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Macroeconomic Reforms and Labour Market Performance: Evidence from Nigeria

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ABSTRACT

The Nigerian government has introduced various macroeconomic reforms, policies and programmes that are not consistent and have not yielded the desired result, given the high unemployment rate. This study investigates macroeconomic reforms on labour market performance in pre and post-reform eras using statistical analysis and Vector Error Correction Model. The findings show that using the 'comparison of the mean employment ratio analysis' between the pre-reform era and post-reform, the macroeconomic reforms targeting key variables have not promoted employment. More so, evidence from the long-run employment equation indicates that employment has a negative relationship with output in the long-run. However, the study shows joint long and short-run causality using employment as a dependent variable. Also, the forecast error shock from government expenditure affects output more than any other variable, with minimal employment effect. Mismanagement of resource is mainly an indicator of a fundamental weakness in policies and institutions. Therefore, to improve the situation, the study suggests that among others, strengthening fiscal capacities and institutions to ensure the restructuring of property rights and to ensure political stability regarding economic reforms..

INTRODUCTION

The goal of promoting employment generation becomes one of the high priorities in both developing and developing economies. Sustainable Development Goals (SDGs) 8 stressed the reasons to generate and promote employment opportunities to sustain per capita economic growth in agreement with national circumstances connected with SDG 12. These goals are predominantly pertinent for developing econ-

omies with a high unemployment rate than developed economies (IMF, World Economic Outlook, 2020). The implications and interaction of reforms on labour market performance remain inconclusive in the theoretical and empirical literature (Lastauskas and Stakenas, 2020). After the global economy financial crisis in 2008, there is a consensus among scholars on the need to introduce economic reforms to improve welfare and employment (Kamal, Rana and Wahid, 2018). However, the timing and requirements for achieving the desired goals of different policy measures generate controversial issues. Thus, in this study, we consider the implication of economic reforms in Nigeria context and its relationship with employment before introducing major reforms, and after the introduction and comparison, the assessment was carried out to ascertain the implication of the reforms on the labour market within the time frame perspectives. Nigeria is endowed with natural resources, but the high unemployment rate and low-income rate remain major macroeconomic problems.

The macroeconomic reforms are presumed to improve the business environment leading to long term growth in income and employment. However, the World Economic Forum's 2016-2017 Global competitiveness Index ranked Nigeria 127 out of 128 countries. World Bank (2017) also ranked Nigeria 169 out of 190 countries in doing business index. However, before the economic recession in 2015, the country witnessed economic growth. During these periods, economic growth has not been inclusive; more Nigerian are unemployed or underemployed and live-in poverty more than a decade ago (World Bank, 2017). Nigeria has been taking steps to enhance the economy by adopting a series of macroeconomic reforms, which have not been consistent and has not yielded a desirable result over the years.

Considering the above and the limited research conducted to investigate the relationship between macroeconomic reforms and Nigeria's labour market performance, this paper seeks to fill in this gap. The research problems can be formalised as follows:

- I. What are the effects of macroeconomic reforms on the labour market performance in Nigeria?
- II. To what extent does government expenditure shock affect the labour market performance in Nigeria?
- III. Is there causality between labour market performance and selected macroeconomic variables in Nigeria?

The research hypotheses can be formalised as follows:

- H0: there is no relationship between macroeconomic reforms and labour market performance.
 - H1: there is a relationship between macroeconomics reforms and labour market performance.
- H0: Government expenditure shock does not affect labour market performance
 - H1: Government expenditure affects labour market performance in Nigeria.
- H0: there is no causal relationship between macroeconomic performance and labour market performance.
 - H1: there is a causal relationship between macroeconomic performance and labour market performance.

