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RELATIONSHIP BETWEEN DOMESTIC DIVERSIFICATION AND UNEMPLOYMENT RATE IN NIGERIA

DANJUMA Bitrus[1], Dimis I. MAILAFIA[2] and ENEJI A. Mathias[3]
[1, 2 & 3]Department of Economics, Faculty of Social Sciences, University of Jos-Nigeria
Correspondence Author: +2348036659431, bitrusdanjuma@yahoo.com

Abstract
The major objective of this study is to investigate the relationship existing between Domestic diversification and Unemployment rate in the Nigerian economy. In line with this objective, a quantitative method within the framework of Autoregressive Distributed Lag (ARDL) model was employed. Agricultural Value Added (AGVA), Manufacturing Value Added (MVA) and Service Value Added (SVA) were the major independent variables for the study, while Unemployment rate (UNEPL) was the dependent variable. The data for the study consisted of annual time series covering the period of 1986 to 2023. Findings from the study revealed that agriculture and service diversifications have positive and statistically significant relationships with unemployment rate in Nigeria. This implies that higher level of agriculture and service diversifications are associated with higher unemployment rate in the economy against theoretical postulations. Desirably however, a negative relationship was discovered between manufacturing diversification and unemployment rate in the short run, suggesting that improved manufacturing diversification is associated with lower unemployment rate in the economy. Cursory to these findings, the study therefore recommended establishment of more agriculture mechanization centres across geopolitical zones to improve production, improvement in the use of Information Communication Technologies as well as reduction in the cost of internet services as a means toward improving overall service production in the economy, reduction and harmonization of manufacturing tax rate, improvement in power supply and transportation networks so as to increase overall production level in the economy.

Key words: Diversification, Agriculture, Manufacturing, Unemployment, Service Value added

1. INTRODUCTION

Globally, rising unemployment is one of the major contemporary development challenges among economies, particularly; the developing economies. Nigerian economy, similarly to other developing economies, has for several decades experienced an unprecedented rise in unemployment rate. For instance, in the year 2022, unemployment rate in the economy had risen to an alarming rate of 33.3%, unarguably one of the highest rates recorded in the economy's transitional period (National Bureau of Statistics, 2022). The negative implication of rising unemployment was clearly manifested in the alarming poverty and deteriorating welfare level recorded in the economy in recent

times. Statistically, an estimated 71.2 and 134 million of the Nigerian population are reportedly living in extreme and multidimensional poverty (Poverty Clock, 2023). With this situation in view, the economy has been labeled the 'capital of poverty' in the world with a 'rising status'

Diversification of the economy which implies a quantitative and qualitative increase in output has been theoretically advanced as the most sustainable strategy needed for enhancing employment creation as well raising income level in an economy (Bature, 2013, International Monetary Fund, 2018, World Bank, 2023). This is often made possible via an expansion in domestic sectors productivities which in turns, increase labour utilization, visa-vis increase in employment rate as well as reduction in overall unemployment rate in the economy. This theoretically ideology formed the basis for the implementation of various diversification policies and programmes in the Nigerian economy such as; the Structural Adjustment Programme (SAP) in 1986, Import Substitutions Policies (ISPs) of the 1990s, National Economic Empowerment and Development Strategy (NEEDS), Transformation agenda and down to the Economic Recovery and Growth Plan (ERGP) transiting to the current period of 2023.

Desirably, domestic diversification was reported to have significantly improved with evidenced of practical transformation visibly in critical domestic sectors particularly, the 'service sector' following GDP rebasing outcome of the economy in 2015 and the United Nation economic assessment of 2018 and 2023 respectively. Regrettably however, unemployment rate in the economy continued to increase. This situation is particularly worrisome, theoretically contradictory and 'macroeconomically' challenging. Thus, in the face of this challenge, the need to re-examine the relationship between diversification and unemployment rate in the Nigerian economy becomes imperative, ultimately raising the motivation for this study. Consequently, this paper is sub-divided into four sections namely; Section I, which covers the Introduction, section II, the literature review, section III is the methodology and sources of data, section IV is result and interpretations and section V is the discussion of findings, conclusion and recommendations accordingly.

2. LITERATURE REVIEW

Conceptual Clarification

Diversification

Nourse (1968) explained diversification as a development strategy for transforming an economy from building and relying on a single source to multiple sources of income spread over primary, secondary and tertiary sectors involving large sections of the population. This is basically aimed at improving overall economic performance as well as enhancing inclusive growth with relative macroeconomic stability. Anyahie and Areji (2014) on the other hand, defined diversification as a process of broadening the range of economic activities in both the production and the distribution of diverse goods and services in an economy. This literally implies that diversification may not necessarily entail increase in output or economic growth, but it may primarily be concern with improvement in macroeconomic stability in an economy.

