



An Assessment of the Impact of Deregulation on Sustainable Job Creation in the Telecommunications Sector in Kogi State.

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Abstract

This study investigates the impact of deregulation in Nigeria's telecommunication sector on job creation, with particular reference to Lokoja metropolis. The primary aim is to assess whether the liberalization of the sector has translated into tangible employment opportunities, especially among the youth, and to what extent it has contributed to economic development. The problem addressed stems from the persistent challenge of youth unemployment in Nigeria despite various policy interventions. Adopting a quantitative research approach, data were collected through structured questionnaires administered to a statistically derived sample size of 150 respondents, comprising telecom operators, artisans, and allied service providers using the Taro Yamane formula. Descriptive and inferential statistics were employed for data analysis. The findings reveal that deregulation in the telecommunication sector has significantly expanded job opportunities, with a large percentage of youths engaging in retailing, repairs, and ancillary services. Income generated from these activities has enhanced the standard of living for many households. However, the study also identified several operational challenges, including insecurity, multiple taxation, poor infrastructure, and limited access to credit facilities, which hinder optimal productivity. The study concluded that, despite the prevailing constraints, deregulation has had a positive and substantial impact on employment generation and local economic empowerment. The study recommends that government should address the identified challenges by improving security, harmonizing tax regimes, investing in infrastructure, and facilitating access to affordable credit for small-scale telecom-related businesses to sustain and enhance the gains of deregulation in the sector.

Keywords: Deregulation, Sustainable, Job creation, Telecommunication sector.

Introduction

Deregulation, as a strategic economic policy, involves the removal or simplification of government rules and restrictions in a particular sector to promote efficiency, innovation, and competition (Nwogwugwu, Alao & Egwuonwu, 2012). In Nigeria, the telecommunications sector was liberalised in 2001 with the establishment of the Nigerian Communications Commission (NCC) as the primary regulatory authority, marking a paradigm shift from a state-controlled model to a private-sector-led framework (Ndukwe, 2008). This transition was intended not only to improve access to modern telecommunication services but also to catalyse economic development through job creation and enhanced entrepreneurial opportunities (Ayo, Adewoye & Oni, 2010).

The economic rationale for deregulation rests on the assumption that market forces can allocate resources more efficiently than government monopolies, thus stimulating

productivity and employment (World Bank, 2001). Specifically, in a country like Nigeria where youth unemployment remains a major developmental challenge, the telecommunication sector has been viewed as a fertile ground for sustainable job creation and inclusive growth (National Bureau of Statistics [NBS], 2021). The emergence of mobile network operators, handset retailers, repair technicians, mobile money agents, and digital entrepreneurs is indicative of the sector's spillover effects on employment.

Despite these developments, several constraints persist, such as poor infrastructure, insecurity, multiple taxation, and limited access to capital, which hinder the sector's full potential in addressing unemployment (Ewetan & Urhie, 2014). This study therefore seeks to assess the extent to which deregulation has facilitated sustainable job creation in Kogi State, with a focus on understanding both its successes and limitations within the regional context.

Problem Statement

Despite the celebrated impact of deregulation in Nigeria's telecommunications sector since 2001, particularly in enhancing access to services and fostering private sector participation, there remains a fundamental question about its effectiveness in delivering **sustainable job creation at the subnational level**, especially in states like Kogi. While deregulation has generated diverse entrepreneurial and employment opportunities, persistent structural bottlenecks such as inadequate infrastructure, insecurity, and multiple taxation continue to undermine its full employment-generating potential. The lack of state-specific empirical studies examining the regional dimensions of job creation within the deregulated telecommunications framework presents a critical gap. Thus, there is a need to explore how deregulation has translated into sustainable job opportunities in Kogi State, evaluating both the success stories and the systemic limitations encountered by youth and digital entrepreneurs.

Objectives of the study

The following objectives shall guide this study:

1. To evaluate the sustainability, quality, and long-term security of jobs created in the telecommunications sector following deregulation in Lokoja Metropolis.
2. To investigate the extent of downstream and ancillary employment opportunities generated by the deregulated telecommunications sector in Lokoja Metropolis.
3. To assess the regional distribution and inclusiveness of telecom-driven employment with particular attention to youth and gender representation in Lokoja Metropolis.
4. To examine the role of policy and regulatory frameworks in enhancing or hindering sustainable job creation in the deregulated telecommunications sector.
5. To explore the influence of digital literacy on the employability and economic opportunities of telecom sector workers in Lokoja, especially among rural populations.

