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Impact of Institutional Quality on Youth Unemployment in Nigeria: A Comparative Analysis of Male and Female Youths

Kurumsal Kalitenin Nijerya'daki Genç İşsizliği Üzerindeki Etkisi: Erkek ve Kadın Gençlerin Karşılaştırmalı Analizi

Nnanna P. AZU
Senior Lecturer, Air Force Institute of Technology
phil4azu@yahoo.com
https://orcid.org/0000-0002-4448-1278

Victor T. OKORIE
Student, Air Force Institute of Technology
danielvictor0805@gmail.com
https://orcid.org/0009-0000-7805-2423

Ifeanyi A. AKADILE
Lecturer, Air Force Institute of Technology
ifeanyiakadile22@gmail.com
https://orcid.org/0009-0001-2539-3619

Johnpaul S. OKAFOR
Student, Air Force Institute of Technology
johnpaulokafor86@gmail.com
https://orcid.org/0009-0005-4126-7566

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ABSTRACT

This paper investigates the influence of institutional quality on youth unemployment in Nigeria, focusing on gender differences among male and female youths, using annual data from 1991 to 2023. Institutional quality is measured through political rights and civil liberties, and the analysis employs the Autoregressive Distributed Lag (ARDL) model. The findings reveal that, in the long run, improved political rights are associated with a 0.93% increase in female youth unemployment, highlighting structural challenges that disproportionately affect women. Conversely, enhanced civil liberties contribute to a 0.56% reduction in female youth unemployment, underscoring their importance in fostering equitable employment opportunities. In the short run, better political rights correlate with a 0.39% decrease in female youth unemployment and a 0.25% reduction in overall youth unemployment. Results for male youths were not statistically significant in both the long- and short-run. These findings emphasise the critical role of institutional reforms and governance frameworks in addressing gender disparities and promoting labour market equity to combat youth unemployment effectively in Nigeria.

Anahtar Kelimeler:
Kurumsal Kalite, Genç İşsizliği, Erkek Genç İşsizliği, Kadın Genç İşsizliği, Nijerya

Jel Kodları:
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ÖZET

Bu çalışma, 1991-2023 yılları arasındaki verileri kullanarak, Nijerya'daki genç işsizliğinin üzerinde kurumsal kalitenin etkisini incelemekte ve erkek ve kadın gençler arasındaki cinsiyet farklılıklarına odaklanmaktadır. Kurumsal kalite, siyasi haklar ve medeni özgürlükler aracılığıyla ölçülmekte olup analizde Otoregresif Dağıtılmış Gecikme (ARDL) modeli kullanılmaktadır. Bulgular, uzun vadede iyileştirilmiş siyasi hakların kadın genç işsizliğinde %0,93'lik bir artışla ilişkili olduğunu ve kadınları orantısız bir şekilde etkileyen yapısal zorlukları ortaya koyduğunu göstermektedir. Öte yandan, gelişmiş medeni özgürlükler kadın genç işsizliğinde %0,56'lük bir azalmaya katkıda bulunarak eşit istihdam fırsatlarının teşvik edilmesindeki önemini vurgulamaktadır. Kısa vadede, daha güçlü siyasi haklar kadın genç işsizliğinde %0,39 ve genel genç işsizliğinde %0,25 oranında bir azalma ile ilişkilidir. Erkek gençler için elde edilen sonuçlar hem uzun hem de kısa vadede istatistiksel olarak anlamlı değildir. Bu bulgular, Nijerya'da genç işsizliğiyle etkili bir şekilde mücadele etmek için toplumsal cinsiyet eşitsizliğini azaltmada ve işgücü piyasasında eşitliği teşvik etmede kurumsal reformların ve yönetişim çerçevelerinin kritik rolünü vurgulamaktadır.

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1. INTRODUCTION

Youth unemployment has continued to persist as a major cause of poverty and discontent, transforming socioeconomic challenges in Nigeria and affecting poverty, discontent, and economic unrest (Anyanwu et al., 2021). Nigeria has a youthful population of over 60%, which leads to an increased population in the employment-seeking mode; thus, the economy struggles to provide. In addition, a lack of strong institutional support obstructs the proper performance of the labour market, economic growth, and governance and leads to unemployment among the youth (Kilishi et al., 2021). This implies that institutions such as regulatory agencies, governance structures, and laws affect investment, employment, and the implementation of labour laws, consequently defining the conditions in the labour market (Robinson & Acemoglu, 2012). Nonetheless, political instability, low regulatory quality, and corruption undermine these institutions in Nigeria, thereby intensifying the issue of youth unemployment in the country (Raifu et al., 2022; 2024).

The connection between labour market outcomes and institutional quality is well-documented internationally. North (1990) and recent studies by Kilishi et al. (2021) and Fakih et al. (2020) indicate that robust institutions foster an environment favourable to economic activity, thereby enhancing job creation and reducing unemployment. Institutions influence access to education, training, and employment opportunities with regard to the youth (Dietrich & Möller, 2016). Structural barriers imposed, such as inadequate institutions, constrain youth participation in labour in Nigeria (Azu et al., 2024, 2021). Commitment also becomes stunted along gender lines due to differences in gender, and this weakness is intensified by discriminatory practices and cultural norms (Asongu & Odhiambo, 2018; 2020; Efobi et al., 2018).