1. LITERATURE REVIEW

Achieving Sustainable Development Goals (SDG), especially in prospect to provide decent jobs and sustainable economic growth as identified in SDG No. 8 and 12 can be achieved by implementing macroeconomic reforms. UNCTAD (2019) pointed out that reforms are essential to creating a conducive environment for sustainable growth and employment generation in developed and developing economies. Although there are still many unresolved and argumentative issues in labour market reforms, macroeconomic reforms are expected to give a desirable result. Jha and Golder (2008) stressed that macroeconomic reforms are invariable to distributional consequences. The timing and requirements of macroeconomic reforms for achieving the desired goals of different policy measures generate controversial issues.

Theoretically, the competitive labour market and the efficiency wage theory demonstrated how policies on tightening and expansionary measures to increase or reduce unemployment; this proposition has shown how reforms may be used to affect short and long-run impacts on the labour market. The classical

economists share the notion that macroeconomic policy is irrelevant; this belief is due to certain assumptions by the school of thought, which has been flawed in the literature. A strand of literature shares the perspective that the government's introduction of reforms and programmes on the labour market will have an adverse effect on the economy (Besley and Burgess, 2004; Forteza and Rama, 2002; Blanchard and Wolfers, 2000; Burki and Perry, 1997). According to the scholars' view, reforms cause labour reallocation and doing this process, the flexibility of the labour market matters. They believe that the longer period it takes to reallocate resources, the more inefficient and negative effect on the labour market performance. However, vast of literature share another perspective that due to uncertainty in the economy that causes shocks, the need for the introduction of macroeconomic reforms by the government is inevitable to mitigate the effect of the shocks on the labour market performance (Asaleye et al., 2020; Popoola et al., 2019; Asian Development Bank, 2005; Bhaduri, 2005). Effect of unemployment if not addressed, may worsen the situation in the long-run. Pissarides (2000) shown that there is a connection between short and long term unemployment through outflows. According to the scholar, the short-run unemployment rate if not addressed by policies and programmes may worsen the state in the long-run.

Empirically, Klinger and Rothe (2010) examine the connection between labour market reforms and Germany's economic performance using a system of simultaneous matching friction. The scholars reported that labour market reforms reduce unemployment slightly in the short run. Similarly, studies have shown that reforms may have long-run impacts on the economy. For example, the study by Jacobi and Kluge (2007) documented that the labour market can improve in the long-run by introducing macroeconomic reforms to address the labour market's effectiveness and efficiency. Aiginger (2004) used OECD data to investigate the effect of labour market reforms on economic growth. Aiginger (2004) stated that the labour market reforms most times are implemented via fiscal and monetary policies, and it was concluded that macroeconomic policies on the labour market improved long-term employment and economic sustainability.

Most of the previous studies have addressed issues relating to labour market reforms and the economy (Lastauskas and Stakenas, 2020; Dosi et al., 2018; Geda et al., 2018; Adascalitei and Pignatti 2016; Anand and Khera, 2016; Krebs and Scheffal, 2013) while there was a disconnect on the impact of macroeconomic reforms on the labour market. In Nigeria, recent studies have examined the relationship between oil subsidy corruption and accounting, financial integration and labour market outcomes, human capital financing and productivity, among others (Abdul-Baki, Uthman and Kasum, 2019; Olopade, Okodua, Oladosun and Asaleye, 2019; Oladipo et al., 2019). The study by Kamal, Rana and Wahid (2018) used panel data to analyse the relationship between macroeconomic reforms and unemployment rate. While the Geda et al., (2018) used macro-econometric model, this approach is more flexible and efficient. However, it could give biased result due to misspecification of theoretical and econometric formulations. More so, Geda et al. (2018) focused on external shock on labour market outcomes. An alternative approach that gives similar results is using econometric and statistical approaches (Akikugbe, 2015; Adegboye et al., 2017). Hence, this study is distinguished by using time-series data set to investigate the impact of macroeconomic reforms on labour market performance. The pre-reform and post-reform implications on labour market performances are investigated using statistical and econometrics approaches.