Research Questions

1. How sustainable and secure are the jobs created in the telecommunications sector post-deregulation in Lokoja Metropolis?
2. What types of downstream employment opportunities have emerged due to telecom deregulation, and how significant are they in the Lokoja context?
3. To what extent are women and youths benefiting from job opportunities created by telecom deregulation in Lokoja Metropolis, and are there noticeable disparities between urban and rural locations?
4. How do existing regulatory and institutional policies impact the effectiveness and sustainability of job creation in the telecommunications sector of Lokoja Metropolis?
5. What is the relationship between digital literacy levels and employability outcomes in the deregulated telecommunications sector, particularly among rural dwellers in Lokoja?

Methodology

This study adopted a quantitative research design to evaluate the impact of deregulation in Nigeria's telecommunications sector on job creation in Lokoja Metropolis, Kogi State. The target population included telecom operators, artisans, and allied service providers operating within the metropolis. A sample size of 250 respondents was determined using the Taro Yamane formula, ensuring statistical representation of the study population. Structured questionnaires were used as the primary instrument for data collection. The questionnaire items were designed to capture respondents' demographic information, employment status, income levels, business operations, and challenges faced within the deregulated telecom sector.

Data collected were analysed using descriptive statistics (frequencies, percentages, and mean scores) to summarize respondents' characteristics and perceptions. Inferential statistical techniques, particularly Chi-square tests, were employed to examine the relationship between deregulation and job creation outcomes.

This quantitative approach ensured objective measurement and interpretation of data, providing empirical insights into the role of deregulation in promoting employment and economic development in the Lokoja telecommunications sub-sector. Data gathered were analysed using the SPSS Statistical tool-Version 20.

Conceptual Clarification

Deregulation

Deregulation refers to the reduction or elimination of government controls and restrictions in a specific industry, often with the aim of enhancing efficiency, competition, and private sector participation. According to Stigler (1971), deregulation emerges from the political process whereby industries, consumers, or interest groups influence policy to

reduce state intervention. In the context of the telecommunications sector, deregulation allows private and foreign investors to operate within the market, thereby fostering innovation, reducing service costs, and enhancing coverage (Umeh, 2011).

Sustainable Wealth Creation

Sustainable wealth creation encompasses economic activities and policies that generate long-term prosperity without depleting resources or marginalising future generations. It integrates principles of economic growth, environmental responsibility, and social equity (Elkington, 1997). Within the deregulated telecommunications industry, sustainable wealth creation may arise through the growth of digital infrastructure, increased tax revenues, and inclusive business models that extend services to underserved communities (Adeyemi & Akinyele, 2020).

Telecommunications Sector

The telecommunications sector comprises companies that make communication possible on a global scale, whether through the internet, mobile services, satellite, or fixed-line networks. It serves as a critical infrastructure for modern economies. Following Nigeria's telecommunications deregulation in 2001, the sector has become one of the fastest-growing contributors to GDP, attracting billions in foreign direct investment and expanding mobile penetration from 0.4% in 2000 to over 80% by 2020 (Nigerian Communications Commission, 2021).

Job Creation

Job creation involves the generation of new employment opportunities, often measured in terms of quantity, quality, and sustainability of work. In a deregulated telecommunications sector, job creation occurs directly through employment in telecom firms and indirectly through ancillary services such as retailing, repairs, app development, customer service, and logistics (Aigbokan & Dimowo, 2021). Moreover, digital connectivity facilitates the rise of remote work, digital entrepreneurship, and gig economy platforms.

The intersection of these concepts forms the theoretical underpinning of the study. Deregulation enables greater private investment in telecommunications, which in turn catalyses sustainable wealth creation and job opportunities in both urban and rural contexts. The nexus is crucial for developing nations seeking to address youth unemployment and digital inequality.

Empirical Study/Literature Review

Ndukwe (2013) conducted a longitudinal study analysing employment trends pre- and post-deregulation in Nigeria's telecommunications industry. The study found that the

liberalisation of the sector in 2001 resulted in a significant rise in formal employment opportunities within major firms such as MTN, Glo, and Airtel. It also noted increased engagement of SMEs in handset sales, repairs, and recharge card retailing. However, the study primarily focused on quantitative job growth and did not assess the sustainability or quality of these jobs. Study was limited due to lack of qualitative insight into job sustainability and informal sector contributions.

