The Problems of Management of Informal Sector Activities: A Case Study of Ikwo Local Government, Ebonyi State, Nigeria

Azuka Chinonso Success¹; Danjuma Sadiq Abubakar²; Kanno Ruth Nkemjika²; Mohammad Umar Farouq²; Mathias Joseph Eriki²; Oluwafunke Victoria Daramola² and Oladokun Deborah Olajumoke²*

¹Department of Economics and Developmental Studies, Alex Ekwueme Federal University, Ebonyi, Nigeria.

²Department of Economics, University of Abuja, Nigeria.

²Rychado Group.

²International Fertilization Development Centre, Nigeria.

²School of Management, University of Bradford, UK.

²Deutsche Geselleschaft Zusammanarbeit (GIZ) GmbH, Abuja, Nigeria

Abstract:- There have been growing concerns about the persistent rise in the size of the informal sector given the troubles and difficulties it presents the government in keeping an actual record of all economic activities in the state. This study investigated the reason behind this continuous rise and how this continuous rise has affected the management of informal activities in Ikwo Local Government. Adopting the Binary Logistics Regression (BLR) model, the study analysed a cross sectional dataset obtained from 200 informal sector operators. Based on the result of the empirical findings, the study discovered that government policies was a major factor that pushed individuals into the informal sector and that the persistent rise in the size informal sector was a strong factor that have made managing the sector difficult for the government. Therefore, the study established that if the government can reduce its tax rates, cut down a bit on the bureaucratic protocols in the formal sector, many informal operators will be encouraged to operate in the formal sector and thus contribute maximally to the overall economy of the state.

Keywords:- Informal Sector, Shadow Economy, Regulations, Policies, Bureaucracy.

I. INTRODUCTION

The informal sector has experienced significant global growth in recent years, driven by the expansion of informal employment during economic recessions. Today, informal employment exceeds average industrial employment in most countries (Vanek et al., 2014). This renewed interest stems from the recognized link between the formal sector, growth, and the challenges of regulating and absorbing the informal sector into the formal economy. Despite attempts to regulate it, the informal economy contributes significantly to the global economy while remaining outside state protection (ILO, 2013). The informal sector encompasses activities such as street vending, unregistered businesses, and wage employment in unprotected jobs, characterized by lack of government taxation and monitoring. While providing economic opportunities for the poor, the informal sector is

often considered unmanageable and troublesome (Wilson et al., 2006; Van Ginneken, 1999). Integrating the informal economy into the formal sector remains a vital policy challenge.

In some European countries, informal sector activities have been included in GDP calculations since 2014, resulting in a 3-7% increase. In Ebonyi State, Nigeria, the informal sector generated about 40% of the state's GDP in 2020 (Wikipedia, 2020). However, it is characterized by long working hours, low wages, inadequate social security, difficulties exercising employee rights, worker exploitation, low government revenue, and high insecurity. Policymakers have called for regulating and protecting the informal sector or integrating it into the formal economy (UN-Habitat, 2015a). In Ebonyi State, the persistent growth of the informal sector has challenged successive administrations, leading to increased population, congestion, and non-contribution to the state's GDP. Furthermore, 87% of informal sector workers in Ebonyi are owed wages (Ogar & Amanze, 2019), and 98% pay taxes to illegal groups rather than the government (Awa, 2022). Massive rural-urban migration and population growth have made informality a reality in Ebonyi State over the past five decades (Agergaard & Thao, 2011). Low-skilled rural migrants, rejected by the formal labor sector, engage in temporary occupations, disregarding the law and lacking formal records. This has led to the expansion of the informal sector and urban poverty, with new generations producing in the informal sector.

Tax evasion strategies of large finance firms, using tax havens and underground economic forms, have spread to activities like smuggling, drug trafficking, and human trafficking, harming the original grassroots informal economy (Peemans, 2013). Regulating the informal economy is considered an important and urgent action for the government. While some self-employed individuals choose informality to evade taxes and avoid registration, others do so out of necessity or tradition. Reducing barriers to registration and offering incentives like tax holidays could encourage formalization. In Ebonyi State, the rise in informal employment is attributed to the formalization of once-formal

employment relationships, as employers prefer to hire informally to avoid payroll taxes and social security contributions (Peemans, 2013). The informal sector in Ebonyi has acted as a haven for informal employment and productive activities, benefiting from avoiding bureaucracies and legalities. While income and savings from the informal sector spent on formally produced consumer goods may benefit the state, it also poses problems in terms of revenue loss, increased production costs for the formal sector, lower productivity and economic growth, reduced public utility expenditure, environmental pollution, and high poverty and weak social welfare institutions.

Designing interventions to address the size of the informal economy without compromising its prospects is a pressing issue for policymakers. The existence of the informal sector distorts the accuracy and sectoral averages in national accounts data, potentially leading to ineffective policies. This study aims to determine how government policies have affected the size of the informal sector in Ikwo Local Government, Ebonyi State, at a time when answers are urgently needed. Developing countries should strive to develop policies that recognize the importance of the informal sector, regulate it when necessary, and increase productivity and improve working conditions for informal sector employees.