2. RESEARCH METHODS

This study examines the relationship between macroeconomic reforms and labour market performance in Nigeria from 1970 to 2018. The Vector Error Correction Model (VECM) was used. Given the set of k variables, $y_t = (y_{1t}, \dots, y_{kt})$ the dynamic interrelationship is given in the VAR as follows:

$$y_t = \delta + \psi D_t + \phi_1 y_{t-1} + \dots + \phi_p y_{t-p} + \varepsilon_t \quad (1)$$

The equation above can be written as:

$$\phi(L)y_t = \delta + \psi D_t + \varepsilon_t \quad (2)$$

In equation 2, $\phi(L) = 1 - \sum_{j=1}^n \phi_j L^j$, δ is the constant term, D_t is the regressors, ψ is the deterministic

term. $\varepsilon_t = (\varepsilon_{1t}, \varepsilon_{2t}, \dots, \varepsilon_{kt})$ is the vector of an observed zero. Equation 2 can be written as:

$$(1 - \phi_1 L - \phi_2 L^2 - \dots - \phi_p L^p) y_t = \delta + \varphi D_t + \varepsilon_t \quad (3)$$

In equation 3, $\phi(L) = (1 - \phi_1 L - \phi_2 L^2 - \dots - \phi_p L^p)$ this is the characteristic of the polynomial on the order of P. In the presence of co-integration among the series, the Vector Error Correction Model (VECM) will be estimated; this is obtained by subtracting y_{t-1} from both sides in equation two and rearranging gives:

$$\Delta y_t = \pi y_{t-1} + \tau_1 \Delta y_{t-1} + \dots + \tau_{p-1} \Delta y_{t-p+1} + \delta + D_t \varphi + \varepsilon_t \quad (4)$$

Where $\pi = -(I_n - \phi_1 - \phi_2 - \dots - \phi_p)$; $\tau_j = -(\phi_{j+1} + \dots + \phi_p)$ $j = 1, 2, \dots, p-1$. It is assumed Δy_t does not contain stochastic trends, and all variables were integrated of order 1. The coefficient τ_1 is referred to as the short-run dynamics while πy_{t-1} shows the long-run impact (Asaleye et al., 2020). The explanatory and dependent variables that enter the model to establish the linkage between employment and macroeconomic reform, the study specified a simple linear model as follows;

$$\text{GDP} = f(\text{LF}, \text{GE}, \text{MS}, \text{INT}, \text{EXP}) \quad (5)$$

In equation 5, LF is Labour force, GDP represents Gross Domestic Product, GE is Government Expenditure, MS is Money Supply, INT is the Interest rate, and EXP is Export. The Johansen co-integration test was used to identify the existence and number of cointegrating vectors. In the presence of cointegrating vectors, the VECM was applied to identify the existence of a long-run relationship and Wald test was used to identify the short-run relationship between the variables for joint long and short-run causality respectively. The series are cointegrated if the combinations of I(1) have a linear combination. Johansen's estimation model is given as follows:

$$\Delta x_t = \mu + \sum_{i=1}^p \tau_i \Delta x_{t-i} + \alpha \beta' x_{t-i} + \varepsilon_t \quad (6)$$

Where x_t is the $(n \times 1)$ vector of all the non-stationary, τ_i is the $(n \times n)$ matrix of coefficients, α is the $(n \times r)$ matrix of error correction coefficients, r is the number of cointegrating relationship in the variable, $\beta = (n \times r)$ matrix of r co-integration; this study normalised on LF in equation 5 to establish employment equation.

3. INTERPRETATION OF THE EMPIRICAL RESULTS

The unit root test is presented first using Augmented Dickey-Fuller (ADF) and Philips Perron (PP), then follows by the statistical and econometrics approaches

Table 1. Unit Root Test

Variables	ADF Test Statistics	PP Test Statistics	Order of Integration
GDP	8.071270	9.69147	I(1)
LF	7.696436	6.3922	I(1)
GE	6.350072	6.74212	I(1)
MS	7.482798	8.91605	I(1)
INT	11.49314	10.34258	I(1)
EXPT	6.519542	6.50395	I(1)

Source: Authors' Computation using Eviews 10

Table 1 presents the unit test of the series used in this study. All the series are not stationary at the ordinary or level form. However, it was observed that the series GDP, MS, LF, INT, EXP and G.E. were stationary at 5 per cent level of significance in the first differenced form.

