

# The Roles of the Informal Sector on Economic Growth in Nigeria

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## Abstract

This paper investigated the role of the informal sector in economic growth in Nigeria for a sample period of 42 financial years ranging from 1981 to 2022. The paper employed the real gross domestic product growth rate, which is a proxy for economic growth, as the explained variable, with agriculture, forestry, and fishing value added percentages of GDP, manufacturing value added percentages of GDP, and gross fixed capital formation percentages of GDP as the explanatory variables to capture the relationships. Also, the autoregressive distributed lag (ARDL) bounds testing procedure was engaged, having confirmed that the variables under consideration were integrated of orders 1(0) and 1(1). The findings revealed the following: agriculture, forestry, and fishing value added percentages of GDP relate to RGDP positively and insignificantly at the 5% level in the short run; manufacturing value added percentages of GDP relate to RGDP negatively and significantly at the 5% level in the short run; and gross fixed capital formation percentages of GDP relate to RGDP negatively and significantly at the 5% level in the short run. On the basis of the outcome, the paper therefore suggested, among others, that there should be an improvement in the share of agriculture, forestry, and fishing value added, manufacturing value added, and gross fixed capital formation percentage of GDP for both formal and informal sectors of the economy through the enhancement of their budget allocations.

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### **Background to the Study**

It is extremely laudable and commonly acknowledged that the informal sector's activities support livelihoods, contribute to consumption and production, and hence foster economic growth in Nigeria. However, there is no universally accepted definition of the informal sector, which makes it difficult to identify and measure for accurate assessment. The informal sector refers to a segment of the economy characterized by economic activities, businesses, and sources of income that operate outside the formal regulatory framework of the government. These activities often lack legal recognition, may not adhere to formal labor and tax regulations, and are not subject to the same level of oversight and protection as formal businesses. This includes businesses that are not officially registered and do not keep a complete set of accounts as well as employees who work in jobs without the most basic forms of social or legal protection and employment benefits. Examples of informal employment workers include street traders, subsistence farmers, small scale manufacturers, service providers (e.g., hairdressers, private taxi drivers, and carpenters), etc. The concept of informal sector was introduced by Keith Hart (A German Anthropologist) in 1973. He described a part of the urban labour force which works outside the formal labour market as informal sector. Since the concept came to limelight, Sindzingre (2004) argues that scholars have subjected the concept to highly heterogeneous phenomena, measurement methods and different definitional terminologies. Informal sector for instance was called irregular economy by Ferman et al (1973), the subterranean economy by Guttmann (1977), the underground economy by Simon (1982). These different terminologies show that no single definition of informal sector or economy could serve different fields. This concept since its inception becomes elusive because of different paradigms, disciplines, interests, and moments in history, that had mutated the meanings. According to the World Bank estimates, the informal sector of the economy accounts for 40 percent Gross National Product (GNP) of low-income countries.

Ekpo and Umoh (undated) on their part opined that activities of the informal sector can be categorized into three board categories. These are:

- i. The informal productive sub-sector: This encompasses all economic activities including the production of tangible goods. These include agriculture production, mining and quarrying (Excluding Petroleum), small-scale manufacturing, building and construction. Specifically, they manifest in food production. Woodwork, furniture making, garment making, welding and iron work etc.
- ii. Informal service sub-sector: This sub-sector includes repairs and maintenance, informal education services, health services, counseling services as well as labour or menial work. Repairs and maintenance services include tailoring, vehicle repairs and maintenance, tinkering, carpentry and servicing of various household and commercial tools. Informal health services, especially in the rural areas, include traditional birth attendants, herbalists and other traditional medical practitioners. There are also traditional spiritualists who offer counseling services. These services are rendered for fees paid to those who render them.
- iii. Informal financial sub-sector: The activities of this sub-sector are mostly unofficial, irregular, informal, shadowy and parallel. The most predominant type

of informal finance in Nigeria is the ESUSU. Among the Yoruba, it is called either ESUSU or Ajo. Among the Igbo, it is called Isusu or Utus. Some groups operate with written laws while others operate with unwritten laws but on oath of allegiance and mutual trust. Generally speaking, the roles of the informal sector to the development of the Nigerian economic growth cannot be over emphasized in terms of employment generation, capital savings and mobilization, efficiency, strong linkages with other sectors, utilization of local technology training ground for entrepreneurs and self-reliance. The question of whether the informal sector can absorb the large pool of labour force made redundant or economically insecure in the formal sector and provide basis for renewed economic growth have now become the central issues to be investigated.

