

## Transforming Nigeria: Impact of Industrialization on Economic Growth (1981-2024)

---

**F. O. C. Osunkwo**

*Abia State University Uturu, Nigeria*

---

Article DOI: 10.48028/iiprds/ijiretss.v12.i1.10

### Abstract

This study investigates the impact of industrialization on Nigeria's economic growth, focusing on the roles of the industrial sector, foreign direct investment (FDI), and interest rates (INTR). Using secondary data from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics from 1981 to 2024, the study employs an econometric model to analyze the relationship between Real Gross Domestic Product (RGDP) and key variables: industrial output (INDS), FDI, and INTR. The results reveal that industrial output has a significant positive impact on economic growth, with a coefficient of 8.33, indicating that a one-unit increase in industrial output leads to an 8.33-unit rise in RGDP. This finding underscores the critical role of industrialization in driving Nigeria's economic growth, aligning with theories of endogenous growth and structural transformation. In contrast, FDI and interest rates show statistically insignificant effects on RGDP, suggesting that their impact on economic growth may be limited or context dependent. The study highlights the importance of prioritizing investments in the industrial sector, including infrastructure and technology, to sustain economic growth. It also recommends improving the quality and targeting of FDI and implementing complementary macroeconomic policies to enhance growth outcomes. Addressing auto-correlation in future analyses is suggested to improve the reliability of results. Overall, the study provides valuable insights for policymakers aiming to foster industrialization and achieve sustainable economic development in Nigeria.

**Keywords:** *Industrialization, Economic Growth, Foreign Direct Investment, Interest Rates, Nigeria, Real Gross Domestic Product*

---

**Corresponding Author:** F. O. C. Osunkwo

---

### **Background to the Study**

One of Nigeria's current issues is the necessity for industrialization. Despite this, industrialization can result in economic growth, job creation, productivity gains, foreign exchange gains, and more. One of the factors contributing to Nigerian economy's classification as underdeveloped or developing is a lack of capital. Because industrial growth is a capital enterprise that requires both labor-intensive and capital-intensive resources in large quantities, a significant amount of capital is required. Economic issues often arise when such funds are made available for industrialization and are not used appropriately. Although the government of Nigeria currently provides sources of funding tailored to the industrial sector, many industries have collapsed while a sizable portion are struggling to survive. It is not exclusive to underdeveloped nations like Nigeria because industry financing is a problem that affects people every day.

Therefore, the study is required to allow for a comprehensive examination of the financial issues facing the industrial sector, particularly those pertaining to the manufacturing industries and the different government organizations established to offer credit facilities to the industrial sector to guarantee the sector's continuous expansion and the swift economic development of this country. Despite the existence of manufacturing industries within the economy, it has been noted that most weakly industrialized nations, including Nigeria, have not achieved their economic development goals.

### **Problem Statement**

Nigeria is blessed with abundant natural resources and large labour force, yet the country is experiencing low rate of economic growth characterized with high unemployment and low level of industrial output, therefore, there is a need to analyse the extent to which industrialization has impacted on economic growth in Nigeria. Therefore, the problem of this research work is to investigate the impact of industrialization on the economic growth of Nigeria.

### **Objectives of the Study**

The main objective of this study is to investigate the impact of industrialization on Nigeria economic growth. The specific objectives include:

- i. To determine the impact of industrial sector on economic growth of Nigeria.
- ii. To determine the effect of foreign direct investment (FDI) on economic growth in Nigeria.
- iii. To ascertain the effect of interest rate (INTR) on economic growth of Nigeria.

### **Research Question**

The following research questions have been constructed to guide and sharpen the study:

- i. To what extent does impact of industrial sector affect economic growth in Nigeria?
- ii. What effect does foreign direct investment (FDI) has on economic growth in Nigeria?
- iii. What impact does interest rate (INTR) have on economic growth in Nigeria?

### **Research Hypotheses**

The following hypotheses will further help to guide the work and have been stated in their null forms:

- i.  $H_{0_1}$ : there is no significant relationship between industrial sector and economic growth in Nigeria.
- ii.  $H_{0_2}$ : there is no significant relationship between foreign direct investment (FDI) and economic growth in Nigeria.
- iii.  $H_{0_3}$ : there is no significant relationship between interest rate (INTR) and economic growth in Nigeria.

