot accept the null hypothesis of no co-integration since the F-Bounds Statistic of 10.11512 was greater than the I (0) and I (1) bounds at 10%, 5% and 1% respectively, therefore we conclude that there exists a long run relationship among the variables.

Table 5: Result of ARDL short run error correction model for the analysis of fiscal policy, automatic stabilizers and manufacturing sector performance in Nigeria
Dependent Variable: Log_MOPT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.240850	2.926128	0.765807	0.4557
D(lnMOPT(-1))	0.495984	0.122330	4.054493	0.0010**
D(lnMOPT(-2))	0.476800	0.115909	4.113581	0.0009*
D(lnGFCF)	0.188790	0.103517	1.823747	0.0882
D(lnGFCF(-1))	-0.246021	0.102854	-2.391945	0.0303**
D(lnTGXP)	-0.025685	0.054637	-0.470095	0.6450
D(lnTGXP(-1))	-0.525570	0.084543	-6.216603	0.0000*
D(lnTGXP(-2))	-0.495833	0.089762	-5.523854	0.0001*
D(lnTGXP(-3))	-0.212424	0.066098	-3.213778	0.0058**
D(lnTXRV)	-0.033611	0.040017	-0.839929	0.4141
D(lnTXRV(-1))	0.278149	0.042142	6.600302	0.0000*
D(lnTXRV(-2))	0.114478	0.036981	3.095632	0.0074*
D(lnTXRV(-3))	0.092988	0.035526	2.617450	0.0194**
D(INFR)	0.006787	0.000866	7.834034	0.0000*
D(INFR(-1))	-0.002528	0.000853	-2.962858	0.0097**
ECM(-1)*	-0.757789	0.084240	-8.995609	0.0000*

Source: Researcher's Extract from Eviews 12 Output Package 2023
Key: * Significant at 1% level; ** Significant at 5% level

Constant (C): From the dynamic short regression result above, the coefficient of the constant term (C) was positive and insignificant and conformed to *a priori* expectation. The value of the constant term was 2.240850 and this showed that when other explanatory variables are held constant, Manufacturing Sector Output (MOPT) will increase by 2.240850 units.

Manufacturing Sector Output (Log_MOPT): The analysis of the short run coefficients of Manufacturing Sector Output showed that manufacturing sector output was positive in the first and second previous year lag period, increasing itself by 0.495984 units in the first-year lag and also in the previous two-year lag period increased itself by 0.476800 units on the average.

Gross Fixed Capital Formation (Log_GFCF): Analysis of the short run coefficient of gross capital formation had a positive coefficient in the current year, insignificantly increasing manufacturing sector

output at 0.188790 units at 5% level of significance while in the first-year lag, gross fixed capital formation had a negative and significant relationship with manufacturing sector out, decreasing manufacturing sector out at 0.246021 units on the average at 5% level of significance.

Total Government Expenditure (Log_TGXP): Analysis of the short run coefficient of total government expenditure had a negative coefficient of 0.025685 units in the current year, implying a negative relationship with manufacturing sector output in the current year and also statistically insignificant at 5% level of significance while in the previous year's lags of 1,2 and 3, total government expenditure had a negative and significant relationship with manufacturing sector output in Nigeria, decreasing the manufacturing sector by 0.525570, 0.495833 and 0.212424 units respectively.

Tax Revenue (Log_TXRV): Analysis of the short run coefficient of tax revenue had an insignificant negative relationship with manufacturing sector output in the current year while in the previous year's lags of 1,2 and 3, tax revenue had a positive and significant relationship with manufacturing sector output in Nigeria, thereby increasing manufacturing sector output at 0.278149, 0.114478 and 0.092988 units, respectively at 5% level of significance.

Error Correction Mechanism (ECM): The error correction mechanism met the required conditions. The significance and rule of the error correction mechanism to hold means that the value of the ECM must be negative and statistically significant error correction for any disequilibrium to be corrected. In light of this, the coefficient of the ECM is -0.7577889. The above result showed that the ECM (-1) value is -0.76%, implying that there is convergence of the equilibrium should there be a system disequilibrium. The negative sign of the coefficient satisfied one condition while the fact that its P-value [0.0000] is less than 5% [0.05] level of significance satisfied the second condition of statistical significance. The coefficient indicates that the speed of adjustment between the short run dynamics and the long run equilibrium is 76%. Thus, ECM will adequately act to correct any deviations of the short run dynamics to its long-run equilibrium by 76% annually. This means that if manufacturing sector output is at a disequilibrium, it converges back to equilibrium at an average speed of about 76% every year in Nigeria.

