Journal of Economics and Behavioral Studies (ISSN: 2220-6140)
Vol. 18, No. 3, pp. 43-50, 2026

Influence of Governance Quality on Youth Unemployment in Kenya: Institutional Growth Theory

*Nuwatuha George, Robert Mugabe, Benjamin Musiita
Faculty of Business, Economics, and Governance, Bishop Stuart University, Uganda
Email: *tuhageorgephd@gmail.com, kakuhanda@yahoo.com, bmusiita@beg.bsu.ac.ug
Corresponding Author: Nuwatuha George

Abstract: Youth unemployment remains a major socio-economic challenge in Kenya, despite sustained economic growth and various employment interventions. This study examines the determinants of youth unemployment in Kenya using institutional growth theory, focusing on the role of governance quality, particularly control of corruption and rule of law. The study employed annual time-series data covering 1996–2024 and applied the Autoregressive Distributed Lag (ARDL) model to estimate both short-run and long-run relationships. The findings reveal a long-run equilibrium relationship between institutional factors and youth unemployment, with the bounds test confirming cointegration. Control of corruption has a negative and statistically significant effect on youth unemployment, indicating that improved governance and reduced corruption enhance employment opportunities for young people. However, the rule of law had an insignificant effect, suggesting that legal reforms alone may not automatically translate into improved youth employment outcomes. The study concludes that strengthening institutional quality, promoting transparent resource allocation, and improving governance effectiveness are essential for reducing persistent youth unemployment in Kenya. The findings highlight the need for integrated employment strategies that combine institutional reforms with investments in skills development, innovation, and labor-intensive economic activities.

Keywords: *Youth unemployment, institutional growth theory, control of corruption, rule of law, ARDL, Kenya*

1. Introduction

Youth unemployment has become a critical global development challenge, with significant implications for economic growth, poverty reduction, and social stability. Young people face higher unemployment risks than adults due to limited work experience, skills mismatches, inadequate access to productive opportunities, and weak labor-market absorption capacity. According to the International Labor Organization (ILO, 2024), the global youth unemployment rate remains substantially higher than the adult unemployment rate, with approximately 64 million young people worldwide unemployed. Developing regions experience the greatest burden, as rapid population growth continues to increase the number of young labor-market entrants without a corresponding expansion in decent employment opportunities. In Africa, where young people constitute the majority of the population, youth unemployment remains a major structural challenge, threatening the ability of economies to harness the potential benefits of the demographic dividend (ILO, 2024; World Bank, 2024).

Sub-Saharan Africa faces particularly severe youth unemployment challenges despite periods of economic growth and increased investment. The region has the youngest population globally, with about 60 percent of its population below the age of 25 years, yet labor markets have struggled to generate sufficient productive jobs for the growing youth workforce (World Bank, 2024). Many young people remain unemployed, underemployed, or trapped in informal and low-productivity activities due to limited industrialization, inadequate private-sector job creation, and institutional weaknesses. Evidence shows that youth unemployment is not only influenced by economic factors but also by institutional conditions, including corruption, weak governance, ineffective regulatory systems, and limited enforcement of labor-market institutions (North, 1990; Acemoglu, Johnson, & Robinson, 2005). Poor institutional quality reduces investment, distorts access to employment opportunities, and weakens the effectiveness of youth employment programs, thereby contributing to persistent unemployment among young people (Fagbemi, Fajingbesi, & Osinubi, 2023; Osinubi & Simatele, 2025).

In Kenya, youth unemployment remains one of the country's most pressing socio-economic concerns. Although Kenya has experienced relatively stable economic growth, employment creation has not kept pace with the increasing number of young people entering the labor market. According to the Kenya National Bureau of Statistics (KNBS, 2023), young people aged 15–34 years represent approximately 29 percent of Kenya's population, making youth employment a central development priority. The country continues to experience

challenges of limited formal employment opportunities, skills mismatch, and high dependence on informal employment, which absorbs most young workers (KNBS, 2023; ILO, 2024). Furthermore, institutional challenges such as corruption, weak accountability, and ineffective governance systems constrain investment and reduce the capacity of the economy to generate sustainable jobs for youth (World Bank, 2024). Institutional growth theory argues that strong institutions are essential for transforming economic growth into employment opportunities by improving resource allocation, reducing uncertainty, and creating an enabling environment for investment and enterprise development (North, 1990; Acemoglu et al., 2005). Therefore, examining how institutional factors such as control of corruption and rule of law influence youth unemployment in Kenya is important for developing effective strategies to address persistent youth labor-market challenges.

