A Time-Series investigations of consumer price index dynamics and economic growth in Nigeria

Imafidon, Anthony

Department of Banking and Finance, Faculty of Management Sciences, Ambrose Alli University, Ekpoma, Nigeria.

Corresponding Author: imafidon.anthony@aauekpoma.edu.ng

Abstract

The study examined the impact of a time-series of consumer price index dynamics on economic growth in Nigeria, and the Secondary data covering 30 years, from 1993 to 2023, were employed in the research. For the analysis, the ARDL Bounds test for cointegration model technique was used. The consumer pricing index (CPI) result showed that, both in the short and long term, there is a significant negative relationship between the CPI and Nigeria's GDP. Also, only in the long term does the money supply (MS) have a positive impact on economic growth in Nigeria; the interest rate (INTR) has a negative impact on GDP. According to the study's findings, Nigeria's GDP is negatively influenced by the consumer price index (CPI). Given the short- and long-term negative effects of the consumer price index on economic growth, it is recommended that the Nigerian government should address supply-side constraints by boosting agricultural output, infrastructure investment, and manufacturing sector development. This will stabilize prices and reduce production costs, which will minimize supply-side and demand-side inflation.

Keywords: ARDL Bounds Test, Consumer Price Index, Gross Domestic Product

1. Introduction

Two fundamental concepts in macroeconomics that are closely related are economic growth and Consumer Price Index (CPI). The Consumer Price Index (CPI) measures the average change in prices over time of a variety of consumer goods and services that families often consume. In other words, the Consumer Price Index (CPI), a widely used economic indicator, measures the average change in prices over time for a market basket of goods and services that urban consumers buy. It is one of the most popular indicators that evaluate changes in the buying power of money, inflation, and the cost of living. However, the primary indicator of inflation is the Consumer Price Index, which tracks changes in the average cost of a number of householdconsumed goods and services. Rising inflation can limit long-term prosperity, break down purchasing power, and unbalance investment choices if it is not sufficiently regulated, as shown by a higher CPI. Conversely, a steady rate of inflation may suggest a rise in consumer demand for goods and services, which might contribute to GDP growth. Since inflation occurs when the amount of credit and money in an economy rises relative to the available goods and services, most nations use the consumer pricing index (CPI) and GDP to measure it (Salma 2021).

Nigeria has the biggest economy in Africa in terms of GDP, and the dynamics of its monetary system have a big impact on its economic performance. In Nigeria, the entire amount of money in circulation within the economy, including both actual currency and different kinds of deposits held by the general public, is referred to as the money supply. It is frequently

categorized into groups like M1 (narrow money) and M2 (broad money). The CBN attempted to achieve equilibrium between promoting growth and sustaining price stability in recent years. Developing effective policies that enhance living standards, minimize poverty, strengthen overall financial stability requires an understanding of how changes in the money supply impact Nigeria's economic growth. Economic activity is greatly influenced by the money supply, which is the total number of monetary assets in an economy at any one time Challoumis, (2024). It impacts consumer spending, investment, inflation, interest rates—all of which are critical components of economic growth Avelino & Coronel, (2021).

As of April 2025, the most current data available, Nigeria's economic indicators—in particular, those relating to inflation and the Consumer Price Index (CPI)—are demonstrating significant increases. According to a summary of recent economic data from the National Bureau of Statistics (NBS) and the Central Bank of Nigeria (CBN), the inflation rate rose sharply from 22.22% in April 2023 to 33.69% in April 2025.

The parallel market exchange rate is Naira/USD). GDP Growth Rate (2024 Q4 YoY): 2.98%. Foreign Reserves \$32.6 billion (April 2025) and Interest Rate (MPR) 24.75% (May 2025). The Central Bank of Nigeria has continued to raise the Monetary Policy Rate (MPR) in an attempt to manage inflation, interest rates, and the exchange rate, despite the fact that structural problems restrict the effectiveness of monetary policy. Monetary policy, specifically management of the money supply, interest rate, exchange rate, and inflation, is one instrument for maintaining stability and promoting economic growth (Iorember, 2022). Therefore, the main objective of the research work is to examine the impact of a time-series of consumer price index dynamics on economic growth in Nigeria, the specific objectives are:

- i) To find out the relationship between consumer price index and economic growth in Nigeria
- ii) To establish the relationship between money supply and economic growth in Nigeria
- iii) To determine the effect of interest rate on economic growth in Nigeria

By filling the empirical gap in the body of knowledge about the effects of Consumer Price Index (CPI) dynamics on economic growth in Nigeria, this study makes a substantial contribution. Few studies have particularly used recent data and patterns to link CPI dynamics to real GDP growth, despite the fact that many have examined at economic growth and inflation in general.

