



The Complexity of Cross Border Induced Stagflation in Nigeria, 2014-2024

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ABSTRACT

The aim of this study is to analyze the complexity of Cross-border induced stagflation in Nigeria from 2014-2024. The Complexity of cross border induced stagflation can be explained by understanding how external economic factors and border-related issues can simultaneously lead to stagnation in economic growth and high inflation. Stagflation is a situation where an economy experiences stagnant growth, high unemployment, and rising inflation and security issues. This paper evaluates the impact of cross border induce stagflation in Nigeria. The Economic Community of West African States (ECOWAS) Trade Liberalization Scheme (ETLS) aims to promote intra-regional trade among member states by removing trade barriers and encouraging economic integration. While border policies can potentially safeguard domestic industries, they need to be complemented by significant improvements in local production capabilities and infrastructure to avoid adverse economic outcomes like stagflation. Cross-border demand-pull inflation highlights the interconnectedness of global economies and how external economic activities can influence domestic price levels. Government borrowing and the effect on the Nigerian economy. Scholars in their study used different modelling approach to test the significance of stagflation in Nigeria. The results from this study recommends that the Central Bank of Nigeria should use the instrument of monetary policy to tackle inflation, control money supply and interest rate. Furthermore, efforts should be made to reinforce productivity by stimulating investment in the economy.

Keywords: Complexity, Cross Border, Induced, Stagflation, Nigeria.

INTRODUCTION

Complexity of cross border induced stagflation in Nigeria is driven by a confluence of external and international factors that affect economic growth, high inflation rate, economic stagnation, policy challenges, security issues and global economic conditions collectively contributed to a challenging economic environment. The demand for foreign exchange (forex) in Nigeria for various imported items like petrol, processed foods, second hand cars, capital goods, fairly used household equipment's/utensils, capital goods, general merchandise, Education, health, tourism, digital trades and lots more. Economic community of West African States regulate the cross-border transactions between member- states. There are two major provisions of the treaty that affects the Nigerian inflation, the first of them is the protocol on free movement; State that African member State can move freely goods and services, persons, capital across member states and right of establishment the second provision/protocol is Ecowas trade liberalization scheme ETLS is a flagship initiative of the economic community of west African states, aims to lower trade barriers and boost economic integration within the region. Established in 1979 and operational since 1990. By uniting member states, it creates a united market that fosters economic growth and development.

Government borrowing has a big impact on the economy of the nation, especially when it comes to the debt servicing mechanism and how that affects inflation later on. In an attempt to relieve financial hardship, government palliatives can occasionally unintentionally lead to price hike. Nigeria has recently been concerned about stagflation, a state marked by high unemployment, slow economic development and raising inflation. The claim that fiscal policies are more important in Nigeria's current stagflation scenario will be expanded upon, even though both monetary and fiscal policies can affect stagflation. Structural factor can also influence the economic performance, stability and development in the context of foreign direct investment, foreign portfolio investment and diaspora remittance in Nigeria and its effects on stagflation.

The Nigerian economy is currently experiencing stagflation. This is more so under the circumstances of high rate of poverty and unemployment rate in the country. To fight (imported) inflation the exchange rate of naira needs to stabilize. And for this to happen, policy must incentivize foreign portfolio investments to boost foreign exchange supply. Stagflation is a complex economic problem, it is better prevented, and fighting it is tough. Nigeria ranked next to Ethiopia with an inflation rate of 28.92 percent as of December 2023. Inflation peaked at a two-decade high, fueled by energy and food price increases and the pass-through effects of exchange rate depreciation. The nation bureau of statistic said that the year-on-year inflation rate was 7.58 percent higher than the rate recorded in December 2022 which was 21.34 percent. The international monetary fund on Thursday maintained its growth forecast of 3.3% for Nigeria economy for 2024, up from 2.9% last year, citing a pick-up in services and trade sectors. The IMF added that the growth outlook was still challenging in Africa's most populous nation and top oil producers with food price inflation 40% in March, raising food security concern.