2. Literature Review

Institutional growth theory emphasizes that the quality of institutions determines how effectively economic resources, investments, and policies translate into employment creation and inclusive development (North, 1990; Acemoglu, Johnson, & Robinson, 2005). Institutional factors such as control of corruption, rule of law, governance effectiveness, regulatory quality, voice and accountability, and political stability influence labor-market outcomes by shaping incentives, reducing uncertainty, improving resource allocation, and strengthening investor confidence. Empirical evidence on the relationship between institutional quality and youth unemployment, however, remains mixed. Regarding corruption control, several studies demonstrate that corruption undermines employment creation by distorting public expenditure, discouraging investment, weakening recruitment systems, and limiting access to economic opportunities for young people. Fagbemi, Fajingbesi, and Osinubi (2023) and Bello, Salisu, and Iyoboyi (2024) find that corruption increases unemployment by reducing economic efficiency and weakening private-sector development. Similarly, Osinubi & Simatele (2025) show that stronger institutional quality, including corruption control, improves socioeconomic outcomes and supports transitions from informal to formal employment. However, other studies indicate that the corruption–youth unemployment relationship is nonlinear and context-dependent. Gouider and Ben Haddad (2024) reveal that corruption control only reduces youth unemployment after countries achieve specific institutional quality thresholds, while Siboyi (2023) identifies a counterintuitive relationship in Southern Africa where reduced corruption may temporarily increase youth unemployment when informal opportunities previously facilitated by corrupt practices disappear. These findings suggest that anti-corruption reforms should be complemented with employment-generating policies to ensure that governance improvements translate into meaningful youth labor-market outcomes.

The role of other institutional dimensions, including rule of law, governance effectiveness, regulatory quality, voice and accountability, and political stability, has also received considerable empirical attention. Studies such as Raies and Mimoun (2025) indicate that stronger legal frameworks and effective governance institutions enhance the employment effects of economic growth by improving contract enforcement, protecting economic rights and encouraging investment. Nevertheless, some evidence suggests that individual governance indicators may not have direct significant effects on youth unemployment when considered independently. Abé Ndjié, Atangana Ondoa, and Ngoa Tabi (2019) found that among African countries, only corruption control and political stability had significant effects on youth unemployment, while rule of law, government effectiveness, and regulatory quality were insignificant. Similarly, Abubakar (2020) reported that voice and accountability and regulatory quality did not significantly reduce youth unemployment in Sub-Saharan Africa, implying that formal governance structures may not automatically translate into employment opportunities without effective implementation capacity. Political stability, however, emerges as a more consistent determinant, with studies by Fomba Kamga et al. (2022) showing that instability discourages investment, weakens economic growth, and increases youth unemployment. Overall, the literature suggests that institutional quality plays an important but complex role in shaping youth employment outcomes, with the effectiveness of governance reforms depending on broader economic structures, labor-market conditions, and the capacity of institutions to convert reforms into practical employment opportunities (North, 1990; Acemoglu et al., 2005; ILO, 2024).

Model: Institutional Growth Model

The theory is rooted in the work of North (1990), who defined institutions as the formal rules, laws, regulations, and informal norms that shape economic interactions by reducing uncertainty and transaction costs. Acemoglu, Johnson and Robinson (2005) further argued that inclusive and effective institutions create incentives for

investment, innovation, entrepreneurship and productive economic activities, while weak institutions constrain growth and limit employment opportunities. From this perspective, the quality of institutions determines how effectively economic resources are allocated and whether growth translates into broad-based welfare improvements, including employment generation.

Institutional Growth Theory assumes that economic performance is not solely determined by physical capital, technology or innovation, but also by the effectiveness of governance systems that regulate economic activities. Strong institutions promote policy consistency, protect property rights, enforce contracts, control corruption, maintain political stability and ensure regulatory efficiency. These institutional factors encourage private sector development, attract investment, support innovation, and stimulate business expansion, which in turn create employment opportunities for young people. Conversely, weak institutions increase uncertainty, raise transaction costs, discourage investment and limit the ability of economies to generate productive jobs.
The comprehensive model is specified as:
$YU_t = \beta_0 + \beta_{11}GOVQ_t + \beta_{12}LAW_t + \beta_{13}COR_t + \beta_{14}REG_t + \beta_{15}POL_t + \mu_t$……(i)
Where: $GOVQ_t$= Governance Effectiveness index, LAW_t= Rule of law index, COR_t= Control of corruption index, REG_t= Regulatory quality index, POL_t= Political stability index

This specification captures the institutional transmission mechanism by illustrating how governance quality conditions the effects of economic and innovation factors on youth unemployment. The model is grounded in Institutional Growth Theory, which posits that effective institutions are essential for translating economic growth into inclusive, equitable and sustainable employment outcomes.