United Nation Framework Convention on Climate Change [UNFCCC],(2003) however defined diversification in terms of market; implying the diversification of markets for exports and of income sources away from domestic economic activities. This implies that an economy is said to be diversified when it produces more goods domestically for consumption and also for exports to different markets internationally. This definition made emphases on both domestic and export diversification. Jones (2001) defined diversification in the context of political economy, referring to exports; specifically to policies aiming at reducing the dependence on a limited number of export commodities that may be subject to both price and volume fluctuations. In general, approach to analyzing diversification is often on the dimension of intensifying domestic production as well as improving export of good and services, known as domestic and export diversification. However the approach of this study is based on domestic diversification.

Domestic Diversification

Papageorgiou and Spatafora (2012) defined domestic diversification as the spread of production process across different economic sectors of an economy. This entails conscious efforts at generating output from related or interrelated economic sectors within an economy. Usman and Landry (2021) explain domestic diversification as expansion in the sectors of an economy which contributes to increase in total output, production and employment. It also implies GDP diversification in an economy. Domestic diversification in the context of this study is

defined as an expansion in total output as well as value added generated from critical sectors of the economy such as agriculture, manufacturing and services. These sectors are particularly important as they reveal or capture significant transformation in the domestic economy over time.

Domestic diversification can be measured from the analyses of sectors output composition and the proportion of sectors value added, individual sectors growth, proportion of primary to secondary and tertiary production, variability in real or nominal GDP as well as the share of oil and non-oil output in relation to the total economic output (Papageorgiou, Spatora & Wang, 2015). The choice of a given metric or tool of measurement however depends on the objective of investigation.

Unemployment

Unemployment is a global macroeconomic phenomenon. Conceptually, Ernest and Rani (2011) defined unemployment as a state where people who are willing to work at the prevailing wage rate but are unable to find jobs. Okeke (2020) defined unemployment as the ratio of people in a country who are actively looking for employment but are not engaged in any. World Bank (2024) defined unemployment as the share of labour force that is without work but available for and seeking employment. This include people who are currently and actively seeking for employment, those who have lost their jobs and those who are not currently engaged and are not seeking current employment but are making future arrangement. By international labour organization, (ILO, 2024) however, unemployed persons are those age over 15 who simultaneously meet three conditions which includes; being unemployed for a given week, being available to take employment within two weeks, having actively sought a job in the last four weeks or having one starting in less than three months. Practically, unemployment by whatever definition remains one of the greatest macroeconomic challenges among economies. While the situation may be vary between developed and developing economies, however one of the well-known characteristics of developing economies is the persisting high rate of unemployment. In Nigeria economy for instance, the rate has been on steady rise as can be visualized in the trend in figure 1.

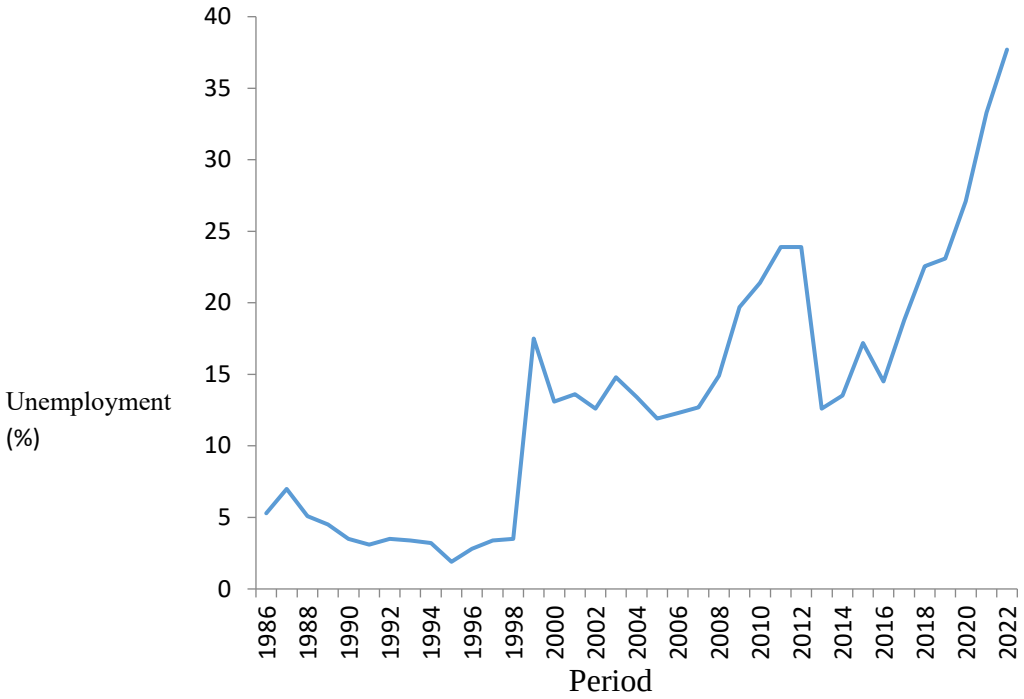

Figure 1: Unemployment Trend in Nigeria: 1986-2022

Source: Author's construction using data from National Bureau of Statistics, 2023.