LITERATURE REVIEW

Conceptual Framework

Nigeria is surrounded by several French-speaking countries that use the CFA Franc (CFA) as their currency. These countries include Benin, Niger, Chad, and Cameroon. The use of the CFA Franc in trade with Nigeria can have several economic impacts: Currency Demand: When goods and services are exchanged between Nigeria and its Francophone neighbors, there is an increased demand for the CFA Franc. This demand can lead to a relative devaluation of the Nigerian Naira (NGN) as Nigerian traders and consumers need CFA to conduct transactions. Nigeria often imports goods from these neighboring countries, when the volume of imports is higher than exports, it can lead to a trade imbalance. This imbalance further pressures the Naira, contributing to its devaluation. Continuous trade involving the CFA Franc can exert pressure on the Naira's exchange rate. If the supply of CFA Francs in the Nigerian market is limited, the exchange rate may become unfavorable for the Naira, making it weaker against the CFA. The economic integration with CFA Franc-using countries can lead to increased cross-border trade, while this can have positive effects on regional trade, it can also make Nigeria's economy more susceptible to fluctuations in the CFA Franc's value and the economic policies of the CFA zone.

As Naira devalues, the cost of imported goods rises, leading to inflation. This is compounded by high transportation and fuel costs, insecurity, and other factors, as previously mentioned. The exchange of goods and services between Nigeria and its Francophone neighbors using the CFA Franc contributes to the devaluation of the Naira. This economic interaction, while fostering regional trade, presents challenges for Nigeria's currency stability and overall economic health. The goal of the May 28, 1975, signing of the Economic Community of West African States (ECOWAS) Treaty, also referred to as the Treaty of Lagos, was to advance economic integration throughout the West African region. The most important revision to the treaty was the ECOWAS Revised Treaty, which was signed in 1993. The treaty has undergone several revisions. By means of economic cooperation and integration among member states, this treaty seeks to establish a single, large trading bloc.

Key provisions of the ECOWAS treaty that regulate cross-border transactions

The agreement creates a foundation for removing tariffs and other non-tariff trade obstacles within the community. With this, the ECOWAS region's free flow of products across borders is intended to be facilitated. The goal of ECOWAS is to establish a common external tariff (CET) for commodities that enter the area through a customs union. States members consent to standardize their customs policies and practices in order to facilitate international trade. The treaty contains clauses pertaining to the freedom of people to move around, live, and establish themselves. This removes unnecessary constraints on the ability of citizens of member states to visit, live, and open businesses in other member states.

Common Trade Policy: Members of ECOWAS strive to establish common trade policies, such as a coordinated strategy for trade talks with outside parties and organizations Harmonization of Standards. In order to facilitate easier trade and guarantee the safety and quality of goods traded within the region, the treaty encourages the harmonization of standards and regulations, including sanitary and phytosanitary measures. The treaty lays out procedures for settling disagreements resulting from international business dealings. This includes the creation of the ECOWAS Court of Justice, which resolves disagreements about how the treaty should be interpreted and applied. To facilitate international trade and economic integration, ECOWAS places a high priority on the construction of regional infrastructure, including telecommunications, railroads, and roads. The treaty contains clauses that require fiscal and monetary policies to be harmonized in order to ease cross-border financial trading. To make cross-border trade even easier, there are also plans to create a single currency in the future. Member states of ECOWAS are urged to establish an atmosphere that is conducive to investment, both from domestic and foreign sources. This includes incentives to draw in foreign direct investment (FDI) and legal frameworks to safeguard investments.

In order to promote initiatives that improve economic integration and lessen disparities among member states, the treaty establishes a regional development fund. By implementing these provisions, the ECOWAS treaty aims to foster sustainable development, peace, and stability in the region while also fostering a more integrated and economically cohesive West Africa. One of the main initiatives of the Economic Community of West African States (ECOWAS) is the Trade Liberalization Scheme (ETLS), which aims to improve trade and encourage economic integration in the region by lowering trade barriers. The ETLS was founded in 1979 and has been in operation since 1990. Its goal is to unite the ECOWAS member states into a single market to promote economic growth and development.

