COMPARATIVE STUDY OF THE ECONOMY OF NIGERIA BEFORE, DURING AND AFTER THE CORONA VIRUS DISEASE 2019 (COVID-19) LOCKDOWN

D.F. Nwosu[1], G. C. Ibeh[1*] and C. E. Onyenekwe[2]

[1]Department of Mathematics/Statistics, Federal Polytechnic Nekede, Owerri, Imo State, Nigeria
[2]Department of Statistics, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
[*]email: gabmicchuks@yahoo.com, +2348065955372

ABSTRACT

This study examines the Nigerian economy before, during, and after the COVID-19 lockdown by analyzing monthly data on six key economic indicators—Gross Domestic Product (GDP), inflation rate, unemployment rate, exchange rate, interest rate, and trade balance—from January 2019 to December 2021. Data were sourced from the National Bureau of Statistics (NBS), the International Monetary Fund (IMF), the Central Bank of Nigeria (CBN), and the World Bank. Repeated measures ANOVA and Friedman's test (for non-normal data) were applied. Due to non-normality, the Friedman test was used to analyze GDP, interest rate, unemployment rate, and exchange rate, revealing significant differences across years. The Nemenyi post-hoc test identified statistically significant differences in GDP (2020–2021), interest rate (2019–2020, 2019–2021), unemployment rate (2019–2020, 2020–2021), and exchange rate (2019–2021). Repeated measures ANOVA was used for inflation rate and trade balance, showing significant differences in inflation rates but not in trade balance. Overall, five of the six economic indicators exhibited significant changes, underscoring the COVID-19 lockdown's substantial impact on Nigeria's economy.

Keywords: Corona Virus Disease 2019 (COVID-19), Economic Indicators, Friedman Non-Parametric Test, Nigeria's Economy, Repeated Measures Analysis of Variance

INTRODUCTION

1.1 Background to the study

The Corona Virus Disease, 2019 (COVID-19) pandemic lockdown has had a critical effect on the economies of many countries around the world, and Nigeria is not an exception. As one of Africa's largest economies, Nigeria has experienced profound economic disruptions owing to the pandemic. The pandemic is believed to have affected various economic indicators which determine the state of the economy of Nigeria. Some of these indicators include the gross domestic product (GDP), inflation rate, unemployment rate, exchange rate, interest rate and trade balance.

To better understand the economic effects of the pandemic on Nigeria, there is need for a comparative study which will examine the economy of the country before, during and after the COVID-19 pandemic lockdown. Such a research study would help to identify the specific impacts of the pandemic on the various economic indicators of Nigeria's economy, and assess the effectiveness of the policy responses aimed at mitigating such impacts. By comparing the pre-pandemic and post-pandemic periods, the study would be able to draw insights into the economic implications of the pandemic on the economy of Nigeria and provide recommendations for future economic policies and strategies.

Kanu (2020) examined how the COVID-19 pandemic lockdown affected Nigeria's economy, highlighting job losses and decreased incomes resulting from the crisis. He acknowledged that the pandemic's setbacks have negated recovery efforts following a previous economic recession caused by a global oil price crash and insufficient foreign exchange earnings. The financial and corporate sectors also faced significant pressure on their balance sheet. Ozili (2020) examined the COVID-19 situation in Nigeria, highlighting its economic impact and structural causes. The study revealed that the economic downturn was driven by declining oil prices and COVID-19-related disruptions. The study noted that although the government and monetary authorities provided financial assistance and accommodative policies, the fear of the virus prevented economic recovery. Nseobot et al. (2020) studied the impact of COVID-19 on Nigeria's economy using an Ex-post facto design and data from government documents. The findings revealed that there was an increase in economic crises as a result of a decrease in oil prices caused by COVID-19 pandemic. Orhero and Oghuvbu (2020) examined the socio-economic effects of the COVID-19 pandemic on Nigeria's development, using the linkage theory and qualitative methods with secondary data. The study disclosed that the pandemic has increased unemployment, reduced revenues and heightened crime rates. Faruk (2020) investigated the impact of COVID-19 on the Nigerian economy from January, 2019 to June, 2021. Using secondary data and ARDL analysis, he found that COVID-19 negatively affected GDP, import and export trade and government revenue.