Figure 1 shows an increasing trend of unemployment rate in Nigerian economy from 1986 to 2022. On the average and throughout the marked period, unemployment rate in the economy has been on a steady increase. Rising unemployment comes with associated macroeconomic challenge in the economy such as increased misery and worsening poverty situation in the economy.

Theoretical Review

Structural Change Theory

The structure change theory was propounded by William Arthur Lewis in the year 1950 and also known as the two-sector model theory (Agbenyo, 2020). The theory states that economies make deliberate efforts to diversify and transform their production structure from primary production to a more diversified production structure. This change in production structure which is reflected in the scope of major activities in critical sectors of the economy such as agriculture, manufacturing and service also increases the labour absorption capacity or employment horizon of the economy, thus leading to a reduction in unemployment rate in the economy. It is anticipated therefore, that a change from primary to secondary or tertiary productions depicts a diversified economy structure characterized by more employment profile.

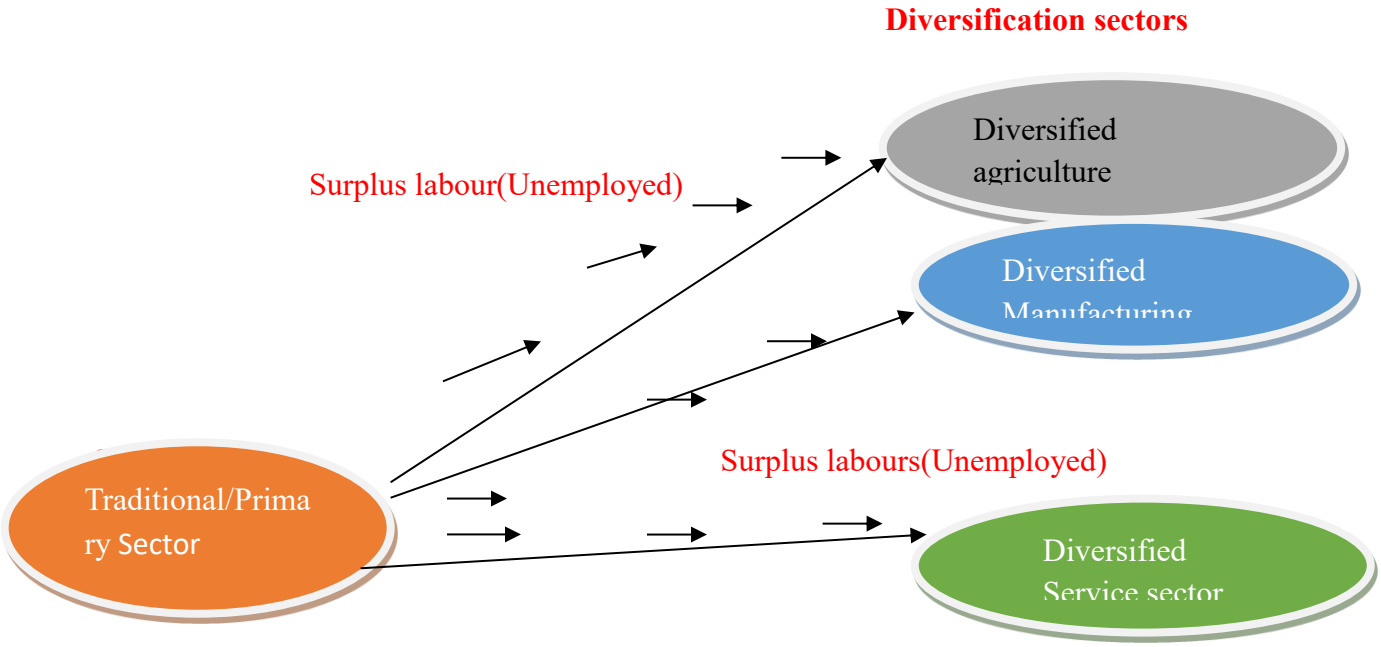

Figure 2: Diversification and 'Surplus Labour Absorption' (Reduced Unemployment)

Source: Author's Construction from Structure Change Theory Analyses.

Figure 2 shows surplus labour absorption in new and emerging diversified sectors in agriculture, manufacturing and service sectors most essentially. Increase labour absorption capacity resulting from new activities sectors help to reduce unemployment rate in the economy, thereby leading to an improvement in overall macroeconomic stability in the economy.

Empirical Review

Maliza and Ke (1993) investigated the relationship between diversification and unemployment in regional economies of United States, the United Kingdom and Canadian cities using regression model. The findings indicated that regions with more diversity experienced lower unemployment that areas with more concentration. Similarly, Izreaeli and Murphy (2003) analysed the effect of industrial diversification on unemployment rate and per capita income using panel estimation technique. The findings indicated that increased diversification is associated with reduction in unemployment rate, while increased concentration is associated with higher per capita income. On the contrary, Fu, Dong and Chai (2010) examined the effect of industrial specialization and diversification on unemployment rate in Chinese cities using a panel estimation technique. The findings

indicated that multiple specialization and diversification increases unemployment rate while specialization reduces unemployment rate in Chinese cities.