CBN is fighting Inflation Instead of Stagflation

The Nigerian economic manager's today stand between the devil and the deep blue sea. The Central Bank of Nigeria (CBN), which is responsible for monetary policy, faces the challenges of a persistent increase in the general price level of goods and services and rising unemployment rate. Yet, the central bank faces another formidable challenge, which is slow economic growth. Traditionally, the relationship between inflation and unemployment is negatively correlated. Lower inflation will cause higher unemployment, and vice versa. But empirical evidence indicates that, in Nigeria, a direct relationship has been existing between inflation and unemployment. Inflation has continued to rise with the unemployment rate. According to CBN data, inflation surged from 22.79% in June 2023 to 31.70% in February 2024. At the same time, the unemployment rate rose from 4.2% in Q2 2023 to 5.0% in Q3 2023, according to the National Bureau of Statistics (NBS), using its revised methodology for collecting labour market statistics in Nigeria. Given the complexity of the relationship between these two macroeconomic indices, especially the multiplicity of structural and monetary factors driving them in Nigeria, the impact of high inflation on unemployment are difficult to counteract with monetary policy alone.

But fiscal and monetary policies are also often counteractive, if not introduced in the right combination, volume, and in synch. For instance, tight monetary policy to reverse a persistent rise in inflation can aggravate unemployment if fiscal policy is also tight. But using cheap money, i.e. loans with low interest

rate, to address unemployment can also worsen inflation. By the same token, adopting dear money, i.e. loans with high interest rate, to tackle inflation can aggravate unemployment, resulting in a slowdown of economic activities.

To be clear, the Nigerian economy is experiencing stagflation, which describes the combination of slow economic growth, high unemployment, and high inflation. Intuitively, the appropriate policies for intervening in this economic condition should seek to stimulate both supply and demand. This is more so under the circumstance of high poverty rate in the country. But, seemingly counterintuitively, the CBN is sidetracking conventional economic policy wisdom. Between May 2023 and March 2024, the central bank has increased the Monetary Policy Rate (MPR) from 18.5% to 24.75%.

The recent decisions of the Monetary Policy Committee of the CBN on aggressive interest rate hikes have been rationalized. To fight (imported) inflation, the exchange rate of the naira needs to stabilize. And for this to happen, policy must incentivise foreign exchange inflows, for all practical purposes foreign portfolio investments to boost foreign exchange supply. Thus, the CBN is leaving no stone unturned in fighting inflation. But it is arguably not trying to grapple with the urgency of fighting stagflation. (Torruam, & Abur, 2014).

Of course, there have been successes that the recent monetary decisions of the CBN have achieved, including helping to narrow the gap in the official and parallel markets exchange rates and attract foreign portfolio investments. But there are trade-offs with regard to the delay in fighting poverty, unemployment, and catalysing economic growth. Stagflation takes place when an economy experiences slow growth, higher unemployment and inflation. Stagflation increases challenges for an economy to operate smoothly because slower economic growth, higher prices of goods and increased unemployment add more difficulties for an economy. This analysis covers historical incidents of stagflation, strategies for countries to avoid stagflation, possibility of stagflation these days, tactics for investors to mitigate the impacts of stagflation and analysis of whether the business cycle leads to stagflation or if supply shocks are the key factor. (Odo, Elom-Obed., Okoro, & Nwachukwu, 2017).

Sincerely it is never easy for an economy to come out of stagflation. A plausible solution is for the Central Bank to try and reduce inflation by increasing interest rates which will in turn reduce borrowing. However, this policy will only be effective in reducing inflation and not unemployment as the use of this policy will make GDP to fall and hence unemployment may still be on the high side. If also the government decides to adopt a contractionary fiscal policy by reducing tax rates and increasing government spending, this might (or definitely) be inflationary, and the inflationary problem persists. (Obute, Asue, Ikwue, & Ikyaaator, 2020).

Another solution to stagflation is to increase the domestic production and supply of goods and services in the domestic economy through policies that affect the production, distribution and supply of goods and services (i.e., privatization and deregulation policies to improve efficiency). That is, through an increase in domestic production of consumables, the external effect of inflation will be curbed (but this might not kill inflation within the economy), and this increase in domestic production would lead to more jobs created for the people which in turn reduces the unemployment rate. This however might be inflationary and only solves one aspect of the conundrum. It will also take a long time, especially in an underdeveloped economy as Nigeria who rely heavily on imported goods for consumption.

