Unemployment and Migration in Nigeria, An Empirical Investigation

Dr. Ibeinmo Friday Cookey[1], and Onyinye Ifeoma Ochuba[2]

[1]Department of Economics, Rivers State University, Nkpolu-Orowurokwo, Port Harcourt, Nigeria

[2]Department of Economics, University of Africa, Toru-orua, Bayelsa State, Nigeria.

DOI: https://dx.doi.org/10.47772/IJRISS.2024.801017

Received: 14 December 2023; Revised: 24 December 2023; Accepted: 28 December 2023; Published: 24 January 2024

ABSTRACT

This study empirically assessed the effect of unemployment on migration in Nigeria over a period of thirty-three years (i.e. from 1990 to 2022). Total unemployment, male unemployment, female unemployment and urban unemployment were used as proxies of unemployment while net migration rate was used to proxy migration. The study employed time series data which were sourced from National Bureau of Statistics (NBS) and World Bank Development Index (WDI). Augmented Dickey-Fuller (ADF) statistic, Bounds cointegration test and Auto regressive Distributive Lag (ARDL) approach were the techniques of data analysis adopted. The data analysis was executed by E Views 12.0. The findings of the study revealed that total unemployment rate, female unemployment and urban unemployment have a positive and significant impact on net migration rate in Nigeria while male unemployment has a positive and insignificant impact on net migration rate in Nigeria. The study concluded that unemployment is a major factor that encourages migration in Nigeria. The study recommended that government should promote policies and initiatives that stimulate economic growth and diversification to create more job opportunities by supporting industries with high employment potential, such as agriculture, manufacturing, and technology.

Keyword: Unemployment, Migration, Male Unemployment, Female Unemployment, Urban Unemployment

INTRODUCTION

Nations of the world are plagued by various economic challenges which stems from underdeveloped, developing and developed economies. Underdeveloped and developing economies are severally confronted by unemployment as a major economic drawback (Obele, 2019). Unemployment in Nigeria has assumed a threatening dimension given the astronomical growth it has witnessed in the past decade with its accompanying devastating socio-economic consequences. This implies that unemployment is one of Nigeria's greatest economic challenges which have been on a continuous rise in the recent past (Adetokunbo, 2017). The International Labour Organization (2020) defined unemployment as the measure of the prevalence of unemployment. This is calculated as a percentage by dividing the number of unemployed persons by all individuals within the employable brackets. There are various types of unemployment ranging from seasonal, frictional, structural and cyclical unemployment. Nigeria is confronted by structural unemployment with its unique characteristic of huge variation between labour demand and its supply (International Labour Organization, 2020). Official data from the National Bureau of Statistics in 2020 have it that persons without a job were 40 million which represents about 19.70 percent. The data is threatening and unhealthy for the economic development, migration and security of Nigeria.

Unemployment in Nigeria has given rise to more people who do not have means of livelihood as well as more people migrating internally or internationally in search for jobs (Agboli, 2020). Unemployment in Nigeria has assumed such a dimension that wishful thinking and mere official statements by government functionaries cannot mitigate it. It requires mindful collaboration between individuals, the private sector as well as the government of day to proffer strategies to address unemployment and its attendant challenges. More worrisome is the challenge of unemployed graduates. This group represents huge economic loose as well as political threat to the nation (Nwankwo and Ifejiofor, 2014).

Consequently, links between unemployment and migration as well as opportunities for employment and intra migration have been reported in extant literature to exist (Schlottman and Herzog, 2015). The movement of individual from one place to another for the purpose of residing temporarily or permanently is known as Migration. Generally, Macroeconomic theory considers migration an equilibrium factor in regional labour markets. Hence, at the individual level, an unemployed person is willing to migrate to another area if his/her perceived that chances of finding a job there are higher than at his/her original location (Schlottman and Herzog, 2015). Furthermore, Oladosu (2021) stated that educated youths are frustrated the moment they enter the labour market with their newly acquired human capital, but lack the opportunity to utilize it due to inadequate employment opportunities, this condition fuels migration. Also, Chen (2017) established that given that migration from the rural areas to the urban areas exacts adverse consequences on employment opportunities in the urban areas, the rural migrants are motivated by their desire not only to enhance their earnings and employability, but also to become urban dwellers. Thus, it can be concluded that a bi-directional movement exists between unemployment and migration. This implies that while unemployment has a huge effect on migration, migration also has a significant effect on unemployment. Consequently, this study seeks to analyse the impact of unemployment on migration in Nigeria.