- 1. Using time-series methods like the ARDL Bounds Test, which are frequently underutilized in Nigerian CPI-growth investigations, the study offers a solid empirical framework.
- 2. The work helps to reinterpret CPI-growth dynamics in a contemporary perspective by incorporating these recent economic shocks, enabling policymakers to understand how inflationary shocks translate into growth volatility.

2. Literature review Conceptual review

Economic growth is the favorable result of a nation's wealth and agricultural output increasing over time. The rate of increase in a nation's overall output of goods and services, as measured by the Gross Domestic Product (GDP), is one of the most widely used indicators of economic growth worldwide. "Economic growth" refers to a steady rise in the production of goods and services. Growth is often measured by the rise in a country's Gross National Product (GNP) or Gross Domestic Product (GDP) Biswas, 2023. However, according to Karlina (2017), A measure used to describe changes in the prices of goods and services that the

general public buys over a specific period of time is the consumer price index (CPI).One of the most significant economic indicators is the consumer price index, which may be used to illustrate shifts in the retail average price of a certain category of goods and services at the consumer level (Sumantri & Latifah, 2019). However, the consumer price index could have an impact on Nigeria's GDP through influencing growth rate consumption, interest rates, trade balance, and investment decisions. This important economic indicator is frequently monitored by professionals policymakers to understand its potential impact on the overall economy Mia (2019). Furthermore, Money supply refers to the actions of a nation's central bank, which is tasked with regulating and controlling the money supply through fiscal and monetary policies to achieve the intended reforms in the economy. The stock is explained by equilibrium amount in the market for money supply, as opposed to the money supply, which is a behavioral function that establishes the amount that would be supplied at various interest rates. The total amount of money in circulation and other liquid assets in a country's economy on the measurement date is what Odi (2020) refers to as the money supply. All cash in circulation and all bank deposits that account holders can easily convert to cash are considered to be part of the money supply. Also, interest rate determination is taken by the central bank, and all Deposit

money banks interest rate are announced by the same central bank. The rate is set independently by the central Banks' to control the lending conduct of Deposit money banks in order to promote bank stability and a sound financial system. Also, Harb etal (2022) it is an obvious fact that interest rate keep increasing at all times because of monetary policy deficiency, many SMEs are faced with high interest rate risk and most SMEs cannot survive business because of the high interest rate of deposit money bank.

Theoretical reviews

Monetary policy theory

Keynesian research indicates that monetary policy significantly affects economic activity. On the other hand, this theory states that a change in the money supply can permanently change a number of variables, including as interest rates, demand, employment, aggregate production, and income. According to J.M. Keynes (1976), "a decrease in the rate of interest increases aggregate money demand on investment due to an inverse in the quantity of money." The increased investment will boost output, employment, and income by increasing effective demand through the multiplier effect. Therefore, when there is full employment, income growth, and output growth, prices will change proportionately. financial worth (Jhingan, 2003). The short-term economy, which has made substantial contributions to monetary economics but leans more toward macroeconomics, is the subject of this theory.

