

## AUTOMATIC STABILIZER AND MANUFACTURING OUTPUT IN NIGERIA

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### Abstract

*This research investigated the effects of automatic stabilizers on the output of the manufacturing sector in Nigeria from 1981 to 2021 with the objectives and research questions that guided the study. The specified model was estimated using the Autoregressive Distributive Lag Model to determine the level of impact that one variable has on the other. From the findings it is seen that total government expenditure (LTGXP) positively contributes to manufacturing sector performance (LMSP) in the long run than tax revenue (LTXRV) in Nigeria. The conclusion drawn from this study is that total government expenditure and gross fixed capital formation are determinants of manufacturing sector performance in Nigeria while tax revenue is a weak determinant of manufacturing sector performance in Nigeria in the presence of other internal and external macro-economic shocks. Based on our results, it is recommended that fiscal policy initiatives must be redirected to make Nigeria a producer nation through the manufacturing sector, which will contribute to economic growth and development.*

**Keywords:** Automatic Stabilizer, Manufacturing Sector, Government Expenditure, Fiscal Policy Initiatives

### INTRODUCTION

The means through which a government adjusts its level of expenditure to monitor and impact a nation's economy is known as fiscal policy which can also be called automatic stabilizer. It is used in conjunction with monetary policy, which is utilized by the central bank to influence the money supply in a country. These two policies are employed to help a country accomplish its macroeconomic objectives. Price stability, full employment, poverty reduction, strong and sustainable economic growth, a positive balance of payments, and debt reduction are among these objectives. Nigeria's economic and poverty-reduction potential has yet to be realized. The recent conduct of macroeconomics, particularly fiscal and monetary policy, has been a major restraint. This has led to rising inflation and decline in real incomes. National economic management became a Herculean task as the economy has to contend with volatility of revenue and expenditure. The widespread lack of fiscal discipline was further exacerbated by poor co-ordination of fiscal policy among the three tiers of government. Also, there is a weak revenue base arising from high-marginal tax rate with very narrow tax base, resulting in low tax compliance. As a result of these and other factors, serious macroeconomic imbalances have emerged in Nigeria. A review of these macroeconomic indices shows that inflation has accelerated to double-digit levels in 2000 and 2001. It increased from 6.94 to 18.87, respectively. This double-digit inflation continued up to 2005, and decreased to single digit in 2006 and 2007. In 2008, the inflation rate reverted to double digit (11.58) and continued to increase, and in 2010, it was 13.72% (International Monetary Fund (IMF), 2011). Unemployment is a major political and

economic issue in most countries. In Nigeria, the years of corruption, civil war, military rule, and mismanagement have hindered economic growth of the country. Nigeria is endowed with diverse and huge resources both human and material. However, years of negligence and adverse policies have led to the under-utilization of these resources (Economic Watch, 2010), and this has contributed to the increasing unemployment rate in Nigeria. In 2000, the unemployment rate was 13.1%, and 21.10% in 2010. On the average, there has been an upward trend (CBN, 2005, 2006, 2009; Nigerian Bureau of Statistics, 2010). The use of government revenues and expenditures to influence macroeconomic variables developed as a result of the Great Depression when the previous laissez-faire approach to economic management became discredited. Fiscal policy is based on the theories of the British economist John Maynard Keynes, whose Keynesian economics indicated that government changes in the levels of taxation and government spending influences aggregate demand and the level of economic activity. Fiscal and monetary policies are the key strategies used by a country's government and central bank to advance its economic objectives. The combination of these policies enables these authorities to target the inflation (which is considered "healthy" at the level in the range of 2% to 3% and to increase employment. Additionally, it is designed to try to keep economic growth at 2% to 3% and the unemployment rate near the natural unemployment rate of 4% to 5%. This implies that fiscal policy is used to stabilize the economy over the course of the business cycle.

Fiscal Policy as a tool of macroeconomic management used by the government to control the economy via its revenue and expenditure portfolios is an important concept in economics. The revenue portfolio consists of components like tax revenue, trade surplus, and foreign aid, while the expenditure portfolio consists of recurrent and capital expenditure. In other words, fiscal policy is the government's deliberate actions towards spending money and for levying taxes aimed at influencing macro-economic variables so as to achieve desired macroeconomic objectives. The relationship between fiscal policy and economic growth has been discussed extensively in the literature using empirical analysis.

According to Tanzi and Zee (2017), there are three cardinal indicators of fiscal policy government expenditure, taxes, and deficits. There have been macroeconomic imbalances of varying degrees in Nigeria. Inappropriate public expenditure and revenue policies, a large deficit in the public sector have been identified by experts as responsible for the macroeconomic disequilibrium (Ajisafe and Folorunso, 2015). Evidence reveals that there was a substantial increase in government spending, primary deficit and debt in Nigeria between 1991 and 2005 (CBN Statistical Bulletin, 2012). This was a result of the oil windfall between 1991 and 1992 which was followed by rapid growth in government spending with an average of about 21 percent of GDP during that period. However, as the oil market weakened in subsequent years, oil receipts were not adequate to meet increasing levels of demands and expenditures as being reinforced by political pressures. Although the democratically-elected government in 1999 adopted policies to restore fiscal discipline, the rapid monetization of foreign exchange earnings between 2000 and 2004 and another era of oil windfall resulted in large increases in government spending. In 2005 alone, the government spending alone increased to 19 percent of GDP from 14 percent in 2000, extraordinary budgetary outlays not initially included in the budget increased (CBN Statistical Bulletin, 2012). The growth and development of the Nigerian economy have not been stable over the years. As a result, the country's economy has witnessed so many shocks and disturbances both internally and externally over the decades. Internally, the unstable investment and consumption patterns, as well as the improper implementation of public