Watson and Deller (2017) examined the relationship between economic diversification and unemployment and great recession using spatial Durbin model .The findings indicated that increased diversity reduced unemployment rate. Equally, Umaru, Iya, and Stephen (2018) investigated the effect of agriculture, service and industrial sectors on unemployment rate in Nigeria using Structural Vector Autoregressive model (SVAR). The findings indicated that shocks in service sector reduced unemployment rate while similar shocks in agriculture and industrial sector increase unemployment rate. Additionally, the study found out that there exist bidirectional causation between unemployment and service sector, one-way causation between unemployment and agriculture while no causation was found between unemployment and industrial sector in Nigeria.

Darlington (2020) analysed the implications of economic diversification on sustainable development in Nigeria drawing lessons from corona-virus pandemic. The study employed a qualitative technique involving historical comparative analyses. The findings showed that there is a consensus on the utilization of agriculture diversification as measure to curb unemployment challenge and correct balance of payment in Nigeria, however no significant emphases has been made to improve manufacturing value addition so as to ensure more effectiveness in achieving sustainable development. Akulegu (2023) examine the effect of diversification on unemployment rate in Nigerian using Vector Error Correction Mechanism (VECM) and time series data spanning through period 1981 to 2020. The findings indicated that the growth rate of agricultural sector and oil sector have positive and statistical significant effect on unemployment in Nigeria, while manufacturing sector presented a negative and statistical insignificant effect on unemployment rate.

Alphonso (2023) examined the relationship between economic diversification and unemployment rate in Canadian cities during covid-19 shock using Herfindahl index and regression model. The findings revealed that increased diversification is associated with increased unemployment rate across Canadian cities. Abdulrazak and Lambe (2024) examine the unemployment challenge and diversification in Nigeria using qualitative method involving review of existing journals and literatures. The study

found that low or poor diversification in the economy has been responsible for the rising unemployment in the economy, thus the need to intensify diversification in the agriculture and manufacturing to curb this macroeconomic challenges.

From the literatures, the findings indicated that diversification and unemployment are related; however the relationship is a mixture of positive and negative in most of the studies, suggesting that more investigations are required dependent on time, location and specific context, thus justifying this study. Furthermore, this study intends to fill gap in literature by investigating diversification from stand point of three critical domestic sectors of the Nigerian economy namely;Agriculure, Manufacturing and Service against unemployment rate. This is highly desirable considering the continuous poor macroeconomic stability associated with rising unemployment rate in the economy and with evidently few existing studies addressing this menace within the Nigerian economy.

3. METHODOLOGY

Research Design

This study adopted a causal research design while the data for the analyses were basically secondary and consisted of annual time series covering the period of 1986 to 2023. This period was chosen basically due to the availability of comprehensive data covering the entire period of investigation and also in consideration of the articulated period diversification drive in the enveloping both the Structural Adjustment Programme (SAP) and post-SAP periods. Table1 is therefore a summary of the respective variables, their respective notations as well as data sources.

Table 1

Variable Notations, Data Measurements and Sources

Variable	Notation	Measurement definition	Sources
Unemployment	UNEPL	(% Total Labour force, ILO Estimate)	World Bank
Agriculture Value Added	AGVA	(GDP at Constant 2015 US$Billions)	World Bank
Manufacturing Value Added	MVA	(GDP at Constant 2015 US$Billions)	World Bank
Service Value Added	SVA	(GDP at Constant 2015 US$Billions)	World Bank
Gross Domestic Per Capita	GDPPCI	(GDP at Constant 2015 US$Billions)	World Bank
Gross Capital Formation	GCF	(GDP at Constant 2015 US$Billions)	World Bank

Source: Author's computation, 2025

Table 1 is a summary of the variables used for the study and their respective notations, measurement definitions and sources of data accordingly. Specifically, the variables AGVA, MVA, SVA, GDPPCI and GCF are measured US ($), while UNEPL was measured in percentages. These data were sourced from world banks publication.

ARDL Model Specification

Steming from the preliminary data analyses, the variables of interest were found to have a mixture of stationarity at 1(0) and 1(1). And that, since none of the variables was found to stationary at 1(2), the Autoregressive Distributed Lag (ARDL) model in the order of Pesaran, Shin and Smith (2001) becomes suitable. Furthermore, in comparison to other classical and neoclassical models, the ARDL is the most dynamic, flexible and also provide a consistent estimate for both short and long run, thus, considered suitable for this investigation. The ARDL model is specified in line with Pesaran, Shin and Smith (2001):

$$\Delta UNEPL_t = \beta_0 + \beta_1 \Delta UNEPL_{t-1} + \sum_{i=1}^{p} \beta_{2_i} \Delta \ln AGVA_{t-i} + \sum_{i=1}^{q} \beta_{3i} \Delta \ln MVA_{t-i} + \sum_{i=1}^{r} \beta_{4i} \Delta \ln SVA_{t-i} + \sum_{i=1}^{s} \beta_{5i} \Delta \ln GDPPCI_{t-i} + \sum_{i=1}^{t} \beta_{6i} \Delta \ln GCF_{t-i} + \alpha_1 UNEPL_{t-i} + \alpha_2 \ln AGVA_{t-1} + \alpha_3 \ln MVA_{t-1} + \alpha_4 \ln SVA_{t-1} + \alpha_5 \ln GDPPCI_{t-1} + \alpha_6 \ln GCF_{t-1} + \pi ECM_{t-i} + \varepsilon_{4t}$$

