IJAAR PUBLISHING®

Scholarly Journal of Social Sciences Research | ISSN: 2955-0785
Vol. 3, Issue 8 (August, 2024) | www.ijaar.org/sjssr

Minimum Wage Versus Commodity market Price Analysis under Three Regimes 2014 – 2024: A Diametrical Relationship

WODU, EBIMOWEI, PhD.
Bayelsa State Ministry of Finance.
Phone: + 2348069091007.
E-mail: ebimowodu@gmail.com

GOODMAN DANIEL DIEGHA, PhD
Department of Economics, University of Africa
Toru-Orua, Bayelsa State, Nigeria
E-mail: Daniel_gdmn@yahoo.com
+2348035481251

Abstract:

This study attempts to investigate the diametrical relationship minimum wage versus Commodity market Price analysis under three regimes 2014 – 2024. Frequency tables, percentages and bar charts. The hypotheses were analyzed by means of E-views tool while ordinary Least Square model was adopted to test the hypotheses. Findings revealed that the most affected in the commodity price increase are rice, garri and cooking gas. Commodity prices were higher during Bola Tunibu regime as a result of growing inflation over the past period. The minimum wage increase had forty thousand (N40, 000) naira added to civil servants at every level from level 02 up to level 16. As a result of inflation, employment rate is declining greatly. Review of minimum wage from N30, 000 to N70, 000 lasted from 2011 to 2024 compared to other periods from 1999. The paper recommended that there should be gradual creation of transparent and liberalized national and regional agricultural markets. There is the need for government to forge closer links between or to merge production, resource-protection, and governance-oriented programs in rural areas. There is the need to support agricultural sector and its author's research and advice, farmers' organizations, rural financial systems and agricultural credits, contract farming, standards, and norms.

Keywords: Minimum wage, Commodity, Market Price, Analysis, Regimes, Diametrical Relationship

Wodu, E. & Goodman, D.D. (2024). Minimum Wage Versus Commodity market Price Analysis under Three Regimes 2014 – 2024: A Diametrical Relationship. *Scholarly Journal of Social Sciences Research. 3*(8), 20-41. DOI: 10.5281/zenodo.13958009

Introduction

Policy makers have had problems of controlling inflation and surge in prices of goods in the market. The surge had become unprecedented that the gross domestic product refused to rise leading to near complete decline in the economy. However, commodity prices fell abruptly in the wake of the financial crisis and global economic downturn. As commodity prices in general and the price of oil in particular are important component of a consumer price index (CPI), Explained that the rising cost of goods in Africa is the rising price of goods in Nigeria and Africa is rise in the price of oil and this is on the increase on daily basis and if the government must set a control in the rising cost of goods there must be positive policy directive from the government. Prices of commodities fluctuates and do not follow a straight line. This misdemeanor is commonplace when it comes to manufactured products. In the past two decades, commodity prices have been volatile due to market finacialization of commodity prices and increase in demand in the global manufacturing firms. Factor input cost, unfavorable market capital mobilization, increased ethnic tension, COVID-19 pandemic, Inversion of Ukrain by Russia in early 2022, which witnessed rapid exploitation of consumers through exorbitant prices. While many commodities got to their highest point in price rise, many have growing prices on daily basis. The main cause has been attributed to supply chain (Lederman, & Porto, 1919). Unfortunately price changes made unambiguous effect on income levels of countries not minding how. In theory, countries income channels are being affected.

The prices of commodities arise from the computed cost of production with a mark of including contingencies without consideration to irrecoverable cost or sunk costs not inclusive. Be it farm produce or processed items, no consideration is given to every expenditure perceived as cost of advertisement of purchase of land and building of factories. These costs are not included when considering production costs. The effect of minimum wage on commodity prices is taken into consideration when trying to resolve the issue of high cost of living in Nigeria. It is established that one of the variables that give rise to increased commodity prices is minimum wage. Since the past three decades, the agitation for increased wage payment has created room for traders and producers of food commodities have advantaged the increase in wages as a reason for to increase the cost of commodities in the market.

Commodity prices, which do not follow a straight line, often fluctuate more than the prices of manufactured goods or services. In commodity markets notorious for their volatility, it's common for prices to fluctuate by more than thirty percent in a year or two (Böwer, Geis & Winkler, 2007). However, the roller coaster trend in commodity prices, which occurred rarely in the past, has recently been a recurring feature of global commodity markets (IMF, 2008). Since the mid-1990s, prices in commodity markets have followed a more volatile course because of the financialization of commodity markets, increases in demand from the global manufacturing industry, fluctuations in factor input costs, unfavorable weather conditions, and intensifying geopolitical tension. Especially due to the disruptions in supply chains following the COVID-19 pandemic and Russia's invasion of Ukraine since the beginning of 2022, the prices of many commodities climbed rapidly and reached their highest levels in history since the 1990s Recently, changing commodity prices has made an unambiguous effect on the income levels of all countries, the effect is that the demand for increase in minimum wage increased all over the world (Stephan, 2009).

Another variable that gives rise to increase in commodity prices is the case of fuel subsidy removal. When government stops subsidizing the cost of fuel importation, the landing price shoots up the pump price as the independent marketers will increase the pump price as to

break-even considering the fact the owners of tank farms of depot operators. Farming also is another key issue here. The cost of farming especially where the government ignors its role in making agriculture viable, for sustained produce as a means of rural development. Agriculture has been considered as essential condition for economic growth and development via inter-sectoral linkages such as means of earning foreign exchange, rural employment, rural income and provision of foods for the rural households. It is obvious that is one of the sustainability of the household population and a base to cushion the effect of rising commodity prices.

Statement of Problem

It has been observed that at any time there is increment of wage labour, prices od good snd services sky rocket in the market. This has been common since the days of oil boom or wind fall. Right from the time when minimum wage was eighteen thousand (N18,000), there has been a rise in commodity prices. This has remained so and has become a re-occurring decimal every three years. By the national wage commission Act it is established that there shall be a review labour wages every three years. This fact has been ignored by the federal government resulting to momentary agitations by Nigeria Labour Congress (NLC). The minimum wage is a strategy used by policymakers to increase low-income families' incomes with the ultimate goal of boosting these workers' standards of living. The Minimum salary Repeal and Enactment Act 2019, which raised the minimum from N30,000 from N18,000 in 2011 and N30,000 in 2019 and up to N70,000 in 2024. It is yet unknown, nevertheless, how Nigeria's national minimum wage will affect the socioeconomic traits of low-paid workers. While some studies contend that the legal minimum wage may lower employment rates and cause cost-push inflation, others claim that it may raise employment levels. Thus, the project's issue statement is to ascertain how minimum wage regulations affect employment rates in Nigeria and to provide insights into the socioeconomic ramifications of such regulations.

It is important to investigate the many issues and worries surrounding the effect of minimum wage regulations on employment rates in Nigeria. There is a substantial knowledge vacuum on the impact of minimum wage laws on commodity prices in Nigeria, even if the goal of its implementation is to raise workers' standards of living. Furthermore, policymakers lack a firm understanding of how minimum wage laws affect employment since there aren't enough thorough research looking at the particular economic effects of these policies in the Nigerian environment. Making educated decisions requires knowing if changes to the minimum wage have a positive or negative correlation with employment rates (Anita & Babalola, 2019). The minimum wage has continued to rise from N18, 000 down to N30, 000 up to N70, 000 in 2024 with a high inflation rate. It became obvious that every wage rise attracts an increase in commodity prices. This gives rise to a pertinent question such as, what are the extents of price differences of selected commodities from 2014 to 2024. To answer this question, it became important to find out the changes in selected commodity prices from 2014 to 2024.