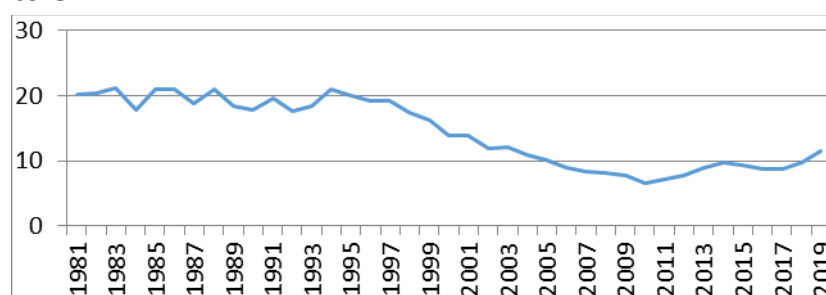
policies, changes in future expectations, and the accelerator, are some of the factors responsible for it. Similarly, the external factors identified are wars, revolutions, population growth rates and migration, technological transfer and changes, as well as the openness of the country's economy are some of the factors responsible. Fiscal policy is a major economic stabilization weapon that involves measures taken to regulate and control the volume, cost, and availability, as well as direction of money in an economy to achieve some specified macroeconomic policy objective and to counteract undesirable trends in the Nigerian economy (Gbosi, 2016). Therefore, economic stabilization cannot be left to the market forces of demand and supply and as well, other instruments of stabilization such as monetary and exchange rate policies among others, are used to counteract the problems identified (Ndiyo and Udah, 2013). This may include either an increase or a decrease in taxes, government expenditures, as well as public debt which constitute the bedrock of fiscal policy but in reality, government policy requires a mixture of both fiscal and monetary policy instruments to stabilize an economy because none of these single instruments can cure all the problems in an economy (Ndiyo and Udah, 2013). Advocates of government intervention in economic activity maintain that such intervention can spur long term growth. They cite the government's role in ensuring efficiency in resource allocation, regulation of markets, stabilization of the economy, and harmonization of social conflicts as some of the ways in which government could facilitate economic growth. In the context of endogenous growth, government role in promoting accumulation of knowledge, research, and development, productive public investment, human capital development, law, and order can generate growth both in the short and long run (Osuala and Jones, (2014), Success, Success and Ifurueze, (2012), Okafor, (2012), Rena, R. (2011)). Opponents hold the view that government operations are inherently bureaucratic and inefficient and therefore stifle rather than promote growth. It seems then that as to whether the government's fiscal policy stimulates or stifles growth remains an empirical question. Even so, the existing empirical findings are mixed, with some researchers finding the relationship between fiscal policy and growth positive, negative, or indeterminate. Nations the world over devise comprehensive strategies directed towards the attainment of distinctive national goals. The transformation agenda of the present government is one such step. Nigeria has always witnessed well-articulated economic and social reforms intended to launch the nation on the path of meaningful development, (Abdul-Rahamoh, Taiwo and Adejare, 2013). The problem with past governments in Nigeria has always been non-achieving of the required results. However, results can only be achieved when the vision is clear to all, the goals are broken down into simple manageable success milestones and responsibility delegated on the basis of competence and result periodically reviewed and laced with the implementable fiscal policy framework, (Babalola and Aminu, 2011). The transformation Agenda is achievable only if we can break from the past and chart a new course in the implementation process more especially as it concerns fiscal policy management. We must realize that the primary goal of governance is to ensure that the services of a state are properly harnessed towards achieving an optimal quality of life for the people derived from the most feasible outcome of real gross domestic products' measurement in Nigeria otherwise called good economy.

Higher government expenditure finance with borrowing may or may not contribute positively to the overall performance of the economy. For instance, if the government increases borrowing in order to finance its expenditure, it will compete (crowds-out) away from the private sector, thus reducing private investment or it may spend the substantive amount on servicing its existing liabilities that can otherwise be used for investment.

Furthermore, in a bid to score cheap popularity and ensure that they continue to remain in power, politicians and government officials sometimes increase expenditure and investment in unproductive projects or in goods that the private sector can produce more efficiently. Thus, government activity sometimes produces misallocation of resources and impedes the growth of national output. In such cases, unfortunately, rising public debt for ever-mounting public expenditure will not be translated into meaningful growth and development.

Since it is universally accepted by all that Nigeria's manufacturing sector is doing well, the risks being perceived must be going away, our concerns about the sector are easily dispelled. The poor performance of the manufacturing sector is almost entirely attributable to weak infrastructural conditions, particularly inadequate power supply and good road and transportation infrastructure, excess tax and high company income tax, poor credit allocation. There is also risk of inconstancy in global economic fundamentals such as the threat of inflation and fluctuation of exchange rates in the secondary markets. As in the past, the government has undertaken numerous manufacturing policies, job increases, manufacturing capacity is now being bolstered, and current policies are benefiting from the expansion of the market has also helped the increase in distribution. Despite its frighteningly low expectations, this sector disappointingly meets demand. According to Afolabi and Laseinde (2019) modern manufacturing processes lead to the implementation of managerial and entrepreneurial skills, as well as high-technology developments that often result in increased productivity and better living conditions on a large scale. But in Nigeria, instead of the manufacturing sector output to be increasing and translating to positive shocks to economic growth, it declines as a result of dependence in oil sector and negligence of the sector. Despite the country's abundant natural resources, the World Bank reports that a larger proportion of Nigerians live in abject poverty, earning less than \$2 per day as Nigeria is ranked 161th out of 186 countries in the Human Development Index (HDI), and among the poorest economy. The nation's economy is plagued by the nature of its economic system, which is based on a monoculture economy and gross underutilization of natural resources.

**Figure 1: Trend Movement of Manufacturing Sector Performance Percentage Contribution to GDP**



*Source: Researcher's compilation*

The economy has been plagued by a slew of issues, including excessive reliance on imports for consumption and input materials, deterioration of socioeconomic infrastructure, capacity underutilization in the industrial sector, weak management strategies and institutional framework, and neglect of the agricultural sector, which was once the backbone of the Nigerian economy.

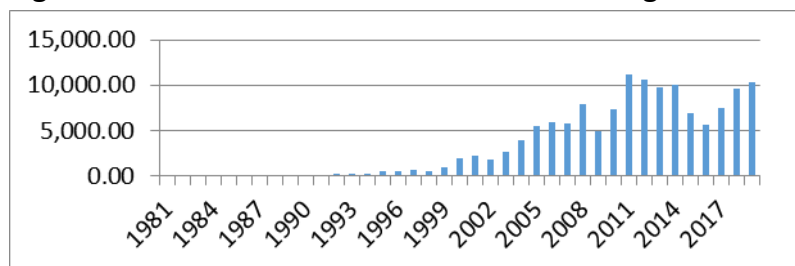
As observed from the graph in fig 1, from 1981 to 1994, there was a steady intercept movement of the percentage contribution of the manufacturing sector to economic growth

going by the 20.26 percent to 20.92 percent which showed a significant contribution to GDP where this steady growth was met with a sharp intercept downtrend movement from 1995 to date showing evidence of the poor performance of the manufacturing sector contribution to GDP of Nigeria.