3.1 The Statistical Approach

The statistical approach showing the pre reforms era (Table 2) and the post-reform era (Table 3). This approach involves comparing the indicators in both periods (pre and post) to determine macroeconomic reforms' efficacy.

Table 2. Descriptive Statistics from 1970 to 1985

Statistics	LF	GDP	MS	INT	EXPT	GE
Mean	25.64500	88.87081	5.983750	5.833125	6.848854	7.277050
Median	27.06000	29.58020	5.410000	7.095000	7.125550	7.928350
Maximum	29.15000	253.0100	13.90000	12.80000	14.18670	14.96850
Minimum	21.01000	4.219000	0.640000	0.760000	0.885668	0.903900
Std. Dev.	2.643442	107.0628	4.696092	3.842035	4.004225	4.583103
Skewness	-0.541974	0.790803	0.271304	0.025173	0.013244	-0.101865
Kurtosis	1.811914	1.682361	1.614452	1.857353	2.091339	1.815808
Sum	410.3200	1421.933	95.74000	93.33000	109.5817	116.4328
Sum Sq. Dev.	104.8168	171936.6	330.7992	221.4185	240.5073	315.0725
Observations	16	16	16	16	16	16

Source: Authors' Computation using Eviews 10

Table 2 depicts the macroeconomic indicators where fewer reforms are introduced in the Nigerian economy, from 1970 to 1985. Evidence from the result shows the mean for L.F., GDP, MS, INT, EXPT and GE has 25.64500, 88.87081, 5.983750, 5.833125, 6.848854 and 7.277050, respectively. The study proceeds to determine the ratio of employment with the key macroeconomic variables such as aggregate output proxy by GDP, total money supply proxy by M2 (MS), total export (EXPT) and government expenditure proxy total aggregate expenditure including capital and recurrent (GE). The average ratio analysis of employment gives 28.9 per cent, 428.6 per cent, 100 per cent and 352.4 per cent with GDP, MS, EXPT and GE, respectively.

Table 3. Descriptive Statistics from 1986 to 2018

Statistics	LF	GDP	MS	INT	EXPT	GE
Mean	38.75250	4818.089	2530.771	14.64982	4775.293	1411.400
Median	37.45000	402.7200	515.4000	13.75000	1588.750	824.4000
Maximum	52.60000	63218.72	27204.10	17.23520	17442.20	5185.300
Minimum	29.87000	256.0000	13.60000	6.000000	8.900000	16.20000
Std. Dev.	6.901517	16037.22	5323.126	3145.756	5699.367	1648.112
Skewness	0.496813	3.332169	3.764942	1.363275	0.957988	1.120154
Kurtosis	2.044699	12.11652	17.80260	3.565997	2.491750	2.860834
Sum	1085.070	134906.5	70861.60	69019.50	133708.2	39519.20
Sum Sq. Dev.	1286.035	6.94E+09	7.65E+08	2.67E+08	8.77E+08	73339397
Observations	33	33	33	33	33	33

Source: Authors' Computation using Eviews 10

Table 3 shows the macroeconomic indicators where significant reforms are introduced in the Nigerian economy, from 1986 to 2018. Evidence from the result shows the mean for LF, GDP, MS, INT, EXPT, and GE has 38.75250, 4818.089, 2530.771, 14.64982, 4775.293 and 1411.400, respectively. The ratio of employment analysis with the key macroeconomic variables such as aggregate output proxy by

GDP, total money supply proxy by M2 (MS), total export (EXPT) and government expenditure (GE) indicates 0.80 per cent, 1.53 per cent, 0.811 per cent and 2.75 per cent respectively. We use the 'comparison of the mean employment ratio analysis' between the first panel (period of 1970 to 1985) and the second panel (period of 1986 to 2018), it was clearly shown that the macroeconomic reforms targeting key variables had not promoted employment opportunity in Nigeria.