However, many factors are responsible for the growing trend of unemployment in Nigeria. Some of these factors include failure of the public and the private sector to create employment for the citizens in addition to the rising quest for white collar jobs by educated youths, rapid population growth which has greatly contributed directly to surge in migration of the labour, government's inability to encourage technical and vocational education. Again, it is undoubtable that some of the social and security challenges confronting the nation at moment are connected to the exponential level of unemployment and migration of youths in particular. Interestingly, there exist some empirical studies on the impact of unemployment on economic growth as well as the impact of migration on economic growth across the world, Nigeria inclusive. However, there is scanty of empirical studies in the Nigerian context that examined the impact of unemployment on migration. It is against this background that this study aims at empirically determining the impact of unemployment on migration in Nigeria.

Objectives of the Study

The aim of this study is to examine the impact of unemployment on migration in Nigeria. The specific objectives are as follows:

1. To determine the impact of total unemployment on migration rate in Nigeria.
2. To ascertain the impact of male unemployment on migration rate in Nigeria.
3. To analyze the impact of female unemployment on migration rate in Nigeria.
4. To evaluate the impact of urban unemployment on net migration rate in Nigeria.

LITERATURE REVIEW

Theoretical Framework

The theories adopted in this study include Keynesian theory and Neo-Classical Theory of Migration. These

theories are reviewed as follows:

Keynesian Theory of Unemployment

This theory was developed by British economist, John Maynard Keynes in 1930. Keynesian unemployment also known as demand deficient unemployment is characterised by inadequate aggregate demand in a nation's economy. Its unique identity is associated with the variation in business cycle, though there might be exceptional cases of persistent cycle as was the case during the 1930's great depression. The Keynesian unemployment theory can be identified by its seasonal increment associated with downward economic trajectories and subsequent decline the moment the economy is revived. This unemployment type is propelled by reduction in effective demand, which gives rise to reduction in production rate. Given that wages do not fall in response to the decline in production rate, labour lay-off becomes eminent which results in exacerbation of the existing unemployment situation. Keynesian theory suggests that by increasing government spending or reducing taxes, aggregate demand will rise, leading to increased production and employment. This is known as demand-side economics, where the emphasis is on boosting demand to drive economic growth and reduce unemployment (Schlottman and Herzog, 2015).Keynesian theory views employment as a function of effective demand which results from increased production. Increased output gives rise to enhanced income which is needed to generate employment. This implies that employment is directly proportional to the level of income. Aggregate supply and demand functions are the determinants of effective demand. Intuitively, aggregate supply is determined by long-run variables such as technical inputs which do not change frequently. In Keynes's view, economic depression and unemployment can be combated using effective aggregate demand. Indicating that aggregate demand is dependent on consumption and investment level which also determines employment level. Consequently, employment can be enhanced by increasing the level of investment and consumption. Coincidentally, consumption is a function of income C(Y) and employment level is also determined by investment level.

Neo-Classical Theory of Migration

The Noe-classical theory of migration was propounded by Kicks (1932). It was expanded and popularized by Lewis (1954) and Harris and Todaro (1970) where they explained trans-border migration in relation to economic advancement. The theory explained that migration decisions are largely dependent on the migrant's anticipated welfare improvement and less on the social stance of his household. From the aggregate viewpoint, the Neo-Classical theory believes that variation in wages propels migration to areas of higher wage rates (Lewis, 1954). According to the developmentalists stance on migration and remittances anchored by Todaro (1969) aligns with the position of the remittance-optimist school which believes that local and international movement of people brings with it change and innovation. In this light, Englama (2018) maintained that less developed economies advocate for international migration since they believe that the migrants would contribute to the development of the home economy by reinvesting substantial portion of their earning and encourage entrepreneurship through innovation and technological transfers. Also, Massey (2013) in explaining economic desires of migration demonstrated it using Neo-Classical theory which explained that differences in wages caused migration which is being drifted from low wage environment to high wage environment. The Neo-classical theory as cited in Ingrida (2017) assumed that migration is brought about as a result of economic comparisons of relative benefits and costs which involves financial and psychological costs. Cindy (2019) also noted the flow of labour is as a result of uneven regional development. Hence, looking at the Neo-classical, the theory opined that labour will move from low-wage to a high-wage location. It has been witnessed world over that there is increasing gap between the high-wage countries and low-wage countries as a result of government and resource management which is more practical and accountable in high-wage countries than the low-wage countries.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue I January 2024

EMPIRICAL LITERATURE

Quite a number of empirical literatures exist on the relationship between unemployment and migration. Some of these studies are reviewed as follow:

Ogu (2022) evaluated the impact of trans-border migration on poverty and unemployment in Nigeria between 1985-2020. The study employed data obtained from the Central Bank of Nigeria's statistical bulletin (2020), World Development Indicators and the KOF Swiss Economic Institute. The statistical tool of Auto Regressive Distributed Lag (ARDL) was used in the study. The findings revealed that migration has a positive and significant relationship with unemployment and a significant and negative relationship with poverty in Nigeria.