In Nigeria, taxation is used as a major fiscal policy tool for the attainment of macroeconomic objective and to influence the workings of the economic system in order to achieve specific economic goals and desired level of investment needed for economic growth and development. Tax is been the primary source of government revenue besides oil has posed a lot of problem of the development of the industrial sector. As the government taxes earnings from investment, it becomes a problem for the firm to raise adequate resources in the capital market. When retained profits are taxed, firms fail to depend on their internal resources for expansion, but resort to borrowing if they can obtain such loans. Thus, the total capacity to invest is likely to decrease.

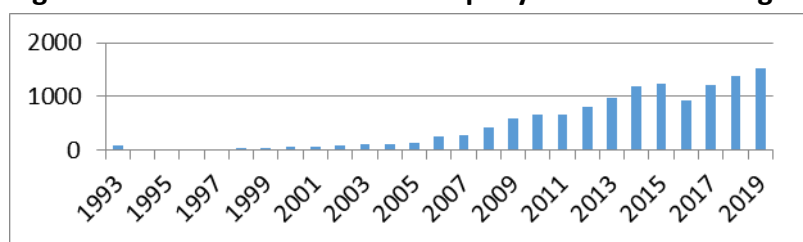
In pursuit of the achievement of economic goal set, government introduces a number of incentives in the annual budget. These investments in certain preferred sectors of the economy and which are sometimes geared toward attracting inflow of foreign exchange to complement domestic supplies for rapid development. Tax concession have therefore been given to pioneer or newly established industries for a number of years, in the form of tax exemption, reduction of tax rate, reduction of import duty on imported raw materials.

**Figure 2: Trend Movement of Tax Revenue in Nigeria**



Source: Researcher's Compilation 2021

**Figure 3: Trend Movement of Company Income Tax in Nigeria**



Source: Researcher's Compilation 2021

Taxation as a major tool of fiscal policy is a big player and determinants for the growth and performance of the industrial sector that is for the manufacturing firms due to increased taxation that is company income tax for the Small and Medium Scale Enterprises (SMEs) can either boost the performance of the sector or induce decline in their productive capacities. Taxation as a the main source of government revenue forms the part of government spending on public goods such as adequate infrastructure such as construction of roads, steady power supply, public parks, hospitals and good telecommunication together with other basic social amenities which in turn creates a good investment atmosphere for the manufacturing sector.

Increased taxes implies increase tax revenue, whereby when the tax payers pays their taxes, government revenue increases which in turn ceteris paribus should translates to increase in government spending in strategic sectors of the economy which brings about economic prosperity. Taking a look at fig 2 and 3 above, it is unfortunate that the increase in Company Income Tax (CIT) which bring about 30% increase in total revenue over the years, has not translated into any meaningful progress in the manufacturing which can be attributed to mismanagement and corruption. For instance from 1994 to present, company income tax (CIT) and Tax Revenue has been on steady increase whereby the small and medium scales (SMES) contributed as much as 46.2 billion naira in 1999, 68.1 billion naira in 2001, 1229.02 billion in 2015 and rising to its peak in 2019 with an absolute value of 1517.51 billion naira whereby this increase reflected in the Tax Revenue values for instance also, in 1999, tax revenue averaged around 949.19 billion naira, 2,231.60 billion in 2001, 6,915.50 billion in 2015 and 10,262.30 billion in 2019, all values in Nigerian naira respectively. As a result, the possibly negative economic implications of high taxes on small medium enterprises (SMEs), as well as gradual instability in the country's economic activities, would lead to periodic increases in unemployment and inflation rates, as well as global economic instabilities; and these factors are highly asserted as being able to take a strong stance against any developing economy (Ogu, 2020). As a result of the aforementioned problem, it is essential to conduct academic investigation on the effect of automatic stabilizers and macroeconomic determinants on manufacturing sector output in Nigeria.

## **LITERATURE REVIEW**

### **Conceptual Review**

Automatic stabilizers are a type of fiscal policy designed to offset fluctuations in a nation's economic activity through their normal operation without additional, timely authorization by the government or policymakers. The best known automatic stabilizers are progressively graduated corporate and personal income taxes, and transfer systems such as unemployment insurance and welfare. Automatic stabilizers are called this because they act to stabilize economic cycles and are automatically triggered without additional government action (Potter, 2021). In the sense that when incomes are high, tax liabilities rise and eligibility for government benefits falls, without any change in the tax code or other legislation. Conversely, when incomes slip, tax liabilities drop and more families become eligible for government transfer programs, such as food stamps and unemployment insurance that help buttress their income. Automatic stabilizers are quantitatively important at the federal level.

Auerbach, Alan, and Daniel (2000) opined that reduced income and payroll tax collection offset about 8 percent of any decline in gross domestic product (GDP). Additional stabilization from unemployment insurance, although smaller than that from the tax system, is estimated to be eight times as effective per dollar of lost revenue because more of the money is spent rather than saved.

Altogether, Russek, Frank, and Kim (2016) estimated that if transfer payments were reduced in size by 0.6 percent of GDP, nation's output and hours worked would be about 6 and 9 percent more volatile, respectively.

Automatic stabilizers also arise in the tax and transfer systems of state and local governments. However, state constitutions generally require balanced budgets, which can force countervailing changes in outlays and tax rules. These requirements do not force

complete balance annually: they generally focus on budget projections rather than realizations, so deficits can still occur when economic conditions are unexpectedly weak. In addition, many governments have "rainy day" funds they can draw down during periods of budget stringency. Even so, most state and local governments respond to an economic slowdown by legislating lower spending or higher taxes. These actions are contractionary, working at cross-purposes with automatic stabilizers.

The concept of government spending arises from the thinking that expenditures undertaken by the government is public. Government expenditures are also called public sector spending or government purchases. Government expenditure has been growing over the years and is very large. Government expenditures can be disaggregated or classified into subheadings, such as recurrent expenditures and capital expenditures. The recurrent expenditures are expenditures or purchases of stationeries, wages and salaries of workers, fuel, electricity bills and other bills, etc. Capital expenditures are constructions undertaken by the government on roads, bridges, health centers, military installations and hardware, etc. (Ukwueze, 2014).

Robert (1994), opined that government spending or expenditure includes all government consumption, investment, and transfer payments. In national income accounting the acquisition by governments of goods and services for current use, to directly satisfy the individual or collective needs of the community, is classed as government final consumption expenditure).

