Impact of Minimum Wage Policy on Income Inequality in Nigeria

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ABSTRACT

This study examine the impact of the minimum wage on income inequality in Nigeria (2011 to 2022). The study specifically analyse the effect of minimum wage rate on income inequality in Nigeria; estimate effect of urban population growth on income inequality in Nigeria; explore impact of economic growth on income inequality in Nigeria. The data was sourced from the Nigerian Living Standard Survey (NLSS), ILOSTAT and World Development Indicators. The data was analysed using estimation technique (descriptive statistics and multiple regressions). The regression analysis showed increased wages reduces inequality in Nigeria. This study also suggests that the increased wages' effect is stronger in urban areas than in rural areas. The study suggest that government should increase wages in the urban area where the impact is stronger on income inequality. Also, implementation of the minimum wage policy should be accompanied by other policies that aim to address income inequality comprehensively.

Keywords : *Minimum wage, Wage policy, Income inequality, Urban population, OLS regression.*

1. Introduction

Income inequality is a significant economic concern that has been a subject of discourse for decades, as it gives rise to numerous economic and social issues such as poverty, limited opportunities, and increased crime rates. However, researchers have identified the minimum wage as one of the most prevalent policies to address income inequality. The minimum wage refers to a legal mandate requiring employers to compensate their employees with a specified minimum amount per hour of work. Essentially, it establishes the lowest remuneration that employers can legally offer for the services rendered by their employees. By its implementation, the vulnerable, uninformed, or marginalized group of individuals is curtailed from being abused. Compared to existing voluntary bargaining mechanisms, the minimum wage provides a more comprehensive safeguard for these groups (Fapohunda, et al., 2013).

The prolonged debate surrounding the minimum wage policy has led to the formulation of four distinct conventions within International Labour Organization. The aims of the conventions (1928, 1949, 1951 and 1970) adopted, are to fortify the minimum wage framework and establish procedures for determining, reviewing, and minimizing legal ambiguity. The primary objective is to ensure that wage earners receive essential social protection by guaranteeing a minimum wage acceptable to costs of living and additional relevant factors (Ratnam, 2006). While proponents argue that the minimum wage effectively mitigates income inequality, opponents contend that it may have adverse consequences, such as increased unemployment rates (Atseye, Takon, and Ogar, 2014).

Nigeria, being the sixth most populous country globally with approximately 220 million inhabitants, grapples with persistent income inequality despite its youthful and active labor force. A considerable portion of the population remains impoverished while a small fraction amasses significant wealth (Odejimi & Ugiagbe, 2019). According to a World Bank report, Nigeria stands as one of the most unequal nations worldwide, with the top 10% of the population owning 38.4% of the country's wealth, while the bottom 40% possesses a mere 11.3% (World Bank, 2020). To address this issue, the Nigerian government introduced a minimum wage policy in 1981, which has undergone several revisions over the years. The most recent revisions occurred in 2011 and 2019, setting the minimum wage at N18,000 and N30,000, respectively, following intense negotiations with the Trade Union Congress of Nigeria. However, it's important to note that

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these negotiations did not encompass privately employed workers and informal workers, who constitute around 70% of the Nigerian workforce. Therefore, it should be emphasized that minimum wage payments in Nigeria are limited to government-employed workers at the federal and state levels (Odejimi & Ugiagbe, 2019).

Nwude (2013) asserts that various tiers of the Nigerian government offer inadequate minimum wages to both public and private workers, falling far short of the United Nations' standards for enhancing citizens' welfare. While Nigeria's minimum wage stands at $300 per month, the International Labour Organization recommends an average of no less than $2000 monthly (ILO, 2015). Consequently, the demonstration of the government's commitment to improving welfare lies on the need to answer the call of labour union for increased minimum wage. However, another study by Akpansung (2014) found that raising the minimum wage had detrimental effects on employment generation within the Nigerian economy. This is attributed to the disincentive it poses for private employers who face high production costs, considering that labor constitutes a key factor of production.

Given that non-compliance is a significant issue within the informal workforce, minimum wages prove more effective in reducing inequalities when accompanied by measures to formalize the informal economy. This study intends examining relative relationship between minimum wage and income inequality with Nigeria as context of study from 2011 to 2022. The specific objectives are to:

I. Analyse relationship between minimum wage and income inequality in Nigeria;

ii estimate effect of urban population growth on income inequality in Nigeria; and

iii. explore effect of economic growth on income inequality in Nigeria

2. Literature Review

Several studies have been conducted on the impact of minimum wage on income inequality.

