

## IMPACT OF INFLATION AND STAGFLATION ON ECONOMIC GROWTH IN NIGERIA

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### Abstract

The aim of this study is to analyze the influence of inflation and Stagflation on the economic growth of Nigeria from 2012 to 2024. The 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.

***Keyword: Inflation, Stagflation, Economic Growth, Nigeria***

## Introduction

Stagflation is a term used to describe a stagnant economy hampered not only by slow growth but by high inflation as well. While this combination may seem counterintuitive, it proved real during the 1970s and early 1980s when workers in the U.S. and Europe were subjected to high unemployment as well as the loss of purchasing power. Stagflation as contained in the works of Obute et al., (2020) is a combination of the ‘stag’ of stagnation and ‘flation’ of inflation and as put forward by Vaish (2005), the term explains the paradoxical inflationary phenomenon in which sustained and substantial price increases have been accompanied by declining output and rising unemployment. Likewise, Baumol and Blinder point out, stagflation can be defined as a slowdown of growth combined with rising rates of inflation. The causes of stagflation during that period remain in dispute, as did the likelihood of a reprise in 2022 amid high energy and food prices, rising interest rates, and persistent supply-chain snags. Inflation is the rate of increase in the overall price level of goods and services in an economy. Stagflation describes a combination of high inflation and economic stagnation as reflected by a slow growth rate and high unemployment. The stagflation of the 1970s marked the U.S. economy's worst performance since the Great Depression. The causes of stagflation remain contentious, with some blaming loose fiscal and monetary policies and others austerity or oil price shocks.

Stagflation has been described as the coexistence of high inflation rate alongside high unemployment rate in an economy. It is however noteworthy in relation to economic growth, when the study of Obute et al., (2021) presents a more complex dimension in Nigeria when their study pointed out that all the three variables; economic growth, inflation rate and unemployment rate appear to be on the rise defying even the nomenclature of stagflation. They stated further that the Nigerian economy has always witnessed appreciable economic growth by even surpassing the global averages and that from 2001 to 2014, the annual growth rates in Nigeria's GDP never went below 6.3% until the economy slipped into recession in 2015 and 2016. But by 2017 and 2018 it reverted back to the path of growth to close at 2.27% just 0.63% below the global average (The World Bank, 2020). CBN (2019) reported equally that the Nigerian real GDP per capita rose steadily especially from 1995 to 2019 and that from a real GDP per capita of N33,060 in 1995, it rose steadily to climax at N684.34 thousand in 2019. As noted, the Nigerian economy has grown steadily over the past decade thereby becoming Africa's largest economy. Whereas, the Nigerian economic growth is said to be tied or closely linked with oil revenues (The Central Intelligence Agency (CIA), 2014; Alley et al., 2014 and Igberaese, 2013). Although, Fefa (2016) submitted that oil revenues in Nigeria (unlike Norway), have negative and significant effects in the long run due to inappropriate oil revenue management channels. Paradoxically, despite her high GDP and GDP per capita, unemployment rate and poverty has remained endemic in Nigeria. Evidence, from statistics revealed that unemployment rates in Nigeria have maintained a double digit since 2006 rising from 12.3% to 21.4% in 2010 and to a climax of 23.9.

## LITERATURE REVIEW

### Conceptual Framework

Inflation is the broad rise in the price of goods and services across the economy. The Federal Reserve deems annual inflation averaging 2% over the long run most consistent with its mandates of stable prices and maximum employment because that keeps the much more dangerous deflation at bay while supporting economic growth. Still, inflation causes a currency to lose purchasing power. For example, if inflation is at 5% and you currently spend \$100 per week on food, the following year you would need to spend \$105 for the same groceries.

Typically, inflation goes hand-in-hand with economic growth, and an overheated economy is one possible cause of higher inflation. Conversely, recessions typically cause inflation to slow. The relationship is intuitive. In an economy running hot by operating above its long-term potential, price increases are necessary to ration labor and other scarce inputs and to offset those increased production costs. Meanwhile, a contracting economy with lots of spare capacity restrains price hikes and wage increases as demand slows.

### **Urban inflation**

On a year-on-year basis, in January 2023, the urban inflation rate was 22.55%, this was 6.38% points higher compared to the 16.17% recorded in January 2022. On a month-on-month basis, the urban inflation rate was 1.98% in January 2023, this was 0.17% points higher compared to December 2022 (1.80%). The corresponding twelve-month average for the urban inflation rate was 19.91% in January 2023. This was 2.48% points higher compared to the 17.44% reported in January 2022.

### **Rural inflation**

The rural inflation rate in January 2023 was 21.13% on a year-on-year basis; this was 6.08% points higher compared to the 15.06% recorded in January 2022. On a month-on-month basis, the rural inflation rate in January 2023 was 1.77%, up by 0.14% points compared to December 2022 (1.63%). The corresponding twelve-month average for the rural inflation rate in January 2023 was 18.84%. This was 2.53% points higher compared to the 16.31% recorded in January 2022,

### **Food index**

The food inflation rate in January 2023 was 24.32% on a year-on-year basis; which was 7.19% points higher compared to the rate recorded in January 2022 (17.13%). The rise in food inflation was caused by increases in prices of Bread and Cereals, Oil and Fat, Potatoes, Yam and Other Tubers, Fish, Vegetable, Fruits, Meat, and Food Products n.e.c. On a month-on-month basis, the food inflation rate in January 2023 was 2.08%, this was 0.20% points higher compared to the rate recorded in December 2022 (1.89%). This increase was attributed to increase in the prices of some food items like Oil and Fat, Bread and Cereals, Fish, Potatoes, Yam & Tubers, etc. The average annual rate of food inflation for the twelve -months ending January 2023 over the previous twelve-month average was 21.53%, which was a 1.44% point's increase from the average annual rate of change recorded in January 2022 (20.09%).