Table 6: Result of ARDL long run estimate on the analysis of fiscal policy, automatic stabilizers, and manufacturing sector performance in Nigeria

Dependent Variable: Log_MOPT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LGFCF	0.823863	0.167865	4.907900	0.0002*
LTGXP	0.744886	0.153262	4.860224	0.0002*
LTXRV	-0.503165	0.094405	-5.329880	0.0001*
INFR	0.007812	0.003699	2.112217	0.0518

Source: Researcher's Extract from Eviews 10 Output Package
Key: * Significant at 1% level; ** Significant at 5% level

Gross Fixed Capital Formation (Log_GFCF): The long run estimates of gross fixed capital formation had a positive relationship with manufacturing sector output (Log_MOPT) in the long run, increasing it significantly by 0.823863 units at 5% level of significance.

Total Government Expenditure (Log_TGXP): The long run estimates of total government expenditure had a positive relationship with manufacturing sector output in the long run, increasing it significantly by 0.744886 units at 5% level of significance.

Tax Revenue (Log_TXRV): The long run estimates of tax revenue had a negative relationship with manufacturing sector output in the long run, decreasing it significantly by 0.503165 units at 5% level of significance.

Heteroscedasticity Test

Heteroscedasticity in the error term affects the estimated coefficients of the regression model thereby distorting inference. In other to avoid this pitfall, the study carried out Breusch- Pagan-Godfrey Heteroscedasticity test check for heteroscedasticity in the error term entering the model. The result of the test is presented in the table below.

Table 7: Result of Heteroscedasticity Test for the analysis of fiscal policy, automatic stabilizers and the manufacturing sector performance in Nigeria

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.467394	Prob. F(19,15)	0.2277
Obs*R-squared	22.75667	Prob. Chi-Square (19)	0.2482
Scaled explained SS	3.702582	Prob. Chi-Square (19)	0.9999

Source: Researcher's Extract from Eviews 10 Output Package 2023

From the estimated Breusch -Godfrey heteroscedasticity test, the null hypothesis of no heteroscedasticity cannot be rejected as the p value from the Breusch- Pagan Godfrey test is 0.2482 indicating an acceptance of the null hypothesis of no heteroscedasticity.

Table 8: Result of Serial correlation for the Analysis of fiscal policy, automatic stabilizers, and manufacturing sector performance in Nigeria

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.164868	Prob. F(2,13)	0.3425
Obs*R-squared	5.319123	Prob. Chi-Square(2)	0.0700

Source: Researcher's Extract from Eviews 12 Output Package 2023

From the estimated Breusch-Godfrey Serial Correlation LM Test, the null hypothesis of Serial Correlation LM Test cannot be rejected as the p value from the Breusch- Pagan Godfrey test is 0.0700 units indicating an acceptance of the null hypothesis of no heteroscedasticity.

Stablity Test

The study shall employ the cusum and cusum squares to ascertain whether the model of the study is stable or not.
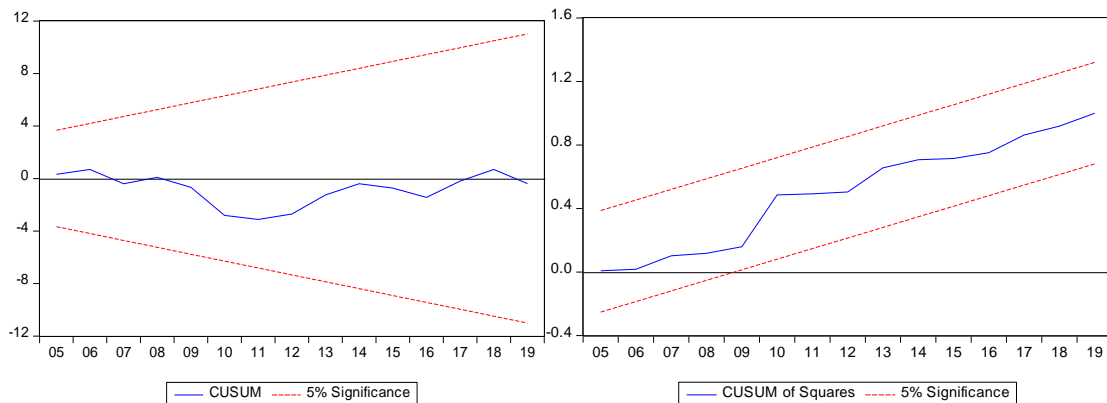
Based on the outcome of the cusum and cusum squares, the cusum curves lies in-between the acceptance region and this implies that the model is stable at 5% level of significance.