Andam et al. (2020) analyzed the economic impacts of COVID-19 and related policies in Nigeria using a multiplier model based on the 2018 Social Accounting Matrix (SAM). The study revealed that the five-week lockdowns in various regions caused a 34.1% GDP loss ($ 16 billion), with significant impacts on the services sector and a 13.1% loss in agricultural output. Household incomes dropped by 33% on average, leading to a 14-percentage point rise in the poverty rate, pushing 27 million people below the poverty line. Farayibi and Asongu (2020) reviewed the macroeconomic impact of COVID-19 in Nigeria using Aggregate Supply–Aggregate Demand (AS-AD) model. They discovered that, while there are significant correlations between inflation rates and economic activity trends, the overall macroeconomic impacts, such as on inflation, employment, exchange rate and GDP growth, are largely insignificant. Mallum et al. (2020) investigated the impact of COVID-19 pandemic on Nigeria's economy, particularly in Abuja, using tax revenue data and Regression Discontinuity Design (RDD). It was discovered that stringent public health measures like lockdowns, while controlling the spread of the virus, negatively affected the local economy leading to predicted revenue losses. Otache (2020) discussed the effects of the COVID-19 pandemic on Nigeria's economy, including job losses, income drops for informal workers, food insecurity, business and school closures, declining oil revenues, and economic uncertainties. Iluno et al. (2021) modeled the impact deaths due to COVID-19 on Nigeria's GDP per capita. Using nine models, the gamma cubic model was found to best predict economic wellbeing. The results show a non-linear relationship, with COVID-19 mortality adversely affecting Nigeria's economic wellbeing. Nweze and Nnadi (2021) empirically studied the influence of the COVID-19 pandemic lockdown on the economy of Nigeria using a survey design. Structured questionnaires were administered to various Nigerian, and data were analyzed using Godden and Yamane statistical tools which revealed that a significant positive relationship exists between the COVID-19 lockdown and the Nigerian economy. Abdulyakeen (2021) examined the economic implications of COVID-19 in Nigeria and proposed policy recommendations to mitigate them. Using secondary data and a descriptive method, the study revealed the pandemic's transmission mechanisms and its widespread negative impact, especially on the financial sector. Using a combination of primary and secondary data analyzed with percentages, single-sample t-test, and the method of least squares, Inegbedion (2021) found a significant decrease in Nigeria's economic activities due to COVID-19 pandemic. Adenomon et al. (2022) analyzed the impact of COVID-19 pandemic on the Nigerian stock exchange. In analyzing the data, they used Generalized Autoregressive Conditional Heteroskedasticity (GARCH) models to fit the data and the results of the analysis showed that COVID-19 caused losses and high volatility in Nigerian stock returns. Thomas et al. (2022) examined the impact of COVID-19 on crime, poverty and unemployment in Nigeria, and its threat to the Sustainable Development Goals (SDGs). The study revealed that the pandemic led to a decline in GDP, spread of poverty, hunger and

significant job losses, particularly in Small and Medium Enterprises (SMEs), worsening underemployment and youth unemployment. Bello et al. (2022) investigated the impact of COVID-19 on sectoral stock prices in Nigeria from February 28 to June 26, using AutoRegressive Distributed Lag (ARDL) bounds test. It was discovered that the pandemic negatively affected stock market indices, particularly the banking sector, which was the worst hit. Anyadike and Mgbomene (2023) studied the influence of COVID-19 on the economy of Nigeria using monthly data from Jan., 2018 to Oct., 2022. Analysis revealed a structural break in May, 2020. Before and after the break, agriculture significantly boosted the GDP, while industrial output became significant post-pandemic. The services sector, however, negatively impacted the GDP post-pandemic as it was worst hit by the pandemic. Sani and Mulyanto (2024) assessed the impact of COVID-19 on Nigeria's fiscal performance, highlighting the worsening budget underperformance, revenue shortfalls and reliance on international loans as a result of the pandemic. Usman et al. (2024) investigated the effects of COVID-19 on Nigeria's socio-economic development between 2019 and 2022, utilizing secondary data for their analysis. Findings from the study suggest there were severe economic consequences due to falling oil prices and business shutdowns as a result of the pandemic.Although previous researchers have investigated the effect of COVID-19 on the Nigerian economy, none, to the best of our knowledge, have comprehensively considered the six key economic indicators used in this study—GDP, interest rate, unemployment rate, exchange rate, inflation rate, and trade balance—in their assessments. This study aims to fill this gap by providing a more holistic evaluation of the impact of COVID-19 on the Nigerian economy through these critical indicators.