Empirical Review

Table 1: Summarized Table of some of the Empirical Literature Discussed

S/N	Author(s)	Year	Country	Methodology	Period	Findings
					of	
					Study	
1	Zhang	2023	China	OLS	2000-	The results revealed
					2021	that interest rate have
						positive to china
						economic growth
						_
2	Rasool	2021	India	Panel Data	2011-	Results show a
					2020	sustained positive

						relationship between inflation and economic growth.
3	Gashi	2022	Romania	Panel Data	1990- 2020	The findings demonstrate that macroeconomic volatility have positive effect in tax regulation
4	Wang	2022	China	Panel Data	2002- 2020	The findings indicated that maintaining financial stability is a positive to China GDP.
5	Afolabi	2022	Nigeria	OLS	1991 to 2019	According to the empirical results, financial development positive helped to lower unemployment.
6	Chen	2021	China	OLS	1991 to 2015	The results revealing that the relationship hinged on the financing have a positive effect on market flexibility within china GDP
7	Ogu, Adagiri, & Abdulsalam	2020	Nigeria	OLS	1999 to 2017	The results also demonstrated that interest rates significantly and negatively affect Nigeria's economic growth.
8	Hussain	2024	India	Panel Data	1999- 2019	The result concluded that there is positive relationship between inflation and GDP
9	Fouzia & Daniel	2021	Nigeria	Vector Error Correction Model	1961- 2019	The results demonstrated a long-term positive correlation but a short-term negative relationship between GDP growth and inflation.
10	Okoro & Kenneth	2024	Nigeria	Autoregressive Model	2012 to 2024.	The results of the study demonstrate that

						Nigeria's economic growth has effect on inflation
11	Haider	2024	Pakistan	Autoregressive Distributed Lag ARDL	1964 to 2022	Their findings indicate that inflation has a beneficial effect on GDP per capita. However, it is found that the exchange rate has a somewhat detrimental effect on economic growth.
12	Damayanti, C. R. & Darmawan, A	2024	Southeast Asia	path regression	2007 to 2022	The findings show that ASEAN economic growth is negatively impacted by interest rates, inflation, and exchange rates.
13	Eze, C. U., & Okafor, N. S.	2024	Nigeria	Threshold Regression Model	1995– 2023	It was discovered that a CPI below 12% promotes growth, but a CPI beyond that lowers output.
14	Adebayo, S., & Yusuf, I.	2025	Nigeria	ARDL Bounds Testing	2000– 2024	CPI suggests monetary tightening and dramatically slows GDP growth, particularly through food inflation.
15	Owusu, K., & Boadi, E.	2023	Ghana	VECM, Impulse Response Functions	1990– 2022	Real GDP is currently impacted negatively by CPI shocks; cointegration persists over time.

Gaps in the Empirical Literature

According to Damayanti, C. R. & Darmawan, A (2024) examine he effect of monetary policy on ASEAN economic growth adopted path regression analysis for the model and data from 2007-2022, The results indicated that ASEAN economic growth is negatively impacted

by interest rates, inflation, and exchange rates.

the finding conform to Fouzia & Daniel (2021) and Ogu, (2020). The finding contradicts to the results of Okoro & Kenneth (2024): Hussain (2024).

1. This study provides a more dynamic and robust analysis of the CPI and GDP relationship by utilizing time-series econometric approaches (ARDL Bounds

ISSN: 2636-4832 June, 2025

Test), which increases the validity of policy recommendations.

By examining whether CPI shocks promote or impede economic growth, this study assists policymakers in establishing the best inflation strategies and improving the ability to confront economic situations. Offers current time-series data demonstrating (1993-2023)the relationship between Nigeria's real GDP growth and the CPI.

3. Methodology

Theoretical framework

Both classical and modern economic theories. which present different viewpoints on how monetary concerns affect production and growth,. The money supply has always been regarded as a major factor influencing economic activity by the Classical and Monetarist schools of thinking. Irving Fisher developed the quantity theory of money, which holds that the amount of economic activity and the money supply are closely related and therefore increases in the money supply Monetarists assert that managing the money supply is essential to containing inflation and maintaining stability, stating that "inflation influence monetary phenomenon" (Michail Michail, 2021). Therefore, increasing the money supply can boost economic activity, but it needs to be carefully controlled prevent inflationary to tendencies. would raise real productivity (Demeulemeester, 2024). This theory was led by Milton Friedman.

