

Macroeconomic Instability and Youth Unemployment in Nigeria: Implications for Demographic Dividend

¹Ogbaji, Felicia Omonya,

²Onoyom, Margaret

Onwanyi,

³Salami, Adeyemi Ismail

& ⁴Malachy Ashywel

Ugbaka

^{1,2,3, & 4}Department of Economics,
University of Calabar, Cross River
State, Nigeria

Article DOI:

10.48028/iiprds/ijdsshmss.v16.i1.20

Keywords:

Demographic
dividend,
Macroeconomic
instability, Youth
unemployment,
Human capital,
Nigeria.

Corresponding Author:

Ogbaji, Felicia Omonya

Abstract

Nigeria's ongoing demographic transition presents a potential opportunity to harness a demographic dividend. However, this opportunity is increasingly threatened by persistent macroeconomic instability and rising youth unemployment. With a rapidly expanding youthful population, the capacity of the economy to productively absorb young people has become a critical policy concern. This study examines the relationship between macroeconomic instability and youth unemployment in Nigeria, with particular attention to economic growth, inflation, exchange rate movements, human development, and population structure measured by the age dependency ratio. Using annual time-series data from 1990 to 2024, the study applies descriptive statistics, correlation analysis, and the Autoregressive Distributed Lag (ARDL) bounds testing approach to analyse both short-run and long-run dynamics. The results confirm the existence of a stable long-run relationship between youth unemployment and the selected macroeconomic and demographic variables. GDP growth is found to exert a statistically significant and negative effect on youth unemployment in the long run, highlighting the role of sustained economic expansion in labour absorption. In contrast, inflation, exchange rate movements, and the human development index display weak and statistically insignificant long-run effects, suggesting that macroeconomic stability and human capital improvements alone are insufficient to generate youth employment. The age dependency ratio significantly influences youth unemployment in the short run, reflecting demographic pressure on the labour market. Overall, the findings indicate that youth unemployment in Nigeria is largely structural and demographic, with macroeconomic instability amplifying existing labour-market rigidities. The study concludes that Nigeria's demographic dividend is not automatic and may remain unrealised without employment-centred growth strategies that align macroeconomic stability with productive youth engagement.

Background to the Study

Changes in demographic composition significantly influence a country's growth and development trajectory. The relative shares of dependent and working-age populations determine the dependency burden faced by the economy and the scope for productive activity. A declining age dependency ratio, reflecting a lower proportion of dependants relative to the working-age population, creates the conditions for a demographic dividend. This dividend refers to the potential for accelerated economic growth arising from favourable shifts in age structure, typically associated with declining fertility and mortality rates and improvements in life expectancy (Adegboye et al., 2023). However, the realisation of this dividend depends on whether the economy can productively engage its labour force.

Global evidence shows that demographic dividends are not automatic. Countries such as Bangladesh and India demonstrate that reductions in age dependency ratios translate into growth only when supported by macroeconomic stability and sustained investment in education and health (Jafrin et al., 2021; Jain and Goli, 2022). Zhou et al. (2023) emphasise that the benefits of declining dependency burdens are conditional on labour productivity and education quality, while Mulugeta (2023) and Woldegiorgis (2023) argue that Africa's youthful population can yield dividends only through coherent employment creation and human capital policies. Nigeria is currently undergoing a significant demographic transition. The population is increasingly youthful, with about 70 percent below the age of 35, implying a gradual decline in the age dependency ratio and a growing pressure on the labour market to absorb young entrants (Okonji, 2023). In principle, a lower dependency ratio should enhance savings, output, and fiscal capacity. In practice, however, this potential can be undermined where employment opportunities and human capital investment fail to keep pace with demographic change.

Youth unemployment, education, and health represent the key channels through which changes in the age dependency ratio translate into either a demographic dividend or a demographic burden. High youth unemployment signals a failure to convert a declining dependency ratio into productive economic participation, effectively transforming potential contributors into dependants. Weak education and poor health outcomes further reduce labour productivity and limit the growth-enhancing effects of demographic change (Zhou et al., 2023; Berde and Kurbanova, 2023). Accordingly, this study uses youth unemployment as a proxy for youth development, capturing the extent to which demographic conditions are translated into productive engagement. Nigeria's macroeconomic environment has remained highly unstable in recent years. Persistent inflation, exchange rate volatility, rising public debt, and inadequate social sector investment have weakened labour demand and constrained youth absorption. Olubusoye et al. (2023) argue that youth unemployment in Nigeria is largely structural, driven by macroeconomic uncertainty and labour market rigidities, which diminish the potential gains from a declining dependency ratio.

Recent data underscore the severity of these challenges. While the overall unemployment rate stood at 4.3 percent in the second quarter of 2024, youth unemployment remained higher at 6.5 percent, with over 60 percent of the unemployed aged 15–34 (NBS, 2024; World Bank, 2022). Inflation rose to 34.2 percent, with food inflation exceeding 40 percent, further eroding youth welfare and employability (NBS, 2024; IMF, 2024). Exchange rate depreciation has increased the cost of education-related inputs and discouraged investment in job-creating sectors (CBN, 2024; World Bank, 2024). Despite a favourable demographic shift reflected in a slightly declining age dependency ratio, Nigeria's persistent macroeconomic instability has constrained employment absorption and weakened youth outcomes. Existing studies have often examined demographic structure and macroeconomic performance separately, with limited attention to how macroeconomic instability interacts with dependency dynamics and youth labour market outcomes. This study addresses this gap by examining trends in macroeconomic indicators and analysing the relationship between macroeconomic instability, age dependency ratio, and youth unemployment, thereby providing empirical evidence on the implications for Nigeria's ability to realise its demographic dividend.

Literature Review

Conceptual Framework

The conceptual framework for this study illustrates the pathway through which macroeconomic instability influences youth outcomes and, by extension, the realisation of the demographic dividend in Nigeria, while recognising the role of population structure as a conditioning factor. The framework is anchored on the premise that favourable demographic conditions alone are insufficient to generate a demographic dividend without supportive macroeconomic and labour market environments.

Fig. 1: Conceptual framework linking macroeconomic instability, youth outcomes, population structure, and demographic dividend

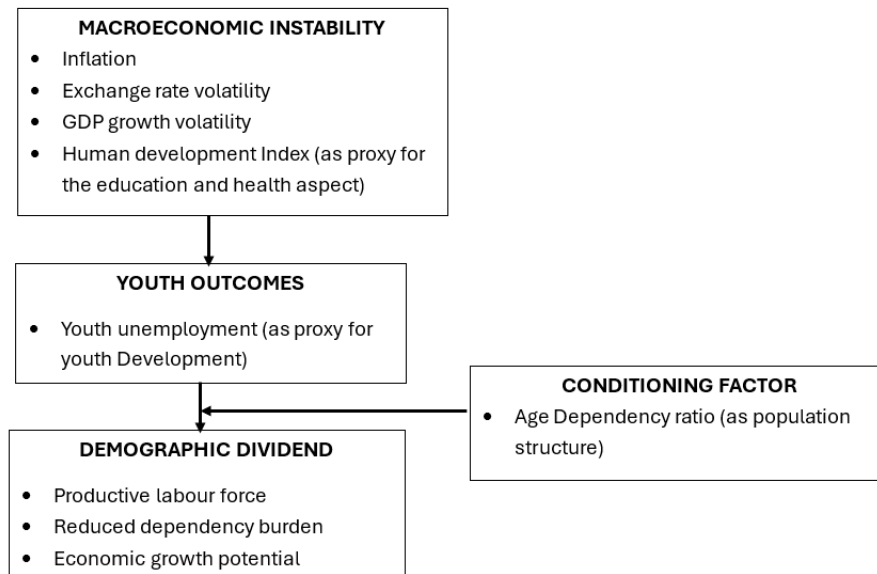


Fig. 1 shows how macroeconomic instability, reflected in inflation, exchange rate volatility, GDP growth volatility, and human development index, shapes the economy's capacity to generate employment. High inflation erodes real wages, exchange rate volatility discourages investment in job-creating sectors, and unstable growth weakens labour demand, while inadequate level of human capital constrains productivity. These conditions directly influence youth outcomes, with youth unemployment serving in this study as a proxy for youth development and the extent of productive labour market integration. High youth unemployment indicates a failure to absorb the growing youth population, converting potential contributors to growth into dependants and undermining savings, productivity, and fiscal capacity. Population structure, measured by the age dependency ratio, conditions this relationship. Although a declining dependency ratio theoretically creates scope for a demographic dividend, its realisation is dependent on macroeconomic stability and successful youth employment. Where instability persists and youth unemployment remains high, favourable dependency dynamics do not yield economic gains but instead intensify socioeconomic pressure. This framework therefore links macroeconomic instability, age dependency ratio, and youth unemployment as jointly determining Nigeria's prospects for realising a demographic dividend.