Table 4. Estimated Correlation Matrix of Variables

<i>Estimated Correlation Matrix of Variables (1970-1985)</i>						
	LF	GDP	MS	INT	EXPT	GE
LF	1.000000					
GDP	0.503174	1.000000				
MS	0.273962	0.870902	1.000000			
INT	-0.090317	0.703277	0.825577	1.000000		
EXPT	-0.082568	0.535508	0.821607	0.818493	1.000000	
GE	0.957511	0.660953	0.896806	0.895369	0.922965	1.000000
<i>Estimated Correlation Matrix of Variables (1986-2018)</i>						
	LF	GDP	MS	INT	EXPT	GE
LF	1.000000					
GDP	-0.546707	1.000000				
MS	0.711243	0.801468	1.000000			
INT	0.933837	0.617888	0.765366	1.000000		
EXPT	0.875485	0.523423	0.649383	0.857502	1.000000	
GE	-0.083259	0.605811	0.776264	0.986398	0.861325	1.000000

Source: Authors' Computation using Eviews 10

Tables 4 presents the estimated correlation matrix of the variables. The preform era result shows that employment is negatively linked to interest rates and exports. It has a positive relationship with government expenditure, aggregate output and money supply. In the post-reform era, employment has a positive correlation with money supply, import and export variables. In comparison, it has a negative relationship with aggregate output and government spending. As a result, despite the massive improvement in macro-economic variables, the impact on employment in the post-reform era has not produced a desirable result.

3.2 Econometric Approach

This subsection presents the study's econometric approach; the co-integration was performed to test the long-run relationship and determine if restricted or unrestricted VAR should be adopted for the analysis.

Table 5. Johansen Co-integration Test

<i>Unrestricted Cointegration Rank Test (Trace)</i>				
<i>Hypothesized No. of CE(s)</i>	<i>Eigenvalue</i>	<i>Trace Statistic</i>	<i>0.05 Critical Value</i>	<i>Prob.**</i>
None *	0.989084	241.7007	95.75366	0.0000
At most 1 *	0.894043	70.27910	69.81889	0.0000
At most 2	0.797881	39.40581	47.85613	0.1095
At most 3	0.695111	21.03220	29.79707	0.1056
At most 4	0.349097	12.52480	15.49471	0.1334
At most 5	0.088325	2.219313	3.841466	0.1363

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

<i>Unrestricted Cointegration Rank Test (Maximum Eigenvalue)</i>				
<i>Hypothesized No. of CE(s)</i>	<i>Eigenvalue</i>	<i>Max-Eigen Statistic</i>	<i>0.05 Critical Value</i>	<i>Prob.**</i>
None *	0.989084	108.4216	40.07757	0.0000
At most 1 *	0.894043	53.87328	33.87687	0.0001
At most 2	0.797881	24.37361	27.58434	0.1314
At most 3	0.695111	18.50740	21.13162	0.1738
At most 4	0.349097	10.30549	14.26460	0.1926
At most 5	0.088325	2.219313	3.841466	0.1363
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Authors' Computation using Eviews 10

Table 5 shows the unrestricted co-integration rank (trace) and unrestricted co-integration test (maximum eigenvalue); both indicate one co-integration equation, which shows that the variables have a long-run relationship. Based on this result, the restricted VAR model (VECM) estimated and the study normalised on LF to generate the employment equation in Table 7 to show the long-run behaviour.

