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## EFFECT OF UNEMPLOYMENT AND INFLATION ON NIGERIAN ECONOMIC GROWTH: A TIME-SERIES ANALYSIS

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This study investigates the effect of unemployment and inflation on economic growth in Nigeria from 1999 to 2021. Employing econometric techniques such as descriptive statistics, trend analysis, and regression analysis, the study explores the relationships between these variables. Findings reveal a significant positive correlation between inflation and GDP growth, while unemployment exhibits a negative correlation with GDP growth. The analysis explains approximately 54.1% of the variance in GDP growth, highlighting the substantial influence of unemployment and inflation on economic performance. Policy recommendations include measures to control inflation, stimulate job creation, and diversify the economy. By addressing these factors, Nigeria can foster sustainable and inclusive economic growth.

**Keywords:** *Unemployment, Inflation, Economic Growth, Nigeria, Time-Series Analysis*

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## Introduction

Even in Nigeria, unemployment and inflation are the main causes of underdevelopment. Despite possessing an abundance of natural and human resources, Nigeria's economy has not performed well; among other social issues, it is marked by high rates of unemployment, high rates of inflation, and low per capita income (Aydin 2017). Not only does unemployment waste labor, but it also reduces output, which in turn reduces income and well-being (Adaramola and Dada 2020). One of the main development objectives in many developing nations is lowering unemployment. Nigeria's economy has not done well because of ongoing economic crises, high exchange rates, debt loads, an unfavorable balance of payments, and high rates of inflation (Durguti 2020).

High inflation has limited the capacity of the labor-surplus economy, leading to underemployment and unemployment in the black market (Karki et al. 2020). The Phillips curve frequently shows unemployment as a short-term declining curve, illustrating the close relationship between inflation and unemployment. Both are necessary for a country's social and economic survival, and when combined, they produce a vicious cycle that traps emerging countries in poverty. Sustained productivity growth is thought to be necessary to break this cycle. Because Nigeria's economy had become so reliant on oil prices, when those prices crashed in the early to mid-1980s, the country was faced with an inflation and unemployment crisis. Nigeria's economy, prior to the 1980s, had low inflation, competitive wage rates, a reasonably tranquil industrial environment, and it supported the country's population increase by importing labor.

Nigeria is a country rich in natural resources and human capital, but it still struggles with high rates of inflation and unemployment as a result of years of economic mismanagement and neglect of its social infrastructure (Ali & Zulfqar, 2018). In respective capacities, past administrations have implemented a number of measures to lower the nation's unemployment rate and regulate inflation. Government initiatives, however, have not produced the expected effects because these issues are reportedly getting worse rather than getting better. (Aliyu, & Elijah, 2017). The oil glut of 1981 was the cause of Nigeria's inflation issue, which led to a foreign exchange crisis and balance of payments imbalances, which called for different import restrictions. These limitations decreased the number of spare parts needed to operate machines and raw materials for domestic production. The lack of products and services resulting from this for domestic consumption drove inflation from 20% in 1981 to 39.1% in 1984.

Adoption of the Structural Adjustment Programme (SAP) in 1986 caused the government to remove subsidies and scale back its economic engagement, which resulted in a temporary reduction of fiscal

deficits. However, as the consequences of the Structural Adjustment Programme (SAP) policies became more pronounced, the GDP growth rate fell from 8.3% in 1990 to 1.2% in 1994, and inflation increased from 7.5% in 1990 to 57.0% in 1994. Due to a combination of factors including deliberate deregulation, higher lending rates, and the delayed effects of budgetary indiscipline, the inflation rate reached 72.8% in 1995.

Conversely, the rise in unemployment in Nigeria has led to a decline in consumption as a result of individuals' low incomes, which in turn has caused poor production as businesses are forced to lower their output due to their inability to sell their goods. As a result, the country's economic growth has slowed.

Because unemployment raises the crime rate, it also has societal repercussions. Furthermore, losing your self-respect and self-esteem among others in your age group in Nigeria is equivalent to losing your job. The percentage of workers without a job indicates how effectively a country uses its human resources and acts as a barometer of economic movement, whether positive or negative.