Empirical Literature Review

Evidence on Demographic Dividend

Mulugeta (2023) analysed Africa's growing population being either a curse or a blessing. The paper carried out an empirical exploration of the paradox and its remedy. Using the ordinary least square regression for the clustered dataset, panel data regression

encompassed 34 African countries. The result showed that harnessing the demographic dividend requires investment in family planning, gender parity, digitalization, industrialization, and job creation.

Zhou et al. (2023) systematically studied the impact of the demographic dividend and education dividend on economic growth. Employing the System GMM method, the result showed that demographic dividend does not depend on population size alone but also on the size of the labor force. Education can improve the demographic dividend and thereby prove the existence of an education dividend, and the effects of the demographic and education dividends vary across regions and stages of development within developing countries. In line with the effect of demographic dividend on economic growth, Jafrin *et al.* (2021) discovered that demographic dividend affects economic growth in Bangladesh, India, Nepal, Sri Lanka and Pakistan, thereby supporting the demographic dividend hypothesis while Berde & Kurbanova (2023) found that human capital with proper education and an appropriately absorbed labour force does have a more powerful effect on demographic benefit. In addition, improving the quality of governance has a significant impact on economic growth.

Likewise, Al-Khraif (2022) examined the changes in age structure, labor force participation, and prospects in Saudi Arabia. The findings revealed that there was an age structural transition: percentage of population 15-64 years increased from 47.2 percent to 67.3 percent, increasing the demographic dividend from 89.6 per cent to 205.5 percent. This influenced the labor force's sectoral distribution, and Gross Domestic Product (GDP) per working age population. Meka'a and Moneboulou (2024) analysed the accounting effect of the demographic dividend in Cameroon, specifically examining the relationship between changes in the working population and economic growth. The results of the estimation, based on an autoregressive staggered lag model, showed demographic dividend is a source of growth for Cameroon which can be augmented through investments in employment, health, education, and governance.

Researching on the employability of the youth population, Jafrin *et al.* (2025) examined the impact of socio-demographic factors, such as gender, age, marital status, field of study, and family financial support on employment status. A questionnaire survey was conducted, and the data was analyzed using a Forward Likelihood Ratio binary logistic regression. The findings revealed that age, marital status, field of study, and financial support are crucial predictors that affect the probability of employment among graduates, whereas gender does not influence the probability of getting employed. Farid and Mostari (2022) reviewed and analysed demographic and economic data to show the trends of demographic transition in Bangladesh, and to estimate possible duration of demographic dividend using the accounting framework and Economic Support Ratio (ESR). The estimation showed that the potential demographic dividend has been accelerated by the decline in fertility and mortality rate, and the increase in working-age people compared to the dependents over the last three decades. Contrary to Farid and Mostari (2022) and literature, M'baye (2023) discovered that fertility had a positive and

significant long-run effect on demographic dividend, although it had non-significant short-run effects in exploring the dynamic relationship between fertility, employment, and the demographic dividend in Mali. The result also indicated that employment has a direct and permanent positive effect on demographic dividend.

Jain and Goli (2022) analysed the potential demographic dividend for India for the period from 2001 to 2061 by using simulation modelling software, Spectrum 5.753 which integrates demographic and socio-economic changes. The results highlight that a combination of favourable demographic changes and the right socio-economic policy scenario in terms of investment in human capital and decent employment opportunities can provide a maximum demographic dividend. Jafrin *et al.* (2021) conducted a situational analysis of the demographic dividend in Bangladesh by examining data on labour market, savings rate and human capital from different national and international sources. The results from the situational analysis indicate that the presence of higher youth unemployment, lower human capital development, shortage of skilled labour force, lower female labour force participation and fluctuating savings rate impedes the favorable impact of the demographic dividend on economic growth.

Macroeconomic policies and demographic dividends

Chen *et al.* (2023) reviewed 18 national policy documents in Nigeria and Tanzania to assess national policies in pre-dividend countries and to determine whether national strategies were primed to capitalize on changing demographic structures, maximally attain the demographic dividend, and augment socio-economic growth. The result showed persistent gaps in policies targeting family planning, although more comprehensive, policies addressing maternal and child health, education, women's empowerment, and labor market still lagged in their specificity and measurability. Singh and Kumar (2021) examined the concept of demographic dividend and in-depth analysis of the changing demographic profile of Indian population in a comparative framework. The study argued that the transformation of demographic potential into demographic dividend is predicted on the premise of adopting a government sponsored social-economic policy regime for public health and education for its youth to acquire valuable skills which will be required and adopt macroeconomic policies which ensure optimal use of human resources. Similarly, Olojede and Oladejo (2023) focused on review of demographic trends in Nigeria, highlighting the opportunities and challenges that come with a youthful population as well as exploring the policies and strategies that Nigeria may implement to leverage its demographic structure to drive economic growth, reduce poverty, and improve standard of living. The study identified macroeconomic policy (re)framing, drafting of the active population into productive activities, diversification of the economy, improvement in education and healthcare, investment in rural infrastructure, encouraging entrepreneurship among the youth, and emphasizing the importance of sexual and reproductive health as strategies for realizing the demographic dividend. Likewise, Groth *et al.* (2019) looked at the possibility of sub-Saharan African countries enjoying demographic dividend. The study outlined policies into necessary and sufficient conditions which SSA countries will need to fulfill to enjoy demographic

dividend. The policies are aimed at improving the demographic dependency ratio, the employment dependency ratio and the socioeconomic dependency ratio, and in addition to formulate and implement adequate policies in population, education, health, and gender equity, design and implement sound macroeconomic policies and improve good governance.

Moreland and Madsen (2017) identified the social and economic factors that are required to successfully achieve a demographic dividend, including fertility, age structure, human capital, education, and the macroeconomic environment. Using several models that incorporate these factors and project dividends, with focus on the *DemDiv* model, developed by the author, the results from the models suggest that changes in a country's population size and age structure will have a positive effect on income per capita when accompanied by appropriate macroeconomic and educational policies. Furthermore, Jimenez and Pate (2017) resolved that despite high population growth rates, persistently high fertility rates have begun to fall and Nigeria is poised to reap a first demographic dividend if it can accelerate the reduction in fertility, especially in the Northern regions, investing effectively in its human resources and providing the right incentives for the large numbers of young people to be employed productively.