Where: *p, q , r, s,t* are the respective individual lags of variables in the model for both short and long run

Δ First difference operator, t-1 -Time series lag, ln - Natural logarithm

β_0 is the constant of the model, $\beta_{1\text{-}6}$ are the short run parameters of the equation

$\alpha_1 \ldots \alpha_6$ are the long run parameters of the equation.

ε_{4t} is the white noise error term

ECM_{t-1} - Error Correction Term

π Parameter of the error correction term

A Priori Expectation of the Explanatory Variables

Table 2: A priori Expectation about the Regressors

Variable	Notation	Expected Sign
Agriculture Sector Value Added	AGVA	Negative(-)
Manufacturing Sector Value Added	MVA	Negative(-)
Service Sector Value Added	SVA	Negative(-)
Gross Domestic Per Capita	GDPPCI	Negative(-)
Gross Capital Formation	GCF	Negative(-)

Source: Author's computation, 2025

From table 2, it is expected that all the independent variables; AGVA, MVA, SVA GDPPCI and GCF are negatively related to the dependent variable UNEPL. This implies that an increase in the values of the independent variables would reduce the value of the dependent variable Ceteris Paribus.

4. RESULTS AND INTERPRETATION

Table 5: Unit Root Test Results

Variables	**At Levels**	**ADF V.**	**P.Value**	**B.Date**	**1st Diff.**	**ADF.V**	**P.Value**	**B.Date**
		At Intercept only				**At Intercept only**		
UNEPL	1(0)	-5.32	0.01**	2017	1(1)	-11.47	0.01**	1990
lnAGVA	1(0)	-24.72	0.01**	2001	1(1)	-5.85	0.01**	2010
lnMVA	1(0)	-3.65	0.30*	2010	1(1)	-5.14	0.01**	1995
lnSVA	1(0)	-5.45	0.01**	2003	1(1)	-6.10	0.01**	2014
lnGDPPCI	1(0)	-5.14	0.01**	2001	1(1)	-4.68	0.03**	2002
lnGCF	1(0)	-2.56	0.88 *	1999	1(1)	-6.91	0.01**	2021
		At Intercept and Trend				**At Intercept and Trend**		
UNEPL	1(0)	-5.15	0.05**	2008	1(1)	-10.08	0.01**	2021
lnAGVA	1(0)	-15.24	0.01**	2001	1(1)	-28.74	0.01**	2002
lnMVA	1(0)	-4.58	0.20*	2002	1(1)	-5.67	0.01**	2012
lnSVA	1(0)	-7.97	0.01**	2014	1(1)	-5.33	0.03**	2003
lnGDPPCI	1(0)	-3.54	0.80 *	2020	1(1)	-6.05	0.01**	2000
lnGCF	1(0)	-3.93	0.57*	2018	1(1)	-8.25	0.01**	2018

Note: * ** *** denotes significance at 1%, 5% and 10% respectively

Source: Output from E-views Version 12.0

The unit root result displayed in table 5 showed the variables of the study with a mixture of stationarity at levels, 1(0) and also at first differences, 1(1). This outcome was equally observed when trend and intercept were included. The fact that none of the variables was found to be of 1(2), indicated that the variables are suitable for efficient estimation.

Table 7: Cointegration (ARDL Bound Test) Result

Lag Length	F-Statistics	
ARDL (3, 3, 3, 0, 3, 3, 2)	31.51793	
	Critical Values	
Significance Level	*Lower Bounds 1(0)*	*Upper Bounds1(1)*
10%	1.99	2.94
5%	2.27	3.28
1%	2.88	3.99

Source: Output from E-views Version 12.0

Table 7 shows the cointegration result for long run relationship between domestic diversification and unemployment rate in Nigeria computed using ARDL Bound test. At 5% significance level, the F-statistic value of 31.51 was found to be greater than both the upper and lower bound critical values of 3.28 and 2.27 respectively. This result implies that there is a long run relationship between domestic diversification and unemployment rate in Nigeria.