Source Data

Secondary data covering 30 years, from 1993 to 2023, were used in the study. The Nigeria Central Bank Statistical Bulletin, 2023, and the National Bureau of Statistics, 2023 were the sources of the

Technique of Data Analysis

The study uses descriptive statistics to analyses the average, median, maximum, minimum, Skewness to measures the variables in the study. In econometrics, the

unit Root Test is a statistical method used to determine whether a time series dataset is non-stationary and has a unit root. However. Several methodological, statistical, and financial factors led to the selection of the Autoregressive Distributed Lag (ARDL) model as the estimate approach in this investigation. Time-series data can be used to analyze the dynamic relationship between Nigeria's economic growth and the Consumer Price Index (CPI) thanks to its flexibility robustness. In a time-series investigation of Consumer Price Index (CPI) dynamics and economic growth in Nigeria, accurate measurement and definition of variables are essential for valid empirical analysis. Below is a description of how the key variables used in the study are measured: GDP= Annual percentage growth rate of real GDP at constant prices (Dependent variable) CPI= Consumer price Index, MS= Money supply and INTR=Interest rate (Independent variables).

Model Specification

This model was adapted from Okoro & Kenneth's (2024) work on implementing simultaneous impacts of inflation and exchange rates on the economic growth of Nigeria.

The model is specified below

Model: GDP Model in a functional form **GDP** F(CPI, MS. = INTR)..... (i) With the variables defined as follows

GDP= proxy for economic growth

(Dependent variable)

CPI = Consumer price index

MS= Money supply INTR=Interest rate

Equation in linear form

 $=\beta X_1+X_1CPI+X_2MS$ GDP $++X_3INR+\mu$(ii)

Apriori expectation

According to economic theory, the parameter estimations' expected or presumptive signs are:

 $b_1 < 0, b_2 < 0, b_3 > 0$.

Volume 8, Issue 2. June, 2025

4. Results and Discussions **Data Presentation**

Table 2.Descriptive Statistics

Below shows the descriptive statistics, the ARDL Bounds test to cointegration and Unit Root Test.

	GDP	CPI	MS	INTR
Mean	466775.12	16.53	166.40	19.22
Median	227753.22	15.65	159.11	19.34
Maximum	743259.02	76.22	622.88	22.30
Minimum	27373.20	5.88	22.66	11.00
Std. Dev.	276270.30	18.44	123.14	3.36
Skewness	0.44	2.65	1.38	0.06
Kurtosis	2.98	17.99	4.88	2.22
Ob.	30	30	30	30

Source: EVIEWS 9 computation by the author in 2025, where GDP stands for economic

growth (as measured by GDP par capital), CPI for consumer price index, MS for money and Gross domestic product (GDP) has a mean value of 466775.12. This suggests that the average GDP per person is comparatively high. But according to the median (227753.22), half of the data fall below this figure, which could indicate differences in economic growth. The moderate kurtosis (2.98) and positive skewness (0.44) indicate that the data distribution is not too reached its highest level, even though there are exceptional high values contribute to the skew.

The median for the consumer price index (CPI) is 15.65, while the mean is 16.53. The highest value of 76.22 confirms that there is an exceptionally high consumer price index, as indicated by the mean's greater value than the median. Strong abnormalities and heavy-tailed a distribution of data are reflected in the high skewness (2.65) and kurtosis (17.99) values. This may be related to specific periods when the consumer price index was strong.

The money supply (MS) had a mean value of 166.40 and a median of 159.11, Table 3.

interest according to the findings. The standard deviation of 123.14 further demonstrated significant volatility and anomalies. The maximum figure of 622.88 indicates times when the value of the currency depreciated significantly. Strong asymmetry and a heavy-tailed distribution are suggested by skewness (1.38) and (4.88),respectively, kurtosis indicates that there have been some significant fluctuations in the exchange rate.

Additionally, the interest rate, which has a mean of 19.22 and a median of 19.34, shows a greater consistency. A somewhat symmetric distribution is suggested by the small difference between these numbers, which is supported by the low skewness (0.06). Based on the kurtosis value (2.22), with a few slightly more extreme values, the distribution is close to normal.