Study Objective

The aim of this paper is to conduct analysis of minimum wage differences versus Commodity market Price under three regimes 2014 – 2024. Specific objectives are:

(a) to find out the minimum wages from 1999 to 2024
(b) to find out the difference in the commodity prices between 1999 to 2024.
(c) to find out which regime has more inflation rate from 2024 to 2024.

Study Hypotheses

The following hypotheses were formulated to guide the objectives of the study:

(i) there is no significant difference in minimum wage?
(ii) there is no significant difference in commodity prices?
(iii) there is no significant difference in new salary in the midst of rising inflation among the three regimes?

Significantly, this paper brings to limelight the measures put in place by the regimes under study to ameliorate the effect increased commodity prices. It shall also add to the stock of literature on minimum wage and commodity prices in Nigeria.

Study Scope

The effect of minimum wage regulations on employment rates in Nigeria was investigated in this research. The research will concentrate on the idea that minimum wage laws affect employment rates, different approaches to deal with the problems caused by wage laws, opportunities, and the connection between wage laws and employment rates in Nigeria. Since the research will make use of secondary data, yearly time series spanning 30 years, from 1991 to 2020, will be obtained.

The study's structure

The study is broken up into five parts. Section 1 covers the study's introduction, problem statement, research question, goals, research hypothesis, importance, scope, and organization. Section 2 covers the other chapters. The literature review is covered in Section 2 in relation to the study's main topic. The third section focuses on the study's methodology, including the data sources, data gathering strategy, and data analysis approach. Section 4 examines regression result interpretation and data display analysis. Section 5 offers an overview, a conclusion, and a suggestion.

Clarification of Concepts

Minimum wage: the payment for work done or performed. This explains the least payment to any individual engaged to any activity. It is the least approved monetary reward for any labor within the country.

*Concept of Minimum Wage***:** In recent years, the word "minimum wage" has been scrutinized closely and has acquired a peculiarly problematic position in terms of policy aims and use. This controversy began to emerge in the 1980s. The notion of minimum wage is often used in diverse contexts and by various parties in several nations. It is simply a phrase used to describe a variety of situations when a worker's compensation is restricted to a certain sum. The lowest amount of money that is required to be given to employees in both the public and private sectors of an economy is known as the minimum wage (Fapohunda et al. 2013). The minimal hourly pay that an employee may be given in accordance with federal law is known as the minimum wage.

Commodity market Price: the cost or amount of a commodity in the general market. This the amount for which a commodity can be purchased in the open market.

Regimes**:** the tenure of a government, mostly military. Elected government is known as tenure or republic.

Diametrical Relationship: a relationship that operates in opposite direction. It is diametrical because it flows on face-to-face direction or parallel.

Literature Review

As posited by Joya, (2015), net benefit approach, the effect of the price of a commodity on income depends on whether the country is a net producer or net consumer of the commodity in question. Different in their development levels are. Theoretically, commodity prices affect

a country's income through two channels, "income" and "cost" (Lederman and Porto, (1919): Svensson, (2005). Commodity prices determine the value of the commodity and affect the demand for commodities used in agricultural and manufacturing industrial production. According to Böwer, et al, (2007), net benefit approach, the effect of the price of a commodity on income depends on whether the country is a net producer or net consumer of the commodity in question. Net producers and exporters benefit from higher commodity prices, while net consumers and importers suffer. The reverse is true when commodity prices decline

The dependence of export revenues of many developing countries, especially low-income ones, on a few commodities has been of interest for both academics and policy makers. Until the 1980s, abundance of natural resources was considered to be an important advantage for developing countries attempting to achieve a rapid economic growth. Since the 1980s, a sizable literature, challenging the view that an abundance of natural resources is a blessing for these countries whose exports are dependent on a small number of commodities, has emerged, (Frankel and & Rose, (2010): Barsky & Kilian, (2002). These studies have suggested that countries with abundant natural resources tend to grow slower than countries with scarce resources, and that natural resource endowment could turn into a "curse". However, many studies have also claimed that the abundance of natural resources is a blessing and positively affects economic growth (Baffes, & Nagle, 2021). Besides, in recent years, many studies have focused on the effect of commodity price volatility on economic growth. The overwhelming majority of those studies found that commodity price volatility negatively affects economic growth (Stephan, 2009).
Nigeria's ten years minimum wage agitation was more of annual renewal up to the year 2000. It has been domesticated by Nigeria labour congress (NLC) that the demand for new minimum wage shall take place in 2027.

From the figures in table 1, it could be recalled the agitation for new minimum wage existed for decades and was been requested annually. In1999, the minimum wage was N3, 000 with a budget of N2.2bn. However, the both the budgets and minimum wages have diametrical relationship. It could also be observed that the longer period before the agitation for minimum wage increase was between the year 2000 and 2011, revealing a period of ten (10) years gap. While the national budget stood at N228bn, the minimum wage was still at N30, 000. The minimum wage rose to N70, 000 in 2024 when the national budget came to N344bn named the budget of Hope. Nigerian Labour Congress (NLC), Trade Union Congress and other unions have stated that federal government shall in agreement the labour unions review the minimum wage after every three (3) years.

A few studies have pointed out the existence of a positive relationship between commodity price volatility and economic growth: Danladi, (2020): Ali, Ahmet, Akpolat & Ismail, (2019). Empirical results of some studies have also revealed that there is no relationship between commodity price volatility and growth (Frankel, 2006).

How to Compute new salary based on N70,000 New Minimum Wage, 2024

Formula; $x = (a \times b) \div c$
Where;

A = Present day Salary
B = New Minimum Wage
C = Previous Minimum Wage
X = New Salary

For example;

Assume your salary (income) is N52,000
Computation;
A = Present day salary = N52,000
B = New salary = N70,000
C = Previous Minimum wage = N30,000
X = New Salary = ?
Application of formula;
X = (a x b) ÷ c
X = (N52,000 x N70,000) ÷ N30,000
X = 3,640,000,000 ÷ N30,000
Therefore
X = N121, 300
New salary should be N121, 000 for the new minimum wage of N70, 000.

***NOTE**: the computed new salary is without computed consequential adjustment*

The new minimum wage was increase in Nigeria from 30,000 to N70, 000 in July 2024. This wage increase has a computation formula established as shown below:

Links between Commodity Prices and Inflation

Commodity prices are argued to be leading indicators of inflation through two basic channels. One is that they respond more quickly to general economic shocks, such as an increase in demand. The second is that some changes in commodity prices reflect idiosyncratic shocks, such as a flood that decimates the supply of certain agricultural products, which are subsequently passed through to overall prices. Depending on the type of the shock, the observed link between commodity prices and inflation would be expected to be different. Moreover, changes over time in the mix of shocks in the economy could affect the stability of a bivariate link between commodity prices and inflation. The strongest case for commodity prices as indicators of future inflation is that they are quick to respond to economy- wide shocks to demand. Commodity prices generally are set in highly competitive auction markets and consequently tend to be more flexible than prices overall. As a result, movements in commodity prices would be expected to lead and be positively related to changes in aggregate price inflation in response to aggregate demand shocks.

Minimum Wage Review Commissions in Nigeria, 1934 – 2024

Prior to 2024, Federal Government of Nigeria has not used the commissions especially since the policy of deregulation of collective bargaining in 1991, it has not ceased to determine minimum wages since 1999 to 2024 as shown in table 1 below (*Fapohunda, Olusegun, & Olanrewaju, 2015).*

Table 1 Federal Government Minimum Wage Review

S/N	Minimum Wage Commission	Year
1	Hunts Commission	1934
2	Harragin Commission	1954
3	Phillipson-Adebo Commission	1948
4	Gorsuch Commission	1954
5	Mbanefo Commission	1959
6	Morgan Commission	1963
7	Eldwood Commission	1966
8	Adebo Commission	1971
9	Udoji Commission	1972
10	Dotun Phillips Panel	1985
11	Ayida Review Panel	1994
12	Philip Asiodu Committee	1998/1999
13	Ernest Shonekan Committee	2000
14	Justice Alfa Belgore Committee	2009/2010

Source: *Fapohunda, Olusegun, & Olanrewaju, (2015)*.