The overall objective of the study is to examine the effect of unemployment and inflation on Nigerian economic growth. However, the specific objectives of the study are as follows;

- i. Examine the effect of inflation on economic growth in Nigeria from 1999 to 2023
- ii. Investigate the effect of unemployment and economic growth in Nigeria from 1999 to 2023

Given the research problem above, the researcher formulated the following research question to this end. The following questions were formulated to guide this study:

What is the effect of inflation on economic growth from 1999 to 2023?

What is the effect of unemployment on economic growth from 1999 to 2023?

It is vital to analyze the effect of inflation, unemployment, and economic growth because these variables have the capacity to significantly impact the state of an economy as a whole.

Inflation is the pace at which prices rise within an economy and can be detrimental to consumer purchasing power as well as corporate efficiency. High inflation can discourage investment and lead to economic instability, but low inflation can promote growth by encouraging consumption and investment.

Unemployment is the proportion of persons who actively seek employment but are unable to find it. It may result in decreased consumer expenditure, a smaller tax base, and unrest in society. Overemployment can also impede economic growth by reducing the talent and resource pool that is accessible to the industry. (Alrayes & Wadi, 2018).

The complex relationship between inflation, unemployment, and economic growth is often influenced

by several factors. However, by understanding this relationship, policymakers may make more informed decisions about monetary and fiscal policies that can promote economic growth, reduce rates of unemployment and inflation, and improve the welfare of the general public.

Since the Nigerian economy is the subject of this study, the majority of the issue statement, research questions, hypotheses, and objectives center on it. The primary focus of this study is how inflation and unemployment affected Nigeria's economic growth over the twenty-two-year period between 1999 and 2023. 1999 was chosen as the foundation year since it marked Nigeria's transition from military to democratic governance. 2023 was chosen in accordance with the availability of data. The inquiry will make use of secondary data.

### **Literature Review** **Unemployment**

The literature on economics lacks a specific definition of unemployment. Simply put, unemployment is the state of not having a job (Azeng & Yogo, 2013). But economists define unemployment as the percentage of the labor force that is unemployed but nonetheless competent, willing, and able to work. Stated differently, the basic assumption behind unemployment, no matter how it is defined, is that there are people out there who ought to be working but aren't (Rivera & Tullao, 2020). The quantity of unemployment in a nation can be determined by calculating the unemployment rate, which is as follows:

$$\text{Unemployment Rate (U)} = \frac{\text{Number of people unemployed} \times 100}{\text{Labour force}} \quad 1$$

### **Types of Unemployment**

According to Rivera & Tullao, 2020 there are four types of unemployment: cyclical, seasonal, frictional, and structural. Workers must learn new skills when their current ones become obsolete or unnecessary, which causes structural unemployment. The time it takes for workers to move between jobs causes frictional unemployment. Industry variations, like construction workers losing their jobs during the rainy season, cause seasonal unemployment. Finally, the business cycle causes cyclical unemployment by causing layoffs due to decreased demand.»

### **Causes of Unemployment in Nigeria**

A number of factors contribute to Nigeria's high unemployment rate, including unfavorable economic conditions, corruption, and poor management that impede economic growth; population growth that outpaces job creation; the neglect of agriculture as a major employment sector due to the shift from agriculture to oil; low levels of security and infrastructure that deter foreign investment; reduced government spending in job-creating sectors; and

high interest rates that discourage investment and job creation.» ; (Adaramola and Dada 2020)

### **The Consequences of Unemployment in Nigeria**

A nation's Gross National Product (GNP) is reduced and its citizens' living standards are raised when there is a fall in overall output as a result of unemployment. When labor resources are not fully utilized, the economy performs below potential, which reduces the production possibility curve and the output of goods and services (Banda et al. 2016). This is an example of inefficient resource usage. Because of unemployment, resources are not being used to their full potential, which leads to slow economic growth. When fewer goods and services are available locally, unemployment may result in a movement of financial resources from the home economy to the global market, raising average price levels (Gyang et al. 2018). Studies have demonstrated a positive relationship between unemployment and criminal activity, with higher crime rates occurring in the presence of unemployment. People lose money when they are unemployed, which puts families in a challenging financial position. Psychological effects of unemployment include feelings of being a burden to society, especially in societies where there is a significant correlation between social status and employment position.