Table 8: ARDL Short and Long Run Estimates

Variable	Coefficient	SE	t-statistic	P. Value
Short run Estimates				
D(lnAGVA(-1))	0.723481	0.213822	3.383563	0.0061***
D(lnMVA(-1))	-0.629616	0.194664	-3.234372	0.0080***
D(lnSVA)	2.065964	0.596821	3.461616	0.0053 ***
D(lnGDPPCI)	-5.243691	0.593950	-8.828502	0.0000***
D(lnGCF(-1))	-0.763322	0.094717	-8.059013	0.0000***
D(Dummy(-1))	1.723230	0.135707	12.69820	0.0000***
CointEq(-1)	-0.707871	0.034849	-20.31252	0.0000***
Long run Estimates				
lnAGVA	0.071049	0.681425	0.104266	0.9188*
lnMVA	1.983973	0.410325	4.835122	0.0005**
lnSVA	2.918560	0.816616	3.573971	0.0044***
lnGDPPCI	-5.200076	1.344653	-3.867226	0.0026***
lnGCF	2.077922	0.461901	4.498628	0.0009***
Dummy	-3.418494	0.595463	-5.740903	0.0001***

Notes:*,**,*** show level of significance at 10%,5%, and 1% respectively
Source: Output from E-views Version 12.0

From table 8, the relationship between agriculture diversification (lnAGVA) and Unemployment rate (UNEPL) was found to be positive and statistically significant in the short with the coefficient estimate of 0.723481 and a probability value of 0.0061. This result contradicted the negative apriori expectation of the study and goes to imply that a 1% increase in agriculture diversification in the Nigerian economy is associated with 0.723481% increase in unemployment rate. In the long run however, a statistically insignificant relationship was uncovered given a probability estimate of 0.9188 greater than 5% threshold.

A negative and positive relationship was observed between manufacturing diversification (lnMVA) and Unemployment rate (UNEPL) in the short and long run respectively with estimated coefficient values of -0.629616 and 1.983973 respectively. The negative outcome is in line with the study apriori expectation and goes to imply that a 1% increase in manufacturing diversification in the Nigerian economy is associated with an -0.63% decrease in unemployment rate in short run; in the long run however,

increase in diversification is linked to 1.98% increase in unemployment rate in the economy against the study apriori expectation. This outcome is an indication of a much complex relationship within the domestic economy.

The relationship between service diversification (lnSVA) and Unemployment rate (UNEPL) was found to be positive and statistically significant in both the short and long run with estimated coefficients of 2.065964 and 2.918560 respectively. This results contradicted the a priori expectation of this investigation and by economic implication, a 1% increase in service diversification in the Nigerian economy would increase unemployment rate by an estimated 2.07% and 2.92% in the short and long run respectively. In conformity with the apriori expectation of the study, a negative and significant relationship was found between Gross Domestic Per Capita Income (GDPCCI) and Unemployment rate (UNEPL) in the Nigerian economy in the short and long run respectively with an estimated-5.243691 and-5.200076, implying that an increase in GDPPCI is associated with lower unemployment rate in the economy. Gross Capita Formation (lnGCF) and Unemployment have both negative and positive relationship with unemployment as reported by coefficient values -0.763322 and 2.077922 in the short and long run. This implies that increase in GCF in the economy would reduce unemployment rate in the economy in the short run while in the long run, increase in service diversification would trigger more unemployment rate in the economy.

To correct for the possible instability associated with unemployment during the structural reform period specifically; during and aftermath of the structural adjustment programme (SAP) in Nigeria, a dummy variable capturing relevant break dates was estimated. The coefficient of the dummy reported an estimated positive coefficient value of 1.723230 with a significant probability value of 0.000, implying that in the short run, the structural adjustment programmes and interrelated policies have contributed in poor macroeconomic stability in the economy via rising unemployment rate in the economy. On the contrary, in the long run, a negative and statistically significant estimate of -3.418494 and a probability value of 0.001 was reported, indicating that structural policies reforms in the economy have contributed in reducing

unemployment rate in the economy. On the overall, the statistically significant values of the dummy variables confirmed that diversification policies and reforms within the period of the study had underlying effect on unemployment situation in the economy, thus, justifying its inclusion in the model.

The speed of adjustment from short run to long run equilibrium as indicated by the error correction mechanism CointEq(-1) was negative and statistical significant with an estimated coefficient value of -0.70787. This implies that disequilibrium in the system would be restored annually at an adjustment speed of 71%.

Table 9**:** Diagnostic Checks on Unemployment Model

Tests	Values	Prob.(<0.05)	Decision
Serial correlation correlation	1.292361	0.3211 *	No Serial
Heterokedasticity	0.686035	0.7856 *	Homoscedastic
Normality distributed	0.742249	0.689958*	Normally
CUSUMSQ	-	-	Stable

Source: Output from E-views Version 12.0

The diagnostic checks test on the model reported in table 9 indicates that the model is free from serial correlation and Heteroskedastic problem. The error terms follow normal distribution and the model is adjudged stable by CUSUMSQ stability criterion. This was based on the obtained probability values of these estimate reportedly greater than 0.05.

5. DISCUSSION OF FINDINGS

The positive relationships identified with agriculture and service diversifications on unemployment rate in the Nigerian economy contradicted the theoretical expectation of this study. Agriculture sector is naturally a labor-intensive sector in developing economies, such as the Nigerian economy. Being a labour intensive sector, increase diversification which tends to expand the scope of production in the sector is anticipated to bring about an increase in employment in the economy as well, particularly given that more labour are often required than machines in intensifying productivity. This on the overall is expected to raise employment level and consequently reduce unemployment rate in the economy.