Criteria for Minimum Wage Determination

A number of criteria for fixing or determining wages and salaries have been identified in the literature. Among these are job evaluation (adjudged the most valuable way of fixing wages), government order (especially with regard to minimum wage), ability to pay (on the part of the employers), cost of living, collective bargaining and the effort of labour unions (which is dependent on the negotiation skills of the parties, the personality and the societal culture of the negotiators and the ideology and culture of the organization); the labour market situation (the interaction of supply and demand of labour in a relatively competitive labour market; the going rate (wages and salaries paid for comparable work by other institutions in the labour work or in the area or industry); and productivity (which has to do with measures of output per person). Modern sector wages and salaries are determined and regulated by administrative decisions of government, Wage Commissions, and Prices and Income Policies. Also, the traditional (mainly rural and informal) intermediate sector wages are influenced to a great extent by market forces and to a lesser extent by wage levels in government establishments. In 1977, the Federal Government had to establish a Productivity, Income and Wages Analysis Agency (to collect and analyze statistics on wages, income and price changes in both the public and private sectors) as a permanent institution to substitute for the institutionalized culture of ad hoc wage commissions to resolve wage and salary problems.

Nevertheless, wage review commissions/ committees still continue to feature in government wage determination process. The ILO Recommendation No. 135 identifies certain criteria, or factors, to be taken into account in determining the level of minimum wages. The criteria include: the needs of workers and their families; the general level of wages in the country; the cost of living and changes therein; social security benefits; the relative living standards of other social groups; and economic factors, including the requirements of economic development, levels of productivity and the level of employment. This criterion also includes the capacity to pay. The basic needs of workers and their families has to with measuring poverty levels and the basic needs of households (especially of wage earner households) using data on average expenditure by low income households on various household goods and services. The statistics can be compiled from household income and expenditure surveys. However in Nigeria, the recommended data is mostly not available.

Next is the general level of wages in the country. The idea of comparable wages and incomes is an important, and sometimes the dominant, consideration in decision-making. Existing

pattern of wages and incomes must be established before judgments can be made on the appropriate level of the minimum wage, taking into account other criteria such as ability to pay and the needs of workers. The pay of the Nigerian worker is one of the lowest in the world and it does not improve even in spite of changing market conditions. Workers in the public sector are particularly worse off. After a minimum wage has been fixed, it needs to be adjusted periodically.

Effects of Changes in Commodity Prices

A comparison of the results with those from the bivariate VARs points to two characteristics of the additional variables. One is that the variables contain added information about inflation that is not contained in either the commodity price indexes or lagged inflation. This is indicated by the higher overall explanatory power of the estimated CPI equations and the smaller forecast errors. The variables contributing the added information, however, differ between the two periods. Separate estimates of CPI equations with lagged values of CPI, a commodity price index, and one of the other variables indicate that NUR, FX, OIL, and FF each add something to the higher overall explanatory power and smaller forecast errors in the multivariate VARs in the first period. In the second period, however, the oil price is the main source of added explanatory power.

The second characteristic is that the added variables contain information about inflation that was attributed to the commodity price indexes in the bivariate VARs. That is, their inclusion reduces the amount of independent information associated with the commodity prices. This is primarily true for the 2014 to 2024 period. For that subperiod, the marginal levels of significance of the coefficients on the commodity terms are raised appreciably compared to the bivariate cases.

The variance decomposition shares for the commodity indexes in the CPI equation show less of a relative role for commodity price indexes, with the bigger change evident for the first sub-period. The other major differences in the variance decomposition shares are in the roles of the oil price and the CPI. Consistent with the above mentioned differences in the added information content of the variables in the two periods, the table shows that changes in the price of oil account for a small share of the forecast error in CPI inflation in the first period and a larger share in the second period. The variance decompositions also show that a higher share of the forecast error for CPI is attributed to itself in the second period. These results suggest that sources of short-run variation in inflation were different for the three periods.

Wage Bargaining Theory

According to the bargaining theory of wages, the relative bargaining power of the parties to the agreement determines pay, working conditions, and hours. When Smith pointed out that employers had mor e negotiating power than workers, he alluded to this argument. Employers could endure the loss of revenue for a longer duration than could workers, and they were also in a stronger position to coordinate their resistance to employee demands. John Davidson, in The Bargain Theory of salaries (1898), extended this concept to a large degree by arguing that salaries are determined by a very complex process with several factors interacting to determine the parties' relative bargaining power.

Empirical Literature

The employee has the right to ask for wage increase as a statutory right which should be applied in line within the salaries and wages commission Act. Widening discussion on this topic is the work of Anzuini, LombardI, & Pagano, (2021) on monetary policy shock impact on commodity prices. Focus of the study was on the relationship between monetary policy

and commodity prices. the standard VAR was adopted for the data analysis. it was discovered that expansionary monetary policy shocks drive up the broad commodity price index and all of its components. It was further found that the variables. Impact of the Changes of Commodity Price Level in the World Commodity Exchanges on Variation of General Price Level was investigated by Miečinskienė, Lapinskaitė, (2014). The study focused on influence on changes of commodity price level. Ordinary Least Regression (OLS) was adopted for the data analysis. The result found that the determinate regression function could be practically used to forecast the dependence of inflation rate on the particular factors.

Ali, Ahmet, Akpolat, & Ismail, (2019) investigated the empirical evidence from countries with different income groups commodity prices and economic growth. The study focus was on the effect of global beverage prices. The study adopted panel system GMM method. The study discovered that for all income group countries, the impact of energy and fertilizer prices on GDP per capita is negative, while the impact of food and metal and mineral prices is positive on GDP per capita. It was further found that rising prices of agricultural raw materials reduces GDP per capita of all income group countries except lower-middle income countries. Again, it was discovered that beverage prices increased the GDP per capita only of high-income countries, while rising precious metal prices decreased the GDP per capita of lower-middle and high-income countries.

International commodity prices and inflation dynamics in Sierra Leone was investigated by Danladi, (2020). The study focused on international commodity price changes. Ordinary Least Regression (OLS) method was adopted for the analysis. it was found that in the international market, the price of cocoa, oil and rice prices as significant determinants of domestic consumer prices both in the long-run and the short-run. Domestic consumer prices are shown to respond negatively to rising cocoa prices, one of the country's major export commodities. Frankel, (2006) studies the effect of monetary policy on real commodity prices. Focus of the study was on connections between monetary policy, and agricultural and mineral commodities. The study adopted content analysis of other studies and discovered that monetary policy has effect on changes in commodity prices.

The relationship between commodity prices and inflation was investigated by Furlong, & Ingenito, (2021). Focus was on the performance of non-oil commodity prices under inflationary pressure. Ordinary Least Square Regression (OLS) method was adopted for data analysis. it was discovered that the empirical link between commodity prices and inflation has changed dramatically over time. Commodity prices were relatively strong and statistically robust leading indicators of overall inflation during the 1970s and early 1980s, but they have been poor stand-alone indicators of inflation since the early 1980s.