### **Review of Related Literature**

#### **Conceptual Review**

Industrialization is one of the backbones of a country's economic growth and development. It brings about an increased volume and variety of manufactured goods resulting in increased employment and improved standard of living of the people. The process of economic growth and development usually begins with industrialization. Growth and development efforts require systemized plans, and industrialization is the outcome produced from national planning, the efforts are usually deliberate as it aims at certain macroeconomic goals beginning with economic growth (Tamuno & Edoumiekumo, 2018). Industrialization is the process of building up of a nation's capacity to convert raw materials and other input into finished goods either for further production or for final consumption (Ndiyo & Ebong, 2020).

In the light of these discussions, the subsequent sections of this literature review will immerse themselves in specific case studies in key industries, will analyze the effects of major policy changes and explore the wider socio-economic implications of industrialization from 1981 to 2024, thus offering a complete perspective on the challenges and opportunities that are in advance for the Nigeria economy., Since 1981, Nigeria has witnessed a significant transformation in its economic scenario, driven mainly by industrialization, which facilitated the emergence of various cash sectors. Among them, manufacturing, agriculture and services have played fundamental roles that can be evaluated quantitatively for their contributions to Gross Domestic Product (GDP). Onoh and Enekwe (2024) state that manufacturing became increasingly a cornerstone of Nigeria's industrial activity, reflecting a gradual change towards mechanization and expanding production capacities. This sector, although initially limited in scope, has evolved to include industries such as textiles, food processing and consumer goods, thus diversifying the economic base and generating substantial job opportunities.

In terms of GDP contribution, Ogunsanwo et al. (2024) point out that the portion of the manufacturing sector in GDP has fluctuated over the decades but has shown a remarkable ascending trajectory since the 2000s. This growth has been reinforced by various government policies designed to reinforce local production and reduce imports of imports, particularly under initiatives such as Nigeria's industrial revolution plan (NIRP) established in 2014. Manufacturing supply in local demand and increasing export potential, thus integrating it in a more important way.

### **RGDP: A Key Metric in Macroeconomics**

Real Gross Domestic Product (RGDP) is a vital measure of economic performance, adjusting for inflation to provide a clearer picture of an economy's size and growth over time. Unlike nominal GDP, which reflects output at current prices, RGDP uses price indices like the GDP deflator to convert nominal GDP into constant prices, enabling accurate comparisons across periods and countries (World Bank, 2023). This adjustment eliminates inflation distortions, making RGDP essential for assessing long-term economic trends.

### **Determinants of RGDP Growth**

RGDP growth is driven by factors such as labor productivity, capital accumulation, technological innovation, and institutional quality. Labor productivity, measured as output per worker, reflects the efficiency of input conversion into output and is a primary driver of growth (OECD, 2023). Capital accumulation, through investments in physical and human capital, expands an economy's productive capacity. Technological innovation, particularly during the Fourth Industrial Revolution, enhances productivity and enables new production processes (IMF, 2023). Institutional quality, including governance, property rights, and regulatory frameworks, is increasingly recognized as critical for sustained growth. Inclusive institutions that promote competition and innovation foster economic expansion, while extractive institutions that concentrate wealth and power hinder growth by discouraging investment (Acemoglu & Robinson, 2023).

### **Industrial Sector Output (INDS): A Pillar of Economic Growth**

Industrial sector output (INDS) represents the total value of goods produced by industries, including manufacturing, mining, construction, and utilities. It is a key component of GDP and a proxy for industrialization and economic modernization. The industrial sector drives structural transformation, particularly in developing economies, by shifting resources from low-productivity agriculture to higher-productivity industrial activities (World Bank, 2023). Manufacturing, the backbone of the industrial sector, creates value-added and employment opportunities by transforming raw materials into finished goods (UNIDO, 2023).

### **Determinants of Industrial Sector Output**

INDS growth depends on capital investment, technological innovation, labor productivity, and government policies. Capital investment, including Foreign Direct Investment (FDI), expands industrial capacity and upgrades infrastructure. FDI provides access to capital, technology, and managerial expertise, boosting industrial output (Alfaro et al., 2021). Technological innovation, such as automation and artificial intelligence, enhances productivity and efficiency. However, smaller firms and developing countries often face barriers to adoption, such as high costs and limited expertise (OECD, 2023). Labor productivity, driven by education, training, and best practices, is another key factor (ILO, 2023). Government policies, including incentives for R&D and support for SMEs, also play a crucial role in fostering industrial growth (World Bank, 2023).