Vázquez, Esquivel, and Hernández (2022) analyzed correlation between minimum wage and employment in Mexico. The study found that the average wage per hour in Zone B increases when comared to others. Similar results were obtained from the panel analysis.

Another study by Adedoyin, Han, and Ah (2020) examined how minimum wage affects reduction of overty in Nigeria, employing data from the Nigeria Living Standard Survey. The study found that increased wages positively affects poverty reduction. Additionally, the study revealed that the effect of increased wages on poverty reduction remains stronger in urban areas compared to rural areas.

Adeniyi et al. (2018) conducted a study analyzing minimum wage effect and income inequality within Nigeria context, utilizing Nigerian Living Standard Survey (NLSS) data. The study discovered reduction in income inequality is as a result of increased wages (that is, low aid workers). Furthermore, the study revealed that urban area is pronounced to the effect than the rural areas.

Likewise, Lina and Yun (2016) investigated how minimum wages has contributed to increased wages in China (2004-2009). From the findings of the study, the earning's ga can be narrowed through increased wages which at the same time reduces inequality

Similarly, Litwin (2015) analyzed the factors influencing inequality in OECD countries using minimum wages as the primary independent variable. The study also concluded that increased minimum wage can reduce income inequality to the point of effective value of the wages.

Also, Ogbeide, and Agu (2015) found a correlation between low wages and income inequality. This relationship arises from the adverse consequences of poverty in many developing countries and serves as a conduit through which there is disparity between the rich and the poor.

2.1 Theoretical Framework

Deprivation theory of poverty has its roots in the work of British sociologists, such as Richard Titmuss, Brian Abel-Smith, and Peter Townsend, who studied poverty and inequality in post-war Britain in the 1950s and 1960s. Their work focused on the social and economic factors that contributed to poverty, including unemployment, poor housing, and lack of access to healthcare and education. Deprivation theory of poverty suggests that people are poor because they lack access to resources and opportunities that are available to others in society, role of social exclusion, discrimination, and inequality in perpetuating poverty (Sabia and Nielsen, 2015).

One of the early proponents of public interest theory was economist and legal scholar Robert Hale, who argued that markets were not neutral, but rather were shaped by legal and institutional factors that benefited powerful economic interests. He believed that the government had a duty to intervene in markets to protect the interests of ordinary citizens. He suggests that the government should regulate markets and industries in order to promote the greater good or public interest. This theory assumes that markets do not always act in the best interest of society, and that government intervention can help to correct market failures and promote the welfare of the general public. One area where public interest theory is particularly relevant is in the context of income inequality**;** in this context, public interest theory suggests that the government has a responsibility to address income inequality through policies and regulations that reduces income inequality. Likewise, the government could implement progressive taxation policies that tax higher-income earners at a higher rate, while providing tax breaks or other benefits to lower-income earners. The government could also implement policies that support education and skills training programs, which can help individuals to earn higher incomes and improve their social mobility (Sabia and Nielsen, 2015).

3. Methodology

The study will be adapting the model used by Litwin (2015) on the Effect of the Minimum Wage on Income Inequality to examine relative effect of minimum wage on inequality with Nigeria as the context of the study.

$INE_{ii} = \beta 0 + \beta 1LMNW_{ii} + \beta 2LGDP_{ii} + \beta 3EDU_{ii} + \beta 4URP_{ii} + u_i$

where : INE = Income inequality; MNW = Minimum wage; GDP= Economic growth; EDU = Education; URP = Urban Population

The data will be sourced from the Nigerian Living Standard Survey (NLSS), ILOSTAT and World Development Indicators.

4. Results and Discussion

In Table 1, the mean value for INE, LMNW, LGDP, EDU and URP (35.48364, 9.937443, 13.24089, 55.05526 and 48.63245 respectively), reveals the average value from the period 2011-2022. The standard deviation values for INE, LMNW, LGDP, EDU and URP (0.322375, 0.238606, 0.243277, 5.518646 and 2.782447 respectively) shows how each of the variable deviates from its mean.

The skewness value for INE, LMNW, LGDP and EDU (0.038280, 1.020621, 0.025562 and 0.566947) respectively shows that the variables are positive which means it has a higher value than the sample mean while URP with skewness value of -0.044826 is negatively skewed.

For Jaque Bera analysis, the null hypothesis in respect to INE, LMNW, LGDP, EDU and URP cannot be rejected since the probability value (0.602524, 0.311820, 0.769266, 0.390494 and 0.709090 respectively) are above the significance level of 0.05 which implies that INE, LMNW, LGDP, EDU and URP are normally distributed.