Manassehi, et al (2016) investigated volatility and commodity price dynamics in Nigeria. Focus of the study was on commodity price dynamics in Nigeria. The study adopted multiple regression using generalized autoregressive conditional heteroschedasticity (GARCH) and exponential GARCH with granger causality test. Result revealed that inflation and exchange rate is shown to be significantly related to spot price volatility which accounts for its volatility. Zhang, et al, (2022) conducted a review and biblio-metric analysis of the Trend of commodity prices. Focus of the study was on prices of commodities in the trading market, people's security and well-being. Biblio-metrics method was adopted for data analysis. It was discovered that the trend concentrated on four aspects: factors influencing commodity prices, the impact of price fluctuations on the macro-economy, forecasts of commodity prices. Abdullahi, et al, (2023) investigated commodity price shock and economic performance in Nigeria. The study focused on fiscal framework for economic growth, despite efforts to save the economy. the study adopted Multivariate Generalized Autoregressive Conditional

Heteroscedasticity (MGARCH) for the analysis. It was discovered that there was a positive volatility shock effect on each variable caused by its past innovations while parameters of the independent variables indicated innovations of shock effects on economic performance.

Materials Method

Research Approach

The study adopted the survey method to investigate what constitutes the value of the new salary in the face of the new minimum wage was investigated using a survey design. The objectives were captured using frequency tables, percentages and bar charts. The hypotheses were analyzed by means of E-views tool to evaluate the model in analyze the effects of monetary policy shocks.

3.0 Analysis and Discussions

The agitation for new minimum wage has remained consistent since 1999 to 2000 when it was delayed for about ten years till 2011 before a new minimum wage was implemented in Nigeria as shown in table two below.

Table 2. **National Minimum Wage from 1999 to 2024**

S/N	YEAR	NASS BUDGET	MINIMUM WAGE
1.	1999	N2.2bn	N3,000
2.	2000	N29.5bn	N7,500
3.	2011	N111bn	N18,000
4.	2018	N139.5bn	N18,000
5.	2019	N128bn	N30,000
6.	2020	N128bn	N30,000
7.	2021	N134bn	N30,000
8.	2022	N139bn	N30,000
9.	2023	N228.1bn	N30,000
10	2024	N344bn	N70,000

Source: National Statistics Bureau

Table 2 result revealed that the lowest minimum wage was in 1999 with N3, 000 as minimum wage. The following year was a successful upgrade of minimum wage to 7,500 in 2000. 2011, 2020 and 2024 had minimum wage review of N18, 000, N30, 000 and N70,000. The new minimum wage is to be reviewed every three (30) years. The observation is that N18,000 minimum wage lasted from 2019 to 2024 before the agitation for a review.

Table 3. Commodity Price changes between 2014 to 2024

S/N	Commodities	Prices				
		Under GEJ	Under Rtd. GMB	Price Diff.	Under Tunibu	Price Diff.
1.		**2014**	**2022**		**2024**	
2.	Half bag of garri	1,300	4,000	**2,700**	26,000	**24,700**
3.	Half bag of rice	3,750	22,000	**21,625**	42,000	**38,250**
4.	Basket of beans	400	2,800	**2,400**	8,000	**7,600**
5.	¼ carton of croaker fish	500	5,500	**5,000**	19,500	**19,000**
6.	¼ carton of frozen chicken	750	2,500	**1,750**	11,000	**10,250**
7.	Laser Vegetable oil (5 Litres)	1,000	4,000	**3,000**	15,000	**14.900**
8.	¼ basket of fresh tomatoes	750	2,000	**1,250**	13,750	**13,000**
9.	Close-up toothpaste (150	120	600	**480**	3,000	**2,880**
10.	Milo (750g sachet)	500	2,100	**1,600**	4,500	**4,000**
11.	Peak milk (800g sachet)	600	3,500	**2,900**	6,500	**5,900**
12.	Sugar (1 packet)	60	500	**440**	1,500	**1,440**
13.	Bread (4 loaves)	800	3,200	**2,400**	8,000	**7,200**
14.	Indomie (1 carton)	800	2,500	**1,700**	7,000	**6,200**
15.	Cooking gas (12.5 kg)	1,875	3,750	**1,875**	15,000	**13,125**
16.	Petrol for Gen (10 liters)	870	1,650	**780**	8,500	**7,630**
17.	Electricity bill (100 KWH)	375	6,800	**6,425**	22,500	**22,125**

Source: National Statistics Bureau

***NOTE:** These calculation was done without consideration to consequential adjustment*

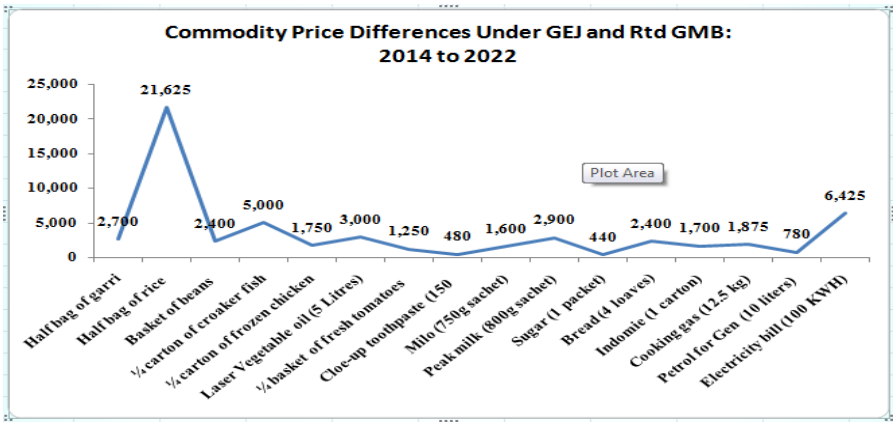


Fig. 1. Commodity Price changes between GEJ and Rtd. GMB (2014 and 2022)
Source: Desk Research, 2024

Analysis result in figure 1 revealed that there was a tremendous change in commodity prices. Between 2014 and 2022, half bag of garri which was originally N1, 300 increased to N4, 000 with commodity price difference of N2, 700. Half bag of rice, half bag of beans and quarter carton of frozen fish that were N3,750, N400 and N500 increased to N22,000, N2,800 and N5,500 reflecting price differences of N21,625, N2,400 and N1,700 respectively. Peak milk (800g sachet), sugar (1 packet) and bread (4loaves) that cost N600, N60 and N800 in 2024 increased to N3,500, N500 and N3,200 with commodity price difference of N1,600, N2,900 and N440 respectively. In 2014 the price of cooking gas (12.5kg) was N1,875, indomie (1 carton) N800, Petrol (10 litres), N870 and electricity bill (100 kwh) increased to N2,500, 3,750, N1,650 and N6,425 with commodity difference of N1,700, N1,875, N780 and N6,425 respectively.

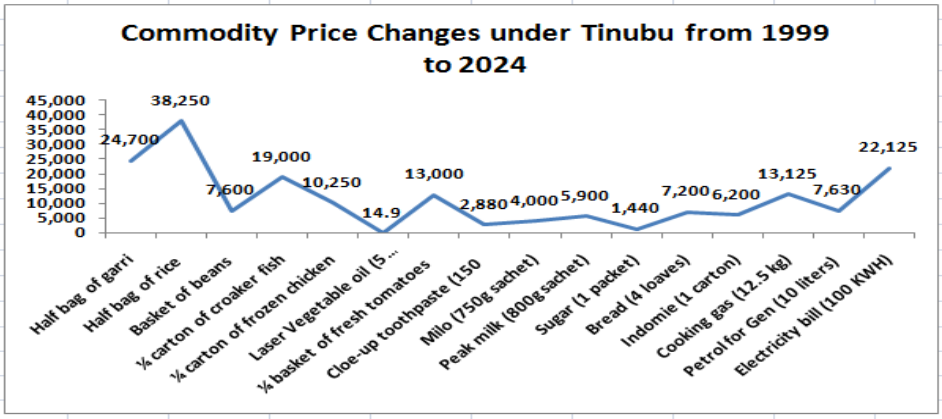


Fig. 2 Commodity Prices between GEJ and Bola Tunibu (2014 to 2024)
Source: Desk Research, 2024

From table 3 figure 1 analysis, it was observed that selected items were more of consumables (food items). The analysis revealed that between 2014 and 2024 which capture GEJ regime and Bola Tunibu, half bag of garri was N1, 300 increased to N26, 000, half bag of rice was 1,750 and rubber of beans was N400. These food items increased to N7,000, N15, 000 and N8,500 reflecting commodity price difference of N24,700, N38,250 and N7,600 respectively.