On the contrary, this finding revealed otherwise. This contradictory outcome in the Nigerian economy could stem from the fact that agriculture production in the Nigerian economy revolves around peasant, subsistence and largely use of crude methods. Increase in peasant and subsistence agriculture production would most likely not reduce the high rate of unemployment prevailing in the Nigerian economy, particularly in midst of population explosion in the economy, thus the reason for the continuous higher unemployment rate in the economy. This finding clearly negate the structure change theory and also contradicted the findings of Izreaeli and Murphy (2003); Watson and Deller (2017), but agrees with the findings of Aminu, Iya, and Stephen (2018), Akulegbu (2023) and Alphonso (2023). This finding contest the applicability of the structure change theory in undeveloped agriculture system of developing economies such as that of the Nigerian economy.

Similarly, the discovered positive and significant relationship between service diversification and unemployment rate in the Nigerian economy is also a theoretical and practical contradiction to the desired and anticipated impact of service diversification on unemployment rate reduction in the economy. Given the fact that the Nigerian economy has quickly integrated into the global service revolution with pronounced expansion in service production, employment is simultaneously expected to also increase, thereby aligning to this transformation. Ironically, this finding suggest otherwise. Increase in service production and simultaneous increase in unemployment rate in the Nigerian economy suggest that more people are losing their existing jobs and that the opportunity of getting new employment in the sector is minimal. This finding could have possible arisen due to the fact that service sector employment is most scientifically and technically skilled oriented. However, Nigerian economy still possesses large number of technically unskilled labour force with poor or deficient technical knowledge, incapable of harnessing the vast employment opportunities available in the service sector. Furthermore, the introduction of sophisticated technology in services sector has invariably led to significant losses of jobs and employment in critical services subsectors such as in the financial services. This has succeeded in worsening unemployment challenge in the economy. This finding does not only contradict the surplus labour notion of structure change theory but also contend the findings of

Papageorgiour (2015), Agu and Caliari (2013). It however agrees with the findings of Fu, Dong and Chai (2010).

The mixed outcome of negative and positive relationship between manufacturing diversification and unemployment rate in the Nigerian economy showed that the sector is highly dynamic. While the negative findings which imply a reduction in unemployment rate with higher level of diversification in the manufacturing sector, the positive finding in the long run however suggest that Nigerian economy may faces higher unemployment as the economy increase her manufacturing diversification. This is practically true considering the multiple spill-over that accompanies manufacturing production in an economy which tends to create more jobs in the economy. This finding is in agreement with Chukwu (2021). Increased unemployment rate in the economy could emanate from the situation where an increase in manufacturing production in the economy is accompanied by higher cost per unit typically experienced in the Nigerian economy. In this situation therefore, increased diversification would also raise production cost and consequently lower profit margins of firms with resultant negative impact on employment creation in the economy. The resulting effect could be loss of jobs and consequently higher unemployment rate persisting in the economy as evidenced in this study. This finding are consistent with the findings of Papageorgiou (2015), Esu and Udonwa (2015), Koren and Tenreyro (2004) and Okulegu (2023) while opposing the findings of Neumann and Topel (1991).

6. CONCLUSION AND RECOMMENDATIONS

Diversification is no doubt important in improving macroeconomic stability through employment creation. Nevertheless, these advantages are not automatic, but depended on the performance of critical domestic sectors in an economy. While increase diversification across essential tends to enlarge the economy and create more viable employment stream, however, the magnitude of such increase across specific sector plays a determining role. For agriculture, improvement in diversification resulting from peasant and subsistence farming may impact only little on unemployment reduction in the economy as it is typically the case in Nigeria. Unarguably, Nigerian economy has rapidly integrated into the global service revolution, however the anticipated benefit of improve employment is

far below the required capacity as the economy is choked up with high proportion of poorly technically sound populace. While manufacturing sector provides an evidence of multiple spill-over in terms of job creation, high cost of complementary manufacturing inputs is a drawback to increase production in the economy. Ultimately, this is an indication that the Nigerian economy is yet to fully maximize the global advantages of diversification in her economy, a cogent reason for the continuous and unwarranted rise in unemployment rate in the economy.

RECOMMENDATIONS

To overcome and correct inadequacies found in the study, the following recommendations are imperative:

1. There is the need to encourage mechanization and commercialization of significant agricultural production in the Nigerian economy. This can be done by government increasing agricultural investment in the form of acquisition and purchase of modern farming technologies. Equally, agricultural development banks as well as private and commercial banks need to increase their total lending for commercial agriculture. This should also go with strict monitoring and supervision of these loans and funds to avoid diversion or misuse.
2. Improvement in power supply, elimination of multiple tax regimes, reduction in complexities of manufacturing firms' registration and overall improvement complementary production infrastructures in the economy. This would help in improving domestic manufacturing and signifcantly curtail the high level of importation in the economy.
3. There is the need to intensify mass skills acquisition programmes for Nigerians to enable them fit in into the global service employment stream. This is in addition to the deployment of information, communication and technologies in all facets of its labour force so as to enhance capacity and equally absorb more labour in the economy.