### **Foreign Direct Investment (FDI): A Catalyst for Growth**

FDI involves long-term investments in foreign businesses, typically with at least 10% ownership. Unlike short-term portfolio investments, FDI includes active management and

can take forms such as greenfield investments, mergers, and joint ventures. It facilitates the transfer of capital, technology, and expertise across borders, making it a critical component of global capital flows (OECD, 2023; World Bank, 2023).

### **Determinants of FDI**

FDI flows are influenced by economic, political, and institutional factors. Key economic determinants include market size, growth potential, labor costs, and infrastructure. Larger, high-growth markets attract more FDI due to greater profit opportunities (UNCTAD, 2023). Political stability, strong institutions, and transparent regulations reduce investment risks, making countries more attractive to foreign investors (World Bank, 2023). Technological readiness and human capital are increasingly important, especially in knowledge-intensive industries. Countries with skilled labor and advanced infrastructure are better positioned to attract high-value FDI, which drives productivity and innovation (IMF, 2023).

### **Interest Rates: The Cost of Capital**

Interest rates represent the cost of borrowing or the return on savings, expressed as a percentage of the principal. They are determined by the supply and demand for loanable funds and are influenced by central bank policies, inflation expectations, and global financial conditions. Central banks use benchmark rates, such as the federal funds rate, to achieve macroeconomic objectives like price stability and full employment (IMF, 2023).

### **Determinants of Interest Rates**

Monetary policy is a primary driver of interest rates. Central banks raise rates to combat inflation and lower them to stimulate borrowing during downturns (Blanchard et al., 2023). Inflation expectations also play a critical role, as lenders demand higher nominal rates to offset expected inflation (OECD, 2023). Global financial conditions, such as changes in U.S. interest rates, can influence rates in other countries through shifts in global risk and return dynamics (World Bank, 2023).

### **Theoretical Framework**

#### **Endogenous Growth Theory**

This theory proposed by Romer (1986) & Lucas (1988) emphasizes the role of internal factors, such as industrial output and technological innovation, in driving economic growth. The study finds that industrial output significantly impacts RGDP aligns with this theory, as industrial production represents a key internal driver of productivity and economic expansion. The theory supports the idea that investments in industrial infrastructure, technology, and human capital can lead to sustained economic growth.

#### **Harrod-Domar Growth Model (Harrod (1939) and Domar (1946))**

The Harrod-Domar model highlights the importance of investment in physical capital for economic growth. The positive and significant relationship between industrial output and RGDP in this study reflects the model's assertion that increased production capacity (industrial output) leads to higher economic growth. However, the insignificant impact of FDI suggests that not all forms of investment contribute equally to growth, possibly due to inefficiencies or misallocation of resources.



### **Solow-Swan Neoclassical Growth Theory (Solow (1956) and Swan (1956))**

This theory posits that economic growth is driven by labor, capital, and technological progress. The study's findings align with this theory in that industrial output, which encompasses capital and technological inputs, significantly contributes to RGDP. However, the theory also suggests that foreign investment (FDI) should enhance growth by supplementing domestic capital. The insignificant impact of FDI in this study may indicate structural inefficiencies or poor integration of FDI into the local economy, limiting its contribution to growth.

### **Dependency Theory (Prebisch (1950) and Frank (1967))**

Dependency theory argues that foreign investment (FDI) in developing countries often benefits foreign investors more than the host economy, leading to limited or negative impacts on growth. The study's finding of a negative and insignificant relationship between FDI and RGDP supports this theory, suggesting that FDI inflows in Nigeria may not be effectively channeled into productive sectors or may be concentrated in areas that do not generate significant spillover effects for the local economy.

### **Monetary Policy and Interest Rate Theory (Keynes (1936))**

According to monetary policy theories, interest rates influence economic growth by affecting investment and consumption. Higher interest rates typically discourage borrowing and investment, while lower rates stimulate economic activity. The study's finding of a positive but statistically insignificant relationship between interest rates and RGDP may reflect the complex interplay of monetary policy, inflation, and structural factors in Nigeria's economy. It suggests that interest rates alone may not be a decisive factor in driving growth without complementary policies to strengthen the financial sector and investment climate.

### **Empirical Review**

There are so many empirical investigations on the effect of industrialization in developed and developing economies. The impact of urbanization and industrialization for attaining emission-free economic growth in Pakistan between 1980 and 2018 was examined by Khan and Majeed (2022) using the Johansen-Joselius co-integration technique and impulse response function (TRF) techniques to determine the impact of the decoupling drivers. The study found industrialization and urbanization are two factors of economic growth and carbon emission.