Quarter carton of croaker fish, was N500, quarter carton of frozen chicken N750, laser vegetable oil was N1,000, Quarter basket of fresh tomatoes N750 and close-up toothpaste (150 was N120. In 2024 they their prices were found to have increased to N19,500, N11,000, N15,000, reflecting commodity price difference of N19,000, N10, 250, and N14,900 respectively.

Further result found that the prices of Indomie (1 carton) in 2022 was N800, cooking gas (12.5kg) N1, 875, petrol (10 liters) N870 and electricity bill (100kwh) was N375. However, it was discovered that in 2024 prices of these products rose to N7,000, N15,000, N8,500 and N22,500 reflecting commodity price difference of N6,200, N13,125, N7,630 and N22,125 respectively.

Table 4. Change in Commodity Prices from 1014 to 2024.

		Under GEJ	Under Tunibu	Price Diff.
1.		**2014**	**2024**	
2.	Half bag of garri	1,300	26,000	**24,700**
3.	Half bag of rice	3,750	42,000	**38,250**
4.	Basket of beans	400	8,000	**7,600**
5.	¼ carton of croaker fish	500	19,500	**19,000**
6.	¼ carton of frozen chicken	750	11,000	**10,250**
7.	Laser Vegetable oil (5 Litres)	1,000	15,000	**14.900**
8.	¼ basket of fresh tomatoes	750	13,750	**13,000**
9.	Close-up toothpaste (150	120	3,000	**2,880**
10.	Milo (750g sachet)	500	4,500	**4,000**
11.	Peak milk (800g sachet)	600	6,500	**5,900**
12.	Sugar (1 packet)	60	1,500	**1,440**
13.	Bread (4 loaves)	800	8,000	**7,200**
14.	Indomie (1 carton)	800	7,000	**6,200**
15.	Cooking gas (12.5 kg)	1,875	15,000	**13,125**

Source: Desk Research, 2024

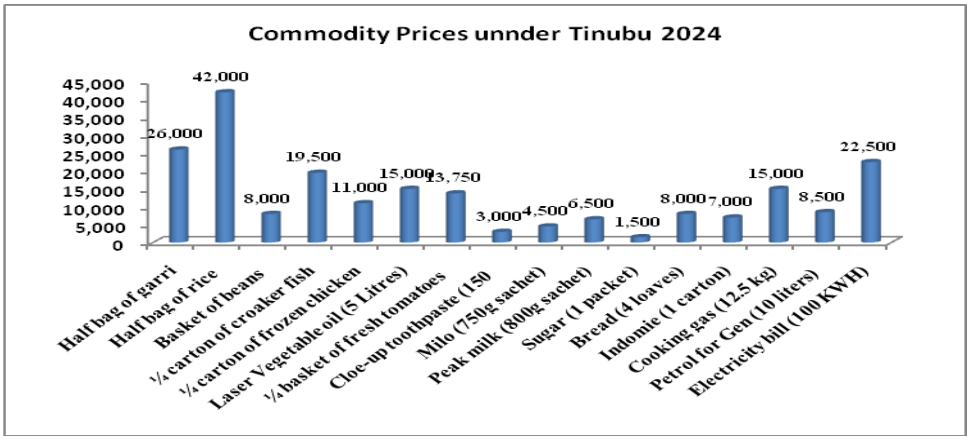


Fig. 3 Commodity Prices Under Tinubu 2024
Source: Desk Research, 2024

From figure 3, it was found that during Tinubu's regime, half bag of garri is being sold for N26, 000. Half bag of rice sold for N42, 000 while basket of beans and quarter carton of croaker fish were sold for N8, 000 and N19, 000 respectively. Quarter carton of frozen fish, laser vegetable oil and quarter basket of fresh tomatoes were sold for N11, 000, N15, 000 and N3, 000 respectively. Within the same period, close-up paste (150 gm), Milo sachet tea (750 gm) and Peak milk (800g sachet) were sold N4,500, N6,500 and N1,500 respectively. Furthermore, in the same period, sugar (packet), bread (4Loaves) and 1 carton of Indomie was been sold for N1,500, N7,000 and N15,000 respectively. Other items such as cooking (12kg), Petrol (N870 per litre) and electricity bill (100kwh) N22, 500 respectively.

Data and Model Details

Because we are interested in how independent or explanatory factors affect the dependent or experimental variable, the research uses an ex post facto design. The minimum wage, labor productivity, fuel price, and inflation rate are the independent variables, while the employment rate as measured by the minimum wage is the dependent variable. Apart from the above stated goals, the research aims to ascertain the relationship between independent factors and Nigeria's success in international commerce. E-view shall be adopted to test the hypotheses.

To gauge the quantitative effect of monetary policy shocks on commodity prices, we estimate a VAR for the United States, the largest oil-consuming economy in the world. Our data set consists of monthly variables from January 1970 to December 2008.3 Admittedly, this covers a very long time span during which policy shifts may have occurred, as documented also by Barsky and Kilian (2004).

For a robustness check, we also estimate the model on a restricted, post-Volcker sample starting in January 1980. Results, omitted to save on space, display no significant difference, however. The variables are the federal funds rate, the money stock (M2), the CPI, the industrial production index, and a commodity price index (in dollars). After identifying the monetary policy shock, we add, ordered as last, the commodity price sub-category for which we are interested in recovering the response.

We consider several commodities, one at a time, but to save on space we only report results for four commodity prices: a broad index, two sub-indices (metals and foodstuffs), and crude oil. Commodity prices are included in the reaction function of monetary policy to control for

imported inflation. While a generalized increase in commodity prices is likely to generate an increase in domestic inflation and prompt a reaction of the Federal Reserve, a change in the relative price of a commodity is less likely to have a significant domestic inflation effect, prompting a contemporaneous (within a month) reaction of the Federal Reserve. Dropping the price of the sub-components from the analysis would eliminate the possibility of disentangling the asymmetric impact of monetary policy on different commodity prices. We estimate a VAR system including the federal funds rate, industrial production, M2, CPI, and the commodity price index. All variables except the federal funds rate are in log-level and are stored in the vector *yt*.

Model Specifications

The model will take into account significant macroeconomic factors and indicators, like the rate of employment, minimum wage, labor productivity, fuel price, and inflation rate, among others. The equation for the multiple linear regression model;

EMR	= f (MIW + LAP + FP + INF) …..…… ……(3).1
Where:	
EMR	=Employment Rate
MIW	= Minimum Wage
LAP	= Labor Productivity
FP	= Fuel price
INF	= Inflation Rate
β_0	= Intercept
β1 , β 2 ,…..β 4	= Partial Slopes of the Linear Regression model
μ	= Stochastic error term

T-value, it is sometimes referred to as the t-statistic or the student test. Each explanatory variable in the model is evaluated for statistical significance using the t-statistic. At a certain degree of freedom, the test is often run at significance levels of 1%, 5%, and 10%. The null hypothesis is rejected when the estimated t-statistic is greater than the critical value, and vice versa when the critical value is greater than the estimated value.