### **Inflation**

Inflation is the general price level of a nation that is continuously growing; it is also characterized as too much money chasing too few goods (Barro 1995). The Consumer Price Index is a common instrument used to measure inflation (CPI). The consumer price index measures changes in the level of prices of consumer goods. It is calculated in this way:

$$\text{CPI} = \frac{\text{Current year price index} \times 100}{\text{Base year price index}} \quad 1$$

### **The Impact of Inflation on the Nigerian Economy**

Inflation has varying effects on individuals due to the depreciation of money (Dinh, 2020). For instance, the majority of Nigeria's impoverished people are unhappy due to rising costs, which deepens the gap between the rich and the poor. Additionally, it helps all businesses because it drives up the cost of goods and services; debtors (borrowers) gain while creditors (lenders) lose because they must pay their creditors with money that appreciates less in an inflationary environment; people on fixed incomes lose because their incomes don't change despite rising prices; and rising prices cause savings and investment to decline, which stifles economic growth and production. Becherair and Tahtane (2017).

### **Unemployment- Inflation trade-off**

According to Ben et al. (2018), Reducing unemployment is difficult for those who are unemployed, but it is not free. Short-term decreased

unemployment may lead to increased inflation, especially if the economy is almost at full employment and resources are being used to their fullest extent. There are two possible explanations for this link: one short-term and one long-term. Although there is an inverse relationship between unemployment and inflation in the short term (Phillips's curve), economists have observed that these two notions have no relationship in the long run. The link has presented regulators with a number of difficulties.

### **Empirical Review**

Miftahu Idris (2021) examined the effects of unemployment and inflation on economic growth in Nigeria using annual time series data covering the years 1986 to 2020. The model coefficient is investigated by the application of the ordinary least squares approach. The findings indicate that although inflation contributes positively to economic growth in Nigeria, the incidence of unemployment has a significant detrimental effect. Cost-push inflation and structural unemployment are two features of the Nigerian economy. Thus, policies that encourage self-employment and reduce operational expenses must be developed by the government and related agencies in order to achieve high, rapid, and sustainable economic growth.

Anidiobu, Okolie, and Oleka (2018) look into how inflation affects Nigeria's economic growth from 1986 to 2015. Data was obtained from the website of the Central Bank of Nigeria (CBN). Descriptive statistics and the Ordinary Least Square (OLS) estimation method were used to estimate the variables. The real gross domestic product (RGDP) was used as a proxy for economic growth, and the independent variables were the interest rate, inflation rate, and currency rate. The findings demonstrated that, in contrast to Idris and Suleiman's conclusions, Nigeria's inflation rate had a positive and insignificant effect on economic growth (2019).

Idris and Suleiman (2019) examine the relationship between inflation and Nigeria's economic growth using a vector error correction method. The variables used in the study were the GDP, interest rate, inflation rate, and exchange rate. The analysis conducted from 1980 to 2017 concluded that there is a statistically significant negative association between interest rates and inflation and long-term economic growth.

Adaramola and Dada (2020) examine the impact of inflation on the growth of the economy from 1980 to 2018. Time series data on the rate of inflation, real GDP, money supply, exchange rate, rate of interest, and degree of openness were used in the study. The investigation made use of the ARDL model, the serial correlation LM test, the heteroscedasticity test, the cumulative sum test, and the normality test. The results demonstrated that interest rates and the money supply have a direct link with economic growth, but exchange rates and inflation have an opposite relationship.

Okoroafor, Adeniji, and Olasehinde (2018) examined thresholds and inflation estimates for Nigeria from 1961 to 2016 as well as the causal relationship between inflation and economic growth in their paper. The results showed that inflation and economic growth are not the same thing during the study period; rather, an inflation threshold of 14%–15% was created for Nigeria, with long- and short-term ramifications.