Overall, a comparative study of the Nigerian economy before, during and after the COVID-19 pandemic lockdown is quite crucial for understanding the pandemic's impacts on Nigeria's economy and providing evidence-based policy recommendations for economic recovery and growth.

This study will be beneficial to policymakers, researchers, and other stakeholders interested in the economic development of Nigeria. The study also intends to reveal the extent to which the COVID-19 pandemic affected the economy of Nigeria, and the key difference in the economic indicators before, during and after the pandemic. It will also disclose the important lessons that can be learned from the COVID-19 experience and how the country can better prepare itself for future unforeseen economic crises.

1.2 Statement of the Problem

The economy of any country is influenced by various key economic indicators, which provide insights into its overall health and stability. Among these, six critical indicators—gross domestic product (GDP), interest rate, unemployment rate, exchange rate, inflation rate, and trade balance—serve as essential metrics for evaluating economic performance. Understanding the impact of significant global events, such as the COVID-19 pandemic lockdown, on these indicators is crucial for a comprehensive assessment of a country's economic status.

In the context of Nigeria, the COVID-19 pandemic and the resulting lockdown had profound effects on various aspects of the economy. However, despite the importance of these economic indicators, there is a noticeable gap in the literature. To the best of our knowledge, no existing study has holistically examined the influence of COVID-19 on these six key economic indicators in Nigeria. This gap in the research leaves an incomplete understanding of how the pandemic and the subsequent lockdown impacted the Nigerian economy.

1.3 Objectives of the Study

This research aims to achieve the following objectives:

1. Assess the impact of the COVID-19 pandemic on Nigeria’s Gross Domestic Product (GDP), examining changes in economic output before, during, and after the lockdown periods.
2. Evaluate the effect of the COVID-19 pandemic on Nigeria’s interest rates, analyzing shifts in monetary policy and market dynamics resulting from the economic disruptions caused by the pandemic.
3. Analyze the trends in Nigeria’s unemployment rate during the COVID-19 pandemic, exploring how lockdown measures and economic stagnation affected employment levels across various sectors.
4. Investigate the influence of the COVID-19 pandemic on Nigeria’s exchange rates, determining how foreign exchange markets and currency valuation responded to the pandemic’s global economic effects.
5. Examine the impact of the COVID-19 pandemic on Nigeria’s inflation rates, identifying key drivers of inflation during the pandemic period and their relation to supply chain disruptions, fiscal policy, and market shocks.
6. Evaluate how the COVID-19 pandemic has affected Nigeria’s trade balance, studying changes in import and export activities and their overall impact on Nigeria's economy.

1.4 Research Questions

This study seeks to address the following research questions

(i) How has COVID-19 pandemic affected Nigeria's GDP?
(ii) What impact has the COVID-19 pandemic had on Nigeria's interest rates?
(iii) How did unemployment rate fair during the COVID-19 pandemic?
(iv) How have Nigeria's exchange rates influenced by COVID-19 pandemic?
(v) What impact has COVID-19 pandemic had on the inflation rates in Nigeria?
(vi) How has COVID-19 pandemic influenced the trade balance of Nigeria?