Bruce-Tagoe (2022) investigated the effect of migration on United State of America's unemployment and wage rates using a balanced panel data of seven strategic states for 12 years. The states studies include California, New York, Florida, Texas, New Jersey, Illinois, and Masschusetts. The study adopted two models: Unemployment growth rate model and Wage growth rate model. Findings of the pooled OLS estimation confirmed that immigration has very little effect on the US labour market. Also, increase in immigration had a positive but statistically insignificant impact on the rate of growth in unemployment of the United States. Factors such as GDP growth and college completion significantly reduced unemployment growth rate.

Fabo (2021) explored the relationship between unemployment, migration and remittances. The study focused on Central Asian and Caucasus countries. The results showed that higher regional unemployment rates led to increased emigration, particularly among low-skilled workers. The study also found that higher unemployment rates in destination countries reduce remittance inflows, indicating a link between unemployment, migration, and economic support to home countries. The findings highlighted the interconnectedness of unemployment, migration decisions, and remittance flows in these regions.

Kahanec (2021) compared the effects of unemployment on migration in Eastern and Western European countries. Using data from multiple sources, the findings reveal that higher unemployment rates are positively associated with migration in both regions. However, the magnitude of the effect is stronger in Eastern European countries. The study attributed this difference to disparities in economic opportunities and labor market conditions between the two regions. Furthermore, the analysis suggests that unemployment benefits play a role in moderating the migration response to unemployment.

Hjazeen, Seraj and Ozdeser (2021) examined the effect of unemployment on the economy of Jordan for the period between 1991 – 2019. Adopting auto-regressive distributed lag (ARDL) model, the study investigated the correlation between unemployment rate and other variables of interest. The study also employed ARDL bootstrap cointegration to find out the long-run relationship among the variables. The finding revealed a long-run relationship between unemployment, economic growth, urban population, female population, and education in Jordan. Furthermore, the findings confirmed an inverse relationship between economic growth and unemployment, and a proportional relationship between female population, education and urban population and unemployment in Jordan.

Falck, Heblich, Lameli and Südekum (2020) studied the consequence of unemployment on migration patterns within Germany employing micro data. Its findings indicated that higher regional unemployment rates led to an increase in migration. However, the effect is heterogeneous across different types of migrants. Unemployment has a stronger impact on low-skilled workers, who are more susceptible to move in the quest for employment. Its findings indicate that tackling regional disparities in unemployment could be a potential

lever to mitigate migration flows propelled by economic factors.

Dettling (2019) investigated the relationship between unemployment and internal migration. The study used administrative data from Denmark. The results showed that higher the local unemployment rate is the key attraction for migration. Factors such as age, educational level, and distance also contribute to migration. Younger individuals and those with higher education are more likely to migrate in response to unemployment. Additionally, the study found that individuals are more sensitive to unemployment fluctuations in regions closer to their birthplace, indicating the influence of social and cultural ties on migration decisions.

Obele (2019) examined the impact of unemployment on Nigeria's economic growth for the period between 1986 and 2008. Using Ordinary Least Square approach, and error correction model, the study examined the relationship between the explanatory variables and the dependent variables. It confirmed that there is a statistically significant relationship between the explanatory variable and Nigeria's economic growth. The cointegration result shows the presence of a long-run relationship between unemployment and economic growth in Nigeria.

Akutson, Messiah and Yakubu (2018) determined the link between unemployment and economic growth in Nigeria. Using annual time series data from 1986 to 2015 as sourced from the Central Bank Statistical Bulletin and National Bureau of Statistics as well as ARDL Bound Testing and the Parsimonious Error Correction Model (ECM) of the ARDL Model to ascertain the link between the variables, the study found that with effective policies, the long-run increase in unemployment has a growth enhancing mechanism on economic growth which is statistically significant.

Sunusi and Ahmad (2017) analysed the impact of unemployment on economic growth in Nigeria from 1970 to 2016 using ADF unit root test, Johansen co-integration, error correction mechanism (ECM) and Granger causality test, the study found that there is a long run relationship between unemployment and economic growth in Nigeria while unemployment rate has a positive impact on the economic growth both in the short run and long run.