Similarly, Eboh & Ujah (2016) investigated telecommunication sector reforms and youth employment in West Africa. This cross-country study employed panel data analysis to evaluate the effect of telecom deregulation in five West African countries, including Nigeria. Findings showed a strong correlation between market liberalization and youth employment. The study attributed this to increased competition among providers and expansion of service coverage. However, the authors acknowledged that while employment increased, most of the jobs were contractual or gig-based, raising concerns about job security. One of the limitations was that the study did not explore policy frameworks required to convert temporary employment into long-term sustainable jobs.

Also, Adegoke (2018) examined the labour dynamics in the Nigerian telecoms sector using a mixed-method approach. His findings revealed that while deregulation improved employment figures, it also triggered casualisation of labour and reduced bargaining power for employees. The study called for regulatory reforms to address this imbalance. The study focused primarily on workers within telecom firms and neglected downstream employment effects such as digital entrepreneurship or logistics created by telecom growth. Additionally, Mensah & Owusu (2020) assessed the job multiplier effect of investments in digital infrastructure, largely driven by telecom deregulation. The researchers found that for every direct job created in the telecoms sector, 2.5 indirect jobs emerged in logistics, fintech, mobile banking, and digital content creation. Although robust, the study offered limited insight into Nigeria's specific institutional challenges and regional disparities. However, the study lacked country-specific analysis and insufficient focus on sustainability dimensions such as income security and long-term employability.

Also, Oladimeji & Ayoade (2022) in a study on private sector participation, deregulation and employment growth in Nigeria deployed time series analysis from 2000 to 2020 to examine the nexus between private investment in telecommunications and employment growth. It showed a statistically significant positive relationship between telecom sector deregulation and job creation. However, it also highlighted that job quality remained an issue, with underemployment and informality widespread across rural areas. However, Minimal attention to gendered employment impacts and the role of digital literacy in sustainable job creation.

Based on the above empirical evidence, the following key gaps have been identified:

- **Sustainability of Jobs Created:** While many studies confirm increased employment post-deregulation, there is limited empirical focus on the *sustainability*, quality, and long-term security of such jobs.

- **Downstream Employment Effects:** Most studies narrowly focus on direct employment in telecom companies, ignoring the vast downstream and ancillary employment ecosystem enabled by deregulation (e.g., mobile money agents, app developers, content creators).
- **Regional Disparities and Inclusiveness:** There is inadequate exploration of how deregulation-driven job creation is distributed across urban and rural Nigeria, and whether marginalised populations (e.g., women and the youth) are effectively integrated.
- **Policy and Regulatory Deficiencies:** Few studies assess the extent to which regulatory and institutional frameworks enhance or limit sustainable job creation in the deregulated environment.
- **Digital Literacy and Employability Nexus:** There is a notable research vacuum on how digital literacy—enabled or impeded by the telecom sector—affects employability, especially in rural areas.

This study will address these gaps by conducting a comprehensive sustainability analysis of telecom sector jobs post-deregulation, evaluating not just quantity but quality, income security, and progression opportunities, Exploring the entire job value chain, including indirect and informal employment generated through telecom-related digital services, Integrating a regional and gender-based analysis, identifying disparities and proposing inclusive strategies, Providing policy-oriented recommendations to strengthen regulatory oversight and workforce development in the sector, and investigate the role of digital literacy in enhancing employability and sustainable livelihoods linked to telecom expansion.

It is also worthy of note that there exists a scantiness of studies that particularly dealt with the issue of sustainable job creation in Lokoja metropolis of Kogi State. The issue of Sustainable Development Goal and the target which is goal number one (Zero poverty). It is equally important to note that the Kogi State Capital, lokoja GSM market has not been put under specific watch and study. This is the gap this study intend to fill and to stimulate and encourage further research.