Table 6. Normalized Co-integrating Coefficient

<i>LF</i>	<i>GDP</i>	<i>GE</i>	<i>MS</i>	<i>INT</i>	<i>EXPT</i>
1.000000	0.053767	0.089119	-0.026780	-0.021267	0.003014
	(0.04957)	(0.00374)	(0.00389)	(0.00209)	(0.00016)
* standard error in parentheses					

Source: Authors' Computation using Eviews 10

Table 6 presents the long-run employment equation. Based on the procedure of the normalisation, the sign is interchanged in the interpretation. The result of the normalised cointegrating coefficient indicates that all variables are statistically significant at the level of 5 per cent. In addition, employment (LF) and two macroeconomics indicators of money supply (MS) and interest rate (INT) have a positive relationship in the long run. In contrast, other variables such as aggregate output (GDP), government expenditure (GE) and export (EX) have a negative relationship in the long run.

Table 7. Variance Decomposition of Government Expenditure

<i>Period</i>	<i>S.E.</i>	<i>GE</i>	<i>RGDP</i>	<i>MS</i>	<i>LF</i>	<i>INT</i>	<i>EXPT</i>
1	2.703156	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	2.728560	98.49591	0.160278	0.528209	0.025799	0.789630	0.000172
3	3.047987	98.53810	0.328653	0.436037	0.037146	0.659762	0.000299
4	4.106346	63.27691	35.94985	0.247017	0.058360	0.467695	0.000170
5	6.560172	25.76776	70.27803	2.060545	0.943700	0.946819	0.003139
6	14.18243	6.373848	90.36892	1.386903	0.976963	0.886177	0.007194
7	25.00429	2.172226	93.78903	1.042451	1.887943	1.099147	0.009204
8	37.23524	1.105593	95.39805	0.715698	2.100052	0.660444	0.020161
9	54.64684	0.543065	96.81452	0.429975	1.715066	0.473658	0.023712
10	56.25232	0.602921	93.72024	0.819230	2.694657	2.111136	0.051815

Source: Authors' Computation using Eviews 10

Table 7 shows the variance decomposition of government expenditure (the emphasis is on government expenditure due to its insubstantiality in resource management in relative to other variables); from

the table, it can be depicted that in period one, the variable GE variation is explained about 100 per cent variation in the forecast error shock of its self. In period two, the variable INT variation is explained about 0.79 per cent variation in GE's forecast error shock. In period three, the variable EXPT variation is explained about 0.000299 per cent variation by the forecast error shock of GE. In period four, MS variation is explained about a 0.24 per cent variation of GE's forecast error shock. In period five, GDP variation is explained about 70.3 per cent of GE's forecast error shock. In period six, the INT variation is explained about a 0.88 per cent variation of GE's forecast error shock. In period seven, about 93.8 per cent variation in GDP was explained by GE's error shock. In period eight, the GDP variation is explained about 95.4 per cent variation by the forecast error shock of GE. In period nine, about 0.43 per cent in the GE forecast error shock variation is explained by the variable MS. In period ten, about 2.11 per cent variation is explained in the IMP due to GE forecast error shock.

Table 8. Causality Test and VEC Residual Serial Correlation LM Tests

Joint Long-run Causality					
Null Hypothesis: no joint long-run causality					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Hypothesis Testing
C(1)	-0.116469	0.031465	-3.701529	0.0012	Rejected
R-squared: 0.614791		F-statistic: 3.069221		Durbin-Watson stat: 2.139197	
Adjusted R-squared: 0.414483		Prob.(F-statistic): 0.007786			
Joint Short-run Causality (Wald Test Equation)					
Null Hypothesis: no joint short-run causality					
Variable	Test Statistic	Value	Prob.	Hypothesis Testing	
C4: C13	F-statistic	0.066797	0.0017	Rejected	
	Chi-square	0.601171	0.0381	Rejected	
VEC Residual Serial Correlation LM Tests					
Null Hypothesis: no serial correlation					
Lags	LM-Stat	Prob.	Hypothesis Testing		
1	41.28155	0.2508	Accepted		
2	30.34105	0.7342	Accepted		

Source: Authors' Computation using Eviews 10

Table 8 presents the result of the system equation using employment as the dependent variable. The long-run coefficient represented C (1) while the short-run coefficients are represented by C (4) to C (13). The Null Hypothesis for the long-run causality is that there is 'no evidence of joint causal relationship when employment is used as the dependent variable', which was rejected at the 5 per cent significance level. Likewise, the Null Hypothesis of short-run causality is that there is 'no evidence of joint short-run causality when employment is used as the dependent variable', this Hypothesis was also rejected. Hence, there is a present of both short and joint-run causality. The result implies that the key macroeconomic variables can influence both in the short and long-run. Finally, the VEC residual Serial correlation L.M. Tests were carried out to determine if the lags are correlated. The study carried out the estimation using two lags. The Null Hypothesis is that there is no serial correlation, which was accepted.