The impact of inflation and interest rates on economic growth in Nigeria between 1981 and 2014 was empirically studied by Babalola, Danladi, Akomolafe, and Ajiboye (2015) using the Ordinary Least Square (OLS) method. They found that while both factors had a negative effect on growth, neither inflation nor interest rate granger causes growth.

In their conclusion, they advised policy makers to concentrate on preserving interest rate stability and low, single-digit inflation. Rabail, Ahmad, Emil, and Narmatha (2017) employed a consistent quantitative approach and the econometric model to ascertain the relationship between the dependent variable, inflation, and the independent variables, money supply, exchange rate, and unemployment rate—all of which were classified as mathematical models and econometric models. The results demonstrated that high inflation may have detrimental repercussions on a country.

Ditimi Keji and Emma-Ebere (2018) carried out an empirical analysis on the relationship between money supply and inflation in Nigeria using annual time series data spanning the years 1970 to 2016. To ascertain the short- and long-term dynamics of the variables under examination, they used an error correction technique and the co-integration test. Their findings showed that the money supply had no long-term or short-term impact on inflation, most likely as a result of the country's present recession. The Granger causality outcome indicates that there was no relationship throughout the study period between the money supply in Nigeria and inflation, and vice versa.

Elijah (2021) looks into the relationship between inflation and unemployment and the growth of the Nigerian economy. The study uses the Autoregressive Distributed Lag (ARDL) model on the selected variables over the thirty-year period spanning 1990–2019. The results of the ARDL model show that all of the variables have short-term statistical significance. Unemployment has a beneficial effect on growth rate, whereas inflation has a negative effect. Over the long run, only unemployment is statistically significant; the inflation rate is not. In the long term, growth rate is positively impacted by unemployment and inflation. Therefore, the study suggests that policy makers should ensure an increase in the output of other sectors of the economy and diversify the economy in order to achieve intrusive economic growth.

Adaramola and Dada (2020) investigate how inflation affected economic expansion from 1980 to 2018. Data

on real GDP, government consumption spending, money supply, interest rates, currency rates, inflation rates, and the level of economic openness were all employed in the study. The study used the ARDL model, cumulative sum test, heteroscedasticity test, serial correlation LM test, and normality test. The results showed that while the inflation rate and exchange rate had the opposite effect on economic growth, the money supply and interest rate were positively connected with it.

### **Theoretical Review**

#### **Okun's law (1962)**

Since output is determined by the amount of labor used in the manufacturing process, Okun's law states that output and employment should have a positive correlation. Since the labor force is equal to the employed minus the unemployed, there is a negative link between output and unemployment. Other parts of Okun's rule state that for every percentage point that the cyclical unemployment rate rises, real GDP declines by two percentage points. According to Okun, in order to maintain and even decrease the unemployment rate, real GDP growth typically needs to be rather near to the rate of growth of its potential. The size of the labor force and productivity levels must therefore continue to rise, forcing the economy to develop faster than it could. This theory suggests that increasing economic output could result from utilizing the work force that is currently employed. Because human capital is wasted and resources that could boost productivity are underutilized, a country with a high unemployment rate cannot witness a rise in production. Since the unemployed's contribution to economic growth is crucial, it is expected of the government to create the required policies and muster the political will to help them return to the labor. Keynesian Theory

The Theory of Keynes According to this hypothesis, when there is full employment and aggregate demand (above potential output) exceeds aggregate supply, inflation arises. For example, when people in a society desire to live beyond their means, this typically results in inflation as a result of rising aggregate demand that isn't accompanied by rising supply. Taxes, government spending, investment spending, and household consumption spending are more Keynesian examples that can influence the level of prices. The key distinction between the monetarist and Keynesian approaches is that the former blames inflation solely on changes in the money supply, while the latter blames excess increases in government and investment spending, among other total expenditures, for the excess in total demand that results in inflation.

### **Methodology**

An expo-facto research design was used in the study. Because of its unique characteristics in analyzing the link between the study's variables, the research design is suitable for this particular investigation. It also includes a thorough description of the modeling equation system that was employed to accomplish the study's goals.

In essence, the study made use of secondary data. The Central Bank of Nigeria Statistical Bulletin is the source of time series annual data on GDP, unemployment, and inflation in Nigeria from 1991 to 2022.