### **All items less farm produce**

The ‘All items less farm produce’ or Core inflation, which excludes the prices of volatile agricultural produce stood at 19.16% in January 2023 on a year-on-year basis; up by 5.29% when compared to the 13.87% recorded in January 2022. On a month-on-month basis, the core inflation rate was 1.82% in January 2023, up by 0.49% points from the 1.33% recorded in December 2022. The highest increases were recorded in prices of Gas, Liquid Fuel, Passenger, and transport by Air, Vehicles Spare Parts, Fuels, and Lubricants for Personal Transport Equipment, Solid Fuel, etc. The average twelve-month annual inflation rate was 16.52% for the twelve-months ending January 2023; this was 3.19% points higher than the 13.33% recorded in January 2022.

### **All Items Inflation**

In January 2023, all items inflation rate on a year-on-year basis was highest in Bauchi (24.79%), Ondo (24.54%), Anambra (24.51%), while Jigawa (19.09%), Borno (19.62%) and Sokoto (19.90%) recorded the slowest rise in headline year-on-year inflation. On a month on-month basis, however, January 2023 recorded the highest increases in Lagos (2.91%), Taraba (2.84%), Ondo (2.68%), while Yobe (0.54%), Jigawa (0.73%) and Oyo (0.87%) recorded the slowest rise on month-on-month inflation. Food Inflation In January 2023, food inflation on a year-on-year basis was highest in Kwara (29.03%), Lagos (27.67%), and Ondo (27.38%), while Jigawa (19.22%), Sokoto (20.80%) and Yobe (21.32%) recorded the slowest rise in year-on-year food inflation. On a month-on-month basis, however, January 2023 food inflation was highest in Lagos (3.67%), Ogun (3.54%), and Ekiti (3.32%), while Yobe (-0.50%), Jigawa (0.18%) and Kebbi (0.92%) recorded the slowest rise on month-on-month inflation

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### **Cost-Push Inflation vs. Demand-Pull Inflation**

There are four main drivers behind inflation. Among them are cost-push inflation, or the decrease in the aggregate supply of goods and services stemming from an increase in the cost of production, and demand-pull inflation, or the increase in aggregate demand, categorized by the four sections of the macro economy: households, business, governments, and foreign buyers. The two other contributing factors to inflation include an increase in the money supply of an economy and a decrease in the demand for money. Inflation is the rate at which the general price level of goods and services rises. This, in turn, causes a drop in purchasing power. This is not to be confused with the change in the prices of individual goods and services, which rise and fall all the time. Inflation happens when prices rise across the economy to a certain degree.

### **Cost-Push Inflation**

Cost-push inflation is the decrease in the aggregate supply of goods and services stemming from an increase in the cost of production. Aggregate supply is the total volume of goods and services produced by an economy at a given price level. When the aggregate supply of goods and services decreases because of an increase in production costs, it results in cost-push inflation. Cost-push inflation means prices have been "pushed up" by increases in the costs of any of the four factors of production—labor, capital, land, or entrepreneurship when companies are already running at full production capacity. Companies cannot maintain profit margins by producing the same amounts of goods and services when their costs are higher and their productivity is maximized.

The price of raw materials may also cause an increase in costs. This may occur because of a scarcity of raw materials, an increase in the cost of labor to produce the raw materials, or an increase in the cost of importing raw materials. The government may also increase taxes to cover higher fuel and energy costs, forcing companies to allocate more resources to paying taxes.

In order to compensate, the increase in costs is passed on to consumers, causing a rise in the general price level: inflation. For cost-push inflation to occur, demand for goods must be static or inelastic. That means demand must remain constant while the supply of goods and services decreases. One example of cost-push inflation is the oil crisis of the 1970s. The price of oil was increased by OPEC countries, while demand for the commodity remained the same. As the price continued to rise, the costs of finished goods also increased, resulting in inflation.

### **Demand-Pull Inflation**

Demand-pull inflation occurs when there is an increase in aggregate demand, categorized by the four sections of the macro economy: households, businesses, governments, and foreign buyers. Demand-pull inflation is the increase in aggregate demand, categorized by the four sections of the macro economy: households, business, governments, and foreign buyers. An increase in the costs of raw materials or labor can contribute to cost-pull inflation. Demand-pull inflation can be caused by an expanding economy, increased government spending, or overseas growth.

When concurrent demand for output exceeds what the economy can produce, the four sectors compete to purchase a limited amount of goods and services. That means the buyers "bid prices up" again and cause inflation. This excessive demand, also referred to as "too much money chasing too few goods," usually occurs in an expanding economy. In Keynesian economics, an increase in aggregate demand is caused by a rise in employment, as companies need to hire more people to increase their output.

The increase in aggregate demand that causes demand-pull inflation can be the result of various economic dynamics. For example, an increase in government spending can increase aggregate demand, thus raising prices. Another factor can be the depreciation of local exchange rates, which raises the price of imports and, for foreigners, reduces the price of exports. As a result, the purchasing of imports decreases while the buying of exports by foreigners increases. This raises the overall level of aggregate demand, assuming aggregate supply cannot keep up with aggregate demand as a result of full employment in the economy. Rapid overseas growth can also ignite an increase in demand as more exports are consumed by foreigners. Finally, if a government

reduces taxes, households are left with more disposable income in their pockets. This, in turn, leads to an increase in consumer confidence that spurs consumer spending.

## **EMPIRICAL LITERATURE REVIEW**

Ahmed, (2024) employed annual data set on growth rate of real GDP, Consumer Price Index Inflation and growth rate of real Gross Fixed Capital Formation to investigate whether there was any threshold effect of inflation on economic growth over the period of 2001-2009. Estimated threshold model indicated that there was non-linear relationship between inflation and economic growth in the Azerbaijani economy and threshold level of inflation for GDP growth was 13 percent. Inflation rate lower than 13 percent reflected statistically significant positive effect on GDP growth but this positive relationship became negative when inflation exceeded 13 percent. He added that, economic growth was expected to decline by about 3 percent when inflation increased above the 13 percent threshold.