The gendered dimensions of youth unemployment in Nigeria should be brought to the limelight. Female adolescents are faced with extra socio-cultural challenges of restricted education, gender discrimination and limited labour market participation. On the other hand, male youths are faced with the issues of skill mismatches and under-employment (Efobi et al., 2018; ILO, 2016). Enacting laws that promote fair work practices, educational access, and gender equality can significantly mitigate these discrepancies (Raifu et al., 2024). Nonetheless, a significant gap remains in the research and policy frameworks regarding the differential impact of institutional quality on male and female youth unemployment in Nigeria.

Although there are various policies, youth unemployment in Nigeria remains worrisome at these levels. Therefore, we will investigate the effectiveness of the existing institutional frameworks (National Bureau of Statistics, 2023). Inadequate enforcement of labour regulations, corruption and ineffective governance hinder job creation and long-term employment opportunities (Abé-Ndjie et al., 2019). Existing policies are insufficient to tackle male and female youth's distinct needs in the light of disparate consequences of unemployment. These gender asymmetries highlight the importance of institutional changes embedding gender considerations into models of labour market dynamics (Asongu & Odhiambo, 2020; Efobi et al., 2018).

Despite studies by authors like Dietrich and Möller (2016) and Fakih et al. (2020) on the power of institutions to tackle unemployment, there has been little research on Nigeria, particularly in the context of gendered dimensions of youth unemployment. The inclination to approach youth unemployment as a single issue reduces the ability to develop targeted solutions because substantial differences exist regarding the problems faced by male and female youth in the labour market (Raifu et al., 2024; 2022). This separation demonstrates a gap that needs to be filled through a comparative study exploring the differential impact of institutional quality on youth unemployment for males and females.

This research aims to fill the gap in understanding the relationship between youth unemployment and institutional quality in Nigeria, with a specific focus on gender differences. By measuring the distinct effects of institutional quality—defined through political rights and civil liberties—on male and female youth unemployment, the study aims to provide policy-relevant insights into how institutional reforms can promote equitable and inclusive employment (Acemoglu & Robinson, 2012). This approach aligns with the broader goals of Sustainable Development Goal (SDG) 8, which advocates for decent work and inclusive economic growth, and SDG 5, which seeks gender equality and the empowerment of women and girls. Motivated by Nigeria's persistently high youth unemployment, the study explores the governance-labour nexus. It highlights the gendered nature of labour market exclusion, offering a framework for strengthening institutions to support sustainable and inclusive development.

This research spans 33 years, from 1991 to 2023, examining the dynamics of how institutional quality influences youth unemployment in Nigeria. The period was carefully selected to capture major political and economic transitions, including the Structural Adjustment Program era, the 1999 shift to democratic governance, and later reforms like globalisation and privatisation. The Autoregressive Distributed Lag (ARDL) technique was employed due to the mixed order of integration in the data. This study contributes significantly to the literature by offering a gender-disaggregated analysis—a dimension often neglected in Nigerian labour research (Fakih et al., 2020; Raifu et al., 2024). It uniquely measures institutional quality through political rights and civil liberties (Freedom House, 2023), revealing both short- and long-run asymmetries, especially in the case of female youth unemployment. Furthermore, integrating insights from human capital theory demonstrates how institutional weaknesses deepen gender disparities in education and labour market participation (Acemoglu & Robinson, 2012; Becker, 1964).

2. A TREND OF YOUTH UNEMPLOYMENT AND INSTITUTIONAL QUALITY IN NIGERIA

Figure 1 presents the trends in youth unemployment and institutional quality. As exhibited in the literature, there's a close relation between the quality of institutions and employment outcomes. According to Binuyo et al. (2024), weak institutions and governance challenges have been found to deepen unemployment and are prominent in developing countries. The prolongations of the periods of poor political rights (for instance, 1993–1997) are relevant to the findings of Robinson and Acemoglu (2012), who explain that in Brazil, often fragile institutions caused by military regimes lead to negative economic effects like high unemployment levels. Nigeria's autocratic and politically unstable period likely limited economic opportunities for the youth.