F-value, Use the F-ratio, or f-statistic, to determine if the regressed model as a whole is statistically significant. It is used to assess the dependability of the regressed model's R^2 and Adj. R^2 for forecasting and prediction. Typically, the test is conducted at a certain degree of freedom (V1 and V^2) at significance levels of 1%, 5%, and 10%. The null hypothesis is rejected when the estimated F-statistic is greater than the critical value of the F-statistic, and vice versa when the critical value of the F-statistic is greater than the estimated value.

Using the findings of Durbin-Watson: The independence of the model's error components is a basic assumption that permits the use of the OLS estimation approach. When assessing the existence and importance of autocorrelation in a regression model, one might use the D-W statistic. Its range of values is 0 to 4.0 and 0 to 1.A value of 4 is considered to have positive autocorrelation, a value between 2.5 and 4.0 indicates negative autocorrelation, and a value of 2.0 indicates no autocorrelation.

Data Presentation

The research looks at how Nigeria's minimum wage affects the country's employment rate. It used secondary yearly time series data spanning thirty years. Data from the investigation are included in this section (See Appendix). The specifics have to do with the research's factors. Contributing factors include the fuel price (FP), labor productivity (LAP), minimum wage

(MIW), employment rate (EMR), and inflation rates (INF). The basis for our study and test is provided by the data.

Descriptive Statistics

The research looks at how Nigeria's minimum wage affects the country's employment rate. It used secondary yearly time series data spanning thirty years. Data from the investigation are included in this section. The specifics have to do with the research's factors. Contributing factors include the fuel price (FP), labor productivity (LAP), minimum wage (MIW), employment rate (EMR), and inflation rates (INF). The basis for our study and test is provided by the data.

Table 5. Descriptive Statistics

	EMR	MIW	FP	LAP	INF
Mean	46.03062	16.02300	0.230556	37466821	17.34321
Median	46.87300	15.71181	0.31400	37120017	11.60610
Maximum	47.17200	10.62154	0.510000	57521553	61.72440
Minimum	42.11400	13.8575	0.010302	21728182	4.277007
Std. Dev.	1.531452	1.787143	0.201815	10212171	15.65586
Skewness	-1.117700	0.225263	-0.142372	0.133670	3.074146
Kurtosis	1.421613	1.502715	1.416314	2.047031	3.172840
Jarque-Bera	6.530429	2.662255	2.706823	1.382917	34.50119
Probability	0.038189	0.264179	0.258357	0.500845	0.000000
Sum	1711.222	511.0199	10.22000	1.46E+09	553.6269
Sum Sq. Dev.	68.13617	103.2655	1.193176	3.08E+15	9172.006
Observations	30	30	30	30	30

Source: Authors' Computation from E-views 12.

This implies that the apriori expectation, suggesting a positive relationship between the dependent variable and the independent variables under study.

Table 5 shows descriptive statistics for variables like employment rate (EMR), minimum wage (MIW), labor productivity (LAP), fuel price (FP), and inflation rates (INF), including mean, standard error, median, standard deviation, variance, kurtosis, skewness, range, minimum value, maximum value, sum, and sum square deviation. It is shown that there are thirty observations for every variable being studied. GDP has the highest mean value, and its subsequent values are MSS, GEXP, TRAD, and EXR. With the exception of INF, which is leptokurtic, the table also showed that all variables are platykurtic since their kurtosis values are smaller than three. The variables pass the normality test according to the Jarque-

Unit root test result

Table 6 provides the results of the unit root tests for the variables that were looked at in this research utilizing the Phillip Perron and Augmented Dickey Fuller approaches. In order to choose the suitable analytic approach and prevent a misleading or erroneous regression result, the unit root test basically looks at the stationarity qualities of the variables of interest. It seems from the table that the stationary features of the variables display a combination of I(1) and I(2), supporting the use of OLS for this study's estimate.

Table 6 Unit root test (ADF-TEST)

Variables	ADF-Statistic	Critical value 5%	Order of integration	Interpretation
EMR	-4.030853	-2.865252	I(1)	Stationary at 1st difference
MIW	-4.234554	-3.533852	I(2)	Stationary at 2nd difference
LAP	-3.158246	-3.020575	I(2)	Stationary at 2nd difference
FP	-4.232556	-2.861742	I(1)	Stationary at 1st difference
INF	-4.241020	-2.865152	I(1)	Stationary at 1st difference

Source: Authors' Computation from E-views 12

4.1.3 Trend Analysis

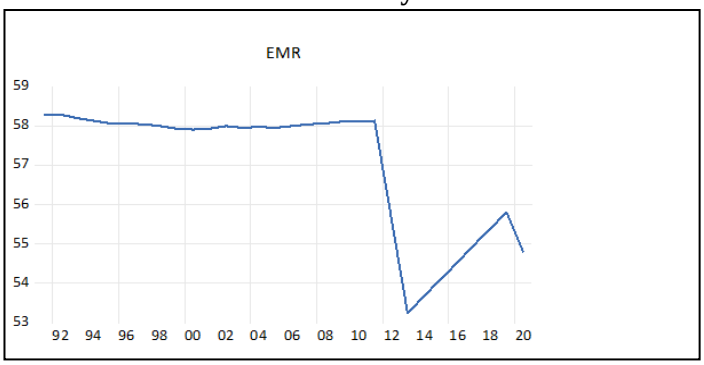
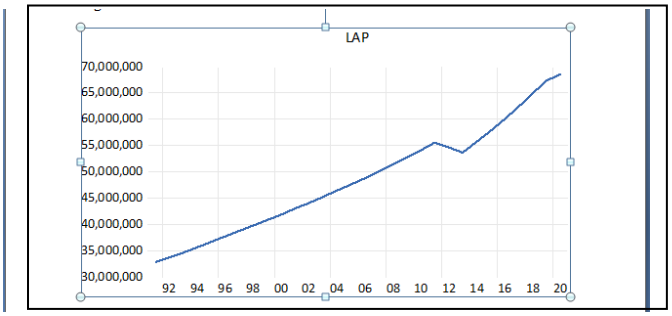