Al-Taeshi, (2023) suggest that all the variables in the unit root model were stationary and the results of causality revealed that GDP caused inflation and not inflation causing GDP. The results also revealed that inflation possessed a positive impact on economic growth through encouraging productivity and output level and on evolution of total factor productivity. Mallik and Chowdhury, (2001) found two results: First, the relationship between inflation and economic growth is positive and statistically significant for Bangladesh, Pakistan, India and Sri Lanka. Second, the sensitivity of growth to changes in inflation rates was smaller than that of inflation to changes in growth rates. The policy implication of these results was the fact that although moderate inflation promotes economic growth, faster economic growth absorbs into inflation by overheating the economy. Frimpong and Oteng-Abayie, (2010) found a threshold effect of inflation on economic growth of 11 percent for Ghana over the period 1960-2008 though failing the test of significance at that level.

Chimobi, (2024) found that growth - inflation interaction was strictly concave with some threshold level of inflation. Inflation threshold level is estimated using a non-linear least squares technique, and inference made by applying a bootstrap approach. The main findings were that inflation rate above 8 percent tend to slow down economic growth while below 8 percent promotes economic growth. Gopakumar et al. (2024) examined threshold effect of inflation on GDP Growth by using a panel data of 165 countries including Oil Exporting Countries and Azerbaijan over the period of 1960-2007. Their study found that for all country groups' threshold level of inflation for GDP growth was about 10 percent (with the exclusion of industrialized countries where threshold level was much lower). Estimated results suggested that inflation from higher than 13 percent decreases real non-oil GDP by 207 percent per year. Lastly, review of literature on money supply and exchange rate influence on economic growth and inflation. Odhiambo and Wondafrash, (2024) revealed that money supply had a direct impact on inflation. Mwase, (2006) indicated that currency appreciation is associated with a decrease in inflation rate, with one quarter lag.



Studies such as Aydin (2017), Mamo (2012), Manoel (2010) and Ndoricimpa (2017) on the inflation and economic growth nexus are mainly cross-country. The findings obtained cannot be directly applied to Nigeria because of the differences in their exposure to political, financial, economic structures, and their reactions to external shocks. This study applies a country-specific approach to investigate whether inflation is detrimental to the economic growth of a country with specific inclination to Nigeria. Also, previous studies use different estimation techniques and receive contradictory results. Some studies show that inflation induces the growth prospects of the economy as observed by the structuralists (Anidiobu, Okolie, & Oleka, 2018; D. Chude & N. Chude, 2015; Enejoh & Tsauni, 2017; Umaru & Zubairu, 2012), while others showed that inflation is harmful to economic growth (Al-Taeshi, 2016; Denbel, Ayen, & Regasa, 2016; Idris & Suleiman, 2019; Kasidi & Mwakanemela, 2015; Manoel, 2010; Mkhathshwa, Tijani, & Masuku, 2015). Apart from this, Anochiwa and Maduka (2015) found no clear convincing evidence, either positive or negative, for the inflation and growth rate of an economy. This implies that the relationship between these two economic variables is far from being empirically settled. Thus, studies in these areas appear inconclusive. The different results obtained by the empirical studies do not permit the researchers to draw an unequivocal conclusion on the subject matter.

Anochiwa and Maduka (2015) are of the view that the ability of monetary authorities to maintain single-digit inflation would increase the capacity to accelerate economic growth. However, the reverse is the case for Nigeria. Available data from the Central Bank of Nigeria Statistical Bulletin (2024) on the trend of inflation indicate that the inflationary situation in the country has become alarming since 1980 until 2024. The inflationary trend shows that Nigeria had only maintained single-digit inflation for fourteen years in the past thirty-eight years. However, the persistent increase in the inflation rate in Nigeria is evidence of the failure of both monetary and fiscal policies.

Al-Taeshi (2016) examines how inflation impacts Malaysian economy from 1970 to 2014 using co-integration and Granger causality test. Evidence from the study suggests that inelastic response was found between economic growth and inflation rate. Using the panel analysis, Ndoricimpa (2017) studies inflation threshold on economic growth in some selected African countries. The result indicates the nonlinear relationship between the two variables, and that low inflation enhances the growth of the economy in the middle-income countries, while it has no effect on the sample put together. The result also shows that inflation beyond the threshold negatively influences the economy in all the countries. In Nigeria, investigating budget deficit and economic growth is causally examined by Ndoricimpa and Akinbobola (2023) using the growth of the economy, inflation rate, budget deficit, and exchange rate. The study shows unidirectional causal relationship between deficit budget and inflation rate and that it runs from the former to the latter. The result also reveals that budget deficit affects inflation rate as a result of frequent fluctuations in the exchange rate.

Umaru and Zubairu (2012), using regression analysis and causality estimation test on data ranging from 1970 to 2010, examine how inflation impacts on the Nigerian economy. The result shows unidirectional relationship between gross domestic product and rate of inflation, while there exist the causal relationships between the former and the latter. The result also indicates that inflation reveals positive influence on the growth of the economy. Inyiama (2013) employs

Johansen co-integration and Granger causality test to determine if inflation weakens the growth of Nigerian economy for the period 1979–2010. The result shows that the rate of inflation is inversely related on economic growth, while the exchange rate and interest rate indicate a direct impact on the economy. The causality test indicates no causal relationships between inflation rate and economic growth.