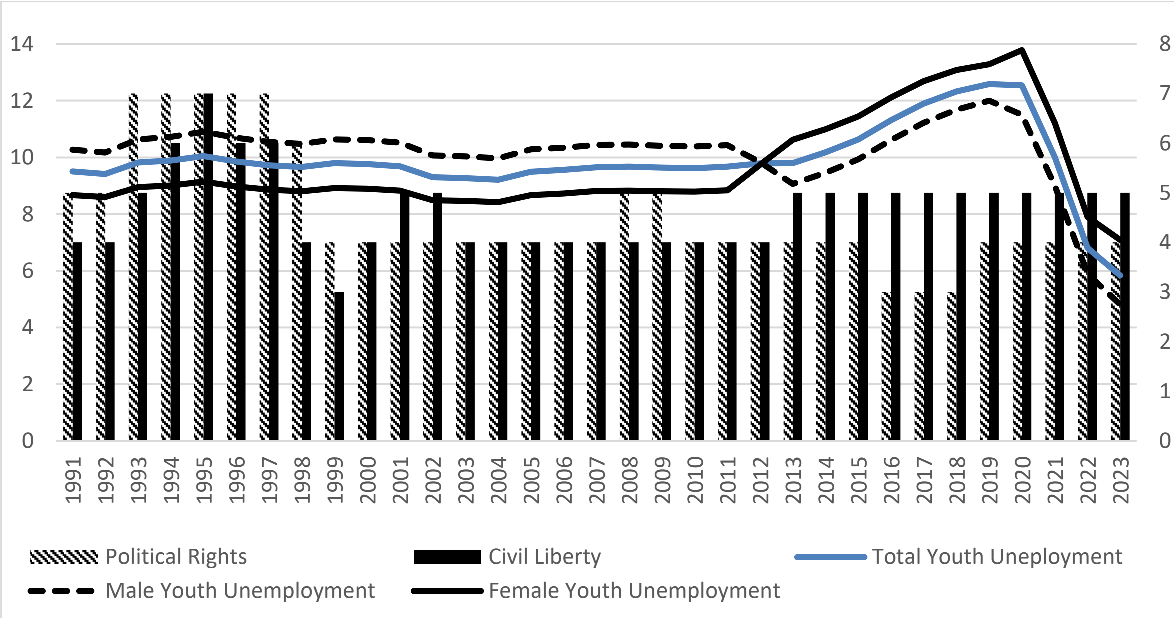

Figure 1. Institutional Quality and Youth Unemployment in Nigeria
Source: WDI and Freedom House

The gender disparity in unemployment corresponds with the findings of Anyanwu et al. (2021), Asongu and Odhiambo (2020), and Efobi et al. (2018), which indicate that female youth in Sub-Saharan Africa frequently encounter systemic barriers, such as restricted access to education and labour market participation, exacerbated by institutional inefficiencies. The increase in female unemployment relative to male unemployment in the late 2010s may indicate structural adjustments and changes in socioeconomic dynamics, as Azu et al. (2024) observed. The notable reduction in youth unemployment between 2021 and 2023 may be associated with post-pandemic economic recovery strategies and specific policy interventions, highlighting the critical role of governance in restoring employment following a crisis. The references underline the relationship between institutional quality, governance, and labour market outcomes in Nigeria, thereby corroborating the trends identified in the data.

3. LITERATURE REVIEW

The basis of this research is human capital theory (Becker, 1962; 1964). It also asserts that individuals' training, education and skills are great economic development and productivity determinants. The hypothesis is that investments in human capital improve employer credibility and earning potential because a skilled labour force has a higher capability of meeting labour market demands. The human capital theory applies to youth unemployment in Nigeria as quality education and skill acquisition are highly determinants of male and female youths' job prospects. A more general measure of institutional quality, for which the quality of educational systems and the availability of training programmes are but particular instances, is defined as effective governance, political rights and civil liberties are major determinants of human capital formation in an institutional context (Robinson & Asemoglu, 2012). Institutional quality, particularly the extent to which corruption and governance are ineffective, tends to worsen gender inequalities in that it reduces the access of women to education skill development and hence propels them to unemployment inequality. Therefore, the interaction between human capital and institutional quality must be analysed to understand why youth unemployment in Nigeria is highly persistent, with gender.

Research in this area takes a diverse approach—empirically presenting perspectives on the relationship between youth unemployment and institutional quality. Dietrich and Möller (2016) conclude that both were critical to analysing how important cyclical and institutional variables were in Europe's youth unemployment after the Great Recession. The analysis based on panel data shows that in addition to structural differences aggravating the situation, some variations exist among nations. The report highlights the necessity of combining institutional changes with macroeconomic stimulation to address youth unemployment effectively. Kawaguchi and Murao (2014) emphasise that youth unemployment in OECD countries has enduring negative effects, exacerbated by rigid labour market structures. These results indicate that addressing institutional deficiencies is crucial for mitigating chronic youth unemployment.

Based on a sample from sub-Saharan Africa (SSA), Kilisi et al. (2021) observe that market-friendly parties clearly cut down on unemployment rates for both genders. Their finding also suggests a gap between immediate impacts and underscores the need for policies which increase private investment and labour mobility. The result is similar to that of Raifu et al. (2024), who explored the relationship between Government expenditure and institutional quality in Nigeria. Furthermore, the long-term effects of expenditure on employment are also negative but may be attenuated by institutional quality insofar as institutional quality reduces the strength of the impact of expenditure on unemployment (Raifu et al., 2022). These studies suggest that to better deal with unemployment, there's room for strengthening institutional frameworks.

Institutions in research in Asia elucidate an influence on employment market trends. Within the context of the Fourth Industrial Revolution, institutional quality and human capital influence unemployment, according to Vicente (2023). The research shows that technical advances increase unemployment rates unless institutional quality and investments in human capital improve sufficiently. In Asian countries, Pham (2024) shows that the implementation of institutional improvements leads to more beneficial government investment into labour and argues for the need for efficient public expenditure and strong governance frameworks.