Purposive sampling, which is generated at the researcher's option, was used in this study. Only the study's purpose is taken into consideration, and the researchers are aware of the objective variables, which include real GDP, which serves as a proxy for economic growth in Nigeria, unemployment, inflation, and Ordinary least squares (OLS) were used to analyze the data, and GDPGR was regressed on the rates of economic growth in Nigeria against inflation, unemployment, and exchange. The technique helps establish quantifiable relationships between factors that can be applied to forecasting. In light of the fitness test and ease of comprehension, this is the most suitable method. Our assumption was that the OLS assumptions would hold in order to estimate the model's parameters. Finding out how much the exogenous or policy variables explain the endogenous variable is made easier with the aid of this analysis.

The Central Bank of Nigeria (CBN) 2023 statistical bulletin, indexmundi, the National Bureau of Statistics (NBS), and the World Development Indicators (WDI) 2023 were the sources of the secondary data used in this study.

Using GDP growth as a stand-in for economic growth, this study updated Okun's type model to include unemployment and inflation as independent variables. Okun's law is essentially a reduction of the Phillips postulate, assuming that GDP growth, unemployment, and inflation are all linear.

$EUERR + INFR = GDPR$  It is impossible to say what to do... (1) Where?

Gross Domestic Product Growth Rate is known as GDPR. UER stands for Unemployment Rate.

Inflation Rate = INFR

Equation (1)'s linear relationship can be expressed as follows:  $GDPR = \beta_0 + \beta_1UER + \beta_2INFR + Ut$ . (2) In which  $\beta_1$  and  $\beta_2$  represent the pertinent elasticity

The constant is denoted by  $\beta_0$ .

The error term,  $ut$ , is susceptible to the standard stochastic consumptions.

### **Data Analysis and Interpretation**

This section presents the information, analysis, and interpretations. The data were examined using econometric approaches, including descriptive statistics, the Ordinary Least Square (OLS) correlation matrix, and the Augmented Dicker Fuller Tests for Unit Roots.

Table 1 displays the summary statistics of the research study's findings. The GDP grew by 5.381% on average between 2002 and 2020; the highest growth rate was 14.604% in 2002 and the lowest was -1.794%. The standard deviation, which is 4.069, shows the difference from the mean. The Jarque-bera probability value of 0.930 indicates that the gross domestic growth

rate is projected to follow a normal distribution during the research period.

During this period, the average unemployment rate in Nigeria was 11.404%. The lowest unemployment rate is 8.22%, while the highest is 19.67%. However, the unemployment rate is not dispersed consistently. Furthermore, the inflation rate has a minimum of 5.40%, a maximum of 18.89%, and a mean of 12.08%. On the other hand, the jarque-bera probability value suggests that the inflation rate is regularly distributed.

Table 1

**Descriptive statistics**

	GDPG	UEMR	INFR
Mean	5.381	11.404	12.108
Median	5.518	9.631	12.225
Maximum	14.604	19.665	18.869
Minimum	-1.794	8.218	5.401
Std. Dev.	4.069	3.351	3.750
Jarque-bera	0.143	8.396	2.108
Probability	0.930	0.015	0.682

Source: Author's computation (2024)

**Trend analysis**

Figure 1 displays the trend analysis of the gross domestic product growth rate for the study period. Since 1999, the GDP has been expanding gradually, and in 2002, it attained its highest growth rate. After that, it has been arithmetically dropping; in 2016, the growth rate shifted to the negative and has been oscillating ever since.

The trend analysis of the unemployment rate during the research period is displayed in Figure 2. The unemployment rate in Nigeria was relatively steady from 1999 to 2012; nevertheless, it reached its lowest point in 2015 and has been gradually increasing ever then.

Figure 3 displays the trend analysis of the inflation rate during the study period; however, the rate has fluctuated due to significant increases and falls.

**Test of Multicollinearity**

This section examines whether the variables in the study have perfect correlation or not. The pair-wise correlation coefficient is shown in Table 2, the correlation matrix. The pair-wise correlation coefficients show that there is no perfect correlation among the independent variables in the study. This allows the impact of inflation and unemployment on the Nigerian economy to be estimated while keeping the control variables at the same levels.