A major hindsight to solving this problem is to look at the macroeconomic variables that are affecting the economy. In the case of Nigeria, Oil prices (which are exogenous and cannot be determined in Nigeria), exchange rates and interest rates are a major contributing factor to stagflation (both inflation and unemployment). Thus, macroeconomic policies that affect the use of these variables need be paid keen attention to. (Orji, & Okafor, 2015)

a major policy direction that can curb the extent of stagflation in an economy is for the government and monetary authorities (CBN to ensure they work hand-in-hand to curb the extent of stagflation on the economy. here, the policy direction is for the monetary authorities to adopt a contractionary monetary policy in the short run (that is reduce money supply in the economy by increasing the cost of borrowing money and this in turn reduces inflation in the economy), while the government needs to increase tax rates and at the same time increase government spending (on welfare and infrastructure to curb the effect of a low spending power). the net effect of this policy is to reduce the spending power of individuals, which in turn reduces inflation, while the increase in government spending, even though, inflationary should boost GDP and reduce unemployment if appropriately invested. The money generated from tax should be used to invest on infrastructures, public-works, the civil society, treasury bonds, etc, which will in turn create jobs and reduce unemployment. Nevertheless, it might take a while to adopt this policy, but it also took Nigeria a long time to get into a stagflation and patience is key if we want the economy to move forward and if we want the appropriate monetary and fiscal measures to be adopted. (Ademola, & Badiru, 2016)

The CBN has to recognise the breadth of the challenges it faces, based on its mandates for price stability, economic growth, and full employment. If it isolates the issues, the other problems will undermine its isolated success, for instance the appreciation in the value of the naira in the last few weeks. a high exchange rate is inherently neither good nor bad. It depends on the growth agenda and external competitiveness of an economy. An export-dependent economy would be better served if its currency is relatively weak than strong, making its exports cheap. But an import-reliant economy like Nigeria's surely needs a strong currency, except that its exchange rate will dissuade domestic production and its exports will be price uncompetitive. (Central Bank of Nigeria. 2020).

EMPIRICAL REVIEW

Ife & Okoro, (2024), analyze the influence of inflation and Stagflation on the economic growth of Nigeria from 2012 to 2024. They found that Nigerian economy is experiencing stagflation which describes the combination of slow economic growth, high unemployment, and high inflation. In an attempt to examine the influence of inflation and Stagflation on the growth prospects of the Nigerian economy, the study employs the autoregressive distributed lag on the selected variables, i.e. real gross domestic product (GDP), inflation rate, interest rate, exchange rate, degree of economy's openness, money supply, and government consumption expenditures for the period. The study findings indicate that inflation and stagflation has a significant negative impact on

economic growth, while other variables in the model depict no influence on the economic growth of Nigeria. However, inflation and the degree of openness show no causal relationship with gross domestic product. As a result, the study recommends that a more pragmatic effort is needed by the monetary authorities to target the inflation vigorously to prevent its adverse effect by ensuring a tolerable rate that would stimulate the economic growth. Intuitively, the appropriate policies for intervening in this economic condition should seek to stimulate both supply and demand.

Olusola, (2024) found that as long as general economic weaknesses persist, confidence in the CBN policies will generally remain weak although they have roused sections of the financial market – especially investors in government bonds and CBN’s open market operation. A more general enthusiasm should have seen domestic savings, which create a larger pool of investable funds, significantly rising. But a slow-moving domestic savings trend has witnessed a weak growth from 20.70% as a percentage of GDP in 2022 to 20.78% in 2023. Conversely, the immediate impact of rising interest rates is more on borrowing costs for businesses, as loans become more expensive, potentially discouraging investment in new projects and/or expansion plans. All of these crises can be interconnected. Inflation has been rising since 2021. In many countries, inflation has already hit double-digit levels in early 2022 and continues to rise (in 2024). In many countries, the escalation of the energy crisis and economic recession will occur at the end of 2022 and perhaps in 2024 both crises in specific configurations. The deepening of these crises could lead to stagflation in 2024.