3. Methodology

The study employed a comprehensive institutional growth model to examine the influence of governance quality on youth unemployment in Kenya, drawing from institutional growth theory, which emphasizes that institutions determine economic incentives, reduce transaction costs, enforce property rights and shape the effectiveness through which economic growth generates inclusive employment opportunities (North, 1990; Acemoglu, Johnson, & Robinson, 2005). The model incorporated governance effectiveness, rule of law, control of corruption, regulatory quality, and political stability indicators to capture the institutional mechanisms through which governance structures influence labor market outcomes. Using annual time-series data covering 1991–2024, the study applied the Autoregressive Distributed Lag (ARDL) approach, which is appropriate for small samples and variables integrated at different orders of I(0) and I(1), after conducting rigorous pre-estimation tests for stationarity, multicollinearity, and other econometric properties (Pesaran, Shin & Smith, 2001; Enders, 2015; Gujarati & Porter, 2021). Post-estimation procedures, including tests for normality, heteroscedasticity, autocorrelation, parameter stability, and sensitivity analysis, were undertaken to ensure the reliability and robustness of the estimated relationships (Brooks, 2019; Wooldridge, 2020).

The ARDL bounds testing results confirmed the existence of a long-run equilibrium relationship between institutional quality and youth unemployment, while the significant error correction mechanism demonstrated that short-run deviations adjust toward the long-run path, validating the dynamic modelling approach (Pesaran et al., 2001). The findings reinforce the argument that stronger institutions enhance employment outcomes by improving accountability, reducing corruption, strengthening regulatory environments, and ensuring that public and private investments are directed toward productive and labor-absorbing activities (North, 1990; Acemoglu et al., 2005; World Bank, 2024). Therefore, improving governance quality, particularly through effective corruption control, institutional transparency, regulatory reforms, and strengthened labor market governance, remains essential for addressing persistent youth unemployment in Kenya (World Bank, 2024; International Labor Organization [ILO], 2024).

4. Results

The study examines the influence of institutional growth factors on youth unemployment in Kenya. The study brief fixes the institutional pair to control of corruption and rule of law, drawn from the World Bank Worldwide Governance Indicators, so two institutional hypotheses are tested here. H1 states that control of corruption has a significant effect on youth unemployment in Kenya. H2 states that the rule of law has a significant effect.

Because the governance indicators begin only in 1996, the sample for this objective runs from 1996 to 2024 rather than from 1991, a shorter window, consistent with North's (1990) view that institutional quality operates as a slow-moving background condition best measured over a sustained run of years rather than a single snapshot.

Descriptive Statistics

Table 1: Descriptive Statistics (original units, 1996-2024)

Variable	Obs	Mean	Std.Dev.	Min	Max	Skewness	Kurtosis
COR	29	-0.923	0.123	-1.180	-0.711	-0.080	2.218
LAW	29	-0.751	0.203	-1.096	-0.425	0.181	1.725

Source: *Author's computation based on WDI data*

Control of corruption averaged -0.92 on the Worldwide Governance Indicators scale, which runs from about minus 2.5 to plus 2.5, and never rose above -0.71, indicating that Kenya remained on the weak side of the global corruption control distribution throughout the period, a pattern Fagbemi, Fajingbesi and Osinubi (2023) link to persistent misallocation of public resources in Nigeria and across the region. Rule of law averaged -0.75 and showed a mild improving trend across the two decades, though it too remained in negative territory throughout, consistent with Kamuntu & John account of weak legal protections continuing to shape precarious work in East Africa.

Multicollinearity Check and Retained Variables

Table 2: Variance Inflation Factors (post-elimination, 1996-2024)

Variable	VIF
SAV	2.19
TECH1	4.55
CAP	2.67
LAB	1.35
KNO	4.49
COR	2.96
LAW	7.34

Source: *Author's computation based on WDI data*

Population growth is removed at this stage because its variance inflation factor exceeds ten once the sample is restricted to 1996 to 2024, reflecting the tighter co-movement between population growth and the other regressors over the shorter, more recent window, the same kind of sample-sensitive collinearity that Hasan et al (2026) report for high dependency ratio economies. Savings, capital, labor, knowledge spillovers, technology, control of corruption and rule of law all clear the cut-off and proceed to estimation, so H1 and H2 remain directly testable.