1.5 Research Hypotheses

To systematically investigate these questions, the following hypotheses are formulated:

General Hypothesis:

H_0 : The lockdown due to COVID-19 has no significant impact on the economic indicators of Nigeria

vs

H_1 : The lockdown due to COVID-19 has a significant impact on the economic indicators of Nigeria

Specific Hypotheses:

1. H_0 : The lockdown due to COVID-19 has no significant impact on the GDP of Nigeria
   Vs
   H_1 : The lockdown due to COVID-19 has a significant impact on the GDP of Nigeria
2. H_0 : The lockdown due to COVID-19 has no significant impact on the inflation rate of Nigeria
   Vs
   H_1 : The lockdown due to COVID-19 has a significant impact on the inflation rate of Nigeria
3. H_0 : The lockdown due to COVID-19 has no significant impact on the unemployment rate of Nigeria
   Vs
   H_1 : The lockdown due to COVID-19 has a significant impact on the unemployment rate of Nigeria
4. H_0 : The lockdown due to COVID-19 has no significant impact on the exchange rate of Nigeria

Vs

H_1 : The lockdown due to COVID-19 has a significant impact on the exchange rate of Nigeria

5. H_0 : The lockdown due to COVID-19 has no significant impact on the interest rate of Nigeria

Vs

H_1 : The lockdown due to COVID-19 has a significant impact on the interest rate of Nigeria

6. H_0 : The lockdown due to COVID-19 has no significant impact on the trade balance of Nigeria

Vs

H_1 : The lockdown due to COVID-19 has a significant impact on the trade balance of Nigeria

2.0 Methodology

2.1 Source of data

The secondary data used in this study were collected from various sources including National Bureau of Statistics (NBS), the International Monetary Fund (IMF), the Central Bank of Nigeria (CBN) and the World Bank. The data comprise the monthly gross domestic product (GDP), inflation rate, unemployment rate, exchange rate, interest rate and trade balance from January, 2019 to December, 2021. For want of space, the data collected for the study are not presented here. However, interested readers can access them online through the websites of the agencies/institutions listed above.

2.2 Method of Data Analysis

To analyze the data, the repeated measures analysis of variance (ANOVA) method of analysis will be adopted. This method is applied to analyze data where multiple measurements are taken on the same subjects over different time points. So, this method will be suitable in analyzing the data as each of the economic indicators is measured monthly (12 times) over different time periods (three years).

Before the application of the method in analyzing the data, the sphericity and normality assumptions will be tested; and remedial measures applied when the assumptions are violated.

The Statement of Hypothesis

$H_0 : \mu_1 = \mu_2 = ... = \mu_k$

Vs

H_1 : At least one μ_i is different from the others

Where μ_i = mean of the ith time point

K = number of time points

Significance level $(\alpha) = 0.05$

Test statistic

$$F = \frac{\text{Mean Squares Between } (MSB)}{\text{Mean Squares Error } (MSE)} \quad (1)$$

$$MSB = \frac{\text{Sum of Squares Between}(SSB)}{\text{Degrees of freedom between}(df_B)} = \frac{\sum_{i=1}^{k} n_i \left(\bar{x}_{i.} - \bar{x}_{..}\right)^2}{k-1} \quad (2)$$

$$MSE = \frac{\text{Sum of Squares Error}(SSE)}{\text{Degrees of freedom for Error}(df_E)} = \frac{\sum_{i=1}^{k}\sum_{j=1}^{n}\left(x_{ij} - \bar{x}_{i.} - \bar{x}_{.j} + \bar{x}_{..}\right)^2}{(k-1)(n-1)} \quad (3)$$

where

x_{ij} = observed value for the jth subject in the ith time point

$\bar{x}_{i.}$ = mean of the observations in the ith time point

$x_{.j}$ = mean of the observations for the jth subject across all time points

$\bar{x}_{..}$ = grand mean of all observations

$n_{i.}$ = number of subjects in each time point

n = number of subjects

Critical value, $F_{\alpha,(k-1),(k-1)(n-1)}$

The null hypothesis is rejected if the test statistic, F is greater than the critical value, or if the p-value is less than 0.05; otherwise, it is not rejected.

In case the normality assumption is not satisfied, the Friedman non-parametric test is applied.