Using annual time series data from 1985 to 2010, Onwachukwu (2015) investigated the impact of unemployment on the economic growth in Nigeria. The study employed Augmented Dickey Fuller methods and Ordinary Least Squares (OLS) and found that unemployment has significant negative effect on economic growth in Nigeria. It was also observed that the inflation has an insignificant negative effect on the economic growth in Nigeria.

Falck (2014) focused on the impact of unemployment on internal migration in Germany during the Great Recession. The study found that higher regional unemployment rates significantly increase the probability of migration. However, the study also observed that the effect varies across different groups. Younger individuals and those with higher education levels are more responsive to changes in unemployment, indicating that these groups are more willing to relocate in search of better employment prospects. Moreover, the study found that individuals with strong social networks in their current location are less likely to migrate, suggesting that social ties can act as a barrier to mobility in the face of unemployment.

Literature Gap

From the recent literature reviewed, only one examined the nexus between unemployment and migration in the Nigeria context as others focused on the relationship between unemployment and economic growth in Nigeria. Also, none of the studies covered employed time series data up to the year 2022. Examining the empirical relationship between unemployment and migration in Nigeria after the COVID -19 era gave this

study its uniqueness.

METHODOLOGY

The research design used for this study is the ex-post fac to research design. Also, this study made use of time series data from 1990 to 2022 which were mainly sourced from National Bureau of Statistics (NBS) report and World Bank Development Index (WDI).

Model Specification

The researchers developed an econometric model based on the objectives of the study. The model reveals the relationship between the explained variable and the explanatory variables. In this model, net migration rate depends on unemployment rate, male unemployment, female unemployment and urban unemployment. The model is specified below:

Functional Model

NMR = *f* (TUEM, MUEMP, FUEMP, UUEMP) (3.1)

Econometric Model

$NMR = \delta_0 + \delta_1 UNEMR + \delta_2 MUEMP + \delta_3 FUEMP + \delta_4 UUEMP + U_t$ (3.2)

ARDL Model

$$\Delta \ln(NMR_t) = \beta_0 + \sum_{t=1}^{p} \beta_{1i} \Delta(NMR_{t-1}) + \sum_{t=1}^{q} \beta_{2i} \Delta(TUEM_{t-1}) + \sum_{t=1}^{q} \beta_{3i} \Delta(MUEMP_{t-1}) + \sum_{t=1}^{P} \beta_{4i} \Delta(FUEMP_{t-1}) + \sum_{t=1}^{P} \beta_{5i} \Delta(UUEMP_{t-1}) + \alpha_{1i} \Delta(NMR_{t-1}) + \alpha_{2i} \Delta(TUEM_{t-1}) + \alpha_{3i} \Delta(MUEMP_{t-1}) + \alpha_{4i} \Delta(FUEMP_{t-1}) + \alpha_{5i} \Delta(UUEMP_{t-1}) + \varepsilon_{1i} (3)$$

Where; NMR = net migration rate, TUEM = total unemployment rate, MUEMP = male unemployment, FUEMP = female unemployment, UUEMP = urban unemployment, β_1-β_5= short run dynamic parameters, α_1- α_5= Long run dynamic estimates of the regressors, Δ = first difference notation, p and q = maximum lag order, ε_{1i} = Stochastic or error term

A Priori Theoretical Expectation: δ_1, δ_2, δ_3, $\delta_4 > 0$.

Variables Description

The variables of this study are classified as dependent variable and independent variable. Net Migration is the explained variable and it is estimated by net migration rate. Unemployment is the explanatory variable and it is represented by total unemployment, male unemployment, female unemployment and urban unemployment.

Net Migration Rate (Explained/Dependent Variable): This is the outstanding amount between the number of people coming into a geographical space (immigrants) and the number of people going out of the same place (emigrants) divided by the total population of the said area. A positive net migration is achieved

when the number of people coming into the area (immigrants) is greater than the number of people going out (emigrants).

Total Unemployment (Explanatory/Independent Variable): This refers to the total number of able bodied populace who are actively seeking to be employed, but are not able to get suitable employment for at least 6 months.

Male Unemployment (Independent Variable): Male unemployment refers to the proportion of the male population that is jobless and actively seeking employment. It is a key indicator of labor market conditions and can provide insights into the economic well-being of men within a given population.

Female Unemployment (Independent Variable): Female unemployment refers to the percentage of the female population that is unemployed and actively seeking work. It provides an indication of the economic opportunities available to women and their participation in the labor force.