The research in African studies demonstrates that there is an interrelation between youth unemployment and governance indicators. Abé-Ndjié et al. (2019) highlight the importance of governance factors, such as political stability and corruption control, to reduce youth unemployment. These consequences are less pronounced in nations characterised by abundant natural resources and elevated levels of corruption. Binuyo et al. (2024) thus argue that better political stability and regulatory quality are required since they show that institutional quality increases unemployment in Sub-Saharan Africa. The findings add credence to Demeke's (2022) finding in the IGAD region that youth unemployment is correlated with political instability.

Fakih et al. (2020) show that gender is an essential determinant of youth employment in the MENA region. The results indicate that increasing gender equity in labour markets can lower total unemployment, but only with respect to men, leaving women worse off but unrelated to their labour market situation. The analysis by Sachs and Smolny (2015) of OECD countries indicates that labour market structures frequently protect older workers, adversely affecting younger entrants. Both studies emphasise the gendered dimensions of unemployment and the necessity for inclusive institutional reforms. Çetin et al. (2015) complement this by examining 15 EU countries and finding that unemployment significantly and negatively affects economic growth, with panel cointegration and Granger causality tests revealing a strong long-run, bi-directional relationship between unemployment and growth. Separately, Günaydin and Çetin (2015), in their study on Turkey, show that youth unemployment is significantly influenced by macroeconomic variables such as per capita income, inflation, trade openness, and FDI, with all showing long-run negative effects and strong causality relationships. These studies underscore the need for inclusive institutional reforms and macroeconomic stability to effectively address youth unemployment, especially through gender-sensitive and age-responsive policies.

The reviewed literature demonstrates a growing recognition of the complex interplay between institutional quality, macroeconomic factors, and youth unemployment across various regions. Studies highlight the significance of governance structures, labour market dynamics, and economic indicators in shaping employment outcomes. However, a notable gap persists in studies that specifically examine this connection through a gender-based comparative lens. While scholars such as Kilishi et al. (2021) and Raifu et al. (2024) have investigated institutional quality in relation to unemployment and government expenditure, many of these studies fail to address the unique challenges faced by male and female youths, particularly regarding access to employment, education, and labour market participation. Similarly, Fakih et al. (2020) and Abé-Ndjié et al. (2019) emphasise the role of institutional and governance factors in youth unemployment but do not offer gender-disaggregated analyses within the Nigerian context, where institutional, cultural, and economic factors may affect young men and women differently. In contrast, the present study distinguishes itself by adopting a gender-comparative approach, revealing how institutional quality—measured specifically through political rights and civil liberties—impacts male and female youth unemployment differently. Moving beyond broad governance indices and treating youth unemployment as a heterogeneous issue, this study addresses a critical gap in the literature. It provides a more nuanced foundation for designing equitable and gender-responsive policy interventions in Nigeria.

In summary, the extant literature underscores the multifaceted and regionally diverse nature of youth unemployment, with institutional quality and human capital emerging as central determinants—yet there remains a pressing need for more context-specific, gender-sensitive analyses that can inform targeted and inclusive policy responses.

4. METHODOLOGICAL NOTES

4.1. Model Specification and Data

The research follows the Ex Post Facto design, which is a fit to analyse the causal relationship between institutional quality and youth unemployment in Nigeria based on historical data. The 1991–2023 period was chosen for data availability and to capture key political and economic shifts in Nigeria, including the Structural Adjustment era, the 1999 democratic transition, and recent events like the COVID-19 pandemic. This 32-year span enables robust analysis of long- and short-run effects, aligning well with the chosen estimation method.

Table 1. Data Sources and Expected Signs of Coefficients

Variables	Expectation	Sources
Total Youth Unemployment (TYU_t)	Dependent	WDI
Male Youth Unemployment (MYU_t)	Dependent	WDI
Female Youth Unemployment (FYU_t)	Dependent	WDI
Political Right (PR_t)	Positive (+)	Freedom House
Civil Liberty (CL_t)	Positive (+)	Freedom House
Nominal GDP (GDP_t)	Negative (-)	WDI
Exchange Rate ($EXC_{i,t}$)	Negative (-)	WDI

Note: WDI-World Development Indicator

The research design allows for a robust investigation of the effects of institutional variables—political rights (PR) and civil liberty (CL)—on youth unemployment rates. The proposed model captures youth unemployment (TYU) as a function of institutional quality (INS), nominal GDP (GDP), and exchange rate (EXC). The study addresses gender-specific dynamics by disaggregating youth unemployment into male (MYU) and female (FYU) categories, offering a comparative analysis that accounts for socioeconomic disparities. The base model is as follows:

$$TYU_t = \beta_0 + \beta_1 INS_t + \beta_2 GDP_t + \beta_3 EXC_t + \varepsilon_t \quad (1)$$