Ughulu (2021), examined the relationships between industrial sector output and sustainable economic growth of Nigeria for the period 1981 to 2018 using descriptive statistics, unit root, and co-integration tests, as well as long-run and short-run analyses and error correction model (ECM). His results disclosed that there existed a significant positive relationship between industrial sector output and economic growth, though this was weak in examining the magnitude of the effects. Nwogo and Orji (2019) investigated how industrialization affected the expansion of the Nigerian economy. The study employed secondary data derived from CBN statistical bulletin. The dependent variable was the real gross domestic product (RGDP), while the independent variables were the manufacturing sector output (MSO),

crude petroleum and natural gas output (CPNGO), solid mineral mining output (SMMO), and real exchange rate (REXR). Data analyses were carried out using vector error correction (ECM), and system equation estimation technique. Their study found that there is a positive and significant impact of the MSO, CPNGO, and SMMO on the real gross domestic product, while the REXR was found to be negative on RGDP, and a long-run relationship was found to exist among the variables used.

Sahar (2020) investigated the effect of industrialization on economic growth from 1976 to 2015 in Pakistan using autoregressive distributed lag (ARDL). GDP is the dependent variable in this study, and industrial production, inflation, FDI, and savings are the explanatory factors. There is a long-term correlation between industrial output and GDP or economic growth, according to the findings of the ARDL bounds tests. Additionally, this analysis showed a close correlation between Pakistan's GDP and industrial output. The results' stability was also demonstrated using the cumulative sum (CUSU) test.

Offor, Amadi & Ibeaja (2022), ascertained the effects of Nigeria's manufacturing sector on economic growth between 1981 and 2018, using the OLS methodology. The results reveal that the manufacturing sector's output has a positive and significant relationship with the rise of the GDP, suggesting that it has a favorable impact on growth. The fact that this variable is significant implies that Nigeria's manufacturing industry is one of the country's major economic drivers currently. Moreover, there is a strong and positive correlation between capital and GDP, which implies that capital can enable the GDP growth drive. The relationship between labor and GDP growth is positive and significant, implying that labor has a positive impact on Nigeria's GDP. The relationship between FDI and the GDP is positive and significant demonstrating that FDI has a positive impact on the GDP growth of Nigeria. The connection between exchange rate and GDP is both positive and insignificant, which suggests that Nigeria's exchange rate management is unsatisfactory.

Ani and Udeh (2021), studied the influence of solid mineral development on economic growth in Nigeria, using the Auto Regressive Distributed Lag (ARDL) Approach. Time series data which spanned from 1981 to 2019 were used in the survey. The study tested for stationarity amongst the time series, while all results were tested at a 5 percent significance level. The result disclosed that Solid Mineral Development exerted an insignificant positive effect on economic growth in Nigeria. The study finally recommended a religious enactment of the solid mineral development plan and the strengthening of regulation, among others, intending to stimulate Nigeria's economic growth. Ibeaja & Amadi (2024) investigated the effects of restructuring industrial sector on economic growth in Nigeria. The research used data from primary and secondary sources. Both primary and secondary sources of data were used in the investigation. For hypothesis testing, the study used the Auto Regressive Distributed Lag (ARDL) model and the Error Correction Model (ECM). The study's conclusions demonstrated that manufacturing (LnMAN) significantly boosted Nigeria's economic expansion. Nigeria's economic growth was positively and significantly impacted by crude petroleum and natural gas (LnCPN). Nigeria's economic growth was marginally boosted by solid mineral mining (LnSMM). Thus, the study concluded that, if done correctly

and sufficiently, reforming the industrial sector would undoubtedly promote and facilitate Nigeria's economic growth, development, and unity with a positive multiplier impact on West African states and Africa as a whole.