According to Taiwo (2012), government's spending is a fiscal instrument which serves a useful role in the process of controlling inflation, unemployment, depression, balance of payment equilibrium and foreign exchange rate stability. In the period of depression and unemployment, government spending causes aggregate demand to rise and production and supply of goods and services follow the same direction.

Government acquisition of goods and services intended to create future benefits, such as infrastructure investment or research spending, is classed as government investment (government gross capital formation). These two types of government spending, on final consumption and on gross capital formation, together constitute one of the major components of gross domestic product. Government spending can be financed by government borrowing, or taxes. Changes in government spending are a major component of fiscal policy used to stabilize the macroeconomic business cycle.

Social scientists maintain that there is a social contract between the people and the government, whereby the former accept to forget some of their fundamental rights and also make certain contributions in return for the provision of common services by the latter (Alasan, 2003). These common services include the maintenance of internal and external security, provision of health and educational facilities, roads, electricity, communication networks and so on.

The provision of the aforementioned services is aimed at increasing the welfare of the people subject to the availability of resources. To enable the government carry out these welfare services or responsibilities, it is imperative that adequate finances be raised. One of the means through which such funds are raised by government is taxation.

Ebiringa and Umah (2012) taxation as a fiscal policy tool is a compulsory levy by the government on individuals, companies, goods and services to raise revenue for its operations and to promote social equity through the redistribution of income effect of

taxation. In line with this frame of thought, taxation is a source of government revenue by which individuals and cooperate bodies are mandatorily required to pay certain proportion of their earnings to the government for the course of development.

Etim, Mbobo, Ihenyen and Ekanem (2020) stated that tax is the transfer of payments from the private sector and public sector employees to the public sector. It constitutes the principal source of revenue to finance government expenditure and also acts as an instrument of fiscal policy. It is „an amount of money paid to the government, usually a percentage (%) of personal income or company profits“. Thus, a good tax has some specific features such as: (i) it is a payment made by tax payer to the government, which is used for the benefit of all citizens; (ii) it is a compulsory contribution imposed by the government on the residents of a country, hence, it is an offence to evade payment, (iii) it is not imposed in return for an equivalent service to the tax payer. This implies that tax payers cannot claim or demand for something equivalent to the tax paid (*quid pro quo*) from the government.

Ogbonna and Odoemelam (2015) opined that taxation is the act of laying a tax, that is the process by which a local, state and central government, through its law-making body, raise revenue to defray the necessary expenses of the government.

According to Anyanwu (1997) as cited in Ogbonna and Odoemelam (2015), taxation can be defined as the compulsory transfer or payment (or occasionally of goods and services) from private individuals or groups to the government. The purpose and importance of taxation is to raise funds with which to promote the general welfare and protection of its citizens, and to enable it to finance its multifarious activities and to redistribute wealth and management of the economy (Jhingan 2004, Bhartia, 2009; Ola (2001) cited in Ogbonna and Ebimobowei, 2012). Tax is that enforced proportional contributions from persons and property levied by the law-making body of the state for the support of the government and all private needs. Roja (2011) in his article titled *The True Nature of Taxation* narrated that nobody likes paying their taxes. However, as the adage about “death and taxes” conveys, there is a sense that taxes are as legitimate and as inevitable as death itself. Tax is a lawful and inevitable levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic wellbeing of the society (Appah and Oyandonghan, 2011, Appah, 2004).

As the Economic Bulletin for Asia and the Far East cited in Jhingan (2002) stated that “Taxation, therefore remains as the only effective instrument for reducing private consumption and investment, and transferring resources to the government for economic development: Jhingan (2002);

Anyanwu (1993) cited in Ogbonna and Odoemelam (2015) pointed out several objectives of taxation. These are:

- To put a curb on consumption and thus transfer resources from consumption to investment.
- To raise revenue for government.
- To reduces economic inequalities.
- To control income and employment

Nzoha (2002) cited in Ogbonna and Ebimobowei (2012) and Patonov and Stuiolova (2012) noted that taxes have allocation function, distributional and stabilization functions. In Nigeria taxes are not necessarily earmarked to those expenditures most conducive to economic growth, either because of political “inefficiencies” or because of redistribution



policies that may yield benefit for society but will not be reflected in robust GDP growth rates (Atkinson, 1985) The truth is that in Nigeria taxes are not earmarked to boost economic development because of corruption and other factors that affect the role of taxation as argued by Nwezeaku (2005). He stated that the scope of these functions depends, among other things, to the political will and economic orientation of the people, their needs and aspirations as well as their willingness to pay tax.

Ogbonna and Ebimobowei (2012) added thus the extent to which a government can perform its functions depend largely on the ability to design tax plans and administration as well as willingness and patriotism of the governed. The level of willingness and patriotism of the governed anchored on the political will power of the government to fight corruption and embark on expenditures that will boost the economy.

Taxes remain the most sustainable and reliable source of public revenue of any modern state. According to Adeniyi and Adedapo (2020), tax revenues account for more than 80% of total government revenue in about half of the countries in the world and more than 50% in almost every country.

In Nigeria, the search for a sustainable source of public finance has brought taxation to the forefront of public discourse and attention. This is further reinforced by dwindling oil revenue which has led to increasing reliance on debt as a way of financing the country's annual budget. In this regard, the International Monetary Fund has maintained that borrowing to shore up revenue is not sustainable. The Minister of Finance has corroborated this with continuous calls to ramp up domestic resource mobilization with a focus on taxation.

This article examines the tax profile of Nigeria as well as some of the factors limiting tax revenue mobilization. In addition, the authors draw lessons from other countries, and ongoing efforts of the Nigerian government with respect to tax revenue mobilization, to highlight key areas where the government and taxpayers can collaborate to further boost tax revenue for the benefit of the country.

## **Theoretical Literature Review**

### ***Keynesian Theory***

The Keynesians, by contrast, held that the world is complex. They agreed that money has relevant effect on aggregate demand, output and prices. However, they argued that money is not the only factor that matters; other factors matter too. They points to conclusive evidence that the velocity of money ( $V$ ) rises systematically with interest rates, so keeping money supply constant is not enough to keep nominal or real GDP constant. The Keynesians believed that government expenditures, taxes, and net export have important effects on aggregate demand and prices. Also, Keynesian economists insisted that price and wage are not flexible; and that if prices and wages are relatively flexible, as monetarists believe, then output will generally be close to its potential. Hence, Keynesians believe that fiscal policy rather than monetary policy exerts dominant influence on economic activities. The debate did not end as the third group of economists emerged with a reason why these systematic policies (fiscal and monetary) were not likely to function optimally (Ubi-Abai and Ekere 2018)

### ***Managerial Theory of Firms***

Managerial Theory of Firms Managerial theory of firm was developed by Bumole in the year 1967 in his book called business behavior, value and growth and as well used by

Sangosanya (2011). This theory is based on the complex nature of the modern manufacturing sector. The theory states that the reason why managers are hired is for revenue maximization and not for profit maximization. This theory believes that for the economy to grow faster through industrialization, the country needs to increase its public expenditure so as to facilitate the developmental processes of their economies. The theory emphasizes that a firm's decisions whether to grow or not depends on the level of fiscal policy because the firm grows through government expenditure on industrialization. This is the theory of which this research is based.