Urban Unemployment (Independent Variable): This refers to the level of joblessness within urban areas, which typically have higher population densities and a more diverse range of economic activities compared to rural areas.

Data Analysis Technique

The descriptive statistics were applied in this study to analyze the distribution of each of the variables over the study period. In addition to this, this research employed the ARDL technique proposed by Pesaran and Shin (1999) to estimate the dynamic relationship between unemployment and migration in Nigeria. The justification for the ARDL was based on the fact that the variables are mixed integrated of order zero and one as shown in the result of Augmented Dickey Fuller (ADF) unit root test.

DATA ANALYSIS AND DISCUSSION

Descriptive Statistical Analysis

Table 1: Descriptive Statistics Result

	NMR	TUEM	MUEMP	FUEMP	UUEMP
Mean	-0.260030	4.642424	6.944545	8.845152	9.263030
Median	-0.288000	3.740000	7.520000	8.720000	8.170000
Maximum	0.289000	9.850000	9.880000	11.91000	19.63000
Minimum	-0.404000	1.900000	3.060000	1.410000	4.960000
Std. Dev.	0.125539	2.179885	1.874702	1.611663	3.649583
Skewness	2.498131	1.357983	-0.369964	-2.677028	1.253322
Kurtosis	12.06246	3.268434	1.953588	15.31685	4.072050
Jarque-Bera	147.2499	10.24173	2.258397	248.0097	10.21977
Probability	0.000000	0.005971	0.323292	0.000000	0.006037
Sum	-8.581000	153.2000	229.1700	291.8900	305.6800
Sum Sq. Dev.	0.504325	152.0608	112.4642	83.11862	426.2225
Observations	33	33	33	33	33

Source: Researcher's Computation, 2023.

The outcome of the descriptive statistics of the research variables (net migration rate, total unemployment

rate, male unemployment, female unemployment and urban unemployment) shown in Table 1 indicates that urban unemployment has the highest mean value of 9.26. This is followed by female unemployment with a mean of 8.85. The mean for male unemployment stood at 6.94, total unemployment rate had a mean value of 4.64 while the average rate of net migration rate stood at -0.26 over the period. The above statistic indicates that the value of urban unemployment is more than the individual values of net migration rate, total unemployment rate, male unemployment and female unemployment over the period. During the period under review also, the maximum net migration rate stood at 0.29% with a minimum value of -0.40%. Also, the maximum value for total unemployment rate stood at 9.85% with a minimum of 1.9%. Moreover, male unemployment has maximum value of 9.88% and a minimum value of 3.06%. The maximum value for female unemployment stood at 11.91%with a minimum of 1.41%. Finally, urban unemployment has a peak rate of 19.63% and the lowest rate of 4.96% over the period of this study.

Unit Root Test

The test for stationarity was done using the Augmented Dickey Fuller (ADF) unit root test. The results of the unit root test are presented below:

Table 2: Augmented Dickey-Fuller (ADF) Test Results

	At Levels		**At First Difference**			
Variables	**ADF**	**Mackinnon Critical Value @ 5%**	**ADF**	**Mackinnon Critical Value @ 5%**	**Order of Integration**	**Decision**
NMR	-3.916863	-2.95711	–	–	I(0)	Stationary at Level
TUEM	0.369946	-2.95711	-4.958816	-2.960411	I(1)	Stationary at 1 st Difference
MUEMP	-1.57103	-2.95711	-7.417029	-2.960411	I(1)	Stationary at 1 st Difference
FUEMP	-6.40879	-2.95711	–	–	I(0)	Stationary at Level
UUEMP	-2.04756	-2.960411	-5.337067	-2.967767	I(1)	Stationary at 1 st Difference

Source: Researcher's Computation, 2023.

The comparison of the test statistic value against the Mackinnon critical value at 5% level of significance in Table 2 showed that net migration rate and female unemployment were stationary at levels and was integrated of order zero I (0) while total unemployment rate, male unemployment, and urban unemployment in the test used (that is, ADF) were stationary at first difference and were integrated of order one I(1). However, the variation in the order of stability or the mixed stationarity in the variables necessitated the use of ARDL in the estimation of the long run relationship within the variables studied.

ARDL Cointegration Test

Table 3: ARDL Bounds Cointegration Test

Series: NMR TUEM MUEMP FUEMP UUEMP		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	K

F-statistic	4.442406	4
Critical Value Bounds		
Significance	I(0) Bound	I(1) Bound
10%	2.2	3.09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: Researcher's Computation, 2023.