Macroeconomic Policies and Youth Development

Nkhumeleni *et al.* (2022) examined the relationship between educational achievement and employment status among working-age South Africans. Secondary data was used, and desktop analysis was performed on the information gathered from the Quarterly Labour Force Survey of 2017 and 2019. The result showed a link between youth unemployment and demographic characteristics, as well as a link between educational attainment and work status in South Africa. Accordingly, women have a harder time finding jobs than men. In addition, being black or African makes it more challenging to find a job compared to other demographic groups. Bal-Domańska (2022) used econometric analyses to assess correlations between youth unemployment rate and market and macroeconomic determinants, including economic growth and productivity of the economy. The research results confirm the importance of the general economic condition as well as the development of knowledge-based economy for the improvement of the youth situation in the labor market. Also, Olubusoye *et al.* (2023) investigated the nature and causes of youth unemployment in Nigeria. The study employed a Vector Autoregressive (VAR) model and the Panel Autoregressive Distributed (PARDL) model to analyze the short-run and long-run significance of the determinants of youth unemployment, such output level, macroeconomic uncertainties and labour market flexibility. The results suggested that the nature of youth unemployment in Nigeria is non-cyclical, partly frictional, but largely structural. Thus, the study recommended fiscal and monetary policy and demand-side subsidy programme solutions to easing and dealing with structural youth unemployment.

Muhammad and Arif (2024) analysed the influence of economic growth, foreign direct investment, corruption perception index, consumer price index, and human

development index on unemployment in the member countries of Association of Southeast Asian Nations (ASEAN). The results of the study employing the Fixed Effects Model (FEM) on data from 11 ASEAN member countries demonstrated that unemployment is negatively influenced by economic growth, consumer price index, and human development index, whereas it is positively affected by the corruption perception index. Conversely, foreign direct investment does not exert a noteworthy impact on unemployment within the ASEAN region. Omoju *et al.* (2023) analysed the impacts of some youth-employment programs and the influence of limited political inclusivity on distribution of the program benefits. Using mixed research methods and primary data collected through focus-group discussion and key-informant interviews, the findings revealed that, the several youth-employment programs in Nigeria have not yielded a marked reduction in youth-unemployment rates as challenges such as lack of framework for proper governance and coordination, inadequate funding, lack of institutional implementation capacity, inadequate oversight of implementation, limited political inclusivity, lack of prioritization of vulnerable and marginalized groups, and focus on stand-alone programs that are not tied to long-term development plans are eminent. Similarly, Oyeinbrakemi and Ebierinyo (2025) investigated the impact of selected fiscal and monetary policies on unemployment in Nigeria between 1981 and 2023. The study analysed annual time series data using Vector Autoregressive (VAR) model. Findings revealed that macroeconomic policy variables such as government expenditure, tax revenue, and broad money supply had negative but significant impact on unemployment rate in Nigeria over the study period. While lending rate had a significant positive impact on unemployment rate and government transfer payments on the other hand had a positive but insignificant impact on unemployment rate in Nigeria over the period of the study. Reenforcing that macroeconomic policies such as government expenditure, tax and broad money supply are veritable tools to reduce the soaring unemployment rate in Nigeria. Recommending an increase of government expenditure in the productive sectors of the economy and cutting down its transfer payments.

Summary of Reviewed Literature

The reviewed literature reveals a growing consensus that the demographic dividend an economic growth potential resulting from changes in age structure depends not merely on population size but critically on the quality of human capital, macroeconomic stability, and governance. Zhou *et al.* (2023) and Berde & Kurbanova (2023) emphasise the role of education and labour force participation in amplifying the dividend, while Mulugeta (2023) and Woldegiorgis (2023) identify key drivers such as job creation, digitalisation, and migration. Studies from South Asia (e.g. Jafrin *et al.*, 2021) demonstrate that favourable demographic shifts, when coupled with sound economic policies, can enhance GDP growth. However, in countries like Nigeria, persistent macroeconomic instability, characterised by inflation, youth unemployment, and limited social investment, undermines the structural conditions needed for realising these gains (Olubusoye *et al.*, 2023; Olojede & Oladejo, 2023). Although prior research highlights the prerequisites and regional prospects for demographic dividends, few studies have explored the Nigerian context with specific attention to how macroeconomic volatility interacts with youth development to constrain demographic dividend realisation.

Theoretical Framework

The relationship between macroeconomic instability and youth development in Nigeria, and its implications for the demographic dividend, can be explained through three complementary theories: the demographic transition theory, human capital theory and Keynesian theory of employment.

Warren Thompson propounded the Demographic Transition Theory in 1929 while Frank W. Notestein further formalized and developed the theory in the 1940s and 1950s. The theory provides the foundation for understanding the demographic dividend. It explains how a country moves from high fertility and mortality rates to lower rates, thereby increasing the proportion of the working-age population. Nigeria's demographic profile, with a large youth population, aligns with this theory. However, the ability to translate this favourable structure into economic gains depends on youth employment, education, and health outcomes. The Human Capital Theory was first discussed by Adam Smith and popularised by Theodore Schultz in 1961 and Gary Becker in 1964. Becker (1964) posits that investments in education and health enhance productivity and economic growth. In the Nigerian context, low investment in education and health reduces the capacity of the youth to participate productively in the labour force, undermining the demographic dividend. The theory supports the argument that without robust investment in human capital, demographic advantage will not translate into sustainable economic growth.

The Keynesian theory of Employment was propounded by John Maynard Keynes in 1936. The Keynesian perspective emphasises the role of aggregate demand in determining employment levels. Under conditions of macroeconomic shocks such as inflation, exchange rate volatility, and fiscal instability, aggregate demand weakens, reducing employment opportunities for youths. In Nigeria, persistent macroeconomic instability depresses both private sector confidence and public sector spending on education and health, directly affecting youth employment and human capital outcomes. Thus, this theory highlights how unemployment and underemployment of young people are driven by macroeconomic instability. Collectively, these theories highlight that while Nigeria's demographic transition creates an opportunity for economic growth, the realisation of its dividend is conditional on macroeconomic stability and sustained investment in human capital.

Methodology

Methodological Approach

The study employs a quantitative research design using secondary data from the National Bureau of Statistics, World Bank, United Nations Development Programme (UNDP), and Central Bank of Nigeria (CBN) covering the period 1990 – 2024. Descriptive statistics and trend analyses are used to capture movements in key macroeconomic indicators, inflation, exchange rate, Gross Domestic Product growth rate, Human development Index and youth unemployment. The research design adopted for this study is ex-post facto design. According to Kerlinger (1964), ex-post factor research explains how the independent variable or variables occurred and in which the

researchers start with the observation of a dependent variable or variables. The independent variables are studied in retrospect for their possible relations to, and effects on the dependent variable or variables. In this type of design, the researcher has little or no control over the independent variable(s). The design is based on various econometric techniques such as unit root test, ordinary least square method and co-integration analysis on the variables of interest.

The study adopted the Auto-Regressive Distributed Lag (ARDL) bounds testing approach developed by Pesaran et al. (2001). ARDL was employed in this study to check the existence of both the long-run and short-run relationships between youth unemployment and inflation, exchange rate, Gross Domestic Product growth rate and Human development index. The bounds testing technique allows the use of the ARDL model for the estimation of level relationships because the model suggests that once the order of the ARDL has been recognized, the relationship can be estimated by OLS, a mixture of I(1) and I(0) variables as regressors, and is suitable for small or finite sample size (Pesaran et al., 2001).

Model Specification

This study is anchored on the human capital theory and the Keynesian employment theory. The human capital theory (Becker, 1964) stresses the role of education and health in boosting productivity, while the Keynesian employment theory adds that macroeconomic shocks, such as inflation and exchange rate instability, reduce aggregate demand and employment opportunities, especially for youths. In this study the Human development Index was used as a proxy to capture the education and health aspect as it affects youth unemployment.

Thus, the functional relationship between youth unemployment and macroeconomic instability is expressed as follows:

$$YUNE = f(INF, EXCHR, GDPGR, HDI, ADR)$$

Where:

YUNE	=	Youth unemployment used as proxy for youth development
INF	=	Inflation
EXCHR	=	Exchange rate
GDPGR	=	Gross Domestic Product growth rate
HDI	=	Human Development Index
ADR	=	Age Dependency Ratio

YUNE represents the youth unemployment rate; it refers to the share of the labor force ages 15-24 without work but available for and seeking employment.