Unit root tests on retained variables

Table 3: ADF and Phillips-Perron unit root tests (IHS transformed)

Variable	ADF level p	ADF diff p	PP level p	PP diff p	Order
COR	0.9530	0.0007	0.2691	0.0000	I(1)
LAW	0.8807	0.0000	0.9448	0.0000	I(1)

Source: *Author's computation based on WDI data*

Both control of corruption and rule of law required first differencing to achieve stationarity under the Dickey-Fuller and Phillips-Perron tests and so enter the model as I(1), the same order as savings, technology and labor force growth. Capital and knowledge spillovers were already established as I(0) and I(1), respectively, in the earlier sections and carry the same order forward. No variable in the Model set is I(2), so the bounds test is again methodologically valid (Pesaran et al., 2001).

Bounds test for cointegration

With savings, capital, labor, knowledge spillovers, control of corruption, rule of law and technology as regressors, the bounds F-statistic for Model reached 5.681, against an upper I(1) bound of 4.513 at the five percent level. The null of no cointegration is rejected, confirming a long-run relationship between the fuller institutional framework and youth unemployment in Kenya, in line with Raies and Mimoun's (2025) finding across a large panel of developing countries that institutional quality shapes how strongly youth unemployment responds to the same growth fundamentals over time.

ARDL estimates, interpretation and discussion

Table 4: Long-run coefficients

Variables	Coefficient	Std. Err	t-stat	p-value
SAV	-0.0213	0.0423	-0.5027	0.6152
CAP	0.4761	0.1772	2.6871	0.0072
LAB	0.0428	0.0354	1.2091	0.2266
KNO	-1.5801	0.1913	-8.2605	0.0000
COR	-1.2052	0.4078	-2.9552	0.0031
LAW	-0.1486	0.2320	-0.6404	0.5219
TECH1	0.0205	0.0273	0.7512	0.4526

Source: *Author's computation based on WDI data*

Table 5: Short-run and error correction estimates

Variables	Coefficient	Std. Err	t-stat	p-value
constant	-9.7717	3.9234	-2.4906	0.0284
ECT	***-0.9793***	***0.3191***	***-3.0687***	***0.0097***
D.SAV.L0	-0.1875	0.0690	-2.7163	0.0187
D.CAP.L0	-0.4204	0.2165	-1.9413	0.0761
D.LAB.L0	-0.0380	0.0498	-0.7637	0.4598
D.KNO.L0	-0.2129	0.9973	-0.2135	0.8345
D.COR.L0	1.1320	0.3810	2.9712	0.0117
D.LAW.L0	0.0245	0.2239	0.1095	0.9146
D.TECH1.L0	-0.2256	0.0976	-2.3109	0.0394

Source: *Author's computation based on WDI data*

Table 6: Post-estimation diagnostics

Test	Statistic	p-value
Breusch-Godfrey (serial correlation)	13.4295	0.0002
Breusch-Pagan (heteroskedasticity)	25.6540	0.2668
Jarque-Bera (normality)	1.3629	0.5059
Ramsey RESET (functional form)	0.0041	0.9528

Source: *Author's computation based on WDI data*

The error correction term is negative and significant (-0.979, p = 0.0097), confirming a genuine self-correcting long-run mechanism once the institutional block is added. Control of corruption carries a negative and significant long-run coefficient (-1.205, p = 0.0031), so stronger control of corruption is associated with lower youth unemployment in the long run, supporting H3.3 and Osinubi & Simatele's (2025) argument that improved corruption control eases the transition from informal to formal employment across Africa. Rule of law, by contrast, is not significant (-0.149, p = 0.5219), which does not support H3.2 in this specification, a result consistent with Abé Ndjié et al.'s (2019) finding across fifty-four African countries that only corruption control and political stability, and not the broader rule of law measure, show a robust independent association with youth unemployment. Knowledge spillovers retain a negative and highly significant coefficient (-1.580, p < 0.001), reaffirming the Model 2 finding, while capital accumulation remains positive and significant, again

suggesting that capital formation in Kenya has not been directed toward labor-absorbing sectors, consistent with the same pattern identified in section 4.2.5. The diagnostics show homoskedastic, normally distributed residuals and no Ramsey RESET functional form misspecification, so three of the four post-estimation checks pass. Only the Breusch-Godfrey test for serial correlation fails, a result that persisted across an exhaustive lag search, both technology versions, and additional Breusch-Godfrey lag orders, so it is reported as a genuine limitation of the short-run dynamic specification rather than resolved by further search.