Where TYU_t is the youth unemployment rate. To achieve the objectives of this research, youth can be substituted with Male Youth Unemployment (MYU_t) and Female Youth Unemployment (FYU_t). INS_t stand for a vector of institutional quality at time t (to be captured in 2 standpoints: political rights and civil liberty as per Freedom House data), $GDP_t$is the nominal GDP at time t and EXC_t is the exchange rate at time t. ε_t – stochastic error term assumed to be normally distributed, β_O is the constant, β_1 *to* β_3 represents the estimated parameters of the model. Equation 1 is expanded to include all the institutional quality variables and transformed into a natural logarithm as follows:

$$lnTYU_t = \beta_0 + \beta_1 lnPR_t + \beta_2 lnCL_t + \beta_3 lnGDP_t + \beta_4 lnEXC_t + \varepsilon_t \quad (2)$$

While other variables remain as previously described, PR_t represents political rights at time, t and CL_t is civil liberty at a time, t; both being proxies for institutional quality. Freedom House presents the institutional quality data in descending order from 7 (worse) to 1 (better), insinuating the lesser, the better. Therefore, the interpretation is reversed; a positive coefficient implies a negative effect and vice versa. All variables in Equation 2 are in logarithm, ensuring linearity and reducing heteroscedasticity, enhancing the reliability of the estimates.

4.2. Estimation Technique

As regards the use of time series data, the Autoregressive Distributed Lag (ARDL) model developed by Pesaran et al. (2001) and Pesaran and Shin (1999) has been popular because it provides an opportunity for the analysis of both short and long-run relationships. As a result, the model can accommodate different variables that are stationary at levels (I(0)), first differences (I(1)) or a combination of them, removing the requirement for pretesting the variables' stationarity (Yusuf & Mohd, 2020). However, the ARDL approach is specifically efficient for dynamic analysis, which simultaneously estimates long and short-run parameters (Toriolaa et al., 2021). For small sample sizes, this method is suitable and yields reliable results across all datasets (Lim & Grosheck, 2021). Through bounds testing, cointegration is established; the F statistic exceeds the upper critical bound, thereby establishing a long-run relationship. The error correction model (ECM) derived from ARDL shows the speed of adjustment to equilibrium by its negative and significant ECM coefficient (Banerjee et al., 1998). In empirical research, the ARDL is more straightforward to estimate and interpret using analytical tools such as Stata. Based on the methodology utilised for the analysis (ARDL), Equation 3 will be expressed as:

$$lnTYU_t = \beta_0 + \beta_1 lnTYU_{t-i} + \beta_2 lnPR_{t-i} + \beta_3 lnCL_{t-i} + \beta_4 lnGDP_{t-i} + \beta_5 lnEXC_{t-i} + \sum_{i=0}^{p} \beta_6 \Delta lnTYU_{t-i} + \sum_{i=0}^{p} \beta_7 \Delta lnPR_{t-i} + \sum_{i=0}^{p} \beta_8 \Delta lnCL_{t-i} + \sum_{i=0}^{p} \beta_9 \Delta lnGDP_{t-i} + \sum_{i=0}^{p} \beta_{10} \Delta lnEXC_{t-i} + ECM + \mu_t \quad (3)$$

Note that all the variables remain as previously described, but Δ stands for the difference (or change) in respective variables, and (-) is the lag sign. In satisfying the long-run relationship, the ARDL bound test requires a null hypothesis for no cointegration HO: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ for equation (3).

5. RESULTS AND DISCUSSION

The summary statistics presented in Table 2 Panel A provide essential insights into the characteristics of the variables. The dependent variables: total youth unemployment ($LTYU_t$), male youth unemployment($LMYU_t$) and female youth unemployment ($LFYU_t$) present mean values of 2.2810, 2.3020, and 2.2535, respectively, with moderate variations as reflected in their standard deviations. The independent variables, political rights (LPR_t) and civil liberties (LPR_t), present mean values of 1.4843 and 1.5261, respectively, with ranges from 1.0986 to 1.9459, suggesting a degree of stability in these governance indicators. Nominal gross domestic product ($LGDP_t$) and exchange rate ($LEXC_t$) display significant variability, with $LGDP_t$ averaging 26.0890 and $LEXC_t$ demonstrating a broad range from 2.2935 to 6.1366, indicative of Nigeria's unstable macroeconomic conditions.

Table 2. Descriptive and Correlation

Panel A Summary Statistics							
Variable	$LTYU_t$	$LMYU_t$	$LFYU_t$	LPR_t	LCL_t	$LGDP_t$	$LEXC_t$
Obs	33	33	33	33	33	33	33
Mean	2.2810	2.3020	2.2535	1.4843	1.5261	26.0890	4.6573
Std. Dev.	0.1435	0.1752	0.1629	0.2412	0.1715	0.7898	1.0717
Min	1.7649	1.5692	1.9590	1.0986	1.0986	24.6756	2.2935
Max	2.5327	2.4846	2.6234	1.9459	1.9459	27.0762	6.1366
Panel B Correlation Matrix							
Variables	$LTYU_t$	$LMYU_t$	$LFYU_t$	LPR_t	LCL_t	$LGDP_t$	$LEXC_t$
$LTYU_t$	1						
$LMYU_t$	0.8802	1					
$LFYU_t$	0.8296	0.4652	1				
LPR_t	-0.1511	0.1063	-0.4095	1			
LCL_t	0.1040	-0.0612	0.2643	0.3583	1		
$LGDP_t$	0.1261	-0.2175	0.4909	-0.4261	0.1743	1	
$LEXC_t$	0.0025	-0.3272	0.3916	-0.8125	-0.1051	0.6859	1

The correlation matrix in Table 2 Panel B illustrates the relationships among youth unemployment, governance, and various economic variables. The three dependent variables are highly correlated, showing a strong similarity and consistent trend across these demographics. The two variables of institutional quality show no evidence of a strong correlation between them; hence, they will be estimated in the same regression. Azu and Nwauko (2021) and Azu & Muhammad (2020) stressed that multicollinearity issues are evident when highly correlated variables are estimated in the same model.