DISCUSSION OF FINDINGS

Effect of total government expenditure on manufacturing sector output in Nigeria
Total Government Expenditure (log_TGXP) was found to negatively contribute to the manufacturing sector performance in the short run while in the long run, it had a positive relationship with manufacturing sector performance. This result is not unexpected given that Nigerians do not equally invest in the nation by supplying it with public goods and services, which help the manufacturing sector. Government spending allows for the production of products and services or the acquisition of those that

are required to achieve the social and economic goals of the government. Government spending is significant because it provides subsidies to businesses that might require money for starting up or growing. The public sector is essential in providing the necessary support because the private sector is unable to meet such financial obligations. For instance, until the government invests in the industry, transit infrastructure projects do not draw private funding. This result backs with the conclusions reached by Ubesi, Ananwude, Cyracus, and Emmanuel (2020).

Effect of tax revenue on manufacturing sector performance in Nigeria
Tax revenue had a negative relationship with manufacturing sector output in the current year but significantly contributed to the growth of the manufacturing sector performance in the previous years. Because high taxes on the manufacturing sector would undoubtedly deter investment in that economy, which in turn affects manufacturing sector performance, low taxes promote the performance of the manufacturing sector. Governments would not be able to support their societies' needs without taxation. Taxes are essential because governments use the money they raise from them to fund social programmes. Taxes are used to provide basic and social amenities like roads, power, clean water, an efficient and affordable health system, and quality education, all of which have a significant positive impact on the manufacturing sector. Taxes are also used to pay the salaries of public employees and to buy security weapons to protect people and property. The results of this study corroborate those of Andabai (2019) and Ubesi, Ananwude, Cyracus, and Emmanuel (2020).

Effect of gross fixed capital formation on manufacturing sector performance in Nigeria
Gross fixed capital formation had a positive and insignificant relationship with manufacturing sector output in the current year at 5% level of significance and also had a significant negative relationship with manufacturing sector output in the previous year's lags. In essence, capital production increases the amount of money moving around the economy. The accumulation of capital goods leads to investment, which in turn leads to the production of more goods and services, which should increase population income and increase demand. As a result, the negative relationship between capital formation and manufacturing sector output in this study suggests that the manufacturing industries do not have adequate access to loans from deposit money banks for economic investment, and this work also supports Kenny's (2019) conclusion.

CONCLUSION, RECOMMENDATION AND POLICY IMPLICATION

This study used the ARDL estimation technique to investigate fiscal policy, automatic stabilizers and manufacturing sector performance in Nigeria for the period 1981-2022. From our findings, total government expenditure and tax revenue were significantly major contributors to manufacturing sector performance in Nigeria than gross fixed capital formation in Nigeria. The conclusion to be drawn from this study is that gross fixed capital formation has an insignificant economic effect on manufacturing sector performance in Nigeria in the presence of other internal and external macro-economic shocks. Nevertheless, to achieve a high and sustainable growth, we proffer some policy recommendations which when properly implemented will surely stimulate greater growth of output.

Based on our results obtained, the study recommends that expansionary policies on fiscal policy measures should be encouraged as they play vital in the growth of manufacturing sector output. Economic policies should be focused on diversifying the economy to enhance performance of manufacturing sector, so as to create more employment opportunities, because it may be a more effective way of reducing the level of unemployment and increasing the growth of the economy.

The study also recommends that government should increase and channel its spending to capital projects and social overheads that will encourage private sector investment. At the same time, prudency in their choice of projects cannot be overemphasized as tax rebates and holidays for those involved in the productive sector of the economy will increase contributions to economic development. There is need to redirect fiscal policy measures towards making Nigeria a producer nation through manufacturing sector which in turn would lead to economic growth and development.

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