In January 2023, the headline inflation rate rose to 21.82% compared to December 2022 headline inflation rate which was 21.34%. Looking at the trend, the January 2023 inflation rate showed an increase of 0.47% points when compared to December 2022 inflation rate. However, on a year-on-year basis, the headline inflation rate was 6.22% points higher compared to the rate recorded in January 2022, which was 15.60%. This shows that the headline inflation rate (year-on-year basis) increased in the month of January 2023 when compared to the same month in the preceding year (i.e., January 2022).

The contributions of items on a class basis to the increase in the headline index are: Bread and Cereal (21.67%), Actual and Imputed Rent (7.74%), Potatoes, Yam and Tuber (6.06%), Vegetable (5.44%), and Meat (4.78%). On a month-on-month basis, the percentage change in the All-Items Index in January 2023 was 1.87%, which was 0.15% points higher than the rate recorded in December 2022 (1.71%). This means that in the month of January 2023, on average, the general price level was 0.15% higher relative to December 2022. The percentage change in the average CPI for the twelve months period ending January 2023 over the average of the CPI for the previous twelve months period was 19.36%, showing a 2.49% increase compared to 16.87% recorded in January 2022. The increases were recorded in all COICOP divisions that yielded the headline index.

## METHODS OF DATA ANALYSIS

To achieve objectives of this study, the researchers used three methods of analysis, each for one objective. The study used reduced form regression equation (ILS) to investigate the impact of inflation on economic growth. Coefficient of elasticity was used to measure the degree of responsiveness of change in GDP growth rate due to change in general price levels. Co-integration technique was applied to measure whether the two variables (inflation and stagflation on economic growth) moved together in the long-run. Reduced form regression equation In order to investigate the impact of inflation on economic growth in Nigeria, the researchers modified the following model adopted from Khan and Senhadji, (2001) for the analysis of threshold level of inflation for Nigeria. 
$$GDP_t = \beta_0 + \beta_1 INFL_t + \beta_2 D(INFL_t - K) + U_t \quad (1)$$
 Where GDP stands for Gross domestic product, INFL= Inflation,  $U_t$  = error term, D= Dummy variable, and K is the threshold level of inflation (the rate of inflation at which structural break occurs). The model by Khan and Senhadji, (2001) was modified by the researchers so as to examine the impact of inflation on economic growth in Nigeria as follows: 
$$GDP_t = \beta_0 + \beta_1 INFL_t + U_t \quad (2)$$
 Where, GDP= Growth rate of real Gross Domestic Product, INFL= Inflation,  $U_t$  = error term and  $\beta_0$  and  $\beta_1$  are parameters. After getting reduced form regression equation, the study established

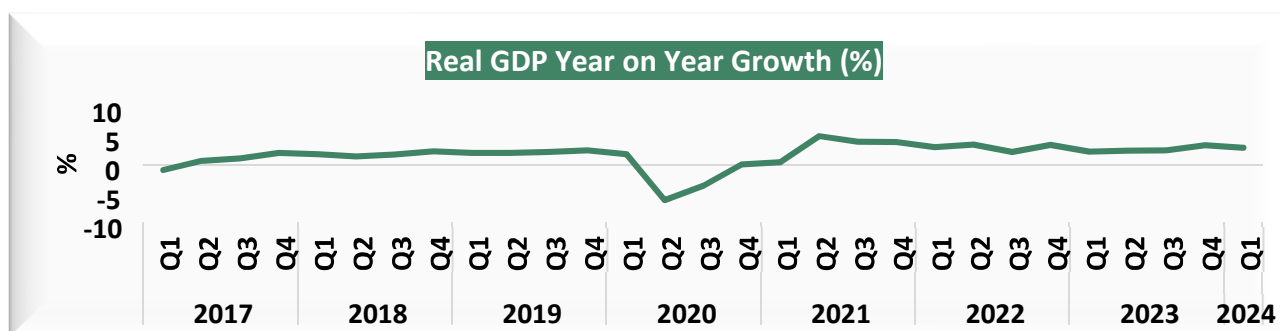


coefficient of elasticity by differentiating the equations with respect to Inflation (INFL). Coefficient of elasticity as the measure of degree of responsiveness.