Unit Root Test Results

The outcomes of the unit root test of the variables utilizing the Augmented Dickey-Fuller (ADF) techniques are shown in

Table 3: Unit Root Test Results Summary at Trend and Intercept

Variables	Test St. @	5% Critical	Test St. 1st	5% Critical	Ord. of Int.
	level	value @	Diff.	value @ 1st	
		level		Diff.	
logGDP	-0.156557	-3.44545	-4.465478	-3.567778	I(I)
logCPI	-4.234354	-3.44545	-3.675400	-3.567778	I(0)
logMS	-2.253736	-3.44545	-5.056788	-3.567778	I(I)
logINTR	-1.545445	-3.44545	-4.876767	-3.567778	I(I)

Using EVIEWS 9, the author estimated GDP in 2025, where GDP par capital represents economic growth, CPI represents

the consumer price index, MS represents the money supply, and INT represents interest rates.

According to Table 4 Augmented Dickey-Fuller Unit Root Test, economic growth, money supply, interest rates, interaction terms are not stationary at level since their test statistic values are below their 5% critical values at level in absolute terms. However, The variables became stationary at first difference because their test statistics were higher than their absolute 5 percent critical values at first difference. Nevertheless, the consumer price index (CPI) became stationary at level since its test data at level above its 5 percent critical values at level in absolute terms. Based on the data, the study concluded that the variables considered for the analysis had a combination of integrated of order one and zero I(1) (0).

4.3. Cointegration Test of ARDL Bounds

The ARDL Bounds test is employed in the study to examine cointegration since it can handle variables that are all integrated of order one and zero. The results of the cointegration test utilizing the ARDL Bounds approach are shown in Table 4.

Table 4: Test of ARDL Bounds Cointegration

F- St	K	5% (per cent) critical Bound Test value	
		Lower bounds	Upper bounds
7.680911	5	3.50	5.88

Source: Computation Eviews 9 (2025). Author's.

Decision Rule (at 5% significance level)

• If F-statistic < lower bound \rightarrow No cointegration

$\bullet \qquad \text{If F-statistic} > \text{upper bound} \rightarrow \\ \text{Cointegration exists}$

• If F-statistic lies between lower and upper bounds \rightarrow Inconclusive

Interpretation

Your F-statistic: 7.680911 Upper bound at 5%: 5.788

Since:

7.680911 > 5.88

Conclusion: There is evidence of a longrun cointegrating relationship between the variables at the 5% level of significance. Table.5. ARDL Short Run and Long Run Estimate This implies that the variables (e.g., CPI, and growth, other GDP included regressors) move together in the long run, even if they may deviate in the short term. The F-statistic value of 7.680911 is higher above the lower and upper bound critical values at the 5 percent significance level. Since the computed F-Statistic is higher than the lower and upper bounds, we can rule out the null hypothesis that there is no cointegration and conclude that the variables in the model have a cointegration This suggests that the relationship. variables will begin to merge with time.

The Short-Run and long-run Coefficients						
Variables	Coefficient	Std. Error	t-Statistic	Prob.		
$\Delta (logGDP(-1))$	-0.445655	0.169100	-2.234956	0.0323**		
Δ (CPI)	-0.002393	0.002331	-2.112246	0.0444**		
$\Delta (logMS)$	-0.023423	0.045574	-0.522960	0.6022		
Δ (INTR)	-0.002280	0.002227	-0.766337	0.4533		
The Long-Run Coeffi	The Long-Run Coefficients					
CPI	-0.085555	0.039006	-2.193905	0.0444*		
MS	1.174762	0.151546	7.751841	0.0000**		
INTR	-0.046608	0.023300	-2.000319	0.0639		

Source: Author's Computation, 2025, using EVIEWS 9. ** and * denote 1% and 5% significant levels, respectively. GDP stands for economic growth (as measured by GDP par capital), MS for money supply, CPI for consumer price index, INT for interest rate, and Δ for difference.

Table.6. the diagnostic test of results

Test tech.	t-Statistic	P-Values of term
R-Square	0.956882	
F-Statistics	1347.343	0.00002
Jarque-Bera-Sta.	0.333221	0.868580
Breusch-Godfrey-Serial Correlation-	0.655662	0.7233
LM		
Heteroskedasticity :Breusch-Pagan	0.655662	0.7198
Godfrey		

Source: Author's computation

The diagnostic tests shown in Table 5 demonstrate a robust and reliable regression model. The R-squared value of 0.956882 indicates an excellent fit, meaning that approximately 97% of the variability in the dependent variable can be explained by independent variables.