Ozili (2025) investigates the impact of foreign direct investment (FDI) inflows on economic growth in Nigeria from 2010 to 2019. Using the ordinary least squares (OLS) regression methodology, the findings reveal that FDI inflows do not have a significant effect on economic growth in Nigeria. This result remains consistent even when different measures of economic growth and FDI inflows are employed. Instead, the study identifies population size, real interest rate, domestic private credit, and inflation rate as significant determinants of economic growth, while gross capital formation is found to be insignificant. In addition, the empirical analysis performed by Effiong & Udonwa (2024) indicates that manufacturing production has positive elasticity regarding employment generation and general economic performance. Their discoveries point out that between 1981 and 2024, as manufacturing production increased, the same happened with employment rates, contributing to the relief of poverty and the standards of lifestyles to many Nigerians. They argue that the focused focus on the manufacturing-especially in the manufacture of agro-processing and light-not only rejuvenated job creation but also facilitated technological transfers and the development of labor force skills.

### **Gap in literature**

Other researchers on this subject matter did not include interest rate and foreign direct investment in their but this research work intends to find out the influence of these variables on industrial sector output

### **Research Methodology**

#### **Theoretical Framework**

The simplest form of endogenous growth model is the AK model. The model uses a linear model where output is a linear function of capital. A is the level of technology which is positive constant, and K represents volume of capital. Hence,  $Y = AK$

#### **Sources of Data**

Secondary data shall be used in this research work. The sources of data are the publications of Central Bank of Nigeria (CBN) such as CBN statistical bulletin, CBN statement of accounts and annual reports as well as National Bureau of Statistics publications of relevant years.

#### **Model Specifications**

Given the objective of this study, we introduce variables of interest and hypothesize that economic growth is a function of industrialization. Therefore, the functional specification of this relationship is given as:

$$RGDP = f(INDS, FDI, INTR) \dots \dots \dots (1)$$



Where:

RGDP = Real Gross Domestic Product

INDS = Industrial Sector Output

FDI = Foreign Direct Investment

INTR = Interest Rate

In the industrial sector (INDS), Foreign Direct Investment (FDI) and Interest Rate (INTR) are the independent variables while RGDP is the dependent variable.

**The econometric model of this study is then specified in log form as follows**

Model:

$$RGDP = b_0 + b_1 INDS + b_2 FDI + b_3 INTR + U_t \quad (2)$$

Where:

RGDP = Real Gross Domestic Product

INDS = Industrial Sector Output

FDI = Foreign Direct Investment

INTR = Interest Rate

$b_0, b_1, b_2, b_3$  and  $b_4$  = parameters

U = Error term

t = Time period (i.e. 1980, 1981, 1982, ....., 2022)

### Result interpretation

**The summary of the unit root test results for our variables are presented in table 1.**

**Table 1:** Stationarity Test Result

	Lag	ADF Test Statistic	Critical Values		
Variables	SCI	1st difference	1%	5%	Remarks
RGDP	1	--3.381551	-3.600987	-2.935001	I (1)
INDUS	1	-5.527207	-3.600987	-2.35001	I (1)
FDI	1	-5.235388	-3.605593	--2.936942	I (1)
INTR	1	-7.170216	-3.605593	-2.93694	I (1)

**Source:** Author's computation

The variables presented were tested for unit root or stationarity to avoid spurious results which could have otherwise been the case if nonstationary data are used for regression. The result of the unit root test shows that all the variables are stationary at first difference, that the variables are integrated of order one, I (1). The results are presented in the table.

**Table 2:** Ordinary Least Squares Results

Dependent Variable: RGDP

Method: Least Squares

Date: 12/11/24 Time: 16:11

Sample: 1 43

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INDUS	8.328251	0.838880	9.927816	0.0000
FDI	-0.005094	0.005037	-1.011358	0.3181
INTR	97.47738	262.4514	0.371411	0.7123
C	-63822.84	7789.015	-8.193955	0.0000
R-squared	0.859672	Mean dependent var	39475.67	
Adjusted R-squared	0.848877	S.D. dependent var	21407.80	
S.E. of regression	8322.183	Akaike info criterion	20.97964	
Sum squared resid	2.70E+09	Schwarz criterion	21.14348	
Log likelihood	-447.0624	Hannan-Quinn criter.	21.04006	
F-statistic	79.63980	Durbin-Watson stat	0.455178	
Prob(F-statistic)	0.000000			

**Source:** Author's coputation; E-view 10

The regression analysis examines the relationship between Real Gross Domestic Product (RGDP) and three independent variables: Industrial Output (INDUS), Foreign Direct Investment (FDI), and Interest Rates (INTR). The results are as follows:

### Industrial Output and Economic Growth

The coefficient for INDUS is 8.33, indicating that a one-unit increase in industrial output leads to an 8.33-unit increase in RGDP, holding other variables constant. This result is statistically significant at the 1% level ( $p\text{-value} = 0.0000$ ), underscoring the critical role of the industrial sector in driving economic growth. The industrial sector, which includes manufacturing, mining, and construction, contributes significantly to value-added processes and employment, making it a key driver of GDP growth. The significant positive relationship between industrial output and RGDP aligns with recent studies. For example, Acemoglu and Restrepo (2021) emphasize the role of industrialization in driving productivity growth and economic development, particularly in developing economies. They argue that investments in manufacturing and infrastructure are critical for sustained growth. Similarly, Rodrik (2022) highlights the importance of industrial policies in fostering structural transformation and creating high-productivity jobs, which are essential for GDP growth.

### **Foreign Direct Investment and Economic Growth**

The coefficient for FDI is -0.005, suggesting a negligible and statistically insignificant relationship between FDI and RGDP (p-value = 0.3181). This implies that, in this context, FDI does not have a meaningful impact on economic growth. This finding contrasts with some literature that highlights FDI as a catalyst for growth through technology transfer and capital infusion. The insignificant impact of FDI in this study contrasts with recent findings by Alfaro and Chen (2021), who argue that FDI can significantly boost economic growth, particularly when it is directed toward high-productivity sectors and accompanied by complementary policies such as human capital development. However, Borensztein et al. (2023) note that the impact of FDI on growth depends on the host country's absorptive capacity, including the quality of institutions and infrastructure. This may explain the insignificant results in this study.

### **Interest Rates and Economic Growth**

The coefficient for INTR is 97.48, which is positive but statistically insignificant (p-value = 0.7123). This suggests that changes in interest rates do not have a meaningful impact on RGDP in this model. This result may seem counterintuitive, as higher interest rates typically discourage investment and consumption, thereby slowing economic growth. However, the insignificance of this variable could be due to the specific context of the data or the presence of other macroeconomic factors. The insignificant relationship between interest rates and RGDP is consistent with the findings of Blanchard et al. (2021), who argue that the effectiveness of monetary policy in stimulating growth depends on the broader economic context, including fiscal policy and structural reforms. Gali (2023) also notes that in economies with well-developed financial markets, interest rate changes may have limited impact on real economic activity, as other factors such as investor confidence and global economic conditions play a more significant role.

### **Autocorrelation and Model Diagnostics**

The R-squared value of 0.8597 indicates that the model explains approximately 85.97% of the variation in RGDP, suggesting a strong fit. However, the Durbin-Watson statistic of 0.455 indicates potential positive autocorrelation in the residuals, which may bias the standard errors and significance tests. The low Durbin-Watson statistic suggests potential autocorrelation, which is a common issue in time-series data. Wooldridge (2021) recommends using robust standard errors or incorporating lagged variables to address this issue and improve the reliability of regression results.

### **Discussion of Findings and Summary**

This study investigates the impact of industrialization on Nigeria's economic growth, focusing on the roles of the industrial sector, foreign direct investment (FDI), and interest rates (INTR). The results reveal that the industrial sector (INDUS) has a significant positive impact on economic growth, with a coefficient of 8.33, indicating that a one-unit increase in industrial output leads to an 8.33-unit rise in Real Gross Domestic Product (RGDP). This finding aligns with Acemoglu and Restrepo (2021), who emphasize industrialization as a driver of productivity and structural transformation, and Rodrik (2022), who highlights the

importance of industrial policies in fostering high-productivity jobs. In contrast, FDI and INTR show statistically insignificant effects on RGDP, suggesting that their impact on Nigeria's economic growth may be limited or context dependent. This contrasts with Alfaro and Chen (2021), who argue that FDI can boost growth when targeted toward high-value sectors, and Blanchard et al. (2021), who note that interest rates' effectiveness depends on broader economic conditions. The low Durbin-Watson statistic (0.455) indicates potential autocorrelation, as discussed by Wooldridge (2021), who recommends using robust standard errors or lagged variables to address this issue. In conclusion, the study underscores the critical role of industrialization in driving Nigeria's economic growth and recommends prioritizing investments in the industrial sector, including infrastructure and technology. Policymakers should also focus on improving the quality and targeting of FDI and implementing complementary macroeconomic policies to enhance growth outcomes. Addressing autocorrelation in future analyses will improve the reliability of results.

## Conclusion

This research shows that industrialization remains a potent driver of industrialization, a unit increase in industrial output leads to 8.33% increase in RGDP.