The Bounds cointegration test result in Table 3 indicates the non-acceptance of the null hypothesis of non-existence of a long run relationship among the variables at all critical levels (lower and upper bounds). This is owing to the fact that the F-statistic of 4.442406 exceeds the critical levels (lower and upper bounds) at 10%, 5%, 2.5% and 1%. The implication of this finding is that there is cointegration among the variables. This further implies that net migration rate has a long run relationship with total unemployment rate, male unemployment, female unemployment and urban unemployment.

Table 4: Long Run Auto regressive Distributive Lag (ARDL) Model

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Dependent Variable = NMR				
TUEM	0.920986	0.203980	4.515069	0.0001
MUEMP	0.031764	0.019915	1.594964	0.1228
FUEMP	0.086686	0.030065	2.883225	0.0089
UUEMP	0.089235	0.033685	2.649052	0.0150
C	0.467643	0.288208	-1.622589	0.1167

Source: Researcher's Computation, 2023.

1. Interpretation of Coefficients

The result of the ARDL long run analysis shown in Table 4 indicates that, the coefficient of total unemployment (0.920986) has a positive relationship with net migration rate. This means that net migration rate will increase by 92.1% given a percentage increase in total unemployment rate while net migration rate will decrease by 92.1% given a percentage decrease in total unemployment rate. Also, the P-value for total unemployment rate is 0.0001while the alpha value is 0.05. Moreover, given that P-value is less than the alpha value (i.e, 0.0001< 0.05), the study concludes that total unemployment rate is statistically significant. Also, the coefficient of male unemployment(0.031764) indicates that there is a proportional relationship between male unemployment and net migration rate. It therefore means that net migration rate will increase by 3.2% given a percentage increase in male unemployment while net migration rate will decrease by 3.2% given a percentage decrease in male unemployment. Also, the p-value for male unemployment is 0.1228while the alpha value is 0.05. Since the P-value is greater than the alpha value (i.e, 0.1228> 0.05), the study concludes that male unemployment is not statistically significant.

Moreover, the coefficient of female unemployment (0.086686) indicates that there is a unidirectional relationship between female unemployment and net migration rate. Meaning that net migration rate will increase by 8.7% given a percentage increase in female unemployment while net migration rate will

decrease by 8.7% given a percentage decrease in female unemployment. Also, the P-value for female unemployment is 0.0089while the alpha value is 0.05. But, given that the P-value is less than the alpha value (i.e, 0.0089< 0.05), we therefore conclude that female unemployment is statistically significant. Lastly, the coefficient of urban unemployment (0.089235) indicates that there is a proportional relationship existing between urban unemployment and net migration rate. Meaning that net migration rate will increase by 8.9% given a percentage increase in urban unemployment while net migration rate will decrease by 8.9% given a percentage decrease in urban unemployment. Also, the coefficient of the P-value for urban unemployment is 0.0150while the alpha value is 0.05. Given that the P-value is lower than the alpha value (i.e, 0.0150< 0.05), the study concludes that urban unemployment is statistically significant.

Table 5: Short Run Autoregressive Distributive Lag (ARDL) Model

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Dependent Variable = NMR				
D(TUEMP)	0.075565	0.024055	3.141345	0.0049
D (TUEMP (-1))	0.010147	0.021566	0.470504	0.6428
D (TUEMP (-2))	-0.059904	0.023236	-2.578023	0.0175
CointEq(-1)*	-0.920986	0.185589	-4.962504	0.0000
Adjusted R^2 = 0.512271; Durbin-Watson stat = 1.974597				

Source: Researcher's Computation, 2023.

Emanating from the ARDL short run results in Table 5, the coefficients of total unemployment rate at initial level (0.075565) and at lag one (0.010147) indicating the existence of a positive relationship between urban unemployment and net migration rate while the coefficient of total unemployment rate (-0.059904) at lag two indicates the existence of an inverse relationship between total unemployment rate and net migration rate at lag two. Also, the P-value for total unemployment rate at initial level (0.0049) and at lag two (0.0175) shows that total unemployment rate is statistically significant at initial level and at lag two while total unemployment rate is not statistically significant at lag one given that its p-value is higher than 0.05.In furtherance to the above, the adjusted R-squared gotten from ARDL analysis is 0.512271. The implication of this is that if the coefficient of determination is adjusted, approximately fifty-one percent (51%), the variation in rate of net migration can be explained by changes in total unemployment rate, male unemployment, female unemployment and urban unemployment. Then the remaining forty-nine percent (49%) of the changes in the model are captured by the error term. Also, the Durbin-Watson stat of 1.974597 which is approximately 2 indicates the non-existence of serial autocorrelation. Lastly, the ARDL error correction result in Table 5 reveals that the expected positive sign of CointEq (-1) is very significant. This attests to the existence of the long run relationship among the variables with their various significant lags. The coefficient of CointEq(-1) which is -0.920986 indicates that the deviation from net migration rate is amended by 92% by the subsequent year.