### ***Harrod-Domar Growth Model***

In economic literature, this model is called capital only model. Harrod (1948) took over from Rostow, because Rostow had some unanswered questions. The model stated that saving is a certain proportion of national income and net investment is defined as the change in capital stock (K). The model further assumes that there is some direct relationship between the size of the capital stock, (K), and total GNP, (Y). This follows that any addition to the capital stock in the form of new investment will bring about corresponding increase in the flow of national output, GNP. This relationship is known in economics as the capital output ratio. If the capital-output ratio is defined as  $k$  and assumes further that the national savings ratio,  $s$ , is a fixed proportion of national output (e.g. 6%) and that total new investment is determined by the level of total savings.

### ***Public Expenditure Theory***

The public sector has a role to play in society to ensure the smooth running of economic activities. Also, the goals of government are sometimes numerous and have several stakeholders involved. Therefore, to avoid chaos, efficiency and equity should guide public spending (Hindrizia & Myles, 2005; Samuelson, 1955). Hindrizia and Myles (2005) explain that efficiency concerns the smooth running of public activities. Efficiency has to do with the coordination, collection and monitoring of government revenue and expenditure towards the provision of services to the stakeholders. Equity is about the fair sharing of public gains among stakeholders. The applicable public expenditure theory in this study is based on Wagner's law, known as the law of increasing state spending. Wagner's law was formulated by Adolph Wagner (1835–1917). The theory states that for any country, public expenditure constantly rises as income growth expands.

According to Magazzino, Giolli, and Mele (2015), Wagner's law stipulates that in the process of economic development, the share of the public sector in GDP has been increasing over time. Cosimo, Lorenzo, and Marco (2015) explain that the law is premised on four principles, as follows: that growth results in increased complexity because there are new and continuing increases in public expenditure; that public expenditure increases result in urbanization and externalities; that the goods supplied by the public sector should have a huge income elasticity of demand; and that growth results in an increase in demand with a resultant increase in public expenditure. This study expects that if growth in expenditure matches economic growth, then it should also translate into economic development; however, this has not been the case in reality in developing nations like Nigeria because sometimes there are elements of fiscal illusion in government activities.

### ***Fiscal Illusion Theory***

The theory of fiscal illusion originates from the work of Puviani (1903) as cited in Mourao, (2008) and with additional impetus from Buchanan (1967). Fiscal illusion is about the misperception of fiscal parameters. According to Oates (1985), fiscal illusion implies

persistent views and biases about public budgetary decisions in any direction based on imperfect information.

Afonso (2014) argues that the benefits of government programs appear to be remote and unrecognized by citizens, while citizens feel more directly the impact of sources of financing the budget, such as taxes. The essence of the theory is to expose the fact that sometimes the real program of government is concealed to accommodate unnecessary spending. This theory is relevant to this study because the real benefits of infrastructure spending may not necessarily translate into economic growth in the same expectation because of the element of illusion in the system.

Oates (1985) argues that the misconception of fiscal parameters could considerably distort economic choices. This study explains the findings based on this theory as an opportunity to show the direction of fiscal illusion in the cost and benefits analysis of government spending on infrastructure towards the ideology of economic growth.

### **Empirical Review**

The research looked at some related empirical literature on effect of automatic stabilizers and macroeconomic determinants on manufacturing sector output in Nigeria.

Etim, Mboobo, Ihenyen and Ekanem (2020) investigated the relationship between taxation and manufacturing output in Nigeria from 1985 to 2018. This is premise on the argument taxation causes disincentive to investment and entrepreneurship. Data were gathered from the published reports of the Central Bank of Nigeria, Federal Inland Revenue Service and National Bureau of Statistics covering the period of the study; ex-post facto research design was adopted. Collected data on manufacturing output, companies' income tax, personal income tax, and value added tax and petroleum profit tax were analyzed using ordinary least square technique. The results show the t-statistics (CIT = -0.9025, PIT = 3.4047; VAT = - 0.2090; PPT = 1.9113) and p-values (CIT = 0.3775; PIT = 0.0028; VAT = 0.8366; PPT = 0.0701) implying CIT and VAT not statistically significant while PIT and PPT were statistically significant with positive relationship with manufacturing out affirming the theoretical conception that companies' income tax discourage entrepreneurship.

Ubesie, Ananwude, Cyracus, and Emmanuel (2020), examined the potential of fiscal policy to stimulate manufacturing sector performance in Nigeria. Ordinary Least Square (OLS) estimation technique was employed, while the effect of estimation was carried out using the Granger causality test based on the data from the Central Bank of Nigeria (CBN) and Federal Inland Revenue Service (FIRS) for the period of 1986 to 2019.

Falade (2020), explored the differential effects of fiscal policy variables on the performance of the key sectors of the economy namely; industrial, agricultural, and service sectors using an Autoregressive Distributive Lag (ARDL) and Error Correction Model (ECM) between 1970 and 2018. Obtained results indicated that while both domestic and foreign debts have no significant effects on the three sectors examined in the short run, it was observed that foreign debt and government consumption expenditure have incremental effects on the industrial sector's output.

Callistus and Paschal (2020), examined the impact of taxation on industrial performance in Nigeria, from 1981 to 2018. Data were obtained from Central Bank of Nigeria (CBN) statistical Bulletin, Annual Report and Statement of Account for the year 2018 and WDI 2018 and fitted into a single linear model in which industrial performance is proxy by industrial output was the dependent variable and company income tax, petroleum profit

tax, customs and excise duty tax, and manufacturing capacity utilization, served as the independent variables.