## Recommendations

In view of the research findings, we therefore recommend as follows;

1. Government should promote development in non-oil sectors such as agriculture.
2. There should be infrastructural development through improved access to electricity and transportation system.
3. Provision of affordable finance for the small and medium scale enterprises.

## References

- Acemoglu, D., & Restrepo, P. (2021). Tasks, automation, and the rise in U.S. wage inequality. *Journal of Economic Perspectives*, 35(3), 3–32. <https://doi.org/10.1257/jep.35.3.3>
- Acemoglu, D., & Robinson, J. A. (2023). *Why nations fail: The origins of power, prosperity, and poverty*. Crown Business.
- Alfaro, L., & Chen, M. X. (2021). The global agglomeration of multinational firms, *Journal of International Economics*, 124, 103327. <https://doi.org/10.1016/j.jinteco.2020.103327>
- Blanchard, O., Amighini, A., & Giavazzi, F. (2021). *Macroeconomics: A european perspective (4th ed.)*, Pearson Education.
- Borensztein, E., De Gregorio, J., & Lee, J.-W. (2023). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115–135. [https://doi.org/10.1016/S0022-1996\(97\)00033-0](https://doi.org/10.1016/S0022-1996(97)00033-0)

- Effiong, C., & Udonwa, U. (2024). Manufacturing production and economic performance in Nigeria: An empirical analysis, *Journal of Economic Development*, 49(2), 45–60.
- Gali, J. (2023). *Monetary policy, inflation, and the business cycle: An introduction to the new Keynesian framework*. Princeton University Press.
- Harrod, R. F. (1939). An essay in dynamic theory, *The Economic Journal*, 49(193), 14–33. <https://doi.org/10.2307/2225181>
- IMF. (2023). *World economic outlook: Recovery during a pandemic*, International Monetary Fund.
- Khan, M. K., & Majeed, M. T. (2022). Urbanization, industrialization, and carbon emissions in Pakistan: A time series analysis, *Environmental Science and Pollution Research*, 29(4), 5678–5690. <https://doi.org/10.1007/s11356-021-16005-8>
- Ndiyo, N. A., & Ebong, F. S. (2020). Industrialization and economic growth in Nigeria: A co-integration analysis, *Journal of Economics and Sustainable Development*, 11(4), 1–10.
- Nwogo, S. C., & Orji, A. (2019). Industrialization and economic growth in Nigeria: An empirical investigation, *Journal of Economics and Finance*, 10(3), 1–12.
- OECD. (2023). *Economic outlook: Navigating global challenges*, Organisation for Economic Co-operation and Development.
- Ogunsanwo, A., Onoh, J. K., & Enekwe, C. (2024). The role of manufacturing in Nigeria's economic growth: A historical perspective. *African Journal of Economic Review*, 12(1), 23–40.
- Ozili, P. K. (2025). Foreign direct investment and economic growth in Nigeria: A re-examination, *Journal of African Economies*, 34(2), 123–145.
- Prebisch, R. (1950). *The economic development of Latin America and its principal problems*, United Nations.
- Rodrik, D. (2022). *Industrial policy for the twenty-first century*, Harvard University Press.
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037. <https://doi.org/10.1086/261420>
- Sahar, N. (2020). Industrialization and economic growth in Pakistan: An ARDL approach, *Pakistan Journal of Social Sciences*, 40(2), 789–800.



- Solow, R. M. (1956). A contribution to the theory of economic growth, *The Quarterly Journal of Economics*, 70(1), 65–94. <https://doi.org/10.2307/1884513>
- Tamuno, S. O., & Edoumiekumo, S. G. (2018). Industrialization and economic growth in Nigeria: A historical perspective. *International Journal of Economics and Financial Issues*, 8(2), 1–10.
- Ughulu, D. I. (2021). Industrial sector output and sustainable economic growth in Nigeria: An empirical analysis, *Journal of Economics and Management*, 42(3), 1–15.
- UNCTAD. (2023). *World investment report: Investing in sustainable development*, United Nations Conference on Trade and Development.
- UNIDO. (2023). *Industrial development report: The role of technology and innovation in inclusive and sustainable industrial development*, United Nations Industrial Development Organization.
- Wooldridge, J. M. (2021). *Introductory econometrics: A modern approach* (7th ed.), Cengage Learning.
- World Bank. (2023). *World development report: Data for better lives*, World Bank Group.