Nigeria's economic woes are not due to a lack of abundant natural resources; rather, they are the result of underutilization of industrial capacity and reliance on imported input for the country's current manufacturing enterprises. The threat has been reduced by the introduction of numerous laws and programs by the government at various levels, but to no avail. However, the contribution of the informal sector to economic growth and development can assist in finding a solution to this issue in terms of employment generation. Nigeria's informal sector looks to have been continuously expanding in recent years as a result of most individuals choosing to establish independent sources of income in order to survive (Onyemaechi 2013). The informal sector may be able to give job creation the necessary boost given the ongoing economic and financial turmoil that characterizes Nigeria's economy. The informal sector performs a variety of functions in the expansion and development of the economy, according to Fapohunda (2012). Many people who desire or are required to work for themselves have access to productive outlets thanks to this, which boosts the output and employment of the national economy. This paper explores how the informal sector has contributed to Nigeria's economic growth against this background.

The following questions were answered in this study:

- a. What are the roles of Agriculture, Forestry and Fishing value added percentage of GDP on economic growth in Nigeria?
- b. What are the roles of Gross Fixed Capital Formation percentage of GDP on economic growth in Nigeria?
- c. What are the roles of Manufacturing Value Added percentage of GDP on economic growth in Nigeria?

The specific objectives are to:

- a. To examine the roles of Agriculture, Forestry and Fishing value added percentage of GDP on economic growth in Nigeria.
- b. To analyze the roles of Gross Fixed Capital Formation percentage of GDP on economic growth in Nigeria.
- c. To evaluate the roles of Manufacturing Value Added percentage of GDP on economic growth in Nigeria.

The following hypotheses were tested:

- H<sub>0</sub>: There is no significant impact of Agriculture, Forestry and Fishing value added percentage of GDP on RGDP in Nigeria.
- H<sub>0</sub>: There is no significant impact of Gross Fixed Capital Formation percentage of GDP on RGDP in Nigeria.
- H<sub>0</sub>: There is no significant impact of Manufacturing Value Added percentage of GDP on RGDP in Nigeria.

## **Literature Review**

### **Modernization Theory**

Based on the dominant modernization theory that characterized the study of informality in the 20th century, it is believed that the formal sector in contemporary society is extensive and growing, while the informal sector is diminishing.

### **Structuralism Theory**

The structuralism thesis, championed by Moser (1978) and Castells and Portes (1989), contends that the formal and informal economies are interconnected and rely on each other. Furthermore, scholars like Henry (1978) and Chen (2012) argue that the existence of the informal economy can be attributed to the presence of capitalism.

### **Legalist/Neo-liberal Theory**

According to this proposition, businesses intentionally opt to operate within the informal economy due to excessive government involvement or regulation in the market. This is because neoliberals perceive state intervention and social protection measures as hindrances to individual freedoms and the market's ability to efficiently allocate resources. Consequently, neoliberals advocate for the complete removal of all constraints on the free market system (Williams 2013: 264). A similar viewpoint, known as Legalist theory, posits that informality primarily arises from the presence of an antagonistic legal system, which compels self-employed individuals to function informally, governed by their own informal and extralegal standards (Chen, 2012: 8).

### **Empirical Literature**

Omedero (2019), conducted a research study examining the Financial and Economic Implications of the Underground Economy from a Nigerian perspective. The study assessed the impact of the shadow economy (informal sector) using both the transaction approach and the Multiple Indicators Multiple Causes (MIMIC) approach to determine its size as a percentage of GDP and the tax revenue losses suffered by the government from 1991 to 2018. By employing the Ordinary Least Squares (OLS) method, the study analyzed the effects of tax revenue earned and lost on Nigeria's GDP. The results of the regression analysis indicated that tax revenue earned positively influences economic growth, while the loss of tax revenue negatively affects GDP. The research concluded that underground economic activities have a detrimental impact on the government and hinder Nigeria's economic progress. As a suggestion, the study proposed formalizing and taxing legal activities within the informal sector while eradicating unlawful ones.