Yinka and Omosola (2020), investigated the impact of oil shocks on manufacturing output in Nigeria via fiscal variables using annual data from 1981 to 2019 which is sourced from Central Bank of Nigeria (CBN). We found that government revenue is explained by oil price in both short- and long-run while expenditure explains revenue in the long-run, though very weak. This is an indication that spending by government can further generate more revenue in the long-run. We equally found that government expenditure is not explained by its revenue which could suggest that it is financed largely by other means like borrowing. In Addition, variations in price level is weakly explained by expenditure- indicating the import-generating nature of inflation in Nigeria.

Jeff-Anyeneh, Ezu, and Ananwude (2019), assessed the long and short-run elements between government consumption and industrial development in Nigeria from 1981 to 2016 with the SEE to assessing how industrial development has been affected by the variety in government spending. The Autoregressive Distributive Lag (ARDL) was the method connected. They found with daunting that government consumption has not emphatically influenced industrial development in Nigeria both in the long and short-run despite of the persistent rise in government consumption and different approaches of the government towards making strides manufacturing activities in Nigeria.

Victoria (2019), examined the determinants of manufacturing sector performance and its contribution to gross domestic product in Nigeria using a time series data from 1981 to 2015 using Johansen Co-integration and the Vector Error Correction Model. The study found that while labor force, gross fixed capital formation and exchange rate showed a positive long run relationship with the manufacturing value added, the average manufacturing capacity utilization, lending interest rate and government expenditure showed a long run negative relationship. The study recommends that policies should be geared towards making the exchange rate, lending interest rate and government capital expenditure more favorable and productive in the manufacturing sector.

Ubi and Daniel (2019), Evaluating the effect of policies The study analyzed the effects of fiscal and monetary policies on economic growth in a panel of 47 sub-Saharan African economies from 1996 to 2016, using descriptive analysis, the econometric techniques of dynamic panel General Method of Moment and the Dumitrescu-Hurlin causality; the scaling quantity analysis inclusive. The study traced the debate from the Keynesians to the Monetarist. The findings showed that fiscal and monetary policies affected economic growth positively in the sub-region. Moreover, fiscal policy has a greater scale effect in enhancing economic growth in sub-Saharan Africa.

Ewubare and Ozo-Eson (2019) evaluated the impact of tax assessment on the output of the manufacturing sector in Nigeria for the period 1980-2017. The variables passed through the unit root test, Johansen co-integration test, and the parsimonious error correction model. The coefficient of corporate tax appeared that a rate increment in corporate tax will increment the output of the manufacturing sector by 0.028585%. Moreover, a rate increment petroleum tax will increment the output of the manufacturing sector by 0.023040%. But the coefficient of value added tax appeared that a rate increment in value added tax will cause a comparing depreciation in the output of the manufacturing sector by 0.010024%.

Afolabi and Laseinde (2019) examined the impact of manufacturing Sector Performance and Economic Growth in Nigeria from 1981 to 2016. The study employed secondary data sourced from the Central Bank of Nigeria statistical bulletin for Autoregressive Distributed Lag (ARDL) model and the Granger causality techniques. Evidence of long-run and short-run relationships among the variables was established.

Andabai (2019) studied the causality between tax collection and manufacturing sector development in Nigeria from 1990-2018. The dependent variable was the output of the manufacturing sector, whereas inflationary rate, value-added tax, and tax from petroleum products were used explanatory variables. The result of the study unveiled that there is a long-run relationship between the variables of interest.

Aziz and Sharifuddin (2019) found out the impact of distinctive sorts of government motivations on the performance of SMEs within the Malaysian food manufacturing sector. The study was conducted utilizing Structure, Conduct, and Performance (SCP) criteria on auxiliary information from 140 companies for years (2013 – 2017). The study found that financial and tax incentives gave distinctive impacts on the performance of SMEs within the Malaysian food manufacturing sector. Tax incentives appeared a solid critical positive relationship with market share and a weak significant positive relationship with capital intensity, return on assets, and return on sales.

Oladipo, Iyoha, Fakile, Asaleye, and Eluyela (2019) assessed the impacts of taxes paid by companies and value-added charges on manufacturing output in Nigeria utilizing Autoregressive Distributed Lags. The long-run result uncovered that there is a positive relationship between corporate tax and manufacturing output, whereas value-added charge uncovers a negative relationship with manufacturing output. In the short-run, the result appeared that corporate tax is not factually significant at a 5% significant level.

Adefeso (2018) dissected the impact of Government Company's income tax on the performance of 54 quoted companies that cut across 17 categories of non-financial service firms in Nigeria for 1990-2002. Utilizing Generalized Method of Moment (GMM) and opposite to the desire, the study found a positive relationship between companies' income tax and the output of listed firms in the manufacturing sector.

Elom-Obed, Odo, Elom-Obed and Anoke (2017), examined the effect of public debt and economic growth, their study empirically analyzed the relationship between public debt and economic growth in Nigeria from 1980-2015. The study adopted Vector Error Correction Model (VECM) approach of econometric data analysis. The variables used in the study include real gross domestic product (RGDP), foreign debt, domestic debt and domestic private savings. The results of the study indicated that: (i) External debt have significant negative impact on economic growth within the period under study. (ii) Domestic debt (DMD) has significant negative relationship with economic growth within the period under consideration. (iii) External debt and domestic debt granger cause RGDP in Nigeria with causality running from external debt and domestic debt to RGDP. The implication of this result is that the negative correlation between debt stocks (external debt and domestic debt) and economic growth which is contrary to aprior expectation may be highlighting the misappropriation and wrong application (corrupt practices) of the borrowed funds. Based their findings, the study recommended therefore that (i) Government should reduce external debt and the ones obtained should be strictly used for purposes intended to ensure positive effect. (ii) Government should cut down on domestic borrowing and ensure that the already borrowed.

Oladele and Agbaja (2017) examined the impact of corporate taxes on performance of selected companies quoted on the Nigerian Stock Exchange (NSE) in Nigeria. Secondary data obtained from the annual reports of fifteen selected manufacturing companies listed on the NSE, covering six years 2010-2015, from fact-book. Data sourced were analyzed using Correlation and Regression analysis; with the aid of E-view econometrics package. Study confirmed existence of significant relationship between corporate tax and performance of manufacturing companies in Nigeria. Also, a high corporate tax rate could impair profits; thereby distorting investment decision. It is recommended that, more incentives be given to manufacturing companies especially during this era of campaign for use of made in Nigeria goods. Government should try as much as possible to strike balance between objective of aggressive tax mobilization and creating enabling environment for emerging businesses in Nigeria. Doing this, will quicken firms' growth and will pay higher taxes in the long run

Bakare and Osobase (2015), examined the impact of monetary and fiscal policies (i.e. stabilization policies) on the performance of the manufacturing sector as a real sector in Nigeria, using an error correction mechanisms model. And discover that those policies have expected impact on output of the manufacturing sector in Nigeria both in the short-run and long-run. Relationship among the stabilization policies on one hand and industrial or manufacturing sector out put on the other hand. The model makes use of time series data while ordinary least squared was the techniques of analysis, the data were filtered with use of augmented dickey fuller unit root test while Johansen cointegration test was used to justify the long-run relationship among all included variables. While the error correction model serves the basis for adjustment from short-run drift (disequilibrium) to long-run equilibrium through its speed of adjustment. The research work established that stabilization policy has a great impact on Manufacturing sector performance and that if certain adjustment are made it would better the lots of the people by developing the sector, through Government fiscal policy and its monetary policy measures.