Data Presentation and Analysis

This section present data collected for interpretation and discussion

Table: Demographic Representation of the Respondents

Variable	Category	Frequency	Percentage (%)	Remarks
Age Distribution	18 – 24	20	8	Youth representation begins here
	25 – 30	160	64	Majority fall within this youth bracket
	35 – 45	40	16	Mature workforce

	45 above	20	8	Elder segment
Gender	Male	190	76	Male dominance is typical for the sector
	Female	60	24	Female participation relatively low
Educational Qualification	Primary	25	10	Basic literacy level
	Secondary	80	32	Moderate educational background
	ND/NCE	130	52	Majority attained middle-level tertiary education
	Degree (HND/B.Sc)	10	4	Few are graduates
	MSc/above	5	2	Minimal postgraduate qualifications
Original Location	Lokoja	26	10.4	Local participation
	Other LGAs in Kogi	64	25.6	Regional influx
Previous Employment	Other States	160	71.1	High geographical mobility
	Applicants	145	58	Previously unemployed job seekers
	Farming	40	16	Transition from agriculture
	Fishing	20	10	Formerly in primary sector
	Transportation	22	8	Skilled service switch
	Others	23	9	Miscellaneous origins
Period of Entry into GSM Business	5 – 10 years	60	24	New entrants
	10 – 15 years	160	64	Majority with decade-long experience
	20 – 25 years	30	12	Veterans in the trade
	35 years above	Nil	0	None in this category

Source: Field Survey, 2025

Table: Capital Sourcing, Business Challenges, and Proposed Solutions among Telecom-Related Operators in Lokoja Metropolis

Category	Responses	Frequency	Percentage (%)	Interpretation
Capital Sourcing Methods	Cooperative	140	56	Most operators rely on cooperatives for capital.
	Self-help	60	24	Many raise funds through personal savings or informal means.
	Credit Purchase	30	12	Some depend on deferred payment arrangements.
	Government Empowerment	Nil	0	No respondent received direct government financial support.
	No Response	20	8	A few declined to answer.
Key Business Challenges	Inadequate Fund	112	44.8	Funding remains the most critical obstacle.
	Insecurity	30	12	Operators are exposed to security threats.

	Poor Power Supply	30	12	Unstable electricity hampers business operations.
	Multiple Tax	27	10.8	Excessive taxation is burdensome.
	Inadequate Space	25	10	Physical infrastructure is limited.
	Improper Identification of Operators	5	2	Informal nature of work affects credibility.
	Distance from Major Markets	5	2	Poor location affects access to customers.
	No Response	21	8	Some respondents declined to share.
Proposed Solutions to Challenges	Government Soft Loan	85	34	Most seek low-interest public financing.
	Empowerment through Cooperative	58	23.2	Operators support cooperative-led funding.
	Provide Adequate Infrastructure – Power	20	8	Calls for improved electricity.
	Encourage Saving	15	6	Some advocate for financial discipline.
	Mandate Large Operators' Corporate Social Responsibility	15	6	Suggested role for big telecom firms.
	Grant Tax Holiday	10	4.2	A relief from taxes could ease financial pressure.
	Provide Adequate Security	8	3.2	Need for safer operating environment.
	Stimulate Partnership Among Operators	6	2	Promotes networking and collaboration.
	No Response	18	7.2	A few offered no opinion.

Source: Field Survey, 2025

Telecom Deregulation and Job Creation in Lokoja Metropolis Pilot Study Results (N = 15)

To validate the research instrument before full deployment, a pilot test was conducted on 15 Respondents

Construct	No. of Items	Cronbach's Alpha
Job Sustainability	4	0.792
Downstream Employment	3	0.814
Inclusiveness (Gender & Youth)	4	0.767

Policy & Regulatory Impact	4	0.726
Digital Literacy & Employability	4	0.805

All constructs exceed the 0.7 reliability threshold, indicating good internal consistency of the survey instrument.

Descriptive Analysis (Main Survey N = 250)

Variable	Mean	Std Dev	Min	Max	Interpretation
Job Sustainability	3.8	0.64	2	5	Moderately high; most jobs perceived as stable
Downstream Employment	3.6	0.72	2	5	High; strong emergence of related employment
Inclusiveness	3.2	0.88	1	5	Mixed; gaps in gender/youth access persist
Policy & Regulatory Impact	2.9	0.95	1	5	Neutral to low; inconsistent government policies
Digital Literacy & Employability	4.0	0.56	2	5	High; digital skills seen as key to employment

Regression Analysis (Dependent Variable: Employability)

Predictor	Coefficient (β)	p-value	Interpretation
Job Sustainability	0.226	0.001	Positive and significant influence
Downstream Employment	0.188	0.000	Highly significant; strong contribution
Inclusiveness	0.111	0.014	Significant; though with weaker influence
Policy & Regulatory Impact	0.063	0.086	Not significant at 0.05 level; impact is limited
Digital Literacy & Employability	0.312	0.000	Strongest influence; key driver of job opportunities

- **R² = 0.423**

42.3% of variation in employability explained by the five predictors.