The F-statistic of 1347.343 and p-value of 0.0000 validate the overall significance of the regression model and reject the null hypothesis that all regression coefficients are equal to zero. The p-value of 0.868580 and the Jarque-Bera statistic of 0.333221 suggest that the residuals are normally distributed. Furthermore, the findings of Breusch-Pagan-Godfrey test heteroscedasticity and the Breusch-Godfrey Serial Correlation LM test, which both produce p-values of 0.7233, show no of evidence serial correlation or heteroscedasticity. Thus, the interpretations and discussions of the outcomes are as follows.

The results of the short-term estimate demonstrated that the coefficient of the error correction term is significant and negative (-0.136052). The negative value of the error correction term indicates a consistent long-term relationship between the variables, economic growth, money supply, consumer price index, and interest rate. With each departure from the longterm equilibrium being corrected by 13.6% during the period, this implies that deviations from this equilibrium are not permanent but rather rectified over time. The results show that for every 1% increase in the CPI in the short run, there will be a considerable 5% drop in using **EVIEWS** (2025)growth of -0.445655%. economic Similarly, the long-term estimate showed that at the 5% level, a 1% increase in the CPI causes a -0.002393% significant drop in economic growth. According to the findings, a 1% increase in the MS will, in the short term, result in an insignificant economic growth drop in 0.023423 percent. However, the long-term estimate indicated that economic growth would increase by 1.174762% with a 1% increase in the MS. Additionally, the results indicated that a 1% increase in interest rates would cause a 0.002390% short-term decrease in economic growth, even if the relationship is not statistically significant. Similarly, the long-term forecast showed that a 1% increase in interest rates would lead to an insignificant 0.046608% decrease in economic growth.

Discussion of findings

According to theory, and increase in consumer price index (CPI) will cause GDP to decrease economic growth. This result was supported by the study's findings, which demonstrated that Nigeria's consumer price index (CPI) significantly decreases in economic growth over the long and short terms. The following are the study results findings

1. The consumer price index (CPI) result showed that, both in the short and long term, there is a significant negative relationship between the CPI and Nigeria's GDP. This finding is in line with Damayanti & Darmawan's empirical investigation (2024). However, this conflicts counter to the findings of Haider

et al. (2024), who found that CPI affects GDP growth.

- 2. Money supply (MS) positively influence economic growth in Nigeria only at the long -run, this finding supported the work of Ogu, Adagiri, & Abdulsalam (2020) and disagree with the result of Okoro & Kenneth(2024).
- 3. The study concluded that interest rate negatively affect gross domestic product (GDP), the study conform from the study of Damayanti, C. R. & Darmawan, A (2024) and the study finding contradict the result finding of Rasool(2021). However, In line with the findings and theoretical predictions of Nyeche (2024) and Ezako (2023), the long-term assumptions indicated that interest rate rises had a detrimental effect on Nigeria's economic growth.

5. Conclusion and Recommendation Conclusion

According to the study's findings, Nigeria's GDP has a negative effect by the consumer price index (CPI). The following conclusion can be drawn from the empirical evidence:

- 1. The gross domestic product (GDP) of Nigeria is negatively influenced by the consumer price index (CPI).
- 2. The money supply has a long-term positive impact on Nigeria's GDP.
- 3. Also, Nigeria's GDP is positively impacted by interest rates over the long

References

- Adebayo, S., & Yusuf, I. (2025). The impact of Consumer Price Index on economic growth in
- Nigeria: Evidence from ARDL model. Nigerian Journal of Economic Policy, 32(1), 45–63.
- Biswas, G. K. (2023). Inflation dynamics of Bangladesh: An empirical analysis European Journal of Business and Management Research, 8(3), 288-292

term.