In another study, Farayibi (2015), investigated the potential of the informal sector in Nigeria for creating employment opportunities. Primary data were gathered through interviews and questionnaires from respondents in randomly selected areas in Ilorin metropolis, Kwara State, Nigeria. Descriptive analysis was used to analyze the collected data, revealing that the informal sector in the country has the capacity to employ individuals across all education levels. It was identified as a significant tool for generating employment, income, and reducing poverty in Nigeria.

Awojobi et al. (2014) evaluated the role of the informal sector in Nigeria's economic development using the output and employment approach, utilizing data from the National Bureau of Statistics (NBS) survey of the informal sector. The study found that the informal economy in Nigeria is notably expanding and substantially contributed to the country's economic growth, as evidenced by the rebased GDP. Furthermore, the informal sector employed approximately 48 million Nigerians, offering income opportunities and reducing unemployment. The largest employers within the informal sector were the agriculture, wholesale, and manufacturing sectors. The study also highlighted that the informal sector is primarily dominated by women, lacks social security, and experiences low unionization. Challenges faced by the sector included limited access to loans, unsafe working conditions, and harassment by local government officials. The study suggested ways to address these challenges and improve the conditions of the informal sector in Nigeria.

Yusuf (2014), examined the role of the informal sector in employment generation and economic contribution in Nigeria. The study employed a quantitative approach, using pure descriptive statistics for analysis. It found that the informal sector not only plays a significant role in creating employment opportunities but also makes a substantial contribution to economic growth. The study highlighted the importance of implementing policies and measures to foster informal sector employment generation.

Onwe (2013), adopted an output and employment approach to investigate the impact of the informal sector on the development of the Nigerian economy. The methodology involved a survey of existing literature on the growth, characteristics, and economic significance of the informal sector. Empirical data from the Central Bank of Nigeria (CBN), Federal Office of Statistics (FOS), and Nigerian Institute of Social and Economic Research (NISER) survey of the Nigerian informal sector supported the analysis. The findings indicated that the informal sector is continuously expanding in developing countries and serves as a vital source of employment and income for the underprivileged. It was also noted that informal sector activities, previously considered marginal, now encompass profitable enterprises, particularly in manufacturing, characterized by low entry requirements, small-scale operations, skills acquired outside of formal education, and labor-intensive methods of production. The paper recommended that Nigeria's development policies should focus on the role of the informal sector, comprehensive data should be made available for in-depth analysis, and efforts should be directed towards integrating the informal sector into national income accounting. Moreover, financial and

technical support should be provided to specific informal sector activities such as retail trade, small-scale home-based manufacturing, and services.

Tshuma and Jari (2013), conducted a study titled "The Informal Sector as a Source of Household Income: The Case of Alice Town in the Eastern Cape Province of South Africa." The research highlighted that the small business (informal) sector could serve as a means to break the cycle of poverty and achieve faster economic growth and development, especially if these small businesses receive support. The study emphasized the importance of enhancing the productivity and competitiveness of informal traders, as it would lead to increased job opportunities, higher national output, and accelerated economic development.

In a study titled "Informal Sector and Employment Generation in Nigeria: An Error Correction Model," Fasanya and Onakoya (2012) investigated the impact of the informal sector on employment generation in Nigeria from 1970 to 2010, using annual time series data. The empirical analysis was based on the augmented Solow growth analytical framework. The findings revealed that informal sector activities play a significant role in absorbing a large portion of the labor force in Nigeria. The study also argued that the formation of human capital is positively linked to the unemployment rate, indicating a lack of sufficient government spending on education in the country.

Arosanyin, Olowosolu, and Oyeyemi (2011) conducted a study focusing on "Employment Generation and Earnings in the Informal Transport Sector in Nigeria." Utilizing logistic models and the Mincerian equation for their analysis, the researchers presented a case study. The study documented that the informal sector provides employment to 21.7% of the unemployed population and 72.3% of those who switch jobs. It suggested that employment and earnings in the informal sector could be improved through government regulation.