Dariusz, (2023), thoroughly analyzes stagflation and recession along with their causes, effects and approaches to resolve them. Detailed literature on stagflation and recession provides value added analysis. In-depth review provides analysis about the history of stagflation, its effects and approaches to solve it. In addition, detailed reviews of recession, causes of major recessions, and major sources of pressure for recession are thoroughly covered. Findings suggest that economies cannot completely avoid stagflation and recession, but they can reduce the effect of these factors on the economy.

Redeck & Curry (2022) found that Stagflation and recession have similar effects on economic performance with huge negative effects on businesses and markets. Stagflation results in lower economic growth, high inflation and reduced employment, whereas recession is an economic period which results in lower economic activity. As per the close connection of both factors, it can be said that either factor results in lower economic performance and negative effects on business markets. It shows that stagflation and recession are also related to each other at some level. Therefore, it can be suggested that stagflation can also result in recession during an economic period. On the other hand, recession can also bring weak economic growth, high inflation and reduced employment where these factors are considered as the key segments of stagflation. (Investopedia, 2022). These factors are considered to have direct and indirect effects on stagflation. Other causes of stagflation include sudden decreases in the supply of goods and services, bad monetary policy, mergers and acquisition. As per analysis, these factors can result in stagflation (Conerly, 2022). Causes of recession include business and investment failure, economic factors, psychological and financial factors. These factors are considered to leave direct and indirect effects on the economy. Other key factors of recession include loss of investors’ confidence, higher interest rates and inflation, reduction in prices of real estate properties, mismanagement, and asset bubble burst.

Odo et al., (2017) in the relationship between unemployment and inflation in Nigeria from 1980-2015 found that the model signified unemployment as a function of inflation, money supply % GDP, total government expenditure % of GDP. The statistical tests used were causality test, VECM test, co integrated test. Based on the above tests carried out, the study found out that Inflation significantly impacted unemployment in Nigeria both in the long and short run within the period under review. There exists a significant causal relationship among the variables in the model. Based on the results, the study recommended that government should use discretionary policy that would reduce unemployment by boosting government expenditure and maintain stability in money supply.

Al-Zeaud, (2014) examine the effects of unemployment and inflation on economic performance in Nigeria. Ordinary least square (OLS) techniques were adopted with various diagnostic tests to determine how fit are the data for the analysis. The study indicated that there exist long run relationship between RGDP, unemployment and inflation. The results also showed that unemployment and inflation are positively related to economic growth not response as expected to growth of output in the country.

Data, & Kumar, (2022) investigates the impact of inflation on economic growth in Nigeria. The study employs the Autoregressive Distributed Lag (ARDL) model on the selected variables that are GDP, inflation, interest rate, money supply and government consumption expenditure from 1990-2020 (31 years). The findings from ARDL model reveal that inflation, interest rate and money supply exert significant negative impact on economic growth while government consumption expenditure exerts significant positive impact on the economic growth. Based on the findings, a more aggressive effort is needed by the government and monetary authorities to tackle the inflation and interest rate fluctuations to forestall the negative impact on the economic growth by ensuring their appropriate rates that will stimulate economic growth. Also the study recommends that government should ensure an appropriate level of money supply that will keep appropriate level of interest rate to avoid plunging the economy into liquidity trap to achieve an intrusive economic growth.

Obute, Asue, Ikwue, & Ikyator, (2020) examine the impact of inflation on economic growth in Nigeria from the period of 1986-2015. Data was sourced from the website of Central Bank of Nigeria (CBN). Descriptive statistics and Ordinary Least Square (OLS) estimation technique were used to estimate the variables. Real Gross Domestic Product is the proxy for economic growth (dependent variable) while, the inflation rate, exchange rate and Interest rate were the independent variables. The findings revealed that the rate of inflation has a positive and insignificant effect on economic growth in Nigeria.