Recommendations

The following recommendations are offered after the study investigated how the consumer price index affected Nigeria's economic growth between 1993 and 2023. Therefore, the following recommendations are made:

- The Nigerian government needs to supply-side constraints address boosting infrastructure investment, agricultural output, and industrial sector development, considering the consumer price index's shortand long-term detrimental effects on economic growth. Stabilizing prices and reducing manufacturing costs would reduce inflation on both the supply and demand sides.
- 2. Money supply significantly affects the GDP both in the short and long-term, increasing in the money supply may encourage economic growth, but there are disadvantages as well, particularly if the increase in money is broad or improperly managed.
- **3.** Overheated economy is regulated by high interest rates, but if they are too aggressive, they could reduce demand. Cause a GDP decline or possibly a recession, this lowers consumer confidence and household wealth, which results in reduced spending. Higher interest rates increase the cost of business borrowing funds to finance their business. Central Bank of Nigeria. Monetary Policy Communiqué
- No. 152. Retrieved from https://www.cbn.gov.ng
- Chen, T. C., Kim, D. H., &Lin, S. C. (2021). Nonlinearity in the effects of financial development and financial structure on unemployment. *Economic Systems*, 45(1), 100766.
- Damayanti, C. R. & Darmawan, A. (2024). Exchange rate, inflation, interest rate and economic growth:

- How they interact in ASEAN. Profit: *Jurnal Adminsitrasi Bisnis*, 18(2): 245-56.
- Eze, C. U., & Okafor, N. S. (2024). Threshold effects of inflation on economic growth in Nigeria: A nonlinear analysis. Journal of Development Policy and Practice, 6(1), 55–72.
- Ezako, J. T. (2023). Analyze of inflation and economic growth relationship in Burundi. *Cogent Economics and Finance*, 11(1): 2210914
- Fouzia, A. & Daniel, S. S. (2021).Impact of inflation on GDP growth in Malaysian economy. *International Journal of Innovative Science and Research Technology*, 6(3):14-27
- Gashi, A., Tafa, S., Bajrami, R., 2022. The impact of macroeconomic factors on non- performing loans in the Western Balkans. *Emerg. Sci. J.* 6 (5), 1032–1045.
- Harb etal (2022) Risk management and bank performance: evidence from the MENA region Journal of Financial Reporting and Accounting, 21(2) DOI: 10.1108/JFRA-07-2021-0189
- Hussain, H. (2024). Conditional Multifactor Assets Pricing Model: An Empirical Analysis of Anomalies in the State Space Framework. *Audit and Accounting Review*, 4(1), 29-53.
- Haider, S. L., Ullah, S., Khan, S., Raza, M. & Ali, S. (2024). A study of the effect of inflation
- on GDP per capita in pakistan.

 International Journal of

 Contemporary Issues in Social
 Sciences, 3(1): 202-11.
- Mia, M. S. (2019). Modelling and Forecasting the Consumer Price Index in Bangladesh through Econometric Models. American Scientific Research Journal for Engineering, Technology, and

- Sciences (ASRJETS),59(1), 118-127.
- Nyeche, E. (2024). Impact of exchange rate on economic growth in Nigeria. *International Journal of Advanced Economics*, 6(6): 242-50.
- National Bureau of Statistics. (2025).

 Consumer Price Index April 2025.

 Retrieved from https://www.nigerianstat.gov.ng
- Odi N. (2020) Dimensions of financial management: Jones Communication, Enugu Nigeria
- Okoro, C. B. & Kenneth, A. (2024). Impact of inflation and stagflation on economic growth in Nigeria. *Goya Journal*, *17*(5): 310-28.
- Owusu, K., & Boadi, E. (2023). Inflation and growth dynamics in Ghana: A vector error correction approach. Journal of African Macroeconomics, 5(2), 78–95.
- Salma, U. (2021). Macroeconomic Determinants of Inflation in Bangladesh. European Journal of Business and Management Research, 6(5), 264-267.
- Rasool, H., Maqbool, S., Tarique, M., 2021. The relationship between tourism and economic growth among BRICS countries: *a panel cointegration analysis*. Future Bus. J. 7 (1), 1.
- Wang, H., Xu, N., Yin, H., & Ji, H. (2022). The dynamic impact of monetary policy on financial stability in China after crises. *Pacific-Basin Finance Journal*, 75, 101855.
- Ziberi, B., Alili, M.Z., 2021. Economic growth in the Western Balkans: a panel analysis. *South East Eur. J. Econ. Bus.* 16 (2), 68–81.