3.3 Discussion of Research Findings

Evidence from the statistical approach shows that the government expenditure increase enormously over time with the introduction of various reforms, policies and programmes as shown by mean expenditure in the pre-reform and post-reform era with 7.277050 and 1411.400 respectively. Even though it is expected that government expenditure will increase overdue to changes in economic transition; however, it has not improved welfare, the unemployment and poverty rate indicated by the official statistics. Khan (2006) stressed that the reduction in the mismanagement of resources and alleviation of corruption practices by the government is necessary and sufficient to ensure that the macroeconomics reforms result in desire outcome. Similarly, that was an increase in average GDP in post-reform, but this growth is referred to as jobless growth. One of the critical factors that might have contributed to this is the lack of Nigerian government transparency in resource management. The finding contradicts the study by Kamal,

Rana and Wahid (2018) that documented macroeconomic reforms improve unemployment rate, poverty rate, and aggregate welfare.

Evidence from the normalised cointegrating coefficient indicates that all variables are statistically significant at the level of 5 per cent. In addition, employment and two macroeconomics indicators of money supply and interest rate have a positive relationship in the long run. In contrast, other variables such as aggregate output, government expenditure and export have a negative relationship in the long run. The outcome of the result between employment and output contradicts Okun's law that stressed an inverse relationship between unemployment and output. Likewise, the general conclusion from the variance decomposition of government expenditure is that the forecast error affects GDP more than any other variables. However, it affects employment afterwards but minimal effect along the 10-period horizon.

CONCLUSION

The high unemployment rate and low income have hindered growth and development in Nigeria. Therefore, promoting employment generation becomes one of the high priorities; this resulted in introducing macroeconomic reforms, policies and programmes by the Nigerian government. The reforms, policies and programmes introduced have not been consistent and has not yielded the desired result. In light of the above, this study examines the relationship between macroeconomic reforms and labour market performance in Nigeria. The study uses both the statistical and econometric approaches, with two panels for the statistical approach, pre-reforms era (where there were fewer reforms, policies and programmes) and post reforms (where more reforms, policies and programmes were introduced). Variance decomposition with emphasis on government expenditure was used to interpret the Vector Autoregression result on the econometric approach. The joint short and long causality was also used to determine the causality level using employment as a dependent variable. The labour market's proxy was limited to employment due to time series data unavailability for wages and income.

The key findings show that the macroeconomic reforms targeting key variables had not promoted employment opportunity in Nigeria. Similarly, that was an increase in average GDP in post-reform, but this growth is referred to as jobless growth. Consequently, evidence from the long-run employment equation indicates that employment negatively correlates with output in the long-run. Conversely, that was evidence of both joint long and short-run causality using employment as a dependent variable. Furthermore, the forecast error shock of government expenditure affects GDP more than any other variables, although it affects employment afterwards but with minimal effect along the 10-period horizon. The study suggests that: need to strengthen fiscal capacities and institution to ensure restructuring of property right; ensure political stability in respect to economic reforms, policies and programmes; accurate evaluation of reform plan and proper implementation for appropriate and feasible macroeconomic goals; finally, anti-corruption strategies should be carefully designed for specific objectives to promote growth and development by identifying the causes of public mismanagement of resources. Drastic reduction in the mismanagement of resources and alleviation of corruption practices by the Nigerian government is necessary and sufficient to ensure that the macroeconomics reforms result in desire outcome.

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