Idris & Suleiman (2019) examine the effect of inflation on economic growth in Nigeria using vector error correction mechanism. Variables used for the study consist of GDP, exchange rate, inflation rate and interest rate. The study was from 1980-2017 and the result was that in the long run inflation and interest are statistically significant and have a negative relationship with economic growth.

Adaramola and Dada (2020) examine the effect of inflation on economic growth from 1980 to 2018. Time series data on inflation rate, government consumption expenditure, exchange rate, supply of money, rate of interest, degree of openness and real GDP was utilized for the study. The study employed ARDL model, test for normality, cumulative sum test, heteroscedasticity test, and serial correlation LM test. Results found that interest rate and money supply have a direct linkage with the economic growth; while, exchange rate and inflation have an inverse relationship with economic growth.

Orji et al., (2015) investigated inflation and unemployment nexus in Nigeria by testing if the original Philips curve proposition holds for Nigeria. The study adopted a distribution lag model with data covering the period 1970-2011. The consumer price index (a measure of inflation rate) was regressed on unemployment rate, growth rate of money supply, budget deficit, real gross domestic product, interest rate and the lag of current interest rate. The result reveals that unemployment is a significant determinant of inflation and there is positive relationship between inflation and unemployment rate in Nigeria. This finding invalidates the original proposition on the Phillips curve hypothesis in Nigeria. The study therefore recommends that the economy should be diversified and appropriate policies should be put in place by government and the monetary authorities in order to curb the menace of inflation and unemployment and consequently reduce the problem of stagflation in Nigeria. Again, there is a need for strong institutional collaboration in dealing with these two macroeconomic variables; unemployment and inflation as have been recommended in the paper.

Chude, (2023) observed the relative impact of inflation and unemployment on the level of economic activities in Nigeria. Granger causality test was to determine the existence of any causal influence between inflation and unemployment. The study indicated that inflation and unemployment significantly affect the level of Nigeria's economic performance, and that causality runs from inflation to unemployment. The result also reveals that two variables are inversely related to economic growth but in the short run and long run, the study concludes that inflation and unemployment are inversely related to each other in the short run but positively related in the long run. The study therefore recommends that the central bank of Nigeria (CBN) should continue pursuit, vigorously and transparently, the policy of inflation targeting, improvement of infrastructure and access to credit to make it possible for more people to do business in Nigeria. Also, that a partnership between the ministry of trade and investment and the world bank in the formers drive towards increasing foreign direct investment inflow, job creation, and general policies towards the growth of small and medium enterprises (SMEs)

Torruam & Abu (2014) examined the causal relationship between unemployment, inflation and crime in Nigeria for the period 1980-2011. The following tests were carried out, unit root test integration test which was used to test for stationarity the long run relationship among the variables respectively. Granger-causality suggested that there is unidirectional causality running from unemployment and inflation to crime in Nigeria. The study recommended that holistic effort should be made by governments at all levels to create jobs and arrest unemployment. Nigeria government instead of employing foreigners should sponsor her citizens abroad for studies to diverse field of study.

Chang-shuai, & Zi-juan, (2023) investigated the impact of inflation and unemployment on economic growth in Pakistan. The time series data used for the time period of 1980 to 2010 which is collected from world data bank. Therefore, there are more and more macroeconomic forecasts suggesting the possibility of a recession in the Polish economy at the end of 2022 or at the beginning of 2023. In view of the above, the central bank raises interest rates in order to curb the rise in inflation. The increase in inflation continues and the rising interest rates on bank loans are cooling down the economic processes and, consequently, may cause a deep downturn in the economy in the coming quarters.

Dada, (2020) carried out a study to examine the impact of inflation on economic growth in Nigeria, utilizing time series data sourced from CBN for the period spanning from 1999 to 2017. The study has two objectives (i) To determine the impact of inflation on economic growth in Nigeria and (ii) To determine the impact of interest rate on economic growth in Nigeria. The study adopts the Ordinary Least Square (OLS) regression technique and established that inflation has positive but not significant impact on economic growth in Nigeria. The result also revealed that interest rate has negative and significant effect on economic growth in Nigeria. It is recommended amongst others that efficient tax policy be implemented and policy to invisible hands on the side of consumers and one-digit interest rate should be achieved.