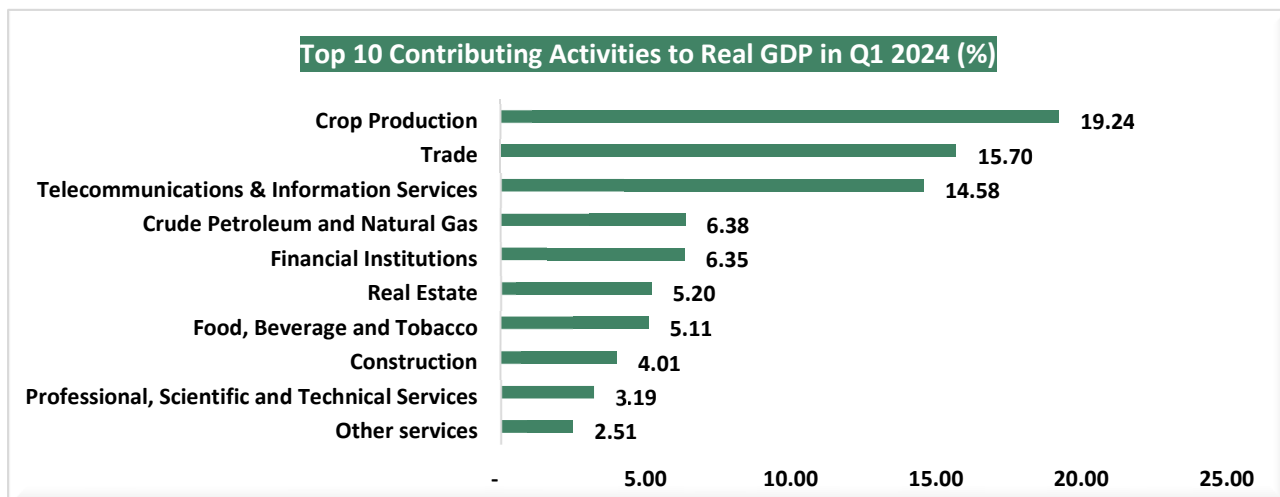
**DATA, RESULTS AND DISCUSSIONS**

This paper uses actual real quarterly GDP and inflation data from the National Bureau of Statistics and real world GDP growth sourced from the International Financial Statistics of the IMF. The dataset span the period 2012Q1 to 2024Q1 so as to capture the recent growth inflation nexus in Nigeria. Because of the changing structure of the Nigerian economy, going back too long in time may not reflect the current realities. We have also adopted the variables used in Mohanty et al. (2011) as our regressors to examine the significance of external developments on the Nigeria’s domestic growth-inflation nexus. It is also expected that the use of the autoregressive and integrated moving average process would control the impact of domestic factors. Checking the order of integration of included variables is crucial in any time series modeling.

The Augmented Dickey Fuller (ADF) and Philips Perron tests are used to test the stationary properties of the data. Both tests indicate that the variables  $y$ ,  $w$  and  $( )$  are integrated of order one. The Engle Granger co-integration test for the three series confirms that these variables are co-integrated, suggesting a long-run relationship between them. Many studies of inflation-growth nexus estimate the threshold level of inflation using different methodologies. This paper finds the specification of the regressor (or control) variables in Mohanty et al. (2011) very appealing. While this paper adopts the same regressors, it also extends the specification of the mean equations (1) through (4) using the Autoregressive and Integrated Moving Average process with an exogenous input (ARIMA-X). Over the years, the GARCH methodology has become quite useful in modeling the mean equation of time series that exhibits some level of volatility. As posited by Engle (1982), this technique allows a conventional regression specification for the mean function with a variance which changes stochastically over the time horizon



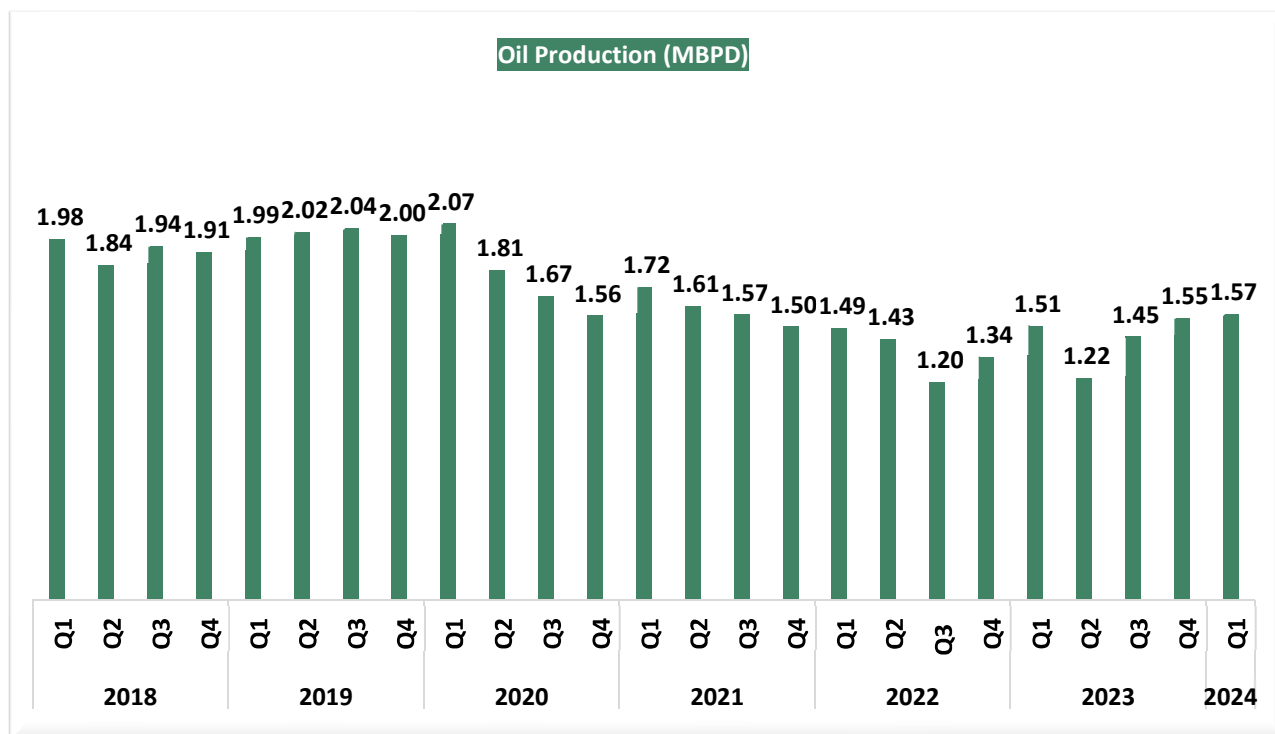
**Figure 1: Real GDP Growth**



### The Oil Sector

The nation in the first quarter of 2024 recorded an average daily oil production of 1.57 million barrels per day (mbpd), higher than the daily average production of 1.51mbpd recorded in the same quarter of 2023 by 0.06mbpd and higher than the fourth quarter of 2023 production volume of 1.55 mbpd by 0.02mbpd.

(Figure 3).



**Figure 3: Crude Oil Output (MBPD)**

The real growth of the oil sector was 5.70% (year-on-year) in Q1 2024, indicating an increase of 9.91% points relative to the rate recorded in the corresponding quarter of 2023 (-4.21%). Growth decreased by 6.41% points when compared to Q4 2023 which was 12.11%. On a quarter-on-quarter basis, the oil sector recorded a growth rate of 13.77% in Q1 2024. The Oil sector contributed 6.38% to the total real GDP in Q1 2024, up from the figure recorded in the corresponding period of 2023 and up from the preceding quarter, where it contributed 6.21% and 4.70% respectively.