Here, we rank each column (year) within each row (month) from 1 to k, where k is the number of conditions (years/time points)

$$\text{Test statistic, } \chi^2 = \frac{12}{nk(k+1)}\left(\sum R_j^2 - \frac{nk(k+1)}{4}\right) \sim \chi^2_{k-1} \quad (4)$$

where n = number of subjects, k = number of conditions (years) and R_j = sum of ranks for condition (year) j.

3.0 Results of Statistical Analyses and Discussion

3.1 Results of Statistical Analyses

For the GDP, interest rate, unemployment rate and exchange rate data, the normality assumption required for the parametric Repeated Measures ANOVA test was violated. Hence, the Friedman non-parametric test, suitable for non-normal data, was used.

Table 1: Results of Friedman Test for the GDP, Interest, Unemployment and Exchange Rates

Data/Variable	Mean Ranks			χ^2	p-value
	2019	2020	2021		
GDP	2.17	1.25	2.58	11.167	0.004
Interest rate	3.00	1.79	1.21	22.372	< 0.001
Unemployment rate	1.08	1.96	2.96	22.533	< 0.001
Exchange rate	1.17	2.00	2.83	16.667	< 0.001

The Friedman tests revealed that significant differences exist in GDP, interest rate, unemployment rate, and exchange rate across the years.

Post-Hoc Test: The Nemenyi post-hoc test is conducted to identify significant pairwise differences.

Table 2: Pairwise Comparisons of GDP Results for Friedman Test

H_0	q value	Pr(>|q|)
GDP_2020 – GDP_2019 = 0	3.175	0.0638
GDP_2021 – GDP_2019 = 0	1.443	0.5638
GDP_2021 – GDP_2020 = 0	4.619	0.0031

The p-value (0.0638) exceeds the significance threshold (0.05), so we do not reject the null hypothesis. Thus, there is no statistically significant difference in GDP between 2020 and 2019 at the 0.05 level of significance. The result is close to borderline, showing a weak indication of a potential difference (not statistically significant at 0.05, but significant at the 0.1 level of significance). Again, the p-value (0.5638) is significantly higher than the significance level (0.05), therefore, we cannot reject the null hypothesis. Therefore, there is no statistically significant difference between GDP in 2021 and GDP in 2019. Finally, the p-value (0.0031) is lower than the significance threshold (0.05). Therefore, we reject

the null hypothesis and conclude that there is a statistically significant difference between GDP in 2021 and GDP in 2020 at the 0.05 significance level.

For the Interest Rate

Table 3: Pairwise Comparisons of Interest Rate Results for Friedman Test

H_0	q value	Pr(>|q|)
InterestRate_2020 – InterestRate_2019 = 0	4.186	0.0086
InterestRate _2021 – InterestRate _2019 = 0	6.207	<0.0001
InterestRate _2021 – InterestRate _2020 = 0	2.021	0.3260

From Table 3, the p-values (0.0086 and 0.00003) are both below the significance threshold (0.05), leading us to reject the null hypothesis and conclude that there is a significant difference between the interest rates in 2020 and 2019, as well as between 2021 and 2019. On the other hand, since the p-value (0.3260) exceeds the significance level (0.05), we do not reject the null hypothesis and infer that there is no statistically significant difference between the interest rates in 2021 and 2020.

For the Unemployment Rate

Table 4: Pairwise Comparisons of Unemployment Rate Results for Friedman Test

H_0	q value	Pr(>|q|)
UnemploymentRate_2020 – UnemploymentRate_2019 = 0	3.031	0.0813
UnemploymentRate _2021 – UnemploymentRate _2019 = 0	6.495	<0.0001
UnemploymentRate _2021 – UnemploymentRate _2020 = 0	3.464	0.0380

According to Table 4, the p-values (0.0380 and 0.00001) are both below the significance threshold (0.05), prompting us to reject the null hypothesis and indicate that there is a significant difference between the unemployment rates in 2021 and 2019, as well as between 2021 and 2020. Conversely, since the p-value (0.0813) exceeds the significance level (0.05), we do not reject the null hypothesis, leading us to determine that there is no statistically significant difference between the unemployment rates in 2020 and 2019.