Post Estimation Tests

Table 6: Diagnostic Tests Results

Test	**F-Statistic**	**Probability**	**Null Hypothesis**	**Decision**
Serial Correlation LM Test	0.290645	0.7504	**H_0:** No serial correlation	Retain H_0
Normality Test	5.912019	0.0964	**H_0:** Normal distribution	Retain H_0

Heteroskedasticity Test	0.071908	0.9959	**H_0:** Homoscedasticity	Retain H_0
Ramsey RESET test	0.001646	0.9680	**H_0:** Correctly specified	Retain H_0

Source: Researcher's Computation, 2023.

The diagnostic test results of the employment generation were shown in Table 6. Specifically, the result of serial correlation LM test showed that there is no proof of autocorrelation since the outcome of the Breush Godfrey LM test probability value is higher than 0.05. In furtherance, the result of normality test revealed that the error term is normally distributed. In addition, the result of heteroscedasticity test confirmed that the model is free from heteroscedasticity, thus confirming the model to be homoscedasticity. Lastly, the outcome of Ramsey RESET test indicates that the model was correctly specified with no missing variable. In conclusion, diagnostic test results in Table 6 provided evidence that all the variables (net migration rate, total unemployment rate, male unemployment, female unemployment and urban unemployment) in our model are in consonance with the ordinary least squares assumptions.

DISCUSSION OF FINDINGS

This study provides an empirical investigation into the consequence of unemployment on migration in Nigeria. Findings emanating from this study showed that total unemployment rate has a direct significant impact on net migration rate in Nigeria. This observation is in consonance with the finding of Ogu (2022) which showed that international migration which was used as a proxy for migration has a positive and significant relationship with unemployment due to international remittances by migrants. Moreover, the results emanating from this study showed that male unemployment has proportionate and insignificant effect on net migration rate in Nigeria. This finding is related to the finding of Kahanec (2021) which stated that male and female unemployment are major determinants of migration in Eastern and Western European countries. Furthermore, a significant and proportionate relationship exists between female unemployment on net migration rate in Nigeria. This finding is related to the finding of Kahanec (2021) which stated that male and female unemployment are major determinants of migration in Eastern and Western European countries. Finally, a proportionate and significant relationship exists between urban unemployment on net migration in Nigeria. This finding is related to the finding of Fabo (2021) which stated that regional unemployment rates led to increased emigration, particularly among low-skilled workers.

The implication of this finding is that it will provide an insight and understanding to the Nigerian government on how to improve its spending on job creation in order to tackle the problem of unemployment and help in creating employment opportunities in Nigeria so as to reduce migration rate.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This article evaluated the effect of unemployment on migration in Nigeria. The study found that increase in unemployment has contributed significantly to increase in net migration rate in Nigeria. This is because total unemployment rate, male unemployment, female unemployment and urban unemployment have positive impact on net migration rate. Based on the findings, the study concludes that unemployment is a major factor that encourages migration in Nigeria.

Recommendations

Emanating from the major findings and summary of this study, the following are recommended:

1. Government should promote policies and initiatives that stimulate economic growth and

diversification to create more job opportunities by supporting industries with high employment potential, such as agriculture, manufacturing, and technology.
2. There should be full encouragement of entrepreneurship and provision of incentives for small and medium-sized enterprises (SMEs) to expand, as they are significant contributors to job creation which is capable of reducing migration.
3. Government and its agencies should implement rural development initiatives to reduce urbanization pressures through investment in rural infrastructure, agriculture, and agribusiness to create employment opportunities in rural areas and reduce urban migration.