**The Non-Oil Sector**

The non-oil sector grew by 2.80% in real terms during the reference quarter (Q1 2024). This rate was higher by 0.02% points compared to the rate recorded in the same quarter of 2023 and 0.28% points lower than the fourth quarter of 2023. This sector was driven in the first quarter of 2024 mainly by Financial and Insurance (Financial Institutions); Information and Communication (Telecommunications); Agriculture (Crop production); Trade; and Manufacturing (Food, Beverage, and Tobacco), accounting for positive GDP growth. In real terms, the non-oil sector contributed 93.62% to the nation’s GDP in the first quarter of 2024, lower than the share recorded

in the first quarter of 2023 which was 93.79% and lower than the fourth quarter of 2023 recorded as 95.30%.

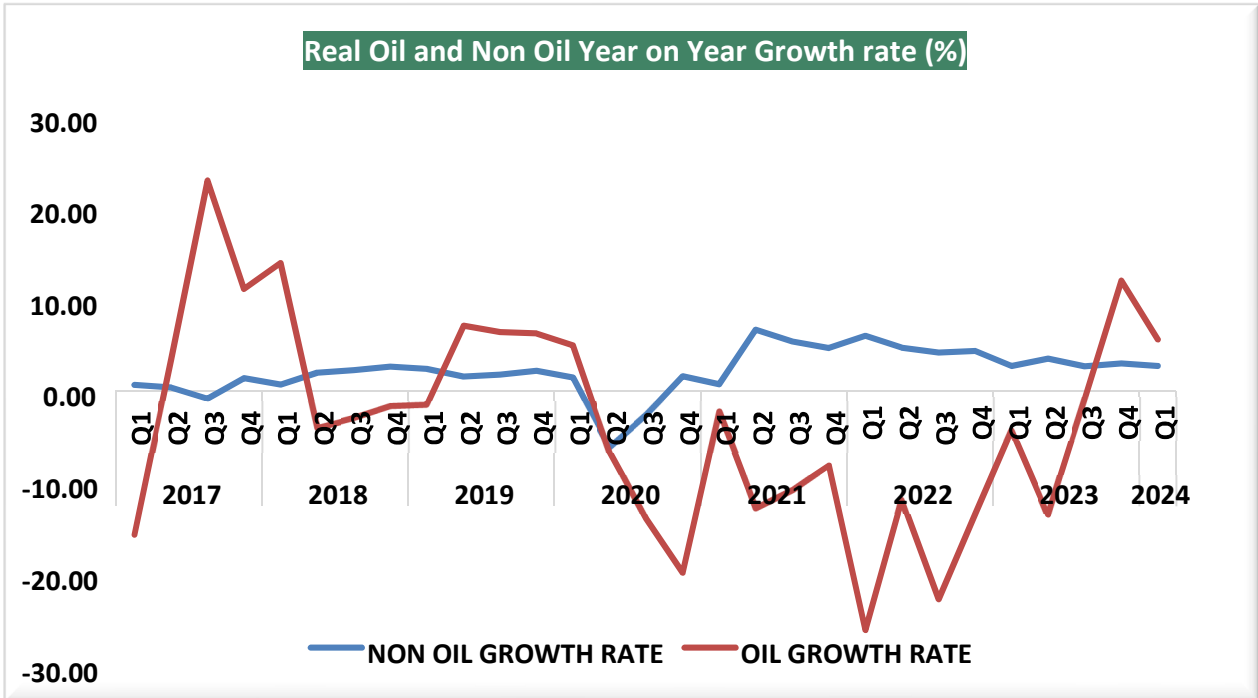
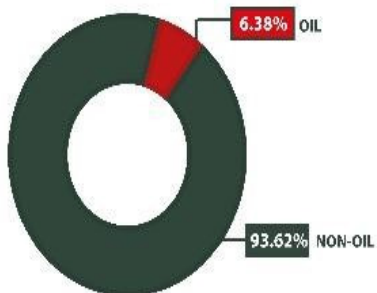


Figure 4: Crude Oil and Non-Oil Growth



## GDP REPORT Q1 2024

CONTRIBUTION OF OIL AND NON-OIL SECTORS



CONTRIBUTION OF OIL AND NON-OIL SECTORS

NON-OIL GDP								
Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
93.37	93.67	94.34	95.66	93.79	94.66	94.52	95.30	93.62

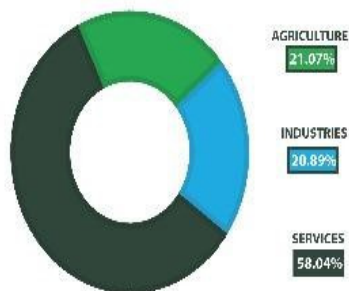
  

OIL GDP								
Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
6.63	6.33	5.66	4.34	6.21	5.34	5.48	4.70	6.38

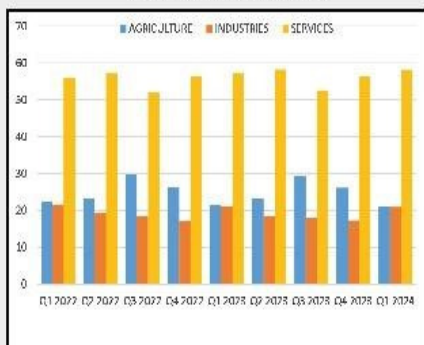
OIL PRODUCTION (MBPD)