CONTRIBUTION TO KNOWLEDGE

This study has departed from the conventional analyses of diversifcation from the narrow window of export to the much dynamic and encompasing domestic dimension, thereby providing basic and foundation knowledge of diversifcation across individual critical sectors of the Nigerian economy. Most importantly, the

discovered positive relationship between service diversification and uneployment rate in the Nigerian economy clearly exposed the ineffectiveness of the service sector in ameliorating the gorwing unemployment challenge currently bedeviling the Nigerian economy, particularly re-informing policy makers of the need be more cautionary in implementing divrsifications policies in the economy.

REFERENCES

Abdulrazak, B.O., & Lambe, E.O. (2024).Unemployment challenges in Nigeria: the imperative for economic diversification. *Kashere Journal of Politics and International Relations*, 2(2), 302-317.

Aminu, U., Iya, I.B., & Stephen, J.Z.(2018).The impact of Agriculture, Service and Industrial sectors on Unemployment in Nigeria. *Dutse Journal of Economics and Development Studies*, 5(1), 9-19.

Alphonso, Y. (2023). To Be or not to Be: The relationship between economic diversity and unemployment rate in Canadian cities during Covid-19 induced shock. *Major Papers*, 245. Retrieved December 17, 2024 from https://scholar.uwindsor.ca/major-papers/245

Chukwu, C. (2021).The impact of economic diversification on economic development in oil producing middle income-countries. Coventry University: *A doctoral thesis*.

Darlington,O.E.(2020).Implications of economic diversification for sustainable development in Nigeria: Lessons from Covid-19 pandemic. *International Journal of Research in Humanities and Social Studies*, 7(9), 11-16.

Fu,S., Dong,X., & Chai,G.(2010).Industry specialization, diversification, churning and Unemployment in Chinese cities. *China Economic Review*, 21(4), 508-520.

Jones,R.J.(2001).*Diversification*.London.Rutledge Encyclopaedia of International Political Economy.

Izreali, O., & Murphy, K. (2003).The effect of industrial diversity on state unemployment rate and per capita income. *The Annals of Regional Science*, 37(1), 1-14.

Malizia, E. E., & Ke, S. (1993).The influence of economic diversity on

unemployment and stability. *Journal of Regional Science*, *33*(1), 221-235

NBS. (2015). *Nigerian economic review, 2014 and 2015 economic review and outlook*. Retrieved July 8, 2022 from https://www.nigerianstat.gov.ng/pdfuploads/Economic%20Review%202014%20and%20Outlook%202015.pdf

NBS. (2022).Unemployment and sectoral reports.*Fourth quarter report*. Retrieved June 15, 2021, from https://nairametrics.com/2021/03/15/nigerias-unemployment-rate-jumps-to-33- 3-as-at-q4-2020/

Okulegu,B.E.(2023).Economic diversification and unemployment in Nigeria. *Global Journal of Applied, Management and Social Sciences*, 26, 72-85.

Papageorgiou, C., & Spataora, N. (2012). Economic diversification in LICs: Stylized facts and macroeconomic implications. *International Monetary Fund,* SDN/12/13.

Papageorgiou, C., Spataora, N. & Wang, C. (2015).Diversification, Growth and Volatility in Asia. *Policy Research Working Paper*.7380.Retrieved July 16,2023, from **https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-7380**

Pesaran, H.M., Shin, Y., & Smith, R.J. (2001). Bound testing approaches to the analyses of level relationships. *Journal of applied econometrics* 16(3), 289-326.

Poverty Clock. (2023). *Poverty Statistics in Nigeria*. Retrieved July 17, 2023, from https://worldpoverty.io/map

Usman, Z., & Landry, D. (2021).*Economic diversification in Africa*: How and why it matters. Carnegie Endowment for International Peace. Retrieved July 9, 2023, from https://carnegieendowment.org/2021/04/30/economic-diversification-in-africa-how-and-why-it-matters-pub-84429

UNFCCC. (2003). *Economic diversification*. Tehran workshop, 18-19 October. Retrieved August 13, 2018, from http://unfccc.int/adaptation/workstream/nairobi/work programme/items/3994.php

Watson, P., & Deller, S. (2017). Economic diversity, unemployment and the great recession. *The Quarterly Review of Economics and Finance*, 64,1-11.

World Bank. (2023). Metadata Glossary. Retrieved July 13,2023, from https://databank.worldbank.org/metadataglossary/world-development-

World Bank (2024).World Bank country classifications by income level for 2024-2025. Retrieved January 10, 2025 from **https://blogs.worldbank.org/en/opendata/world-bank-country-**classifications-by-income-level-for-2024-2025