In a study titled "Informal Self-Employment and Poverty Alleviation: Empirical Evidence from Motorcycle Taxi Riders in Nigeria," Ogunrinola (2010) focused on two major cities in Nigeria using descriptive analysis and the OLS technique. The research concluded that the informal sector serves as a significant employer of young school leavers, with 86% of the participants earning above the minimum wage level. Furthermore, the study highlighted that some graduates from tertiary institutions engage in motorcycle riding due to a lack of desired formal sector employment opportunities.

### **Model Specification**

The model for this study can be implicitly stated as:

$$RGDP = f(AFFG, GFCF, MGDP) \dots \dots \dots 1$$

Where:

RGDP: Real Gross Domestic Product growth rate.

AFFG: Agriculture, Forestry and Fishing value added percentage of GDP.

GFCF: Gross Fixed Capital Formation percentage of GDP.

MGDP: Manufacturing Value Added percentage of GDP.

Meanwhile, Stating the model in its explicit form, the equation can be expressed as:

$$RGDP_t = \beta_0 + \beta_1AFFG_t + \beta_2GFCF_t + \beta_3MGDP_t + \mu_t \dots\dots\dots 2$$

Where:

$\beta_0$ : Constant or intercept of the regression line.

$\beta_1, \beta_2, \beta_3$  are the parameters.

$t$  refers to time measured in years.

$\mu_t$  is the error term or disturbance term containing unobserved factors

### Model Specification

The model justification for the choice of these variables on the role of the informal sector in economic growth in Nigeria can be summarized as follows: Real Gross Domestic Product (GDP) Growth Rate: The real GDP growth rate is a crucial indicator of overall economic performance. It helps assess the rate at which the economy is expanding or contracting over a specific period. By including this variable, the study aims to understand how the informal sector contributes to the overall economic growth of Nigeria. Agriculture, forestry, and fishing Value Added Percentage of GDP: Nigeria's economy heavily relies on agriculture, forestry, and fishing activities. By considering this variable, the study seeks to examine the impact of the informal sector on the value-added contribution of these sectors to the country's GDP. Gross Fixed Capital Formation Percentage of GDP: Gross fixed capital formation represents the investment in physical assets, such as machinery, equipment, and infrastructure, which are crucial for economic development. Including this variable allows for an analysis of how the informal sector influences investment patterns in the Nigerian economy. Manufacturing Value Added Percentage of GDP: Manufacturing is a significant sector that drives industrialization and job creation. By incorporating this variable, the study aims to understand how the informal sector affects the value-added contribution of manufacturing to Nigeria's GDP. In summary, these chosen variables help provide insights into how the informal sector impacts various aspects of economic growth in Nigeria, including overall GDP growth, the performance of key sectors like agriculture and manufacturing, and the investment in critical physical assets.

### Sources of Data

The data for this study were from secondary sources. Specifically, annual time series data of the variables from 1981 to 2022 were obtained for the purpose of this study. Annual Statistical Bulletin of Central Bank of Nigeria (CBN) and World Development Indicators (WDI),

## Findings and Discussion

### Unit Root Test

**Table 1:** Summary of the Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	ADF Statistics	Test Critical Values (5%)	Order of Integration	Conclusion
RGDP	-3.020606	-2.941145	I(0)	Stationary
AFFG	-6.815162	-2.943427	I(1)	Stationary
GFCF	-3.739893	-2.938987	I(0)	Stationary
MGDP	-7.469425	-2.941145	I(1)	Stationary

**Source:** Authors's compilation (Eviews10)

The unit root test presented in Table 1 above shows that the variables RGDP (real gross domestic product growth rate) and GFCF (gross fixed capital formation percentage of GDP) were integrated of order zero (I (0)) and became stationary at level with no unit roots. On the other hand, the variables AFFG (agriculture, forestry, and fishing value added percentage of GDP) and MGDP (manufacturing value added percentage of GDP) were integrated of order one (I (1)) and became stationary at the first difference with no unit roots. It becomes appropriate to apply the bounds test.