For the Exchange Rate

Table 5: Pairwise Comparisons of Exchange Rate Results for the Friedman Test

H_0	q value	Pr(>|q|)
ExchangeRate_2020 – ExchangeRate _2019 = 0	2.887	0.1025
ExchangeRate _2021 – ExchangeRate _2019 = 0	5.774	0.0001
ExchangeRate _2021 – ExchangeRate _2020 = 0	2.887	0.1025

From Table 5, the p-value (0.0001) is not up to the significance level of 0.05, so the null hypothesis is rejected. Thus, we conclude that a statistically significant difference exists between exchange rate in 2021 and 2019. However, the p-value (0.1025) is more than the threshold of significance (0.05), so we fail to disprove the null hypothesis. Therefore, we infer that there is no statistically significant difference between the exchange rates in 2021 and 2019, or between 2021 and 2020.

For the inflation rate and trade balance data, the normality assumption was met, justifying the use of Repeated Measures ANOVA, appropriate for normally distributed data.

For the Inflation Rate

Table 6: ANOVA Table (Type III Tests)

Effect	DFn	DFd	F	p-value	p < 0.05	ges
Year	2	22	88.02	$3.18e^{-11}$	*	0.88

The ANOVA results show a significant effect of the year on inflation rate ($F(2,22)=88.02$, $p < 0.001$, ges = 0.88). This indicates that inflation rate varies significantly across the years 2019, 2020 and 2021.

Table 7: Mauchly's test of Sphericity

Effect	W	p-value	p < 0.05
Year	0.127	$3.35e^{-05}$	*

Mauchly's test for sphericity is significant ($W = 0.127$, $p <0.001$), indicating that the assumption of sphericity has been violated.

Table 8: Sphericity Corrections using Greenhouse-Geisser and Huynh-Feldt Corrections

Effect	GGe	DF[GG]	p[GG]	HFe	DF[HF]	p[HF]
Year	0.534	1.07, 11.75	$6.7e^{-07}$	0.545	1.09,11.98	$5.35e^{-07}$

The sphericity corrections (Greenhouse-Geisser (GG) and Huynh-Feldt (HF) corrections) are applied due to the violation of sphericity. Both corrected p-values are still significant (p[GG]<0.001 and p[HF]< 0.001), confirming the significant of the year on inflation rate.

Table 9: Post-Hoc Test (Pair-wise Comparisons)

Measure	Group1	Group2	n_1	n_2	statistic	df	p-val	p.adj
Infl rate	2019	2020	12	12	-6.36	11	$5.36e^{-05}$	$1.61e^{-04}$
Infl rate	2020	2021	12	12	-16.4	11	$4.52e^{-09}$	$1.36e^{-08}$
Infl rate	2019	2021	12	12	-6.32	11	$5.66e^{-05}$	$1.7e^{-04}$

The Post-hoc tests show significant differences between all pairs of years for inflation rate, indicating that the inflation rate varied significantly from year to year across 2019, 2020 and 2021.

For Trade Balance

Table 10: ANOVA Table (Type III Tests)

Effect	DFn	DFd	F	p-value	p < 0.05	ges
Year	2	22	2.547	0.101		0.129

The ANOVA results show there is no significant effect of the year on trade balance (F(2,22)=2.547, p =0.101, ges = 0.129). This indicates that trade balance did not vary significantly across the years.

3.2 Discussion

The analysis of the Nigerian economy before, during, and after the COVID-19 pandemic reveals significant impacts across multiple economic indicators, shedding light on the substantial disruptions caused by the pandemic.

The mixed results from the comparisons of the GDP over the three years under study provide important insights into economic trends. The near-significance in the comparison of 2019 and 2020 GDP suggests there might have been economic disruptions or changes during these years that warrant closer

examination. The lack of significant change between 2019 and 2021 GDP suggests stability in economic conditions over these two years. However, the significant change between 2020 and 2021 highlights a distinct economic shift that could be influenced by policy changes, market conditions or other macroeconomic factors. Similar studies, such as Ozili (2021), Faruk (2020) and Thomas et al. (2022) noted a sharp decline in GDP due to the pandemic, attributed to lockdown measures and decreased economic activities.