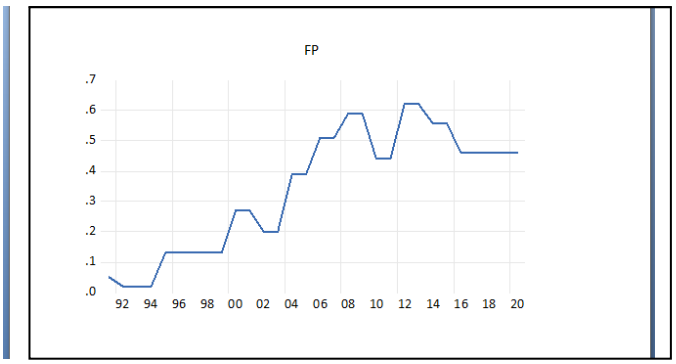
Figure 4 Employment Rate

4,3 Inflation Rate

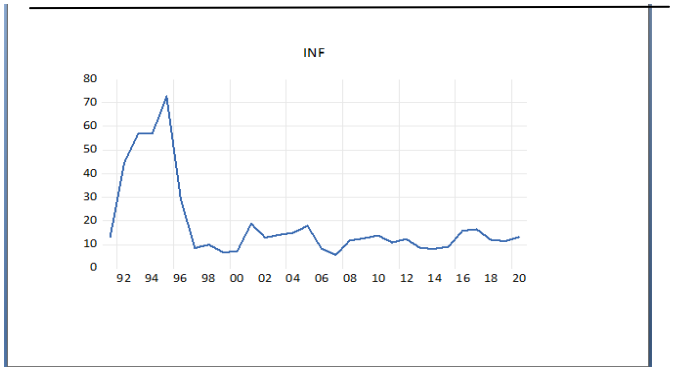
INF



Labour Productivity



Fuel Price



4.4 Labour Productivity

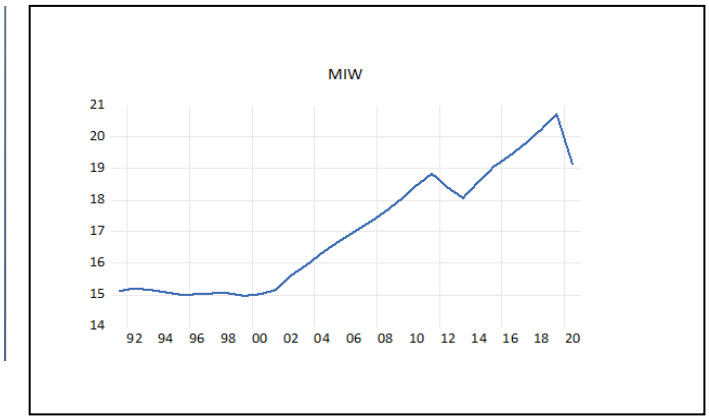


Figure 4.5 Minimum wage

Trend Analysis

Diagram Figure 4. 1 shows how to examine a variable trend. According to trend analysis, employment rates were consistent between 1991 and 2011. After that, there was a decline from late 2011 to 2013, followed by an uptick starting in 2014. This indicates that, despite minimum wage hikes, the employment rate is not at a stable level and has declined significantly over time. As a result, Nigeria's employment rate has been rapidly declining since the 2011 Great Fall and is now hardly increasing. This implies that the employment rate is still growing slowly even with increases in labor productivity and minimum pay. Of all the variables, the Fuel Price (FP) variable exhibits one of the strongest rising trends. as a result of the nation's over dependence on crude oil and its large fuel imports. The lack of refineries in the nation may be the cause of this. According to the trend analysis, gasoline prices in Nigeria have been rising steadily since 1994. The high rate of fuel price persistence is evident in the trend analysis, even if there has been minimal decrease in price. Low employment rates and growing transportation costs may be to blame for this.

One of the most crucial points that has to be made is that the trend analysis revealed that the inflation rate is fairly erratic. From 1998 until 2020, there was an uninterrupted flow. However, from 1991 to 2020, there was a clear rising trend in labor productivity; trend analysis indicates that labor productivity will continue to rise at a steady and continuous pace. In conclusion, the Minimum pay (MIW) exhibited a consistent upward trend from 1991 to 2000, followed by a continuous upward trend from that point until 2020. However, even with this rise in the minimum pay, the employment rate continues to decline throughout the years and for the duration of this research.

Information Analysis

Since the variables passed the unit root test of stationary at the level and initial differences, each variable in the model specifications is integrated of order 1(0). At the 5% probability level, the ADF test statistics' absolute value is higher than the critical value's absolute value. To further verify the stationarity, we can now do the

Data Requirement, Sources, and Measurement

Primary and secondary sources are the two fundamental sources from which data for a research project may be obtained. However, we utilized secondary data for our study. The World Development Indicators (WDI) and publications from the National Bureau of Statistics (NBS) served as the foundation for the secondary statistics.

The data used in this research were gathered from secondary sources. Since secondary data is seen to be the most appropriate method for obtaining the necessary information and to take the least amount of time, it was selected for this investigation. However, since it offers certain additional advantages over other methods, this has been selected as the primary methodology of data gathering for this research among other data collection instruments. For instance, it is economical and time-saving.

The Ordinary Least Squares (OLS) estimation methodology is the method used to estimate the parameters of the given model. The OLS was chosen as the estimation method because of the favorable characteristics of its estimate, also known as the blue features. These attributes guarantee sound deduction of conclusions and appropriate formulation of recommendations. The OLS was chosen because it is among the finest estimating techniques for linear economic models.

Econometric Views (E-views) was utilized to get the OLS estimate for the model that was provided. Diagnostic and summary statistics including the t-statistic, modified R^2, F-statistic, Durbin-Watson (d) statistic, and coefficient of multiple determination (R^2) are used to assess the computed model. This data collection allows us to evaluate the estimated model's resilience and dependability.

Commonly Used Statistics

This is dependent upon the model's parameter estimations' level of statistical confidence. The following standards for statistics were applied:

To put it statistically: This test aids in verifying the precision, coherence, and reasoning behind the data collection process. They include words like skewness, mean, SD, and so on.

The link between two variables may be shown via correlation. The methods of Pearson's correlation will be used in this investigation. Its values vary from -1 to +1, where 0 to 0.49 indicates a poor link and 0.5 to 0.99 indicates a significant correlation. For Value 1, it is said that connection creation is flawless.

Coefficient of Multiple Determination (R^2): The coefficient of determination is the square of the Pearson's correlation. It calculates the percentage of the dependent variable's total variance that the independent variable or regression model can account for. It assesses how well the regressed model fits the data. Its values fall between 0 and 0.4, with values between 0.5 and 0.99 considered to have exceptional goodness of fit and values between 0 and 1.0

considered to have poor goodness of fit. The quality of fit is said to be fully satisfied when the value is 1.

Modified Coefficient of Determination (Adj. R^2): This statistic assesses the regressed model's goodness of fit while accounting for the model's degree of freedom, or the ratio of parameters to sample size. It is a more useful statistic for evaluating the multiple regression model's fit than the R^2 measure.

T-value, It is sometimes referred to as the t-statistic or the student test. Each explanatory variable in the model is evaluated for statistical significance using the t-statistic. At a certain degree of freedom, the test is often run at significance levels of 1%, 5%, and 10%. The null hypothesis is rejected when the estimated t-statistic is greater than the critical value, and vice versa when the critical value is greater than the estimated value.

F-value, Use the F-ratio, or f-statistic, to determine if the regressed model as a whole is statistically significant. It is used to assess the dependability of the regressed model's R^2 and Adj. R^2 for forecasting and prediction. Typically, the test is conducted at a certain degree of freedom (V_1 and V_2) at significance levels of 1%, 5%, and 10%. The null hypothesis is rejected when the estimated F-statistic is greater than the critical value of the F-statistic, and vice versa when the critical value of the F-statistic is greater than the estimated value.

Using the findings of Durbin-Watson, the independence of the model's error components is a basic assumption that permits the use of the OLS estimation approach. When assessing the existence and importance of autocorrelation in a regression model, one might use the D-W statistic. Its range of values is 0 to 4.0 and 0 to 1.A value of 4 is considered to have positive autocorrelation, a value between 2.5 and 4.0 indicates negative autocorrelation, and a value of 2.0 indicates no autocorrelation.

Federal Government's Revised New Salary for levels 01 to 17
Based on New Minimum Wage Consequential Adjustment 2024

The federal government released a template on the new salary scale for civil servants following the new minimum wage of N70, 000 revealed that civil servants from grade levels 10 to 17 are to receive the following as monthly salary:

Table 7. New Salary based on New Minimum Wage

S/N	Grade Level	New Salary	S/N	Grade Level	New Salary
1	01	N70,000 – N80,000	9	09	N260,000 – N300,000
2	02	N80,000 – N95,000	10	10	N300,000 – N350,000
3	03	N95,000 – N115,000	11	11	N350,000 – N410,000
4	04	N115,000 – N135,000	12	12	N410,000 – N480,000
5	05	N135,000 – N160,000	13	13	N480,000 – N560,000
6	06	N160,000 – N190,000	14	14	N560,000 – N650,000
7	07	N190,000 – N220,000	15	15	N650,000 – N750,000
8	08	N220,000 – N260,000	16	16	N750,000 – N850,000
			17	17	N850, 000 – N1,000,000

Source: Federal Budget Office, 2024

From figures in the table, it was observed that level 01 had the basic minimum wage. Subsequently, forty thousand (N40, 000) naira was added to every level's existing thirty thousand (N30, 000) old minimum wage to make up the seventy thousand (N70, 000) naira level thirteen (level 13) the salary increased by N100, 000 while levels 01 to 12 salary was increasing by N40, 000.