METHODOLOGY

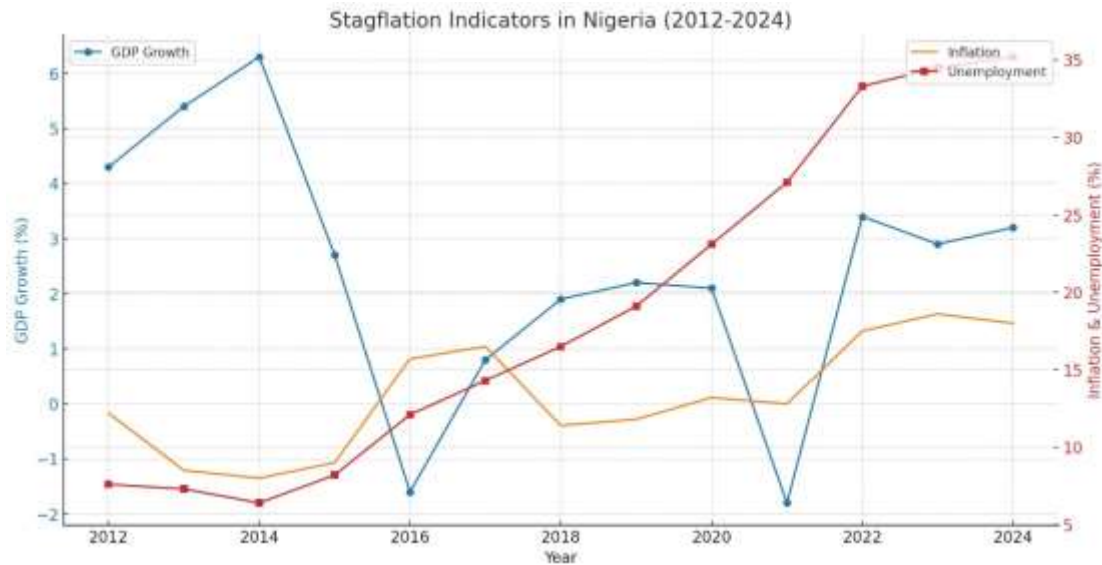
The research design that is used for the data analysis of this study is the time series analysis. The data used in the analysis include manufacturing index, Government expenditure, inflation rate, money supply consumer price index (CPI) interest rate and exchange rate.

$GDP=C+I+G+(X-M)$ where: C =Consumer spending on goods and services I =Investment spending on business capital goods G =Government spending on public goods and services X =Exports M =Imports

$GDP=C+I+G+(X-M)$ where: C =Consumer spending on goods and services I =Investment spending on business capital goods G =Government spending on public goods and services X =Exports M =Imports

In this equation, exports minus imports ($X - M$) equals net exports. When exports exceed imports, the net exports figure is positive. This indicates that a country has a trade surplus. When exports are less than imports, the net exports figure is negative. This indicates that the nation has a [trade deficit](#).

Graph that shows the state of the Nigerian economy from 2012 to 2024



The graph shows the state of the Nigerian economy from 2012 to 2024, emphasizing the relationship among GDP growth, inflation and unemployment rates. Nigeria's GDP increased rather rapidly between 2012 to 2024, reaching a peak of 6.3% in that year. Nevertheless, GDP growth began to slow dramatically in 2015 and even contracted in 2020 (-1.8%) and 2016(-1.6%) as a result of a number of causes, including the COVID-19 epidemic and declining oil prices. There has been a slight rebound after 2020, with growth rates settling in the range of two to three percent. The percentage of inflation decreased from 2012(12.2%) and 2014(8.0%). Inflation began to soar in 2015 and peaked in 2023 at 18.6%. This was primarily due to supply chain disruptions, increasing import costs, and currency devaluation.

Unemployment rates have gradually risen from 7.6% in 2012 to an alarming 35.2% in 2024. The rapid increase in unemployment since 2015 reflects economic challenges such as insufficient job creation, population growth, and structural inefficiencies. In Nigeria, stagflation is clearly depicted by the data: times of low or negative economic growth that are accompanied by high inflation and rising unemployment, particularly starting from 2015. The situation highlights the importance of comprehensive policy measures that address the root cause of economic stagflation, inflation and unemployment.