5.1. Unit Root Tests and Cointegration

The findings from the Augmented Dickey-Fuller (ADF) unit root test shown in Table 3 demonstrate the stationarity properties of the variables analysed. The results show that total youth unemployment, male youth unemployment, female youth unemployment and civil liberty are integrated at level I(0) at various significant levels. In contrast, political rights, nominal GDP and exchange rate are stationary at first differences I(1) and at different significance levels. The results support the choice of the ARDL estimation technique.

Table 3. Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	Level (t-statistics)	1st difference (t-statistics)	Remarks
$LTYU_t$	-4.358***	-4.338***	I(0)
$LMYU_t$	-5.528***	-3.764***	I(0)
$LFYU_t$	-2.659*	-3.753***	I(0)
LPR_t	-1.821	-4.399***	I(1)
LCL_t	-3.699***	-4.807***	I(0)
$LGDP_t$	-1.974	-3.255**	I(1)
$LEXC_t$	-1.294	-4.163***	I(1)
Critical Values	10%	5%	1%
Level	-2.623	-2.983	-3.709
Ist Difference	-2.624	-2.986	-3.716

Note: * indicates stationery at 10 %, ** means stationery at 5% and *** means stationery at 1%. Unit root test was based on Augmented Dickey-Fuller (ADF) Using Stata 14

The model was estimated in three variations: total youth unemployment (T), male youth unemployment (M), and female youth unemployment (F). The cointegration bounds test indicates a long-run relationship across all models, as the F-statistics surpass the 1% critical upper bounds: 6.697 (T), 5.855 (M), and 5.627 (F). Thus, the null hypothesis of the absence of a long-run relationship is rejected. Again, the error correction terms (ECM-1) are negative and significant at the 1% level, with adjustment speeds of 71.0% (T), 68.2% (M), and 55.8% (F), suggesting effective corrections towards equilibrium. The results in Table 4 indicate robust long-run dynamics, the absence of serial error correction and data instability occasioned by a structural break (Abdullahi et al., 2024) within the ARDL framework.

Table 4. Cointegration Bound Tests Result

F-statistic (T)	6.697	EC_{M-1}	-0.710***	(0.164)
F-statistic (M)	5.855	EC_{M-1}	-0.682***	(0.163)
F-statistic (F)	5.627	EC_{M-1}	-0.558***	(0.156)
F-Bounds Test	Significant level	10%	5%	1%
	Lower bound	2.45	2.86	3.74
	Upper bound	3.53	4.01	5.06

Note: the number in parenthesis represents t-statistics, *** signifies a 1% level of significance, F-statistics is determined with restricted constant and no trend; T- Total Youth Model, M-Male Youth Model and F-Female Youth Model

5.2. Short Run and Long Run Results

The regression results presented in Table 5 illustrate the long-term effects of institutional quality, as measured by political rights and civil liberties, on youth unemployment in Nigeria, explicitly emphasising male and female youth. Both political rights and civil liberty are interpreted in a reverse form due to the structure of the data. In the long term, political rights demonstrate negative coefficients of -0.385 for total youth unemployment, -0.267 for male youth unemployment, and -0.931 for female youth unemployment. However, only the outcome for female youth unemployment is statistically significant at the 10% level. This suggests that a 1% improvement in political rights increases female youth unemployment by 0.93%, all things being equal. This finding suggests that adverse political environments may compel female youths to engage in unconventional or informal employment as a survival strategy. Civil liberty exhibits a positive and statistically significant coefficient for both total and female youth unemployment. The coefficients of 0.287 and 0.563 are significant at the 5% and 1% levels, respectively. This indicates that improved civil liberties correlate with a decrease in total youth unemployment and female youth unemployment by 0.29% and 0.56%, respectively.