Therefore it is (old N30, 000 minimum wage plus N40, 000 = N70, 000 minimum wage). This revealed that those within the lower grade level are not better off compared to those on a

higher grade. This was continues up till level 17 which had about nine hundred and ninety-nine thousand one hundred and fifty naira only (N999, 150).

Repositioning Nigeria External Trade

Much of Nigeria's merchandise export structure has not changed since the late 1960s. exports have remained at primary level. Much of Nigeria merchandise export structure has not changes since 2014s. Export have centered on the production of primary products which make up our annual export about 98 percent while less than 1 per cent of Nigeria's commodity exported commodities are locally manufactured. In the past few decades, petroleum alone accounted for 91 percent exported goods from Nigeria.

However, volatilities that characterize Nigeria commodity market dominant role coppled with inadequate management of oil revenue during the period of wind fall that pushed other productive sectors such as agriculture and manufacturing sectors behind thereby exposing Nigeria to the volatilities in the crude oil market. The only remediating factor is for Nigeria to consistently invest to improve on all her manufacturing economic activities to foster productivity and exports. This will improve on the open economy with rest of the world and also increase her foreign exchange earnings.

Conclusion

The influence of unemployment on economic growth in Nigeria from 2000 to 2019 has been determined by this research. Humans are the most precious resource in both developed and developing nations. Therefore, it becomes essential that these assets be utilized and managed appropriately in order to accomplish progress. Making sure that sufficient money is invested in human capital is one method to achieve this. The aggregate abilities, know-how, and intangible resources of people that may be used to generate economic value are referred to as human capital. According to the study, addressing unemployment is necessary to promote economic development.

Recommendations

If commodity prices are to be controlled with the aim of stabilizing the economy, the following suggestions should be adopted by the government.

There is the need for government to development of rural infrastructure, reduction of transaction costs and unnecessary regulation of national agricultural markets, efforts to strengthen individual and collective land ownership and use rights and institutions, particularly in rural areas.

1. There should be gradual creation of transparent and liberalized national and regional agricultural markets.
2. There is also the need for active support for the agricultural sector and its actors research and advice, farmers' organizations, rural financial systems and agricultural credits, contract farming, standards, and norms.
3. There should be deliberate efforts on the part of authorities for the improvement and expansion of production base of the country's export commodities such as cocoa and rice, which the country has comparative advantage, to reduce the pressure on the local currency and the prevalent upward trend of consumer prices.

4. A diversified energy source and an active production sector can reduce the overdependence on oil and, ultimately, the direct pass-through of commodity price fluctuations to consumer prices in the economy.
5. The need to forge closer links between or to merge production, resource-protection, and governance-oriented programs in rural areas.
6. There should be liberalization of the international trade in agricultural goods, including sufficient but rule-bound flexibilities for developing countries that are designed to provide targeted protection for their markets;

References

Anita Babalola (2019). An empirical analysis of how Nigeria's increased national minimum wage affected the country's inflation and unemployment rates. *Economics Amity Journal*, 4(1), 17–34.

Abdullahi, N. Y, Duru, M. C, Umar, A & MaikudI, L. Y. (2023). Commodity price shock and economic performance: An empirical evidence for Nigeria. *Lapai Journal of Economics; 7(2), 49 - 61*

Ali S., Ahmet G., Akpolat, O. & Ismail, B.(2019). Commodity prices and economic growth: Empirical evidence from countries with different income groups *Faculty of Applied Sciences, Department of Finance and Banking, Turkey*

Anzuini, A., LombardI, M. J. & Patrizio Pagano, P. (2021). The impact of monetary policy shocks on commodity prices. *International Journal of Central Banking. 5(3), 89 – 103.*

Ali S., Ahmet G.,¨Akpolat, O. & Ismail, B.(2019). Commodity prices and economic growth: Empirical evidence from countries with different income groups *Faculty of Applied Sciences, Department of Finance and Banking, Turkey*

Barsky, R. B., & Kilian. L. (2002). "Do we really know that oil caused the great stagflation? A monetary alternative." In NBER Macroeconomics Annual 2001, ed. B. S. Bernanke and K. Rogoff, 137–98. Cambridge, MA: MIT Press.

Böwer, U., Geis A. & Winkler. A. (2007). Commodity price fluctuations and their impact on monetary and fiscal policies in Western and Central Africa, European Central Bank Occasional Paper No. 60.

Baffes, J., Koh, W.C & P. Nagle, (2021), The Evolution of Commodity Markets over the Past Century, *Commodity Markets: Evolution, Challenges, and Policies*, 2022.

Danladi, D. J. (2020). International commodity prices and inflation dynamics in Sierra Leone. African Economic Research Consortium, Nairobi. Bringing Rigour and Evidence to Economic Policy Making in Africa. AERC Research Paper 382

Furlong, F & Ingenito, R. (2021). Commodity prices and inflation. Retreived from; http://www.nber.org/papers/w

Fapohunda, T. M., Olusegun, A. S. & Olanrewaju, L. I. (2015). Minimum wage implementation and management in a post-recession economy: the Nigerian experience. *Euroan Scientific Journal April edition 8(7),18 – 35.*

Furlong, F & Ingenito, R. (2021). Commodity prices and inflation. Retrieved from; http://www.nber.org/papers/w

Frankel, J. A. (2006). The effect of monetary policy on real commodity prices. NBER working paper series 12713. Retrieved from: http://www.nber.org/papers/w12713.

Fapohunda, Atiku, S., T., and Olanrewaji, L. (2012).Nigeria's experience implementing and managing minimum wages in a post-recession economy. Journal of European Science, 8(7), 18–35.

Frankel, J. A. & Rose. A. K. (2010). "Determinants of agricultural and mineral commodity prices." In *Inflation in an Era of Relative Price Shocks,* eds. R. Fry, C. Jones, and C. Kent. Reserve Bank of Australia.

IMF. (2008). "Food and fuel prices: Recent developments, macroeconomics impact, and policy responses". Fiscal Affairs, Policy Development and Review, June 30. Washington DC International Monetary Fund.

Miečinskienė, A., Lapinskaitė, I. (2014), The Research on the Impact of the Changes of Commodity Price Level in the World Commodity Exchanges on Variation of General Price Level, *Economics and Sociology*, Vol. 7, No 4, pp. 71-88. DOI: 10.14254/2071-789X.2014/7-4/5

Joya, O. (2015). Growth and volatility in resource-rich countries: does diversification help? Struct. Change Econ. Dynam. 3(5), 38–55. [32] World Bank, *Global Economic Prospects: the Turning of the Tide*? June, World Bank, Washington, DC, 2018.

Lederman, D & Porto, G. (1919). The price is not always right: on the impacts of commodity prices on households (and countries), The World Bank Research Observer 31 (1), 168–197.

Stephan, S. (2009). Trading practices and price dynamics in commodity markets and the stabilizing effects of a transaction tax. Retrieved from: http://www.wifo.ac.at/publikationen?detail-view=yes&publikation_ id=34919.

Svensson, L. E. O. (2005). "Oil Prices and ECB Monetary Policy."Retrieved from Available at http://people.su.se/˜leosven/papers/ep501.pdf.

Ukraine war and rising commodity prices: implications for developing countries, Global Food Security. 36 (2023) 100680. [35] S. Mohtadi, D. Castells