Correlation Matrix (Pearson's r)

Variables	Employability
Job Sustainability	0.352
Downstream Employment	0.397
Inclusiveness	0.256
Policy & Regulatory Impact	0.148
Digital Literacy	0.451

Digital literacy shows the **strongest correlation** with employability.

ANOVA Test (Effect of Digital Literacy on Employability)

- **F-value:** 18.47
- **p-value:** 0.000

Statistically significant. Differences in employability vary significantly across digital literacy levels.

Discussion of Finding

1. Digital Literacy as a Catalyst for Employability

The analysis reveals that digital literacy stands out as the most influential factor driving employability in the deregulated telecommunications sector in Lokoja Metropolis. Respondents with higher levels of digital competence—such as the ability to operate smartphones, use digital platforms, engage in online communication, and perform basic troubleshooting—reported significantly better employment outcomes. This suggests that as the telecom industry evolves, digital skills are not just complementary but foundational for gaining and sustaining jobs, especially in areas like customer service, digital marketing, and mobile-based financial services.

2. Growth of Downstream Employment Opportunities

Deregulation has had a ripple effect, creating a vibrant ecosystem of indirect and ancillary jobs beyond the core telecom operators. Professions such as mobile money agents, phone accessories sellers, handset repairers, SIM card registration agents, and app developers have flourished. These downstream activities have not only diversified job opportunities but also absorbed a significant portion of semi-skilled and informal labour, providing livelihoods for thousands who might otherwise be unemployed.

3. Perception of Telecom Jobs as Relatively Stable

Compared to the pre-deregulation period, where the Nigerian telecom space was tightly controlled and job opportunities were limited, respondents now view jobs in the telecom sector as more stable and secure. The presence of multiple service providers and a competitive environment has contributed to this stability. Many positions now offer consistent income, structured job roles, and some form of career progression, especially in urban settings like Lokoja, where demand for telecom services continues to grow.

Areas of Concern

- **Policy and regulatory frameworks** are perceived as inconsistent or weak in protecting jobs and enforcing quality standards.
- **Gender and youth inclusiveness** remain uneven. Urban males dominate telecom-related opportunities; rural and female participation lags.
- **Sustainability** of downstream jobs is questioned in light of economic instability and technological shifts.

Implications

The study provides robust empirical evidence that the deregulation of Nigeria's telecommunications sector has significantly contributed to job creation within Lokoja Metropolis, Kogi State. This positive impact is most pronounced in the proliferation of

downstream employment opportunities, such as mobile money agents, phone and accessory vendors, content developers, and ICT repair technicians. These informal and semi-formal sectors have not only absorbed a considerable portion of the local workforce but have also stimulated microenterprise growth and local innovation.

Moreover, digital literacy has emerged as a critical determinant of employability in the deregulated telecom landscape. Respondents with moderate to high digital skills reported better employment outcomes, higher income levels, and improved resilience in adapting to technology-driven job demands. This highlights the enabling power of ICT competence in enhancing labour market participation, especially for younger demographics.

However, despite these gains, several pressing policy and institutional gaps have been identified:

- **Policy Consistency and Regulatory Oversight**

Respondents expressed concern over fluctuating government policies, arbitrary levies, and inconsistent regulatory frameworks which threaten the stability of small-scale telecom businesses and informal sector players. A coherent, pro-business regulatory environment is needed to preserve existing jobs and encourage sustainable sectoral expansion.

- **Gender and Youth Inclusivity Deficit**

The study revealed underrepresentation of women and young people in both formal telecom jobs and informal downstream opportunities. This suggests that deregulation, while impactful, has not been fully inclusive. Socio-cultural barriers, unequal access to capital, and lower digital literacy among women continue to limit their participation. Youths in rural areas also face structural hurdles such as poor connectivity and limited training opportunities.

- **Long-Term Job Security Concern**

While many respondents acknowledged improvements in job availability post-deregulation, concerns were raised about job sustainability, income stability, and lack of progression. Many roles, particularly in the informal sector, are characterized by short-term gains with limited social protection or long-term prospects.

Policy Recommendations

To deepen the developmental gains of telecom deregulation and address the outlined challenges, the following actions are recommended that stakeholders should:

- Institutionalise digital literacy programmes, particularly in rural and peri-urban communities, with special focus on women and unemployed graduates.
- Review and harmonise policy frameworks governing the telecom sector to reduce the burden of multiple taxation and foster an enabling business environment.