Table 5. Regression Result on the Short-run and Long-run Impact of Institutional Quality on Youth Unemployment in Nigeria

Variables	Youth	Male Youth	Female Youth
Long Run Results			
LPR_t	-0.385 (0.295)	-0.267 (0.315)	-0.931* (0.460)
LCL_t	0.287** (0.111)	-0.0126 (0.128)	0.563*** (0.159)
$LGDP_t$	0.0246 (0.040)	-0.00705 (0.042)	0.120* (0.064)
$LEXC_t$	-0.0762 (0.089)	-0.0955 (0.093)	-0.188 (0.141)
Error Correction Short Run Results			
ECT_{t-1}	-0.710***(0.202)	-0.682***(0.197)	-0.558**(0.195)
ΔLTY_{t-1}	1.287*** (0.317)	1.408*** (0.317)	0.737** (0.277)
ΔLPR_t	0.252** (0.114)	0.156 (0.127)	0.386***(0.131)
ΔLPR_{t-1}	0.144 (0.106)	0.0330 (0.118)	0.292** (0.116)
ΔLCL_t	-0.125 (0.117)	-0.0234 (0.108)	-0.128 (0.151)
ΔLCL_{t-1}	-0.0670 (0.100)	0.0161 (0.112)	-0.108 (0.110)
$\Delta LGDP_t$	-0.139 (0.115)	-0.127 (0.129)	-0.109 (0.122)
$\Delta LGDP_{t-1}$	-0.0422 (0.051)	0.0103 (0.052)	-0.0878 (0.065)
ΔEXC_t	-0.0448 (0.148)	-0.0911 (0.159)	0.0705 (0.165)
Constant	1.543** (0.576)	2.325*** (0.698)	0.307 (0.625)
Observations	33	33	33
R-squared	0.833	0.835	0.778

Note: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The results indicate a distinct pattern for political rights in the short run. Political rights demonstrate positive coefficients of 0.252, 0.156, and 0.386 for total, male, and female youth unemployment at the level. Only the total and female youth unemployment results are statistically significant at the 5% and 1% levels, respectively. The findings indicate that improved political rights result in a 0.25% decrease in total youth unemployment and a 0.39% decrease in female youth unemployment, all things being equal. The result at lag one is predominantly insignificant, except for female youth unemployment, which exhibits a coefficient of 0.292, significant at the 5% level. This indicates that an improved political right would lead to a 0.29% decrease in female unemployment in the short run. The statistically significant findings for female youths in both the long and short term highlight their increased sensitivity to variations in institutional quality, potentially arising from unequal opportunities or sociopolitical obstacles.

The short-run results for civil liberty are predominantly not statistically significant; however, the coefficients offer some insight into the underlying dynamics. At level, civil liberty exhibits coefficients of -0.125, -0.0234, and -0.128 for total, male, and female youth unemployment, respectively. At lag one, the coefficients are -0.0670 for total youth unemployment, 0.0161 for male youth unemployment, and -0.108 for female youth unemployment. While not statistically significant, the results suggest that the negative coefficients for total and female youth unemployment may indicate that civil liberty enhancements could lead to increased unemployment levels in the short run. The mixed results highlight the complexity of the relationship between institutional quality and youth unemployment, especially in the context of gender disparities, necessitating more nuanced policy interventions.

5.3. Post Diagnostic Test

The diagnostic test results in Table 6 validate the robustness and reliability of the regression models concerning total, male, and female youth unemployment. The R-squared values—0.883 for total youth, 0.835 for male youth, and 0.778 for female youth unemployment—demonstrate that the models account for a substantial portion of the variability in unemployment rates. Male youth unemployment exhibits the most extraordinary explanatory power, whereas the lower R-squared value for female youth indicates the potential influence of unexamined factors, warranting additional investigation.

The Breusch-Godfrey test indicates no serial correlation, with probabilities of 0.8050 for total youth, 0.2919 for male youth, and 0.9021 for female youth, all exceeding the 0.05 threshold. The Breusch-Pagan-Godfrey test indicates an absence of significant heteroscedasticity, as all models exhibit probabilities greater than 0.05. The CUSUM test verifies model stability, as cumulative residuals stay within established critical limits. The diagnostic results confirm the reliability of the models and underscore their utility in shaping gender-specific youth unemployment policies in Nigeria.

Table 6. Diagnostic Test

Statistics	Youth	Male Youth	Female Youth
R-Square	0.833	0.835	0.778
Serial Correlation	0.061 (0.8050)	1.111(0.2919)	0.015(0.9021)
Heteroscedasticity Test	16.30 (0.1010)	8.51 (0.1061)	16.38 (0.1100)

Note: Probabilities are in parentheses. Serial correlation is with the Breusch-Godfrey LM test; the Heteroscedasticity test is with the Breusch-Pagan test. All were done using Stata 14.