The result obtained on interest rates between 2019 and 2020 implies a statistically significant increase in interest rates within the period. This period marks the onset of the COVID-19 pandemic, which brought about considerable economic uncertainty and volatility. The Central Bank of Nigeria likely raised interest rates in an attempt to curb inflationary pressures and stabilize the financial system amidst reduced economic activities and disruptions caused by lockdown measures. The sustained significance difference in the interest rate between 2019 and 2021 suggests that the elevated interest rates observed in 2020 persisted into 2021. The prolonged economic impacts of the pandemic, including continued supply chain disruptions and inflationary trends, could have necessitated the sustained higher interest rates. In contrast, the insignificant difference between 2020 and 2021 suggests that after the initial increase in 2020, the CBN maintained a steady interest rate policy into 2021. The lack of significant change may reflect a period of policy consolidation aimed at fostering economic recovery while managing inflation.

The significant differences in unemployment rates between 2021 and both 2019 and 2020 indicate substantial shifts in the labour market during the period. These shifts could be due to a variety of factors such as the impact of global events like the COVID-19 pandemic. The stability in unemployment rates between 2019 and 2020 suggests that the employment landscape did not undergo significant changes between these years. This stability could be attributed to effective policy measures taken to maintain employment levels.

The significant difference in exchange rates between 2019 and 2021 indicates that the exchange rate experienced notable changes over this time frame, which could be attributed economic events or policy shifts due to the COVID-19 pandemic, changes in interest rates, inflation rates, foreign exchange reserves or international trade dynamics. Conversely, the stability of the exchange rates between 2020 and 2021 suggests that there were no major disruptions or significant changes in factors influencing the exchange rate during these years.

The significant year-to-year variations in inflation rates provide critical insights into the economic conditions prevailing over three years. The significant differences between each pair of years suggest that each year experienced unique inflationary pressures or policy responses. The significant difference between 2019 and 2020 could be attributed to the economic effects of the COVID-19 pandemic lockdown, which led to disruptions in supply chains, changes in consumer behaviour, and policy responses aimed at mitigating the economic fallout. The significant difference between 2020 and 2021 likely reflects the recovery phase from the pandemic, with varying degrees of economic stimulus, supply chain normalization, and changes in demand influencing inflation rates. The significant difference between 2019 and 2021 underscores the long-term economic impacts of the pandemic and subsequent recovery efforts highlighting the shifts in economic conditions over the two-year period.

The lack of marked variation in the balance of trade over the years under study suggests that the overall trade dynamics, in terms of exports and imports, remained relatively stable despite any economic changes or external factors that may have affected other economic indicators during this period. This stability might be an indication that the trade balance had been resilient to external economic disruptions such as the COVID-19 pandemic. This resilience could be due to diversified trade partnerships, stable demand for key exports or effective trade policies that mitigated the impact of global disruptions. Additionally, the stability could be the reflection of effective trade policies and agreements that maintained a balance trade environment. Consistent trade policies could have helped in avoiding large fluctuations in the trade balance.

4.0 Conclusion

The lockdown due to COVID-19 pandemic had a critical impact on the Nigerian economy, significantly affecting GDP, interest rates, unemployment rates, exchange rates, and inflation rates. The analysis indicates a notable economic downturn in 2020, with some recovery beginning in 2021. The long-term effects, particularly on unemployment and inflation, suggest that full economic recovery may take time.

Policymakers need to address these challenges by implementing strategies that promote economic growth, stabilize inflation, and create employment opportunities. Supporting sectors hardest hit by the pandemic, such as small and medium-sized enterprises, and measures to enhance foreign exchange stability will be crucial in fostering a resilient economic recovery. Lessons learned from the pandemic can inform future policies to better prepare for and mitigate the impacts of similar global crises.

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