Table 2

**Correlation matrix**

	GDPG	INFR	UEMR
GDPG	1		
INFR	0.030	1	
UEMR	-0.579	0.333	1

Source: Author's computation (2024)

**Unit root test**

The Augmented Dickey Fuller (ADF) test is used to administer the stationarity test. The ADF test is based on the unit root (non-stationary) premise.

The unit root test, which determines whether variables are stationar, was introduced in this section. The results of the Augmented Dickey-Fuller (ADF) unit root test are shown in Table 4.3. The test statistics and critical values were compared at a significance level of 5%, and it was concluded that the series are either integrated of order zero [I(0)] or order one [I(1)].

Table 3

**Augmented Dickey-Fuller (ADF) test**

H <sub>0</sub> : Unit root			
Variables	I(d)	Statistics values	Critical values (5%)
GDPG	I(0)	-4.210	-3.632
INFR	I(0)	-4.030	-3.645
UEMR	I(0)	-4.067	-3.645

Source: Author's computation (2024)

**Ordinary least square**

Table 4 displays the findings of the ordinary least square (OLS) estimation, which was used to investigate the relationship between the rates of inflation and unemployment and the GDP growth rate (dependent variable).

The coefficient of inflation, which is 0.272, indicates that, with the unemployment rate held constant, a one-unit increase in the inflation rate is connected with a 0.272-unit increase in the GDP growth rate. This demonstrates the positive correlation between inflation and GDP growth rate.

On the other hand, the unemployment rate's coefficient, which is -0.764, shows that a one-unit increase in the unemployment rate is associated with a -0.764-unit decline in the GDP growth rate, all other things being equal. This implies a negative correlation between the pace of GDP growth and unemployment.

With an R-squared of 0.541, it can be inferred that variations in the rates of unemployment and inflation explain approximately 54.1% of the variance in the GDP growth rate. Stated differently, 54.1% of the variation in the GDP growth rate can be explained by the model using only two independent variables. The remaining 45.9% cannot be explained and may be the result of other factors that the model did not account for.

**Discussion of findings**

The study offers comprehensive insights into various aspects of the Nigerian economy, focusing on the relationships between unemployment, inflation, and GDP growth over a span of 23 years. Descriptive statistics reveal key averages, with unemployment averaging at 11.44%, inflation at 12.11%, and gross domestic product (GDP) growth rate at 5.40%.

### GDPGR

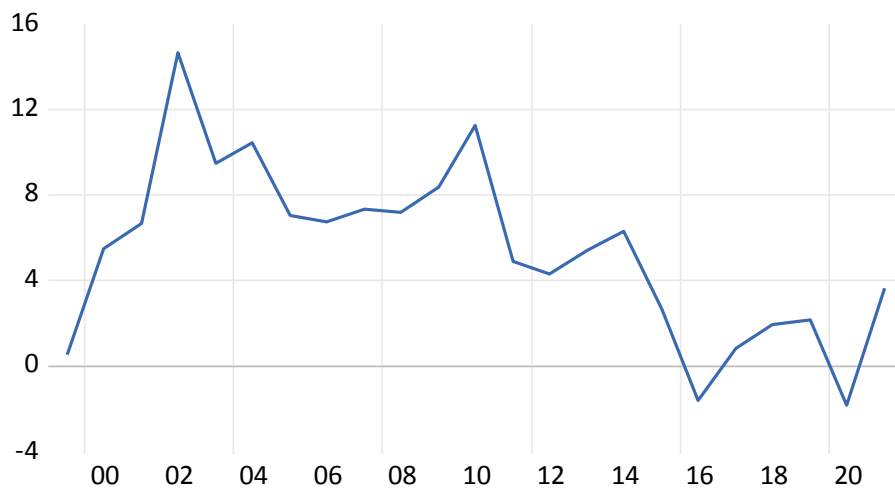


Fig. 1. Gross Domestic Product Growth Rate  
Source: Author's computation (2024)