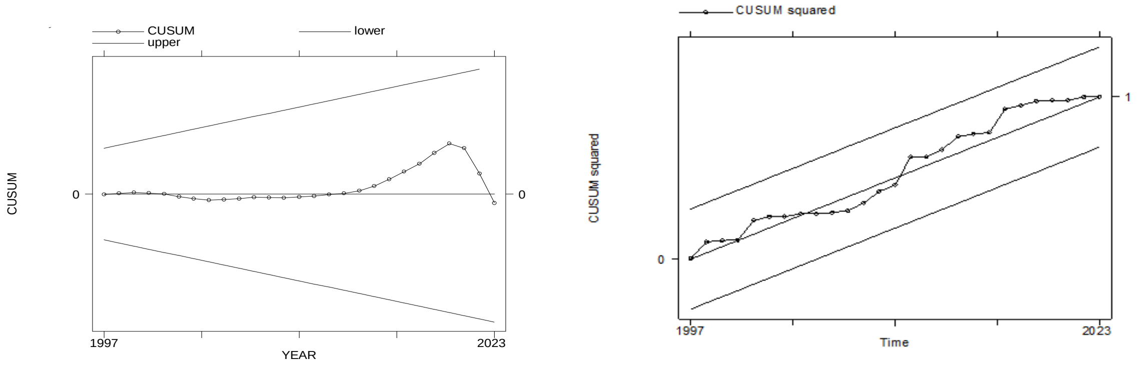

Figure 2. CUSUM and CUSUM Sqaured

5.4. Discussion of Findings

The regression findings provide crucial new information on how institutional quality, as determined by civil freedoms and political rights, affects youth unemployment in Nigeria, with an emphasis on gender dichotomy. Improved political rights show a strong negative correlation with female youth unemployment over the long run, indicating that political rights eventually lead to higher rates of female youth unemployment. This surprising result could reflect sociopolitical dynamics, where unfavourable political circumstances may lead to young women turning to informal or unstable work. Conversely, civil liberty has a positive and significant coefficient, reflecting that improved civil liberty reduces overall and female youth unemployment in Nigeria. These results align with research highlighting the vital impact of institutional quality—particularly political stability and governance—on unemployment trends, such as that conducted by Abé-Ndjié et al. (2019) and Binuyo et al. (2024). Additionally, the findings highlight the unique vulnerability of young women, supporting the claim made by Fakih et al. (2020) that gender differences influence unemployment outcomes in institutional settings.

Political rights have a short-term favourable impact on both overall and female youth unemployment, with notable decreases seen as political rights increase. The results show the direct advantages of political changes in establishing fair possibilities and are susceptible to female youth unemployment. Given the ongoing impact on female unemployment, the delayed effects further highlight the enduring nature of institutional factors. On the other hand, civil liberty coefficients are generally not significant in the short run. Still, the negative trends imply that improvements may ultimately lead to a rise in young unemployment in Nigeria. These contradictory findings support the complexity outlined by Kilishi et al. (2021), who contend that for institutional improvements to have noticeable impacts, time and complementing policies are needed. Therefore, the gender-specific results, which are complex, support policies that are specifically designed to address the particular obstacles that young women in Nigeria confront in the job market.

Human capital theory, which highlights the importance of education, skills, and institutional frameworks in improving productivity and employment outcomes, is consistent with the study's results. The findings highlight the critical role that institutional quality—determined by civil freedoms and political rights—plays in reducing youth unemployment in Nigeria, especially among young women. According to Fakih et al. (2020), although increased civil freedoms are associated with lower unemployment, restrictions on political rights and civil liberties worsen gender inequality by preventing equal access to chances for education, vocational training, and employment. The illogical long-term correlation between political rights and female unemployment implies that unfavourable institutional settings force young women into informal work, which reflects enduring gender inequality. These results are consistent with Robinson and Asemoglu (2012), who contend that poor institutional quality impedes human capital development and sustains structural inequality, particularly for underprivileged populations. Likewise, Vicente (2023) highlights how crucial strong institutional frameworks are to converting technology and economic breakthroughs into fulfilling jobs. Reducing unemployment, improving human capital, and advancing labour market justice in Nigeria need strengthening governance and tackling gender-specific issues.

6. CONCLUSIONS

With an emphasis on the gender-specific impacts of political rights and civil freedoms, the results of this study highlight the crucial role that institutional quality plays in resolving youth unemployment in Nigeria. Although a positive correlation exists between improving civil liberty and lower youth unemployment rates, the inverse association between enhanced political rights and higher rates of female youth unemployment highlights more serious institutional and structural issues. These findings demonstrate the ongoing gender disparities in educational opportunities, skill development, and employment prospects, especially for young women. The sensitivity of female youth unemployment to differences in institutional quality is further shown by the short- and long-term dynamics, underscoring the pressing need for fair institutional changes and inclusive governance to close these gaps.

It is suggested that governments focus on institutional changes that improve political stability, civil liberties, and governance quality while addressing gender-specific hurdles in light of these results. Policies aiming at lowering the structural and cultural barriers that disproportionately impact female youths should be combined with investments in human capital, such as high-quality education and focused skill development programs. Furthermore, encouraging women to participate in governance and decision-making procedures might aid in developing policies better suited to their particular difficulties. Collaborative efforts between government, private sectors, and civil society to design and implement gender-sensitive interventions will mitigate youth unemployment and foster more inclusive economic growth in Nigeria.

This study acknowledges key limitations, including the absence of methods that account for structural breaks, if any, which may affect the accuracy of its findings. Future research should apply Fourier-based ARDL models to capture smooth structural shifts over time. Expanding institutional indicators, incorporating regional-level data, and exploring panel analyses across countries are also recommended to strengthen the analysis and provide a deeper, more nuanced understanding of gendered youth unemployment dynamics.

AUTHORS' DECLARATION:

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Conceptualisation, writing-original draft, editing – **ANP, OVT, AIA** and **OJS**, data collection, methodology, formal analysis – **ANP, OVT**, **OJS** Final Approval and Accountability – **ANP** and **AIA**.

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