Figure 1: CUSUM plot

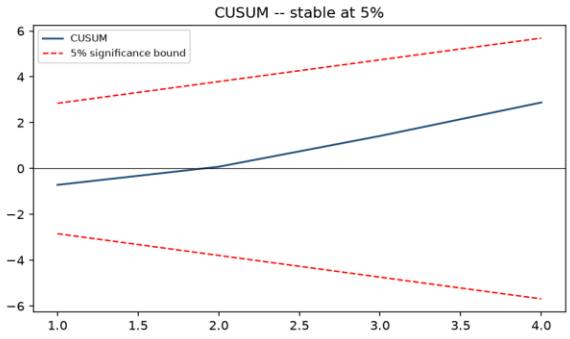
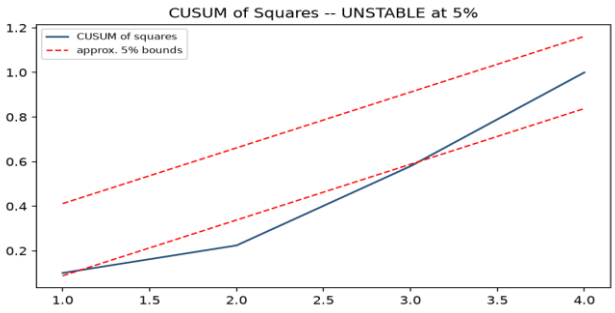


Figure 2: CUSUM of squares plot



The recursive residual sample for Model is very short once seven regressors are estimated over twenty-nine annual observations, leaving only four points from which to compute the CUSUM and CUSUM of squares statistics in Figures 1 and 2, so both should be read as indicative rather than conclusive stability checks. Bearing that caveat in mind, Model remains, on balance, the most econometrically coherent of the three specifications, with cointegration confirmed, the error correction term negative and significant, and three of the four diagnostic tests passing, a combination that supports the overarching argument of this study that institutional quality completes an explanation of Kenyan youth unemployment (North, 1990; Acemoglu, Johnson and Robinson, 2005).

5. Conclusion

Adding controls for corruption and rule of law over the shorter 1996 to 2024 window also produced a confirmed cointegrating relationship, with a bounds statistic of 5.68 against an upper bound of 4.51 and a negative and significant error correction term of -0.98 (World Bank, 2024). That a long-run relationship survives on a window of only twenty-nine observations is itself notable, since it indicates the institutional determinants add explanatory content strong enough to register even after the sample is shortened by the late start of the governance series (North, 1990).

The error correction term of -0.98 implies almost complete correction of any disequilibrium within a single year, which should be read with some caution on a short sample, because a coefficient close to minus one can signal either very rapid adjustment or a specification straining against a limited number of observations (Pesaran, Shin and Smith, 2001). Taken at face value, it says that once the institutional determinants are in place, the long-run relationship binds tightly and youth unemployment returns quickly to its institutionally conditioned level, a pattern consistent with the view that institutions set the medium-term frame within which labor market outcomes settle (Acemoglu, Johnson and Robinson, 2005).

Control of corruption emerged as negative and significant, supporting H2 and echoing Osinubi & Simatele (2025) finding that stronger corruption control eases the transition from informal to formal youth employment across Africa. The mechanism most consistent with this result runs through the allocation of public opportunity, since weaker corruption control diverts procurement, public hiring and program placement toward patronage and away from open competition, which falls hardest on young entrants who lack the networks to capture rationed positions (Osinubi & Simatele, 2025). On this reading, the corruption coefficient is not a general governance proxy but a specific channel through which the fairness of access to opportunity shapes who among the young finds work (North, 1990).

Rule of law was not significant, so H1 is not supported, a result that mirrors Abé Ndjié et al.'s (2019) finding that among the six Worldwide Governance Indicators, corruption control and political stability carry the most robust independent association with youth unemployment, while the broader rule of law measure does not. Two readings are plausible, and neither can be settled here. The first is measurement overlap, since rule of law and control of corruption are strongly correlated across the governance indicators and the estimation may attribute their shared variation to the corruption measure alone (Abé Ndjié et al., 2019). The second is that the rule of law channel operates over horizons longer than the twenty-nine-year institutional window can capture, so its absence reflects the sample rather than the world.