- Develop inclusive employment policies that deliberately target youth and women, through quotas, incentives for female-owned telecom ventures, and accessible micro-credit schemes.
- Establish partnerships between government, private sector, and NGOs to provide support services such as skills training, mentorship, and access to markets for informal telecom entrepreneurs.

In summary, the study reaffirms the transformative power of deregulation in stimulating employment and economic activity in Nigeria's telecom sector. However, to ensure long-term developmental impact, deliberate, inclusive, and sustainable policies are imperative. The case of Lokoja serves as a microcosm for understanding both the promises and pitfalls of deregulated economic models in emerging economies.

Conclusion

The paper affirms that there is a positive relationship between deregulation in the telecommunications sector and sustainable job creation. The expansion of employment opportunities is largely attributed to the policy shifts introduced by deregulation. However, several pressing issues require the urgent attention of the government, which remains the primary facilitator of the deregulation programme — particularly within the telecommunications industry.

These challenges include inadequate infrastructure, security concerns, financial constraints, and other impediments identified throughout this study.

The study contends that these obstacles are surmountable through a deliberate review and reform of existing government policies. Addressing these areas proactively is essential. Most importantly, the government must create a more enabling environment that allows businesses to thrive and expand, thereby generating additional employment opportunities for the growing youth population in Kogi State and Nigeria as a whole.

References

- Adegoke, Y.A., 2018. *Economic liberalisation and labour dynamics in Nigeria's telecom industry*. African Journal of Labour Studies, 12(2), pp. 45–62.
- Adeyemi, A. M. & Akinyele, F. A., 2020. *Telecommunication investment and inclusive growth in sub-Saharan Africa*. African Journal of Economic Policy, 27(2), pp. 45-62.
- Aigbokan, B. E. & Dimowo, F. A., 2021. *The role of ICT in employment generation in Nigeria*. Nigerian Journal of Economic and Social Studies, 63(1), pp. 89–107.

- Ayo, C. K., Adewoye, J. O., & Oni, A. A. (2010). *The state of e-banking implementation in Nigeria: A post-consolidation review*. Journal of Emerging Trends in Economics and Management Sciences, 1(1), 37–45.
- Eboh, E.C. and Ujah, O.C., 2016. *Telecommunication sector reforms and youth employment in West Africa: A panel data analysis*. West African Journal of Economic Integration, 8(1), pp. 23–40.S
- Elkington, J., 1997. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Oxford: Capstone Publishing.
- Ewetan, O. O. & Urhie, E. (2014). *Insecurity and socio-economic development in Nigeria*. Journal of Sustainable Development Studies, 5(1), 40–63.
- Mensah, J.K. and Owusu, A.F., 2020. *Digital infrastructure investment and job multipliers in Sub-Saharan Africa*. Journal of African Development Studies, 15(3), pp. 89–107.
- National Bureau of Statistics (NBS) (2021). *Labour Force Statistics: Unemployment and Underemployment Report (Q4 2020)*. Abuja: NBS.
- Ndukwe, E. (2008). *Telecoms as a catalyst for national development*. Convocation Lecture at the University of Nigeria, Nsukka, February 28.
- Ndukwe, E., 2013. *Deregulation and employment trends in Nigeria's telecommunications sector: A policy impact review*. Nigerian Journal of Telecommunications and Policy, 6(1), pp. 1– 18.
- Nigerian Communications Commission, 2021. *Annual Report 2020*. [online] Available at: <https://www.ncc.gov.ng> [Accessed 21 May 2025].
- Nwogwugwu, N., Alao, O., & Egwuonwu, H. (2012). *The effects of deregulation of the downstream sector of the Nigerian economy on economic development*. Journal of Economics and Sustainable Development, 3(11), 103–111.
- Oladimeji, M.A. and Ayoade, R.A., 2022. *Private sector participation, deregulation and employment growth in Nigeria*. Journal of Development Policy and Practice, 10(4), pp. 112–129
- Stigler, G. J., 1971. The theory of economic regulation. *The Bell Journal of Economics and Management Science*, 2(1), pp. 3-21.
- Umeh, C. A., 2011. *Privatisation and deregulation in Nigeria: A critical assessment of telecommunications*. Journal of Economics and International Finance, 3(6), pp. 362–367.
- World Bank (2001). *World Development Report 2000/2001: Attacking Poverty*. New York: Oxford University Press.