INF measures the rate of inflation and captures changes in the general price level that affect purchasing power, production costs, and employment conditions.

EXCHR: denotes the exchange rate and reflects the value of the domestic currency relative to foreign currencies, influencing investment, trade competitiveness, and labour demand.

GDPGR: represents the gross domestic product growth rate and captures the pace of economic expansion and the economy's capacity to generate employment opportunities. HDI is the human development index and measures improvements in education, health, and living standards that influence labour productivity and employment prospects. ADR: It represents the age dependency ratio and measures the proportion of dependents relative to the working-age population, indicating demographic pressure on the labour market and economic resources.

The econometric equation is given as:

$$YUNE_t = \beta_0 + \beta_1 INF_t + \beta_2 EXCHR_t + \beta_3 GDPGR_t + \beta_4 HDI_t + \beta_5 ADR_t + \mu_t$$

β_0 is the constant while β_1 to β_5 are the coefficients of the explanatory variables. The theoretical expectation of the study is that macroeconomic stability has a positive effect on youth development.

The theoretical a priori expectations about the signs of the coefficients of the parameters are as follows: $\beta_1 < 0$, $\beta_2 > 0$, $\beta_3 < 0$, $\beta_4 < 0$, $\beta_5 > 0$.

The ARDL equation is specified as follows:

$$\begin{aligned} \Delta YUNE_t = & a_{01} + \sum_{j=1}^p a_{1j} \Delta YUNE_{t-j} + \sum_{j=1}^{q1} a_{2j} \Delta INF_{t-j} + \sum_{j=1}^{q2} a_{3j} \Delta EXCHR_{t-j} \\ & + \sum_{j=1}^{q3} a_{4j} \Delta GDPGR_{t-j} + \sum_{j=1}^{q4} a_{5j} \Delta HDI_{t-j} + \sum_{j=1}^{q5} a_{6j} \Delta ADR_{t-j} + U_{1t} \end{aligned}$$

Where:

p = lag length of the model

Δ = first operator difference

U_t = error term of white noise disturbance

a_i = the long-run coefficient multipliers

The ECM shows the short-run dynamics, that is, the speed of correction to long-run equilibrium after certain short-run disturbances. The ECM is illustrated as follows:

$$\begin{aligned} \Delta YUNE_t = & \beta_0 + \beta_1 \sum_{i=1}^q \Delta YUNE_{t-1} + \beta_2 \sum_{i=1}^q \Delta INF_{t-1} + \beta_3 \sum_{i=1}^q \Delta EXCHR_{t-1} + \beta_4 \sum_{i=1}^q \Delta GDPGR_{t-1} \\ & + \beta_5 \sum_{i=1}^q \Delta ADR_{t-1} + \beta_6 \sum_{i=1}^q \Delta ADR_{t-1} + \delta ECM_{t-1} + U_t \end{aligned}$$

Where:

ECM_{t-1} = one lag period of error correction term

δ = the ECM coefficient

β_i = the short-run coefficients to be estimated

Presentation and Analysis of Descriptive Data

Trend Analysis

This section presents the trend analysis of youth unemployment, inflation, exchange rate, GDP growth, and human development index.

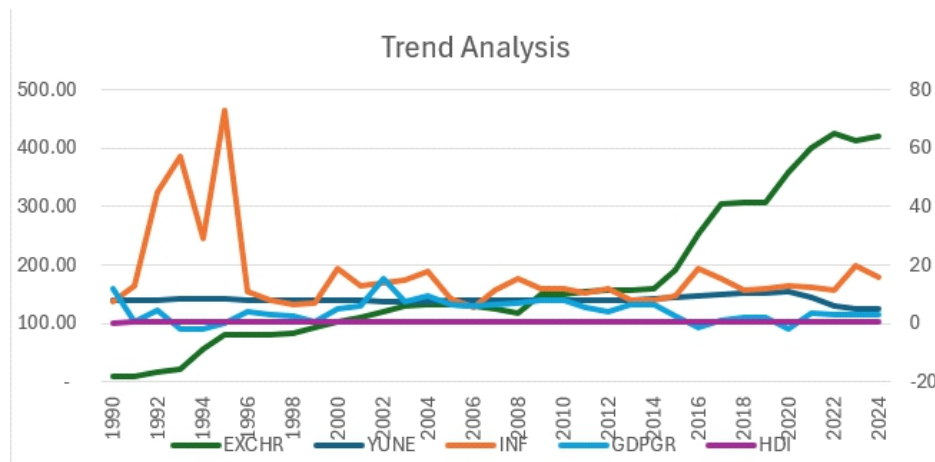


Fig 2: Trend in Nigeria's YUNE, INF, GDPGR, HDI 1990 – 2024.

Source: Graphed by Author, 2025 with data from CBN, UNDP, WDI 2024

Fig. 2 illustrates the overall trajectory of the variables in Nigeria between 1990 and 2024. Statistical evidence from the data shows that youth unemployment (YUNE) averaged 8.13 percent over the study period, with the lowest five-year average of 5.05 per cent recorded in the early 1990s, and the highest average of 10.85 percent observed in the mid-2000s. The trend indicates a gradual increase in unemployment over the decades, reflecting the structural nature of Nigeria's labour market challenges.

Inflation (INF) averaged 16.47 percent over the study period, but its distribution was highly volatile. While the early 1990s and mid-1990s experienced relatively moderate inflation rates, the late 1990s witnessed peaks above 70 percent, signifying macroeconomic instability. The 2000s and 2010s recorded more stable but persistently double-digit inflation, which continued to undermine purchasing power and economic welfare. The exchange rate (EXCHR) displayed a sharp upward trend. From an average of ₦8.04 per US dollar in the early 1980s, it rose steadily to reach a peak of ₦425.98 per US dollar in the mid-2010s. This depreciation of the naira underscores the persistent foreign exchange imbalances and overreliance on oil exports during the period.

GDP growth (GDPGR) averaged 4.21 percent over the study period, but the trend reveals significant fluctuations. While the economy contracted to -2.04 percent in the mid-1990s, the 2000s experienced strong expansions with growth rates above 10 percent in certain years. However, from 2015 onwards, growth slowed considerably, reflecting the combined effect of oil price shocks, exchange rate instability, and weak diversification.

The Human Development Index (HDI) recorded an average of 0.472 between 1990 and 2023. The trend shows gradual improvement over time, rising from 0.379 in the early 1990s to 0.548 in recent years. This suggests that while welfare indicators in health, education, and living standards improved moderately, they lagged behind population growth and failed to translate into commensurate employment outcomes.

Overall, the trend shows that while Nigeria recorded modest progress in GDP growth and human development, persistent inflation, rising unemployment, and a sharply depreciating exchange rate highlight deep-rooted structural weaknesses. The pattern reinforces that growth alone, without stability and targeted labour policies, has been insufficient to address the youth unemployment challenge and allow for a proper economic dividend.

Descriptive statistics

Table 1: Descriptive Statistics

	YUNE	INF	EXCHR	GDPGR	HDI	ADR
Mean	8.128329	16.4669	169.8162	4.211757	0.471671	88.812
Median	8.056	12	131.27	4.195924	0.479	89.23
Maximum	10.851	72.81	425.98	15.32916	0.548	94.05
Minimum	5.052	5.34	8.0378	-2.03512	0.379	80.97
Std. Dev.	1.175365	14.18894	122.4257	3.852935	0.054787	2.860113
Skewness	-0.31718	2.749201	0.868005	0.531668	-0.1984	-0.98032
Kurtosis	4.819001	10.13215	2.672434	3.588387	1.73546	4.278738
Jarque-Bera	5.412135	118.2708	4.551504	2.153785	2.561575	7.990582
Probability	0.066799	0	0.10272	0.340652	0.277818	0.018402
Sum	284.4915	576.3415	5943.566	147.4115	16.5085	3108.42
Sum Sq. Dev.	46.97043	6845.089	509594.1	504.7338	0.102054	278.1284
Observations	35	35	35	35	35	35

Source: Computation by the author, 2025 with the aid of E-view 10.