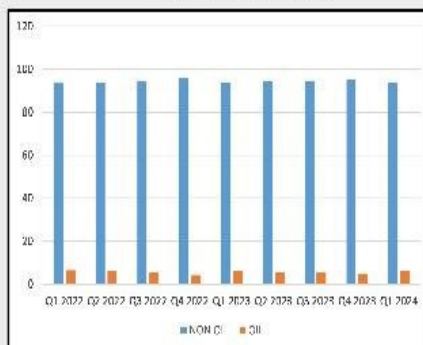
CONTRIBUTION TO REAL GDP



SHARE OF AGRICULTURE, INDUSTRY AND SERVICES



SHARE OF OIL AND NON-OIL SECTORS



## Major Economic Sectors: Q1 2024

### Mining & Quarrying

The Mining & Quarrying sector consists of Crude Petroleum and Natural Gas, Coal Mining, Metal ore and

Quarrying and other Minerals sub-activities. This sector grew nominally by 34.14% (year-on-year) in Q1 2024. Metal Ores exhibited the highest growth rate of all the sub-activities at 220.87%, followed by Crude Petroleum and Natural Gas activity at 33.23%. Crude Petroleum and Natural gas was the main contributor to the sector with a weight of 98.45% in Q1 2024. Comparing Q1 2024's rate of growth relative to Q1 2023 and Q4 2023 growth rates, there was an increase of 37.66% points and a rise of 19.07% points respectively. The Mining & Quarrying sector contributed 7.86% to the overall GDP in the first quarter of 2024, higher than the contributions recorded in 2023 first quarter at 6.73% and higher than the previous quarter at 4.47%.

In real terms, the Mining and Quarrying sector grew by 6.30% (year-on-year) in the first quarter of 2024. Compared to the same quarter of 2023 and the fourth quarter of 2023, it was higher by 10.26% points and lower by 1.74% points respectively. Quarter- on- quarter, the growth rate recorded was 10.45% during the quarter. The contribution of Mining and Quarrying to Real GDP in the quarter under review stood at 6.47%, higher than the rate of 6.26% recorded in the corresponding quarter of 2023 and higher than the 4.91% recorded in the fourth quarter of 2023.



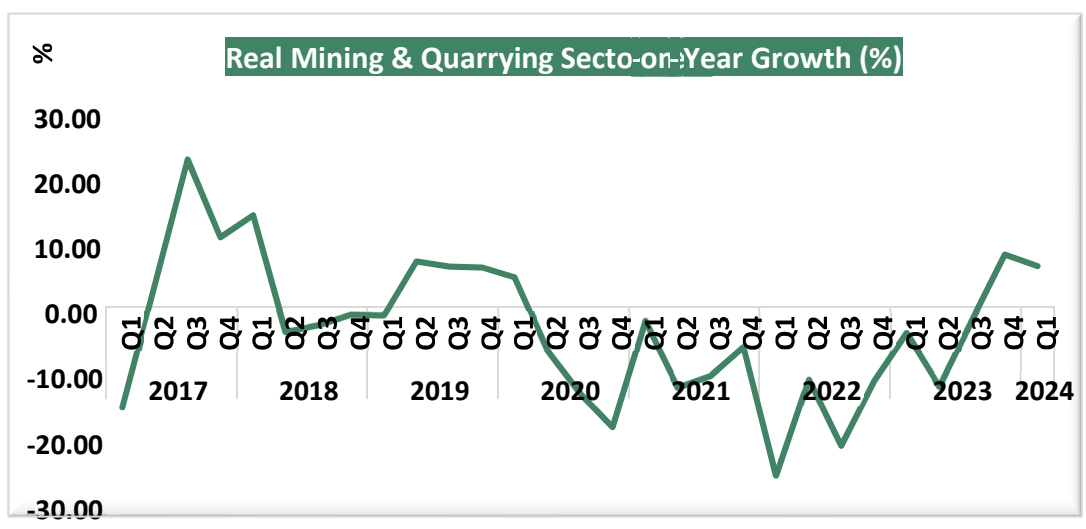


Figure 5: Mining and Quarrying real growth

Table 9: Quarterly Real Growth Rate by Sector (%) Year-on-Year

												<b>2023</b>										<b>2024</b>	
<b>GROWTH</b>												<b>Q1</b>		<b>Q2</b>		<b>Q3</b>		<b>Q4</b>		<b>Total</b>		<b>Q1</b>	
<b>CONTRIBUTION TO GDP</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>											
AGRICULTURE					-	1.50	1.30	2.10		1.13	0.18												
AGRICULTURE	23.91	23.33	22.90	23.11	0.90	24.45	25.08	25.13	25.16	26.21	25.88	25.58											
INDUSTRIES	23.61	24.81	24.93	23.71	0.31	21.96	22.25	22.24	22.25	21.36	20.56	19.02											
INDUSTRIES						1.94	0.46	3.86	0.72														
SERVICES	50.48	51.86	52.16	53.18	53.59	52.67	52.63	52.60	52.44	53.56	55.40	56.18											
SERVICES					4.35	4.42	3.99	3.98	4.18	4.32													
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00											
<b>REAL GROWTH RATE AT BASIC PRICE</b>					2.31	2.51	2.54	3.46	2.74	2.98													
<b>REAL GROWTH RATE AT MARKET PRICE</b>					2.40	2.65	3.09	3.21	2.86	2.79													
<b>NON OIL GROWTH RATE</b>					2.77	3.58	2.75	3.07	3.04	2.80													
<b>OIL GROWTH RATE</b>					-	-	-	12.11	-	5.70													
					4.21	13.43	0.85		2.22														