Knowledge spillovers and capital accumulation indicate that the institutional variables operate alongside rather than (World Bank, 2024). This stability is evidence of a robust rather than a fragile productivity relationship, since a coefficient that holds its sign and significance across a change of specification and a change of sample window is unlikely to be an artefact (Habanabakize & Dickason, 2023). It also supports the cumulative reading of the design, because it shows the institutional layer adding a distinct channel of its own rather than merely re-labelling variation already captured by productivity (Acemoglu, Johnson and Robinson, 2005).

Policy Recommendations

The findings suggest that Kenya should strengthen institutional quality as part of its youth employment strategy, particularly through enhanced control of corruption, transparent public resource allocation, and merit-based access to employment opportunities. Policies should also promote knowledge spillovers, innovation, and skills development while directing capital investment toward labor-intensive sectors that generate more jobs for young people. Although the rule of law was not statistically significant, continued reforms in legal institutions, contract enforcement, and labor market governance remain important for creating a stable environment that supports sustainable youth employment.

References

Abé Ndjié, S., Atangana Ondoa, H., & Ngoa Tabi, H. (2019). Governance and youth unemployment in Africa. *Labor History*, 60(6), 869-882

Abubakar, S. (2020). Institutional quality and economic growth: Evidence from Nigeria. *African Journal of Economic Review, 8*(1), 48–64.

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). *Institutions as a Fundamental Cause of Long-Run Growth. National Bureau of Economic Research, 385-472.*

Bello, I., Salisu, S. M., & Iyoboyi, M. (2024). Effect of Inflation and Corruption on Unemployment in Nigeria. *UMYUK Journal of Economics and Development (UJED)*, 1(2), 15–28

Brooks, C. (2019). *Introductory econometrics for finance* (4th ed.). Cambridge University Press.

Enders, W. (2015). *Applied econometric time series* (4th ed.). John Wiley & Sons.

Fagbemi, F., Fajingbesi, A., & Osinubi, T. T. (2023). Corruption: Governance challenge towards reducing unemployment in Nigeria. *Journal of Public Affairs*, 23(4), e2880. https://doi.org/10.1002/pa.2880

Fomba Kamga, B., Talla Fokam, D. N. D., & Ningaye, P. (2022). Political instability and youth unemployment in sub-Saharan Africa. *Review of Development Economics*, 26, 1850–1879. https://doi.org/10.1111/rode.12870

Gouider, A. & Ben Haddad, H. (2024). Gender Analysis of the Corruption and Youth Unemployment Nexus in African Countries: A Dynamic Panel Threshold Approach. Region et Developpement, Region et Developpement, LEAD, Universite du Sud - Toulon Var, 60, 5-29.

Gujarati, D. N., & Porter, D. C. (2021). *Basic econometrics* (6th ed.). McGraw-Hill Education.

Habanabakize, T. & Dickason, Z. (2023). The Role of Industrialization on Employment and Economic Growth in South Africa. International Journal of Economics and Financial Issues, 13. 116-123. 10.32479/ijefi.15094.

Hasan, M., Kalsoom, U. & Malik, M. (2026). Impact of Dependency Ratio on Economic Growth: Evidence from Selected Asian Countries. *Journal of Political Stability Archive*. 4. 450-463. 10.63468/jpsa.4.1.26.

International Labor Organization (ILO). (2024). *Global Employment Trends for Youth 2024*. Geneva: ILO.

Kamuntu, R. & John, M. (2025). Legal Protection of Free Movement of Labor Within the East African Community: A Comparative Analysis. International Journal of Law and Society. 8, 403-426. 10.11648/j.ijls.20250804.23.

Kenya National Bureau of Statistics (KNBS). (2023). *Economic Survey 2023*. Nairobi: KNBS. North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.

Osinubi, T., & Simatele, M. (2025). Informal economy, institutional quality, and socioeconomic conditions in African countries. *Economic Journal of Emerging Markets*, *17*(1), 95–109. https://doi.org/10.20885/ejem.vol17.iss1.art8

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics, 16*(3), 289–326.

Raies, A. & Mimoun, M. (2025). Augmented Okun's Law: Does Institutional Quality Shape the Unemployment-Growth Relationship? Insights From Developing and Emerging Economies. Administration & Society. 57. 915-941. 10.1177/00953997251345146.

Siboyi, L. (2023). Youth unemployment in South Africa: The role of corruption. Johannesburg: The University of the Witwatersrand.

Wooldridge, J. M. (2020). *Introductory econometrics: A modern approach* (7th ed.). Cengage Learning.

World Bank. (2024). *World Development Indicators*. Washington, DC: World Bank.