REFERENCES

1. Adetokunbo, K. (2017). Nigeria's unemployment crisis: Guardian Newspaper – by Abati R; February 27.
2. Agboli, A. (2020). The impact of unemployment and inflation on economic growth in Nigeria (1981 – 2017). International Journal of Business and Economic Sciences Applied Research, 1(1), 47-55.
3. Akutson, S., Messiah, A. & Yakubu, D. (2018). The impact of unemployment on economic growth in Nigeria: An Application of Autoregressive Distributed Lag (ARDL) Bound Testing. Sumerianz Journal of Business Management and Marketing, 1(2), 37-46.
4. Akutson, S., Messiah, A. & Yakubu, D. (2018). The impact of unemployment on economic growth in Nigeria: An Application of Autoregressive Distributed Lag (ARDL) Bound Testing. Sumerianz Journal of Business Management and Marketing, 1(2), 37-46
5. Bruce-Tagoe, H. (2022). Immigration and unemployment and wages in the U.S. Journal of Development and Sustainability, 5(3), 701-717.
6. Chen, C. (2017). Rural–urban migration and urban employment. GOJAMSS, 9(8), 79-90
7. Cindy, L. (2019). Microfinance and gender inequality in China. International Economic Development Program, Ford School of Public Policy, University of Michigan (2009).
8. Dettling, K. (2019). Unemployment and migration: Evidence from administrative data. Political Economy, 51(2), 201-212.
9. Englama, A. (2018). The impact of remittance on economic development. Central Bank of Nigeria Bullion, 31(4), 5-17.
10. Fabo, K. (2021). The relationship between unemployment, migration and remittances. The study focused on Central Asian and Caucasus countries. Journal of Economics and Finance, 3(3), 277-288.
11. Fabo, L. (2021). Unemployment, migration, and remittances: evidence from Central Asia and the Caucasus. AUDOE, 7(5), 81-97.
12. Falck, O. (2014) focused on the impact of unemployment on internal migration in Germany during the Great Recession. Journal of Third World Studies, 6(3), 34-45.
13. Falck, O., Heblich, S., Lameli, A. &Südekum A. (2020). Unemployment and migration: New evidence from micro data. Journal of Urban Economics, 72(2), 225-239.
14. Harris, J. R. and Todaro, M. P. (1970). "Migration, Unemployment and Development: A Two-Sector Analysis," The American Economic Review, 60(1), 126-142.
15. Hjazeen, H., Seraj, M. &Ozdeser, H. (2021). The nexus between the economic growth and unemployment in Jordan. Future Business Journal, 7(1), 1-8.
16. Hjazeen, S., Seraj, G. &Ozdeser, H. (2021) investigated the impact of unemployment on Jordan's economy over the period 1991–2019. Journal of Economic Structures, 9(15), 1-19.
17. Iloabuchi, C. C. (2019). Analysis of the effect of unemployment on the economic growth of Nigeria. IOSR Journal of Economics and Finance, 10(3), 82-89.
18. Ingrida, L. (2017). Migration and economic development in Nigeria.International Journal of Scientific Engineering and Science, 4(3), 90-107.
19. International Labour Organization (2020). Global employment trends for youth 2020: A generation at risk. International Labour Organization, Geneva, pp. 2020.
20. Kahanec (2021) compared the effects of unemployment on migration in Eastern and Western

European countries. The World Economy, 40(1), 116-139.
21. Lewis, W. A. (1954). Economic development with unlimited supplies of labor. The Manchester School, 22(2), 139-191.
22. Massey, D. S. (2013). Theories of international migration: Review and appraisal. Journal of Economics, 11: 54-62.
23. Nwankwo, C. A. &Ifejiofor, A. P. (2014). Impact of unemployment on Nigerian economic development: A study of selected local government area in Anambra State, Nigeria. European Journal of Business and Management, 6(35), 104-112.
24. Obele, T. E. (2019). Unemployment and its effect on the growth of Nigeria economy. Journal of Economics, Management and Trade, 23(2), 1-9.
25. Ogu, N. M. (2022). THE effect of international migration on unemployment and poverty in Nigeria. International Journal of Economics Foundations, 1(1), 1-10.
26. Oladosu, I. O. (2021). The impact of unemployment rate on economic growth in Nigeria: An error correction modelling approach. International Journal of Economic and Management Sciences, 5(9), 115-126.
27. Onwachukwu, C. I. (2015). Does Inflation Significantly Impact on Economic Growth in Nigeria? Global Journal of Human Social Science: Economics, 15(8), 90-111.
28. Pesaran, M. H. & Shin, Y. (1999). An autoregressive distributed-lag modelling approach to cointegration analysis. Econometric Society Monographs.
29. Schlottman, K. & Herzog, T. (2015). The links between unemployment and migration. International Journal of Economic Policy Studies, 8, 97-115.
30. Sunusi, Y. E. & Ahmad, M. T. (2017). An analytical study of the impact of unemployment on economic growth in Nigeria (1970-2016). IOSR Journal of Humanities and Social Science (IOSR-JHSS), 22(7), 74-81.
31. Todaro, M. (1969). A model of labour migration and urban unemployment in less developed countries. American Economic Review, 59: 138-148.