<b>GROWTH</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
AGRICULTURE	6.70	2.94	4.27	3.72	4.11	3.45	2.12	2.36	2.17	2.13	1.88	1.13
INDUSTRY	2.43	2.16	6.76	(2.24)	(8.85)	2.15	1.87	2.31	(5.85)	(0.47)	(4.62)	0.72
SERVICES	3.97	8.38	6.85	4.78	(0.82)	(0.91)	1.83	2.22	(2.22)	5.61	6.66	4.18
REAL GROWTH RATE AT BASIC PRICE	4.21	5.49	6.22	2.79	(1.58)	0.82	1.91	2.27	(1.92)	3.40	3.10	2.74
REAL GROWTH RATE AT MARKET PRICE	4.28	5.39	6.31	2.65	(1.62)	0.81	1.92	2.21	(1.79)	3.65	3.25	2.86
NON OIL GROWTH RATE	5.81	8.42	7.18	3.75	(0.22)	0.47	2.00	2.06	(1.25)	4.44	4.84	3.04
OIL GROWTH RATE	(4.95)	(13.07)	(1.32)	(5.45)	(14.45)	4.69	0.97	4.59	(8.89)	(8.30)	(19.22)	(2.22)

*Table 10: Annual Real Contribution & Growth Rate by Sector (%) Year-on-Year*

## SUMMARY AND CONCLUSION

This paper examines the stagflation and inflation rate in economic growth in Nigeria. This study found out that an increase in the general price level (inflation) has been detrimental to sustainable economic growth in Nigeria. These results have important policy implications for both domestic policy makers and development partners, implying that controlling inflation is a necessary condition for promoting economic growth. Thus, policy makers should focus on maintaining inflation at a low rate (single digit). Stability in inflation rate is an important factor as the results from the findings indicated that about 64 percent of the variations in GDP have been explained by inflation. This could imply any fluctuation in country's general price level has a significant impact on economic growth. In this regard the study concluded that all factors which cause an increase in the general price levels such as energy crisis, exchange rates volatility, and increase in money supply, poor agricultural production and so forth should be addressed.

## REFERENCES

- Ahmed, S. (2024). An Empirical Study on Inflation and Economic Growth in Bangladesh. *OIDA International Journal of Sustainable Development*, Vol. 2, No. 3, pp. 41-48.
- Al-Taeshi, H. T. A. (2023). The impact of inflation on economic growth: evidence of Malaysia from the period 1970-2014 (Published Master Thesis Submitted to Near East University Graduate School of Social Sciences Economics Maste
- Anidiobu, G. A., Okolie, P. I. P., & Oleka, D. C. (2018). Analysis of inflation and its effect on Economic growth in Nigeria. *Journal of Economics and Finance*, 9(1), 28-36.
- Anochiwa, L. I., & Maduka, A. (2015). Inflation and economic growth in Nigeria: empirical Evidence? *Journal of Economics and Sustainable Development*, 6(20), 113-121.
- Aydin, C. (2017). The inflationgrowth nexus: A dynamic panel threshold analysis for d-8 Countries. *Romanian Journal of Economic*, 20(4), 134-151.
- Chimobi, O. (2024). Inflation and Economic Growth in Nigeria. *Journal of Sustainable Development*, Vol. 3, No. 2, pp. 44-51.

- Chude, D. I., & Chude, N. P. (2015). Impact of inflation on economic growth in Nigeria. *International Journal of Business and Management Review*, 3(5), 26-34.
- Datta, K. and Kumar, C. (2011). Relationship between Inflation and Economic Growth in Malaysia. *International Conference on Economics and Finance Research IPEDR*, Vol. 4, No. 2, pp. 415-16.
- Denbel, F. S., Ayen, Y. W., & Regasa, T. A. (2016). The relationship between inflation, money Supply and economic growth in Ethiopia: Cointegration and causality analysis. *International Journal of Scientific and Research Publications*, 6(1), 556-565.
- Espinoza, R., Leon, H. and Prasad, A. (2010). Estimating the Inflation-Growth Nexus-A Smooth Transition Model, *IMF Working Paper*. Vol. 10, No. 76, pp. 2-9.
- Frimpong, M. and Oteng-Abayie, F. (2010). When is Inflation harmful? Estimating the Threshold Effect for Ghana, *American Journal of Economics and Business Administration*, Vol. 2, No. 3, pp. 232-239.
- Gopakumar, K. (2024). An Empirical Analysis of Inflation and Economic Growth in India, *International Journal of Sustainable Development*, Vol. 15, No. 2 pp. 4-5.
- Idris, T. S., & Suleiman, S. (2019). Effect of inflation on economic growth in Nigeria: 1980–2017. *MAJASS*, 18, 33-48. 17.
- Madhukar, S. and Nagarjuna, B. (2011). Inflation and Growth Rates in India and China: A Perspective of Transition Economies, *International Conference on Economics and Finance Research*, Vol. 4, No. 97 pp. 489-490.
- Mallik, G. and Chowdhury, A. (2001). Inflation and Economic Growth: Evidence from Four South Asian Countries, *Asian Pacific Development Journal*, Vol. 8, No. 1, pp. 123-135.
- Mohanty G. (2011). The Inflation-Growth Nexus: Testing for Optimal Inflation for Ghana, *Journal of Monetary and Economic Integration*, Vol. 11, No. 2, pp. 71-72.
- Ndoricimpa, A. (2023). Threshold effects of inflation on economic growth in Africa: Evidence from a dynamic panel threshold regression approach (Working Paper Series No 249, African Development Bank, and Abidjan, Côte d'Ivoire).
- Odhiambo, N. (2024). Inflation Dynamics and Economic Growth in Tanzania. A Multivariate Time Series Model, *Journal of Applied Business research*, Vol. 28, No. 3, pp. 746-47.
- Umaru, A. and Zubairu, J. (2012). The Effect of Inflation on the Growth and Development of the Nigerian Economy: An Empirical Analysis, *International Journal of Business and Social Science*, Vol. 3, No. 10, pp. 187-188.
- Umaru, A., & Zubairu, A. A. (2012). Effect of inflation on the growth and development of the Nigerian economy (an empirical analysis). *International Journal of Business and Social Science*, 3(10), 183-191.