Shuaib, Augustine and Ogedengbe (2015), examined the impact of fiscal policy on the growth of Nigerian economy using time series data from 1960-2012. The study explored secondary data from the Central Bank Statistical Bulletin for the period of 1960 to 2012 and used various econometric analyses and/or statistical analytical (E-view 7.2) method to examine the relationship between fiscal policy and growth. The paper tested the stationarity—through Group unit root test, and stationarity found at first differenced at 5% level of significance. Factor method, Goodness-of- fit summary, VAR and its properties were tested. Also, the Co-integration Technique and Pairwise-Granger Causality were employed in this study to test and determine the long-run relationship among the variables examined. From the result of the empirical findings, it was discovered that fiscal policy has a direct relationship with growth.

## **RESEARCH METHODOLOGY**

### **Research Design**

Every macroeconomic modeling is generally motivated by two objectives: forecasting and policy analysis. In pursuit of these objectives, every model should ideally satisfy four criteria. First, it must fit into a theoretical framework, second, the specification of the model must reflect a clear understanding of the conceptual literature within which policies are formulated and executed along with an envisaged process of adjustment. Third, it is

essential that the model is built on a firm and rich data base and finally, the estimated model must adequately utilize the rigors and sophistication of econometric methodology.

For the purpose of this research study, the ARDL bounds model will be used to investigate the short run and long run coefficients of the variables while the Toda-Yamamoto causality test on the other hand will be utilized to investigate the causality between automatic stabilizers and macroeconomic determinants on manufacturing sector in Nigeria.

This research study will bring one model to capture the effect of the determinants of automatic stabilizer and macroeconomic determinants on manufacturing sector in Nigeria. Based on the nature of this research study, secondary data will be used and the design is the ex-post facto. Ex-post facto is a research after the factor has been known and it applies to secondary data (Anyanwu, 2000).

**Model Specification**

The construct for this study is therefore fashioned according to the work of Ubesie, Ananwude, Cyracus and Emmanuel (2020) where the followings were captured:

$$MSCRGDP = (REXP, CEXP, FSD, CIT, INTR, INFL).....eqn(1)$$

$$LogMSCRGDP_t = a_0 + a_1LogREXP_t + a_2LogCEXP_t + a_3LogFSD_t + a_4LogCIT_t + a_5INTR_t + a_6INFL_t + u_t.....eqn(2)$$

Where:

*MSCRGDP* = Manufacturing sector contribution to real gross domestic product

*REXP* = Recurrent expenditure

*CEXP* = Capital expenditure

*FSD* = Fiscal deficit

*CIT* = Corporate income tax

*INTR* = Interest rate

*INFL* = Inflation

*a0* = constant coefficient

*u* = error term

*t* = time trend

This study will employ the autoregressive distributed lag model (ARDL) to capture the objectives of the research. The ARDL is preferable because unlike OLS, it allows us to use a mixture I(1) and I(2) variables in estimating the impact of foreign exchange reserve on selected macroeconomic variables. To modify the model in order to capture the objectives of the study, the model is explicitly stated as follows:

$$LMSP = F(LTXRV, LTGEXP, INFR, LGFCF).....equ(3)$$

The Econometric specification of the ARDL is given thus:

$$\begin{aligned} \Delta LMSP_t = & \alpha_0 + \sum_{i=1}^k \alpha_1 \Delta LMSP_{t-i} + \sum_{i=1}^k \alpha_2 \Delta TXRV_{t-i} + \sum_{j=1}^k \alpha_3 \Delta TGXP_{t-i} \\ & + \sum_{j=1}^k \alpha_4 \Delta INFR_{t-j} + \sum_{j=1}^k \alpha_5 \Delta GFCF_{t-j} + \beta_1 LMSP_{t-i} + \beta_2 TXRV_{t-i} \\ & + \beta_3 TGXP_{t-i} + \beta_4 INFR_{t-i} + \beta_5 GFCF_{t-i} \\ & + \mu_{t1} \dots \dots \dots 4 \end{aligned}$$

Where:

MSP = Manufacturing Sector Value Added to Gross Domestic Product

TXRV= Tax Revenue

TGXP = Total Government Expenditure

INFR = Inflation Rate

GFCF = Gross Fixed Capital Formation

$\alpha_1$  to  $\alpha_7$  are short run parameters to be estimated

$\beta_1$  to  $\beta_6$  are long run parameters to be estimated

$\mu$  = Stochastic error term

$t$  = Time period

## RESULTS

### Unit Root Test

In order to verify the reliability of the time series data used for this analysis, a unit root test will be conducted on the selected time series data to determine whether they are stationary or non-stationary in level form. The unit root test that will be employed in this task is the Augmented Dickey Fuller unit root test. The result of the ADF Test is presented below:

**Table 1: Unit root test for the analysis of automatic stabilizers and the manufacturing sector performance in Nigeria**

VARAIBLE	ADF(LEVEL)	5%critical Value	ADF1 <sup>ST</sup> DIFF	5% critical Value	REMARK
LMSP	-4.569619*	-2.948404	-3.495738	-2.951125	@I(0)
LTGXP	-0.423101	-3.536601	-7.708211*	-3.536601	@I(1)
LTXRV	-1.289291	-2.941145	-6.200360*	-2.943427	@I(1)
LGFCF	0.421573	-2.941145	-3.541330*	-2.943427	@I(1)
INFR	-2.958757*	-2.938987	-5.672638	-2.943427	@I(0)

*Source: Researcher's compilation from Eviews 10 Regression Output 2021.*

From the stationarity test result on Table 1 above, showed that LMSP and INFR are stationary at level while LTGXP, LGFCF and LTXRV 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 4.2 above indicated that the logged series for all the variables were integrated of order one including Inflation Rate (INFR).