### UER

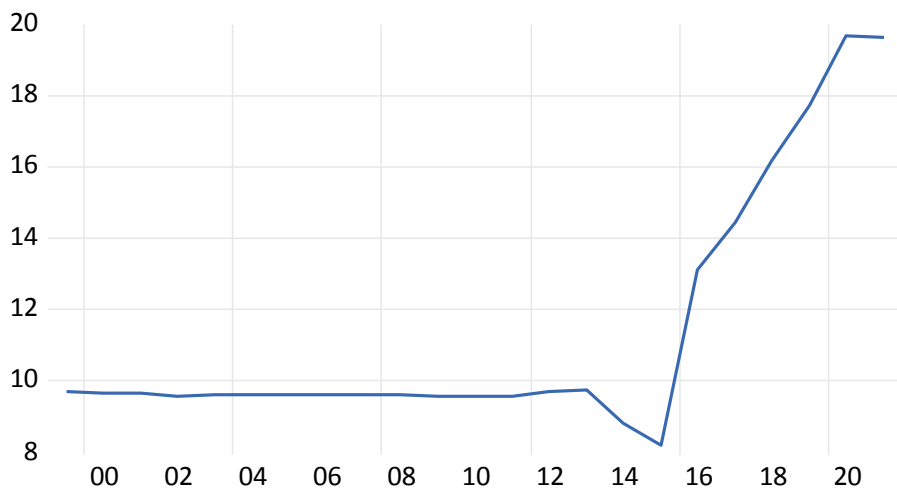


Fig. 2. Unemployment Rate  
Source: Author's computation (2024)

### INFR

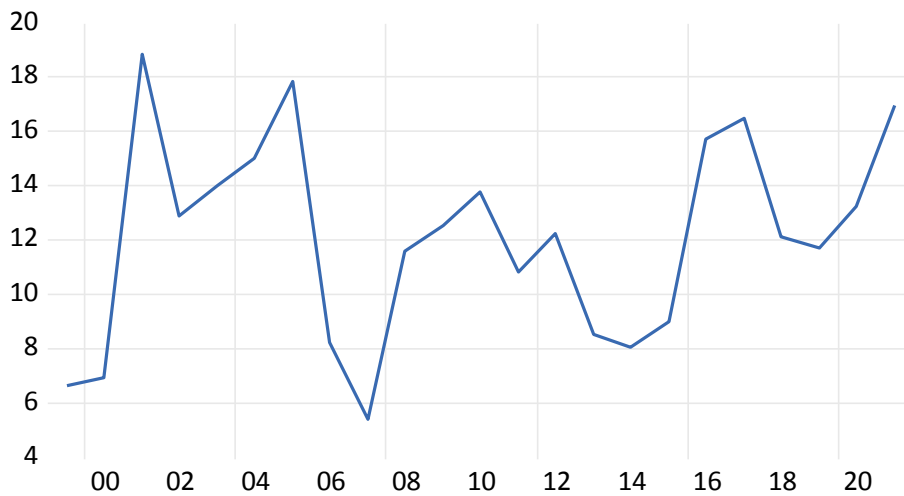


Fig. 3. Inflation Rate  
Source: Author's computation (2024)

Table 4

**Dependent Variable: GPDR**  
**Method: least Squares**  
**Date: 01/20/24 Time: 10:09**  
**Sample: 1999 – 2022**  
**Included observation: 23**

Variable	Coefficient	Std. Error	t-statistics	Prob.
C	10.796	2.892	3.732	0.001
INFR	0.272	0.201	1.355	0.191
UEMR	-0.764	0.213	-3.581	0.002
R-squared	0.541		Mean dep. Var.	5.381
Adjust R-squared	0.530		S.D dependent var.	4.069
S.E of regression	3.330		Akaike info. Criterion	5.365
Sum squared resid	221.760		Schwarz criterion	5.513
Log likelihood	-58.696		Hannan- Quim criterion	5.402
F-statistics	6.483		DW test	1.343
Prob(F-stat)	0.009			

Source: Author's computation (2024)

In analyzing the trends, GDP growth shows a consistent rise from 1999, peaking in 2002 before declining steadily, turning negative in 2016, and fluctuating thereafter. Similarly, the unemployment rate remains relatively stable until 2012, with a noticeable decline in 2015 followed by sporadic increases.