Gross domestic product (GDP) is a broad measurement of a nation's overall economic activity. Imports and exports are important components of the [expenditures method](#) of calculating [GDP](#). The formula for GDP is as follows:

Model Specification

For this study we have two models as follows: Model 1: $MF1 = b_0 + b_1 GEP + b_2 IFL + b_3 MSP + U$ Where; MF1 = Index of the manufacturing sector GOVEX = Government expenditure INF = Inflation rate 39 MSP = Money supply b_0 = Intercept b_1, b_2, b_3 are unknown parameters U = error term or stochastic disturbance $b_1 > 0, b_2 > 0, b_3 > 0$ In the model above Government expenditure and money supply should have positive influence on the manufacturing index while inflation rate exhibits a negative influence Model 2: $MF1 = b_0 + b_1 CPI + b_2 NIR + b_3 FR + U$ Where; MF1 = Index of the manufacturing sector CPI = Consumer price Index NIR = Interest rate (nominal) EXR = Exchange rate b_0 = Intercept b_1, b_2, b_3 are unknown parameters U = Error term $b_1 > 0, b_2 > 0, b_3 > 0$ In the model above exchange rate should have a positive influence on the index of the manufacturing sector while CPI and interest rate should have a negative influence on the manufacturing index.

Estimation Procedure

The secondary data collected were classified and tabulated after which the multiple regression technique was used to estimate the respective relationships. This showed to what extent the dependent variable is related to the independent variables. They were obtained from the Central Bank Statistical Bulletin and the National Bureaus of statistics. The data was collected on annual bases.

Statistical tool and evaluation techniques

To test the validity of the hypothesis formulated for the study multiple regression was used. The research used the following test and coefficients to measure the magnitude of relationship between the variables.

The multiple coefficient of determination

This is used to measure the proportion of variation in explained by the condition of X's Where RSS = Regression Sum of Squares TSS = Total Sum of Squares R^2 = Adjusted multiple coefficient of determination Corrected from the degree of freedom where; n = No of observation k = No of parameters. Multicollinearity in every regression equation there exists some level of multicollinearity between its independent variables. It shows the presence of linear relationship among independent variables. This is to test the hypothesis that the entire regression coefficient are equal to Zero entire regression coefficient are equal to Zero except the interest i.e. $H_0: b_1 = b_2 = b_3 = 0$ $H_1: b_1 \neq b_2 \neq b_3 \neq 0$ Analysis of variables (ANOVA) is used to calculate this by utilizing a class of continuous probability distribution called F= distribution Decision Rule: If $F_{cal} > F_{table}$ we reject the null hypothesis but of F_{cal}

< Ftable we reject alternative hypothesis Autocorrelation using Durbin Watson Test Autocorrelation is a correlation between successive variables. Durbin Watson test is used in the test which is devoted thus, Decision rule If $d=0$, there is perfect auto perfect auto correction between variables If $d=4$, there is a perfect negative auto correction between variables If $d=2$, there is no auto correction between variables

CONCLUSION

Detailed review of stagflation shows that it has direct and indirect connection with slow growth, higher unemployment and inflation. As per the nature of stagflation, inflation and unemployment increase at the same time which runs contrary to the old school of thought. In addition, a recession results in lower output levels in an economy, reduced consumer spending and lower employment opportunities. Considering the nature of both factors, economies need to develop specific approaches to deal with stagflation and recession where clarity in rules and regulations is compulsory for success in the market.

RECOMMENDATIONS

The positive impact of inflation on economic growth equally calls for the implementation of policies, which will enhance invisible hands in the country. This can be done through implementation of minimum wage, tax holding and ease of doing business. The negative relationship between interest rate and economic growth calls for efficient interest rate regime/policy to be formulated and implemented. The results from this study recommends for possible consideration by government: that the Central Bank of Nigeria should use the instrument of monetary policy to tackle inflation, control money supply and interest rate. Furthermore, Efforts should be made to reinforce productivity by stimulating investment in the economy.

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