Results of the regression analysis (Table 2) showed reduction in inequality through increased wages. The coefficient of the MNW (minimum wage) was negative even though it was not statistically significant at 5%, however when MNW is increased, income inequality by 0.41%. The results also showed a percentage increase in economic growth will bring about 4.1% reductions in income inequality in Nigeria. Likewise, the coefficient of education reveals that 1% increase in education will reduce income inequality by 0.07% while 1% decrease in rural-urban migration will bring about 0.43% reduction in income inequality in the country.

5. Discussion

The findings of this study corroborates the findings of Atseye, Takon and Ogar, (2014) suggest MNW (minimum wage) policy can be an effective tool for reducing income

Table 1 : *Descriptive Analysis*

	INE	LMNW	LGDP	EDU	URP
Mean	35.48364	9.937443	13.24089	55.05526	48.63245
Median	35.51000	9.798127	13.20613	51.07770	48.68300
Maximum	35.90000	10.30895	13.62325	62.01600	52.74600
Minimum	35.10000	9.798127	12.85203	51.07770	44.36600
Std. Dev.	0.322375	0.238606	0.243277	5.518646	2.782447
Skewness	0.038280	1.020621	0.025562	0.566947	-0.044826
Kurtosis	1.515116	2.041667	1.931334	1.321429	1.778499
Jarque-Bera	1.013257	2.330657	0.524636	1.880687	0.687547
Probability	0.602524	0.311820	0.769266	0.390494	0.709090
Sum	390.3200	109.3119	145.6498	605.6079	534.9570
Sum Sq. Dev.	1.039255	0.569330	0.591837	304.5545	77.42009
Observations	11	11	11	11	11

Source: *Author's, 2023*

***Table 2 :** Regression Analysis*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LMNW	-0.409795	0.535774	-0.764867	0.4870
LGDP	-4.095764	1.950785	-2.099546	0.1037
EDU	-0.069020	0.012569	-5.491142	0.0054
URP	0.425066	0.158895	2.675140	0.0555
LINE	-0.246097	0.315917	-0.778993	0.4795
C	85.65096	28.18411	3.038980	0.0384
R-squared	0.968927		Mean dependent var	35.46700
Adjusted R-squared	0.930085		S.D. dependent var	0.334798
S.E. of regression	0.088525		Akaike info criterion	-1.727343
Sum squared resid	0.031347		Schwarz criterion	-1.545792
Log likelihood	14.63672		Hannan-Quinn criter.	-1.926504
F-statistic	24.94559		Durbin-Watson stat	2.889473
Prob(F-statistic)	0.004094			

***Source:** Author's, 2023*

inequality in Nigeria. The study also highlights the need for the government to review the minimum wage regularly to keep up with the rising cost of living. Also, while MNW can reduce income inequality, it is not a comprehensive solution to the problem. Other policies such as reducing rural-urban migration and curbing the rise in income inequalities in urban areas requires a multifaceted approach that includes investments in rural development, job creation, education, social safety nets (by implementing social programs that provide financial assistance to low-income families, such as cash transfers, food subsidies, and health care coverage), and decentralized governance.

In conclusion, the study shows that increased MNW can reduce income inequality in Nigeria. From this study, the effect of MNW on inequality is stronger in urban areas than in rural areas. The study suggests the following policies for policy-making in Nigeria:

- Develop rural areas: One of the primary drivers of rural-urban migration is the dearth of economic prospects and fundamental infrastructure in rural regions. The government can stimulate rural area growth through investments in vital infrastructure, including transportation networks, power supply, and water facilities, alongside fostering agricultural advancement and other economic ventures. Such measures can generate employment opportunities and enhance the standard of living in rural areas, thereby diminishing the impetus for individuals to migrate to urban areas.
- Provide affordable housing: The expensive prices of houses in cities are a big reason for disparity between the poor and the rich. Many low-paid workers can't afford to buy or rent good-quality houses. The government can help these workers by offering cheaper housing choices in cities. They can do this by building public housing or by giving money to private developers to make affordable homes. This would make it easier for low-income workers to handle their expenses and live and work in cities.
- Promote regional development: Investing in infrastructure and economic development in various regions of the country is a means by which the government can foster balanced regional development. Such initiatives can lead to the creation of job opportunities and economic growth in non-urban areas, thereby alleviating the strain on urban centers and diminishing the allure for migration.
- Improve access to education: The government has the capacity to enhance educational accessibility, with a specific focus on rural areas, through initiatives such as constructing schools, offering scholarships and grants, and enhancing the overall quality of education. By doing so, it can foster an environment that generates additional employment prospects in rural regions and diminishes the inclination for individuals to relocate to urban areas in pursuit of better educational and career opportunities.

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