Table 1 presents the descriptive statistics of the study's variables covering the mean, maximum and minimum values within the period under study, 1990 to 2024. Table 4.1 showed that the average values of Youth Unemployment (YUNE), Inflation (INF), Exchange Rate (EXCHR), GDP Growth (GDPGR), Human Development Index (HDI) and Age Dependency Ratio (ADR) were 8.13 percent, 16.47 percent, ₦169.82 per one dollar, 4.21 percent, 0.472 and 88.81 percent respectively. The maximum values of Youth Unemployment, Inflation, Exchange Rate, GDP Growth, Human Development Index and Age Dependency Ratio were 10.85 percent, 72.81 percent, ₦425.98 per one dollar, 15.33 percent, 0.548 and 94.05 percent respectively, while the minimum values of Youth Unemployment, Inflation, Exchange Rate, GDP Growth, Human Development Index

and Age Dependency Ratio were 5.05 percent, 5.34 percent, ₦8.04 per one dollar, -2.04 percent, 0.379 and 80.97 percent respectively.

The analysis of skewness also shown in Table 1 indicated that Inflation, Exchange Rate and GDP Growth were skewed to the right, given the positive values of the skewness of these variables. This implies that the mean values of Inflation, Exchange Rate and GDP Growth were greater than their respective median values. Youth Unemployment, Human Development Index and Age Dependency Ratio were skewed to the left, as indicated by the negative skewness values of these variables. This suggests that the mean values of Youth Unemployment, Human Development Index and Age Dependency Ratio were less than their respective median values. The analysis of kurtosis showed the distributions of the variables of the study. Exchange Rate and Human Development Index were platykurtic, as their kurtosis values were less than 3, indicating relatively flat distributions. Youth Unemployment, Inflation, GDP Growth and Age Dependency Ratio were leptokurtic, as their kurtosis values exceeded 3, indicating that these variables were peaked and possessed thick tails. This suggests the presence of outliers in the distributions of Youth Unemployment, Inflation, GDP Growth and Age Dependency Ratio.

Correlation Analysis

Table 2: Correlation Matrix

	YUNE	INF	EXCHR	GDPGR	HDI	ADR
YUNE	1	-0.02562	-0.03052	-0.28717	0.090853	0.059144
INF	-0.02562	1	-0.23511	-0.35879	-0.38424	0.246841
EXCHR	-0.03052	-0.23511	1	-0.2175	0.899781	-0.78692
GDPGR	-0.28717	-0.35879	-0.2175	1	-0.05694	0.119217
HDI	0.090853	-0.38424	0.899781	-0.05694	1	-0.65047
WAP	0.059144	0.246841	-0.78692	0.119217	-0.65047	1

Source: Computation by the author, 2025 with the aid of E-view 10.

Table 2 shows the correlation matrix of the variables of the study. This provides a firsthand picture of the expected relationship among the variables of the study. Table 2 shows that Youth Unemployment (YUNE) has a negative but weak correlation with GDP Growth (GDPGR), Inflation (INF) and Exchange Rate (EXCHR). This is in line with theoretical expectations since higher economic growth, controlled inflation and a stable exchange rate are generally expected to reduce unemployment, particularly among youths. Youth Unemployment also shows a positive but very weak correlation with Human Development Index (HDI), which is contrary to theoretical expectation, as improvements in human development are expected to enhance employability and reduce youth unemployment. In addition, Youth Unemployment has a positive but weak correlation with Age Dependency Ratio (ADR), suggesting that an increase in the dependent population relative to the working-age population may exert pressure on the

labour market and contribute to youth unemployment, although the relationship appears weak at the correlation level.

Table 2 further shows that Inflation has a negative correlation with GDP Growth and Human Development Index, which is theoretically consistent, as persistent inflation is expected to hinder economic growth and reduce overall welfare. Inflation also shows a negative but weak correlation with Exchange Rate, suggesting that exchange rate movements were not strongly associated with inflationary pressures during the period under study. Inflation, however, has a positive correlation with Age Dependency Ratio, implying that higher dependency burdens may be associated with inflationary pressures, possibly through increased consumption relative to production. The results also indicate that Exchange Rate has a very strong and positive correlation with Human Development Index (0.8998). This result is theoretically counterintuitive, as exchange rate depreciation is often expected to worsen living standards. However, the observed positive relationship suggests that improvements in human development may have occurred alongside exchange rate depreciation during the study period, possibly due to structural reforms, external inflows or social sector investments. Exchange Rate also shows a strong negative correlation with Age Dependency Ratio, indicating that periods of higher dependency ratios were associated with lower exchange rate values.

Presentation and Analysis of Econometric Data

Unit Root Test Results

Table 3: Unit Root Tests Results

Variable	At level	After first difference	Remark
	ADF	ADF	
EXCHR	1.3548 (-2.9571)	-4.3639 (-2.9571)	I (1)
GDPGR	-3.7964 (-2.9511)	N/E	I (0)
HDI	-1.3601 (-2.9511)	-6.0529 (-2.9540)	I (1)
INF	-3.7923 (-2.9511)	N/E	I (0)
YUNE	-3.6122 (-2.9604)	N/E	I (0)
ADR	-2.7967 (-2.9571)	-10.1500 (-2.9540)	I (1)
N/E = not estimated, because the individual unit root test results were stationary at level at five percent confidence level () = values in parentheses are the corresponding probability values.			

Source: Computation by the author, 2025 with the aid of E-view 10.

The summary of the unit root test results of the study's variables as shown on Table 4.3, depicts that EXCHR, HDI, and ADR were not stationary at level but they became stationary after first difference using the Augmented Dickey Fuller (ADF) unit root test method while GDPGR, INF and YUNE variable were stationary at level using ADF unit root test method. Hence, due to the mixed stationary results of I (0) and I (1) using ADF, the Autoregressive distributed lag model (ARDL) was used to estimate the equation.

Bounds Test Results for Cointegration

The Bounds test is a cointegration test which is conducted to ascertain the existence or non-existence of long run relationships among the variables of the equation of the study. According to Pesaran et al. (2001), the Bounds test is another way for testing for cointegration, that is, the existence or absence of a long run relationship between or among variables within the ARDL modelling technique.

Table 4: Bound Test Results for Long run Relationships among the Study's Variables

Test Statistic	Value	K
F-statistic	9.8074	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.08	3
5%	2.39	3.38
2.5%	2.7	3.73
1%	3.06	4.15

Source: Computation by the author, 2025 with the aid of E-view 10.

Given that the value of the F-statistic of 9.979665 is greater than the critical values at the 5% level in the lower bound (2.56) and upper bound (3.49), the Bounds test results provided in Table 4 indicate that the variables in the estimated equation have a long run relationship. As a result, the null hypothesis of no cointegration is rejected, and the study proceeds to estimate the long run coefficients of the study's equation as well as the short run error correction model.