Conversely, the inflation rate exhibits fluctuations throughout the study period, marked by sharp increases and declines, indicating a volatile inflationary environment. Regression analysis highlights the impact of unemployment and inflation on GDP growth. A negative correlation is observed between unemployment and GDP growth, with a coefficient of -0.764, suggesting that higher unemployment leads to decreased GDP growth.

In contrast, there exists a positive correlation between inflation and GDP growth, as indicated by a coefficient of 0.272, implying that higher inflation rates are associated with increased GDP growth.

These findings underscore the intricate dynamics at play within the Nigerian economy and emphasize the importance of addressing unemployment and managing inflation to foster sustainable economic growth. Policymakers can utilize these insights to design targeted interventions aimed at promoting job creation, stabilizing prices, and enhancing overall economic resilience and prosperity.

### Conclusion and Recommendations

#### Conclusion

Based on the meticulous analysis of data spanning from 1999 to 2022, this study provides valuable insights into the dynamics between unemployment, inflation, and Nigerian economic growth. Our findings indicate a significant relationship between these variables, shedding light on crucial aspects of the nation's economic landscape.

Firstly, the positive correlation between inflation and GDP growth underscores the importance of managing inflationary pressures to sustain economic expansion. Conversely, the negative correlation observed between unemployment and GDP growth underscores the

urgency of addressing unemployment as a hindrance to economic progress.

Our analysis, incorporating various econometric techniques, explains approximately 54.1% of the variation in GDP growth, demonstrating the substantial influence of unemployment and inflation on economic performance. Moreover, the stationarity of inflation and unemployment series indicates their suitability for robust time-series analysis.

In light of these findings, it is recommended that policymakers prioritize measures to control inflation, stimulate job creation, enhance skills development, diversify the economy, and implement rigorous monitoring and evaluation mechanisms. By adopting these recommendations, Nigeria can navigate the challenges posed by unemployment and inflation while fostering sustainable and inclusive economic growth.

Ultimately, this study contributes to the body of knowledge on the Nigerian economy, providing policymakers, researchers, and stakeholders with valuable insights to inform evidence-based decision-making and drive socio-economic development in the country.

#### Recommendations

The recommendations for this research study are:

**1. Policy Measures to Control Inflation:** Given the positive correlation between inflation and GDP growth, policymakers should focus on implementing measures to control inflationary pressures. This may include monetary policy adjustments, such as interest rate changes, to stabilize prices and foster a conducive environment for sustainable economic growth.

**2. Job Creation Initiatives:** Recognizing the detrimental impact of unemployment on economic growth, there is a pressing need for targeted interventions to spur job creation. This could involve government-led programs to promote entrepreneurship, investment in infrastructure projects, and initiatives to enhance the business environment, thereby stimulating employment opportunities across various sectors.



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## ВПЛИВ БЕЗРОБІТТЯ ТА ІНФЛЯЦІЇ НА ЕКОНОМІЧНЕ ЗРОСТАННЯ НІГЕРІЇ: АНАЛІЗ ЧАСОВОГО РЯДУ

У цьому дослідженні вивчається вплив безробіття та інфляції на економічне зростання в Нігерії з 1999 по 2021 рік. Використовуючи такі економетричні методи, як описова статистика, аналіз тенденцій і регресійний аналіз, дослідження досліджує зв'язки між цими змінними. Результати показують значну позитивну кореляцію між інфляцією та зростанням ВВП, тоді як безробіття демонструє негативну кореляцію зі зростанням ВВП. Аналіз пояснює приблизно 54,1% відхилень у зростанні ВВП, підкреслюючи значний вплив безробіття та інфляції на економічні показники. Політичні рекомендації включають заходи щодо контролю над інфляцією, стимулювання створення робочих місць і диверсифікації економіки. Враховуючи ці фактори, Нігерія може сприяти сталому та інклюзивному економічному зростанню.

**Ключові слова:** безробіття, інфляція, економічне зростання, Нігерія, аналіз часових рядів

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