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 the same order.

### Autoregressive Distributed Lag Bounds Test for Co-Integration

**Table 2: Result of ARDL Bounds Test for Co-Integration on the Analysis of 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 10*



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 exist a long run relationship among the variables.

### Dynamic ARDL Short Run Error Correction Model and Discussion for the Analysis of Automatic Stabilizers and Manufacturing Sector Performance in Nigeria

**Table 3: Result of ARDL short run error correction model for the analysis of automatic stabilizers and manufacturing sector performance in Nigeria**

Dependent Variable: LMSP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.240850	2.926128	0.765807	0.4557
D(LMSP(-1))	0.495984	0.122330	4.054493	0.0010**
D(LMSP(-2))	0.476800	0.115909	4.113581	0.0009*
D(LGFCF)	0.188790	0.103517	1.823747	0.0882
D(LGFCF(-1))	-0.246021	0.102854	-2.391945	0.0303**
D(LTGXP)	-0.025685	0.054637	-0.470095	0.6450
D(LTGXP(-1))	-0.525570	0.084543	-6.216603	0.0000*
D(LTGXP(-2))	-0.495833	0.089762	-5.523854	0.0001*
D(LTGXP(-3))	-0.212424	0.066098	-3.213778	0.0058**
D(LTXRV)	-0.033611	0.040017	-0.839929	0.4141
D(LTXRV(-1))	0.278149	0.042142	6.600302	0.0000*
D(LTXRV(-2))	0.114478	0.036981	3.095632	0.0074**
D(LTXRV(-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**
CointEq(-1)*	-0.757789	0.084240	-8.995609	0.0000*

*Source: Researcher's Extract from Eviews 10 Output Package 2019*

*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 performance (MSP) will increase by 2.240850 units.

Manufacturing Sector Performance (LMSP): From the analysis of the short run coefficients showed that manufacturing sector performance (LMSP) 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.

Gross Fixed Capital Formation (LGFCF) had a positive coefficient of 0.074491 units, implying a positive relationship with Manufacturing Sector Performance (LMSP) in the current year but statistically insignificant at 5% level of significance and in the previous year's lags of year 1 had a negative significant relationship with LMSP, this implied that in the current year lag, one unit increase in gross fixed capital formation (LGFCF) will increase manufacturing sector performance (LMSP) by 0.495984 units but statistically insignificantly at 5% level of significance and in the previous year lag one a previous increases in LGFCF will decrease LMOPT significantly by -0.246021 units respectively.

Total Government Expenditure (LTGXP) had a negative coefficient of -0.025685 units in the current year, implying a negative relationship with LMSP in the current year and also statistically insignificant at 5% level of significance and in the previous year's lag of year 1,2

and 3 had a negative significant relationship with LMSP with the coefficients of -0.525570, -0.495833 and -0.212424 units, respectively.

Furthermore, Tax Revenue (LTXRV) was found to have a negative co-efficient with manufacturing sector output (LMOPT) in the current year, decreasing LMSP insignificantly by -0.033611 units implying that for every increase in LTXRV, LMSP decreased by -0.033611 units. And in the previous year's lag of year 1, 2 and 3 had a positive significant relationship with manufacturing sector performance (LMSP) with the coefficients of 0.278149, 0.114478 and 0.092988 units, respectively.

Similarly, Inflation Rate (INFR) had a positive significant relationship with LMSP in the current year with the coefficients of 0.006787 units, implying that any unit increase in inflation rate will increase manufacturing sector performance (LMSP) significantly by 0.006787 units. And had a negative significant co-efficient in the previous year lag 1 with manufacturing sector output. This implies that a unit increase in INFR in the previous year's lag of year 1 will decrease LMSP by -0.002528 units at 5%` level of significance respectively.

Finally, the Error Correction Mechanism met the required conditions. The significance and rule of ECM holds that negative and statistical significant error correction coefficients are necessary conditions for any disequilibrium to be corrected. In light of this, the coefficient of CointEq (-1) is -0.7577889 units. The above result showed that the ECM (-1) value was -0.76% implying that there was convergence of the equilibrium should there be system disequilibrium. The negative sign of the coefficient satisfied one condition while the fact that its P-value [0.0000] was less than 5% [0.05] level of significance satisfied the second condition of statistical significance. The coefficient indicated that the speed of adjustment between the short run dynamics and the long run equilibrium was 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 LNFCEXP is at disequilibrium, it converges back to equilibrium at an average speed of about 76% (0.757789 x 100) every year in Nigeria.

#### **ARDL long run estimate for the analysis of automatic stabilizers and manufacturing sector performance in Nigeria.**

**Table 4: Result of ARDL long run estimate on the analysis of automatic stabilizers and manufacturing sector performance in Nigeria**

<b>Dependent Variable: LMSP</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
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
R-squared	0.889226	Mean dependent var	0.181327	
Adjusted R-squared	0.811685	S.D. dependent var	0.126629	
S.E. of regression	0.054951	Akaike info criterion	-2.667225	
Sum squared resid	0.060392	Schwarz criterion	-2.000648	
Log likelihood	61.67645	Hannan-Quinn criter.	-2.437123	
Durbin-Watson stat	1.976731			

*Source: Researcher's Extract from Eviews 10 Output Package 2019*

*Key: \* Significant at 1% level; \*\* Significant at 5% level*

Gross Fixed Capital Formation (LGFCF): The long run estimates of gross fixed capital formation (GFCF) had a positive relationship with manufacturing sector performance

(LMSP) in the long run increasing it significantly by 0.823863 units at 5% level of significance, implying that LGFCF is a will contributor effectively to manufacturing sector performance (LMSP) in the long run.

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

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

Inflation Rate (INFR): The long run estimates of inflation rate (INFR) had a positive relationship with manufacturing sector performance (LMSP) in the long run, increasing it significantly by 0.007812 units at 5% level of significance.

## RECOMMENDATION

Based on our results, the following were recommended:

- Fiscal policy initiatives must be redirected to make Nigeria a producer nation through the manufacturing sector, which will contribute to economic growth and development.
- Government economic policies should focus on economic diversification in order to improve the output of the manufacturing sector and generate more job opportunities, as this could be a more efficient way of reducing unemployment.
- Government should spend more on the factors that will encourage manufacturing sector and make a policy that will implement the expenditures rather than siphoning the funds. And the expenditure should be mainly on capital factor that has a significant effect on manufacturing sector performance.

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