Short-Run ARDL Results of Estimated Youth Unemployment Equation

Table 5: Short run ARDL and error correction results

Dependent variable: D(YUNE)				
Variable	Coefficient	Standard Error	t-Statistic	Probability
D(INF)	0.0058	0.0055	1.0491	0.3533
D(INF(-1))	0.0069	0.0052	1.3258	0.2555
D(INF(-2))	-0.0203	0.0042	-4.8062	0.0086
D(INF(-3))	-0.0204	0.0032	-6.2761	0.0033
D(EXCHR)	0.0418	0.0048	8.5639	0.0010
D(EXCHR(-1))	0.0057	0.0038	1.5049	0.2068
D(EXCHR(-2))	0.0094	0.0038	2.4188	0.0729
D(EXCHR(-3))	0.0267	0.0036	7.3019	0.0019
D(GDPGR)	0.0627	0.0222	2.8162	0.0480
D(GDPGR(-1))	-0.3539	0.0287	-12.3014	0.0003
D(GDPGR(-2))	-0.4384	0.0336	-13.0377	0.0002
D(GDPGR(-3))	-0.2945	0.0284	-10.3553	0.0005
D(HDI)	3.2862	7.4407	0.4416	0.6816
D(HDI(-1))	-20.506	10.572	-1.9394	0.1244
D(HDI(-2))	-55.480	11.402	-4.8657	0.0082
D(HDI(-3))	59.479	10.121	5.8768	0.0042
D(ADR)	0.9552	0.0827	11.548	0.0003
D(ADR(-1))	0.8761	0.0809	10.822	0.0004
D(ADR(-2))	1.6521	0.7686	2.1495	0.0980
D(ADR(-3))	-6.5609	0.7961	-8.2411	0.0012
ECT (-1)	-1.6101	0.1229	13.1008	0.0002
Diagnostic Tests				
Adjusted R-squared	0.9244			
Breusch-Godfrey Serial Correlation LM Test:	61.797(0.0159)			
Heteroskedasticity Test: Breusch Pagan- Godfrey	0.5814 (0.8242)	Durbin-Watson statistic		2.796

Source: Computation by the Author, 2025 with the aid of E-view 10.

Table 5 shows the short-run ARDL results and error correction coefficient, which captures the speed of adjustment from short-run disequilibrium to long-run equilibrium. As displayed in Table 5, the short-run coefficients measure the immediate and lagged effects of the explanatory variables on changes in youth unemployment. The short-run coefficient of inflation, D(INF), is 0.0058 with a probability value of 0.3533. This coefficient is positive but not statistically significant at the five percent level of significance, implying that a one percent increase in inflation leads to about 0.006 percent increase in youth unemployment in the short run, all other things being equal. However, the second and third lagged values of inflation, D(INF (-2)) and D(INF(-3)), have coefficients of -0.0203

and -0.0204 with probability values of 0.0086 and 0.0033 respectively. These are negative and statistically significant, indicating that higher inflation in earlier periods reduces youth unemployment in the short run, possibly reflecting short-term labour absorption effects arising from inflation-induced economic activities.

In the short run, the coefficient of exchange rate, $D(\text{EXCHR})$, is 0.0418 with a probability value of 0.0010 , which is positive and statistically significant at the five percent level. This implies that a one percent increase in the exchange rate (depreciation) leads to about 0.042 percent increase in youth unemployment in the short run. While the first lag of exchange rate, $D(\text{EXCHR}(-1))$, is positive but not statistically significant, the second and third lags, $D(\text{EXCHR}(-2))$ and $D(\text{EXCHR}(-3))$, are positive and weakly to strongly significant, indicating that exchange rate depreciation exerts a delayed but persistent upward pressure on youth unemployment. The short-run coefficient of GDP growth, $D(\text{GDPGR})$, is 0.0627 with a probability value of 0.0480 , indicating a positive and statistically significant effect at the five percent level. This suggests that contemporaneous GDP growth may initially increase youth unemployment, possibly due to jobless growth or structural rigidities in the labour market. However, the lagged values of GDP growth, $D(\text{GDPGR}(-1))$, $D(\text{GDPGR}(-2))$ and $D(\text{GDPGR}(-3))$, are negative and statistically significant, implying that economic growth reduces youth unemployment after some time lag. This indicates that the employment effects of growth materialize gradually in the short run.

The short-run coefficient of human development index, $D(\text{HDI})$, is 3.2862 with a probability value of 0.6816 , which is positive but not statistically significant. However, the second and third lagged values, $D(\text{HDI}(-2))$ and $D(\text{HDI}(-3))$, are statistically significant with mixed signs, suggesting that improvements in human development affect youth unemployment in a nonlinear manner in the short run. The short-run coefficient of Age Dependency Ratio, $D(\text{ADR})$, is 0.9552 with a probability value of 0.0003 , which is positive and statistically significant at the five per cent level. This implies that a one percent increase in the age dependency ratio leads to about 0.96 percent increase in youth unemployment in the short run. The first and second lagged values of ADR are also positive and statistically significant, indicating that a higher dependency burden persistently worsens youth unemployment. However, the third lag, $D(\text{ADR}(-3))$, is negative and statistically significant, suggesting a possible adjustment effect over time.

The error correction term, $\text{ECT}(-1)$, has a coefficient of -1.6101 with a probability value of 0.0002 . This coefficient has the correct negative sign and is statistically significant at less than the five percent level. This implies that about 161 percent of the short-run disequilibrium is corrected within one period, indicating a very rapid speed of adjustment from short-run disequilibrium to long-run equilibrium. The magnitude and statistical significance of the error correction coefficient confirm the existence of a stable long-run relationship between youth unemployment and the explanatory variables, consistent with the Bounds test results. The adjusted R-squared value of 0.9244 indicates that approximately 92.44 percent of the variations in youth unemployment are explained

by the independent variables in the short run. The Durbin Watson statistic of 2.796, which is close to the benchmark value of 2, suggests the absence of autocorrelation in the model. The Breusch-Godfrey Serial Correlation LM test reports a probability value of 0.0159, while the Heteroskedasticity Breusch-Pagan-Godfrey test reports a probability value of 0.8242, confirming that the model is free from heteroskedasticity.

Long-Run ARDL Results of Estimated Youth Unemployment Equation

Table 6: Long Run ARDL Results

Dependent variable: YUNE				
Variable	Coefficient	Standard Error	t-Statistic	Probability
INF	0.0525	0.0215	2.4379	0.0714
EXCHR	-0.0064	0.0193	-0.3319	0.7566
GDPGR	-0.4571	0.1071	-4.2681	0.0130
HDI	16.833	27.9944	0.6013	0.5800
ADR	-0.7945	0.3666	-2.1669	0.0961
C	74.308	24.6570	3.0136	0.0394

Source: Computation by the Author, 2025 with the aid of E-view 10.

Table 6 shows the long-run results of the youth unemployment equation. The long-run coefficient of Inflation (INF) is 0.0525 with a probability value of 0.0714. This coefficient is positive but not statistically significant at the five percent level of significance. This implies that a one percent increase in inflation will lead to about 0.053 percent increase in youth unemployment in the long run, all other things being equal.

The long-run coefficient of Exchange Rate (EXCHR) is -0.0064 with a probability value of 0.7566. This coefficient is negative but not statistically significant at the five per cent level of significance. This means that a one per cent increase in the exchange rate will lead to about 0.006 percent decrease in youth unemployment in the long run, all other things being equal. The long-run coefficient of GDP Growth (GDPGR) is -0.4571 with a probability value of 0.0130. This coefficient is negative and statistically significant at the five percent level of significance. This implies that a one percent increase in GDP growth will lead to about 0.46 percent decrease in youth unemployment in the long run, all other things being equal. This result is consistent with economic theory, which posits that sustained economic growth enhances employment opportunities and reduces unemployment.

The long-run coefficient of Human Development Index (HDI) is 16.833 with a probability value of 0.5800. This coefficient is positive but not statistically significant at the five per cent level of significance. This means that a one per cent increase in HDI will lead to about 16.83 per cent increase in youth unemployment in the long run, although this result is not statistically supported and runs contrary to theoretical expectations that improvements in human development should reduce unemployment. The long-run coefficient of Age Dependency Ratio (ADR) is -0.7945 with a probability value of 0.0961. This coefficient is

negative and weakly significant at the ten per cent level of significance. This implies that a one percent increase in the age dependency ratio will lead to about 0.79 percent decrease in youth unemployment in the long run, suggesting that demographic adjustments over time may ease labour market pressures, although the result should be interpreted with caution due to its marginal level of significance.