The ARDL Bounds test approach to co-integration was conducted in order to determine the existence of long run relationship between the dependent and independent variables.

**Table 2:** ARDL Bounds Test Result when dependent variable is RGDP.

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	2.307875	3
Critical Value Bounds		
Significance	I(0) Bound	I(1) Bound
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

**Source:** Authors's compilation (Eviews10)

The ARDL Bounds Test result presented in Table 2 above shows that when the dependent variable is RGDP, the computed value of the F-statistic is 2.307875, which is lower than the I (0) Bounds at the 5% significant level, implying that there is no co-integration in the equation. Thus, we analyze the ARDL short-run model.



**Table 3:** Summary of Diagnostic Test Results and analysis

Test	Type	Statistic value		Probability value
Goodness of fit	R-Squared	0.399036		
	Adjusted R-Squared	0.326192		
Joint significance	F-statistics	5.477943		0.001702
CUSUMS	Recursive estimates	Lies within 5% significance level		
Normality	JB test	Jarque-Bera	0.432306	0.805612
Autocorrelation	Breusch-Godfrey LM Test	F-statistic	1.301653	0.2865
Heteroskedasticity	Breusch-Pagan-Godfrey Test	F-statistic	1.396320	0.2568
Multicollinearity	Variance Inflation Factors	Coefficient variance	Less than 10	No multicollinearity

**Source:** Authors's Compilation (Eviews10)

### Test of Hypotheses

#### Test for Hypothesis 1

$H_0$ : There is no significant impact of Agriculture, Forestry and Fishing value added percentage of GDP on RGDP in Nigeria.

**Decision:** Based on the outcome, agriculture, forestry, and fishing value-added percentages of GDP relate positively to gross domestic product in the short run and are statistically insignificant at the 5% level. This is because, unlike the formal economy, the informal sector's operations are not included in the country's gross domestic product (GDP). As a result, the GDP computation is a significant underestimate of the country's GDP when the massive informal economy is excluded.

#### Test for Hypothesis 2

$H_0$ : There is no significant impact of Gross Fixed Capital Formation percentage of GDP on RGDP in Nigeria.

**Decision:** From the result, the gross fixed capital formation percentage of GDP relates to gross domestic product negatively in the short run and is statistically significant at the 5% level. This is because the range of fixed assets included in statistical measurement is defined by the purpose for which they are used. Fixed assets are assets that are produced repeatedly or continuously in production processes for more than one year.

#### Test for Hypothesis 3

$H_0$ : There is no significant impact of Manufacturing Value Added percentage of GDP on RGDP in Nigeria.

**Decision:** From the result, the manufacturing value added percentage of GDP relates to gross domestic product negatively in the short run and is statistically significant at the 5% level. This is as a result of the nation's slow progress towards industrialization, with the manufacturing sector recording a dismal 9% average contribution to the gross domestic product (GDP) in three years, from 2019 to 2021.

### **Conclusion and Recommendation**

This article explores the impact of the informal sector on Nigeria's economic growth. The informal sector is a diverse and flexible industry operating across various sectors, offering affordable services to its customers. Many workers in this sector lack formal education but have acquired basic skills through on-the-job experience, without access to formal training facilities for further knowledge advancement. Despite this, these small businesses contribute over 50% of both formal and informal employment in agricultural and non-agricultural sectors, helping to address the issue of unemployment.

Based on the study's findings, it aligns with the observations and recommendations of many economists. The Nigerian government should stop undervaluing the informal sector and instead promote its formal recognition. By doing so, the economic dynamics may accelerate the overall growth rate of the economy. Several policy recommendations emerge from the study: (1) Increase the proportion of GDP from value-added industries like agriculture, forestry, and fishery, with a focus on increasing the budget allocation and purchasing of farm products. (2) Foster a collaborative environment between the government and the informal sector to encourage economic capital investment. (3) Address the constraints hindering the manufacturing sector's performance and its contribution to GDP. (4) Integrate the operations of the informal economy into the official economy, recognizing its significance and functions. (5) Implement policies to resolve issues within the informal sector, enhance productivity, and improve the pay of unorganized sector workers.

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