Test of Stability

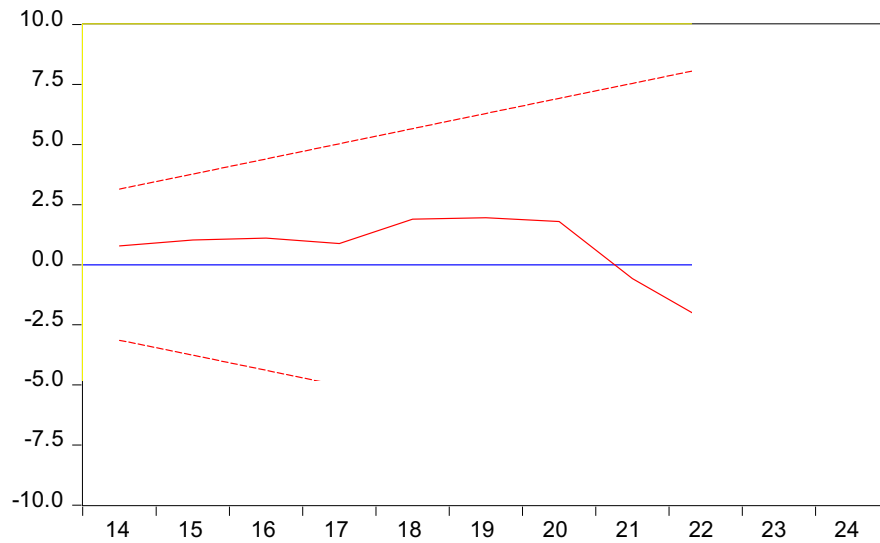


Fig. 3: Test of stability of the coefficients of the estimated youth employment equation (CUSUM of Chart)

The stability test using the cumulative sum (CUSUM) in Fig. 3 reveals that the coefficients of the variables in the estimated youth unemployment equation remained consistent throughout the study's period. The swing of trends within the CUSUM limit at the 5 percent significance level bound demonstrates this. This, on the other hand, implies that the parameters of the youth unemployment equation do not suffer from any structural instability over the period of the study, meaning all the coefficients of the equation are stable. The stability test using the square of CUSUM test as shown in Fig. 3 reveals that the coefficients of the variables in the estimated youth unemployment equation also remained consistent throughout the study's period. The swing of trends within the square of CUSUM limit at the 5 percent significance level demonstrates this. This, on the other hand, implies that the parameters of the youth unemployment equation do not suffer from any structural instability over the period of the study, which means all the coefficients of the model are stable and can be used for making long run policy decisions.

Discussion of Findings

The results show that inflation has a positive but statistically insignificant impact on youth unemployment in the long run, while its short-run effects are mixed across lag

periods. This implies that a one per cent increase in inflation leads to only a marginal increase in youth unemployment in the long run, although this effect is not statistically significant. Theoretically, inflation erodes purchasing power, increases production costs, and discourages private sector expansion, thereby limiting employment opportunities for youths. This finding aligns with the observations of Olubusoye et al. (2023) and IMF (2024), who noted that inflationary pressures in Nigeria weaken economic stability and labour-market outcomes. However, the insignificance of inflation in this study suggests that inflation alone does not directly drive youth unemployment in Nigeria but interacts with deeper structural and demographic factors.

The findings further reveal that GDP growth has a negative and statistically significant impact on youth unemployment in the long run, indicating that a one per cent increase in GDP growth reduces youth unemployment by about 0.46 percent, all other things being equal. Although the short-run effects of GDP growth are mixed, the long-run result confirms that sustained economic expansion eventually translates into improved employment opportunities for youths. This result is consistent with economic theory and supports the findings of Muhammad and Arif (2024), Bal-Domańska (2022), and Jafrin et al. (2021), who emphasized that long-term growth enhances labour absorption. The implication is that growth-driven policies remain essential for tackling youth unemployment, provided such growth is inclusive and employment-intensive.

The Human Development Index (HDI) is found to have a positive but statistically insignificant effect on youth unemployment in the long run, suggesting that improvements in education, health, and living standards have not translated into meaningful reductions in youth unemployment in Nigeria. This result runs contrary to theoretical expectations but aligns with Olubusoye et al. (2023) and Jafrin et al. (2021), who argued that weak labour-market structures, skills mismatch, and limited industrial absorption undermine the employment benefits of human capital improvements. The finding further supports the demographic dividend literature, which stresses that human development alone is insufficient unless accompanied by productive employment opportunities and effective macroeconomic policies (Zhou et al., 2023; Mulugeta, 2023).

The exchange rate exhibits a negative but statistically insignificant impact on youth unemployment in the long run, implying that exchange rate depreciation has not significantly influenced youth employment outcomes in Nigeria. This finding contradicts conventional expectations that currency depreciation worsens employment prospects by increasing production costs and discouraging investment. However, it is consistent with Chen et al. (2023) and Olojede and Oladejo (2023), who noted that macroeconomic distortions in Nigeria often transmit to the labour market indirectly through inflation, investment uncertainty, and institutional weaknesses rather than direct employment effects. This suggests that exchange rate volatility affects youth unemployment mainly through secondary channels rather than immediate labour absorption. A key contribution of this study is the role of the Age Dependency Ratio (ADR). The short-run results indicate that ADR has a positive and statistically significant

impact on youth unemployment, implying that increases in the dependent population relative to the working-age population intensify pressure on the labour market and worsen youth unemployment. However, in the long run, ADR exhibits a negative and weakly significant effect, suggesting that demographic adjustments over time may ease labour-market pressure if supported by appropriate economic and employment policies. This finding aligns with the demographic dividend literature, which emphasizes that a favourable age structure alone does not guarantee employment gains unless accompanied by investments in education, health, governance, and job creation (Mulugeta, 2023; Zhou et al., 2023; Groth et al., 2019).

Overall, the occurrence of coefficients with signs that deviate from theoretical expectations reflects the structural nature of Nigeria's economy and labour market. In particular, macroeconomic variables such as inflation, exchange rate, and human development indicators do not transmit automatically into youth development outcomes due to institutional weaknesses, skills mismatch, and limited productive absorption. This stresses the argument of the demographic dividend literature that favourable macroeconomic or demographic conditions alone are insufficient. Without complementary employment-intensive growth, effective labour-market institutions, and targeted youth policies, improvements in macroeconomic indicators may fail to reduce youth unemployment.

Conclusion

The study establishes that sustained GDP growth is central to addressing youth unemployment in Nigeria, while other macroeconomic indicators such as inflation, exchange rate and human development index have not demonstrated significant long run effects. This underscores the structural nature of youth unemployment and supports the view in the literature that Nigeria's demographic dividend is at risk unless deliberate policies are pursued to stabilise the macroeconomy, expand productive employment opportunities, and strengthen investment in human capital development.

Policy Recommendations

Based on the findings, the study makes the following recommendations:

- i. The negative and statistically significant impact of GDP growth on youth unemployment indicates that sustained and inclusive economic growth is essential for reducing youth unemployment in Nigeria. Government should therefore intensify growth-enhancing policies that prioritise labour-absorbing sectors such as agriculture, manufacturing, construction, and information and communication technology (ICT). Emphasis should be placed on economic diversification away from oil dependence, support for small and medium-scale enterprises, and the creation of an enabling business environment capable of generating long-term employment opportunities for young people.
- ii. The insignificant effect of the Human Development Index (HDI) on youth unemployment suggests that improvements in education and health have not adequately translated into employment outcomes. This underscores the need for

- better alignment between human capital development and labour-market demand. Government should therefore strengthen technical and vocational education and training (TVET), expand digital and entrepreneurial skills programmes, and improve the quality of education to ensure that youths acquire relevant, market-driven skills that enhance employability and productivity.
- iii. The insignificant long-run impact of inflation on youth unemployment indicates that while inflation may not directly influence employment, persistent price instability undermines job creation indirectly by discouraging investment and weakening economic confidence. Government should enhance fiscal and monetary policy coordination aimed at achieving price stability. Maintaining moderate inflation will help preserve purchasing power, stimulate private sector activity, and create a more conducive environment for sustainable youth employment.
 - iv. The insignificant impact of exchange rate movements on youth unemployment highlights the indirect transmission of exchange rate volatility to labour-market outcomes. To address this, government should pursue policies that promote exchange rate stability through export diversification, increased non-oil foreign exchange earnings, and prudent monetary policy management. A more stable exchange rate will boost investor confidence, lower production costs, and support youth-led enterprises and small businesses that rely on imported inputs.
 - v. Given the significant role of age dependency ratio in influencing youth unemployment, particularly in the short run, government should implement policies aimed at harnessing the demographic dividend. These include investments in family planning, youth-focused employment programmes, labour-market reforms, and governance improvements that facilitate the productive absorption of the growing working-age population. Without such targeted interventions, Nigeria's demographic transition may continue to exacerbate youth unemployment rather than deliver its expected economic benefits.

References

- Adegboye, A. A., Agbanusi, E., & Oladeji, S. I. (2023). African demographic dividend: Case study of Nigeria's age structure. In A. I. Adeniran (Ed.), *African development and global engagements* (pp. 31–63). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-21283-3_3
- Al-Khraif, R. M., Abdul Salam, A., & Abdul Rashid, M. F. (2022). Demographic dividend in Saudi Arabia: From age structural changes to economic gains. *Journal of Economics and Management*, 44, 19-37.
- Bal-Domańska, B. (2022). The impact of macroeconomic and structural factors on the unemployment of young women and men, *Economic Change and Restructuring*, 55(2), 1141-1172.

- Becker, G. S. (1964). Human capital; a theoretical and empirical analysis, with special reference to education. New York, *National Bureau of Economic Research*; distributed by Columbia University Press.
- Berde, É., & Kurbanova, M. (2023). Does the demographic dividend with human capital development yield an economic dividend? Evidence from Central Asia, *Post-Communist Economies*, 35(2), 154-178.
- Central Bank of Nigeria, CBN (2024)
- Chen, X., Prata Menezes, N., Rusatira, J. C., Cardona, C., Odeku, M., Kioko, D., Castro, J., Ibeawuchi, C., Lincoln, J. S., Ng'wanansabi D., Macha, J., Msemo, A., Yusuph, N. & Rimón, J. G. (2023). Demographic dividend-favorable policy environment in two pre-dividend African nations: review of national policies and prospects for policy amendments in Nigeria and Tanzania. *BMC Public Health*, 23(1), 1070.
- Farid, S., & Mostari, M. (2022). Population transition and demographic dividend in Bangladesh: extent and policy implication, *Journal of Social and Economic Development*, 24(1), 108-126.
- Federal Ministry of Finance, FMOF (2023)
- Groth, H., May, J. F., & Turbat, V. (2019). Policies needed to capture a demographic dividend in Sub-Saharan Africa, *Canadian Studies in Population*, 46, 61-72.
- International Labour Organisation, ILO (2023).
- International Monetary Fund, IMF (2024).
- Jafrin, N., Akhtar, R., Masud, M. M., & Ghosh, D. (2021). Cashing in on the Demographic Dividend: Is Bangladesh Moving in the Right Direction? *Population Review*, 60(2), 142-165.
- Jafrin, N., Ghosh, D., & Saif, A. N. M. (2025). Do socio-demographic characteristics affect graduates' employment status? *Discover Sustainability*, 6(1), 53.
- Jafrin, N., Mahi, M., Masud, M. M., & Ghosh, D. (2021). Demographic dividend and economic growth in emerging economies: Fresh evidence from the SAARC countries, *International Journal of Social Economics*, 48(8), 1159-1174.
- Jain, N., & Goli, S. (2022). Potential demographic dividend for India, 2001 to 2061: a macro-simulation projection using the spectrum model, *SN Social Sciences*, 2(9), 171.

- Jimenez, E., Pate, M. A. (2017). Reaping a demographic dividend in Africa's Largest Country: Nigeria. In: Groth, H., May, J. (eds) *Africa's Population: In Search of a Demographic Dividend*. Springer, Cham. https://doi.org/10.1007/978-3-319-46889-1_3
- Kerlinger, F. N. (1964). *Foundations of behavioral Research*. Holt, Rinehart & Winston.
- M'baye, C. K. (2023). Fertility, employment, and the demographic dividend in sub-Saharan African countries with incipient demographic transition: evidence from Mali, *Journal of Population Research*, 40(2), 7.
- Meka'a, C. B., & Moneboulou, M. M. A. (2024). Analysis of the accounting effect of the demographic dividend in Cameroon, *Journal of Social and Economic Development*, 1-20.
- Moreland, S., Madsen, E. L. (2017). Demographic Dividend Models. In: Groth, H., May, J. (eds) *Africa's Population: In Search of a Demographic Dividend*. Springer, Cham. https://doi.org/10.1007/978-3-319-46889-1_28
- Muhammad, R. K., & Arif, M. (2024). Analysis of the influence of macroeconomic indicators on unemployment rate: Evidence in ASEAN, *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 7(2), 2910-2926.
- Mulugeta Woldegiorgis, M. (2023). Towards inclusive development through harnessing demographic dividend? Empirics for Africa. *Journal of Social and Economic Development*, 25(2), 380-402.
- National Bureau of Statistics, NBS (2024).
- Nkhumeleni, M., Stiegler, N., & Ogujiuba, K. (2022). Interaction of Unemployment, Socioeconomic Factors and Demographic Dividend in South Africa: Issues and Policy Options. *International Journal of Economics and Financial Issues*, 12(5), 95-105.
- Okonji, E. (2023) Nigeria's youth population offers great potential for tech innovation. *ThisDay*, December 7, 2023. Retrieved on 20 August 2025 from <https://www.thisdaylive.com/2023/12/07/nigerias-youth-population-offers-great-potential-for-tech-innovation/>
- Olojede, M. O., & Oladejo, A. O. (2023). Harnessing Nigeria's demographic dividend for socioeconomic development, *International Journal of Development and Sustainability*, 12(8), 316-331.
- Olubusoye, O., Salisu, A., & Olofin, S. O. (2023). Youth unemployment in Nigeria: nature, causes and solutions, *Quality & Quantity: International Journal of Methodology*, 57(2), 1125-1157.

- Omoju, O. E., Ikhide, E. E., Olanrele, I. A., Abeng, L. E., Petreski, M., Adebayo, F. O., Odigie, I. & Muhammed, A. M. (2023). Empirical Review of Youth-Employment Policies in Nigeria. *arXiv preprint arXiv:2310.07789*.
- Oyeinbrakemi, A. & Ebierinyo, A. A. (2025). Macroeconomic policies and unemployment in Nigeria, *AKSU journal of Management Sciences*, 10(1), 138-159. DOI:10.61090/aksujomas.10109
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships, *Journal of Applied Econometrics*, 16(3), 289–326. <https://doi.org/10.1002/jae.61>
- Singh, P., & Kumar, S. (2021). Demographic dividend in the age of neoliberal capitalism: an analysis of employment and employability in India, *The Indian Journal of Labour Economics*, 64(3), 595-619.
- United Nations Children Emergency Fund, UNICEF, (2023).
- Woldegiorgis, M. M. (2023). Drivers of demographic dividend in sub-Saharan Africa, *Review of Evolutionary Political Economy*, 4(2), 387-413.
- World Bank (2022). World Development Indicators.
- World Bank (2024). *World development indicators*.
- World Health Organisation, WHO (2023).
- Zhou, J., Deng, J., Li, L., & Wang, S. (2023). The demographic dividend or the education dividend? evidence from China's economic growth, *Sustainability*, 15(9), 7309.