II. LITERATURE REVIEW

Although several efforts have been made to curb the persistent expansion and rise in the size of the informal sector, several authors and economic scholars have proposed various measure in which to achieve these while some have even purported radical ideas as to how the informal sector should be handled. Some scholars have been of the opinion that the informal sector offers a lot of trouble to the formal economy so it should be curtailed by the government so as not to serve as a hindrance to economic growth. Sultana et al. (2022), was one of such scholars who regarded informal sector activities as parasites to sustainable growth in an economy based on their study on the impact of the informal sector on the sustainability of developing countries. Employing the linear regression model, the authors studied a panel dataset obtained from 50 developing countries between 2010 to 2019 (9 years). The result of their study revealed that the informal sector played a detrimental role in the sustainable development of developing countries while economic freedom alongside economic growth had a positive and significant impact on the sustainable development of developing countries. This discovery iterated with the ideas of Saidu & Dauda (2014), who proposed that the informal sector presented a huge problem to the growth of the overall economy given that it worsened the problem of tax evasion which further affected the growth of the economy. This claim was made based on their study of tax evasions and governance challenges in the Nigerian informal sector. This study was conducted based on the increasing level of tax evasions ongoing in the Nigerian informal sector. The study employed the Spearman ranked order correlation test to analyze a cross sectional data obtained primarily from 200 respondents. The authors discovered that bad governance, illiteracy and some political

issues had a positive significant impact on tax evasions and were major determinants of the increasing size of the informal sector. However, they further discovered that the high level of tax evasion in Nigeria due to informal activities worsened the position of the overall economy and is also a stumbling block to the implementation of government policies as policies are facilitated by government expenditure and in turn government expenditure is majorly a function of tax revenue. These results backed the opinions of Benjamin & Mbaye (2010), who opinionated that it was more profitable for informal producers to formalize their operations given that business growth was limited in the informal sector. This opinion was based on their study to determine the relationship that existed between informality, productivity enforcement in West Africa using a firm level analysis. Their work adopted the Logistics Regression Model to analyze a cross sectional dataset obtained primarily from 900 respondents (formal and informal firms) scattered across the capital cities of three different countries (Benin Republic, Burkina Faso and Senegal). The empirical findings revealed that productivity level was higher in formal firms than in informal firms and that the productivity gap was smaller for large informal operators/firms than for their smaller counterparts.

On the other hand, some scholars have suggested that the informal sector possesses a lot of potentials and offers unquantifiable benefits to the overall economy making it a gem that should be tapped and harnessed by national governments. Iterating this but from an employment perspective, Huda & Islam (2020), supported this notion as they examined the employment opportunities in the informal sector using evidences from urban cities in Bangladesh. Utilizing a central tendency analysis model, Huda & Islam (2020), analyzed a cross sectional data set obtained from the responses of 387 respondents to a survey conducted in five cities in Bangladesh (Dhaka, Chattogram, Rajshahi, Khulna and Sylhet). Their findings indicated that the informal sector has a positive and significant impact on employment rate as it generates about 99% of the total employment and contributes about 50% of Bangladesh's GDP annually. The study therefore, identified some problems faced by participants in the informal sector ranging from shortage of capital, to low profitability and to high services charges. The authors concluded that if the government could formulate and implement policies that would tackle these problems, the full potential of the informal economy could be harnessed by the semi-formalization of the sector. These suggestions were also very similar to that of Uko et al. (2020), as they stated that although informal activities adversely affected tax revenue, however, it paid this off in the massive employment and income generation it contributes to the overall economy. This conclusion was reached after they evaluated the contribution of the informal sector in terms of employment and income generation in Nigeria. Utilizing the Ordinary Least Square (OLS) model to analyse a cross sectional dataset obtained secondarily in 2019, the authors discovered that the informal sector via its components contributes positively and significantly to employment generation and income generation but does not contribute significantly to tax revenue. Factors such as political considerations, poor/lack of

incentives, corruption, cumbersome tax mechanism and poor record keeping have been regarded as the reason behind poor contribution of the informal sector to tax revenue. Fasanya & Onakoya (2012), continued in this line of thought still dwelling on employment generation and GDP growth, as they examined the role of the informal sector on employment generation in Nigeria. They utilized the Ordinary Least Square (OLS) regression method and an error correction model (the granger causality test in particular) to analyze a time series data between the period of 1970 to 2010 (40 years). The empirical findings showed that the informal sector had a positive and significant effect on unemployment rate and contributed positively to the national GDP.

Despite these contradicting thoughts shared by different scholars, some scholars have been more concerned about the factors driving the informal sector which has been at the root of its incessant growth in size. Tonuchi & Idowu (2020), examined the size of the Nigerian informal economy utilizing a multiple cause, multiple indicator (MIMIC) model to analyze a time series data which covered the period of 1970 to 2018 (48 years). The empirical findings showed that the informal sector has been increasing in size as it has ranged from 47% to 67% between 1970 and 2018, alongside the revelation that the informal sector had a dual significant impact on the entire economy (a positive impact in that it contributes an average of 67% to the GDP annually and a negative impact in that it accounts for 56% loss of potential tax revenue annually). The study concluded that regulation burden, unemployment, and institutions are the key drivers of the informal sector in Nigeria. This was in line with the thoughts of Mukorera (2019), as he examined the willingness to formalize using the informal MSMEs in Zimbabwe as a case study. The study employed the Principal Component Analysis (PCA) alongside Logistics model to study a cross sectional dataset obtained primarily from 88 respondents (MSMEs). The result showed that willingness and unwillingness of informal operators to formalize is significantly related to bureaucratic asymmetry regarding registration process, access to technology, management skills, institutional imperfections and financial/market constraints. These findings were in line with that of Ogbuabor & Malaolu (2013), in their study 'the size and causes of the informal sector of the Nigerian economy using the Error Correction MIMIC Model (EMIMIC)'. The study adopted a time series dataset between 1970 to 2010 (40 years). Based on the empirical findings it was discovered that the size of the informal sector in Nigeria has hovered between 53.6% and 72% of the GDP and has been fuelled by factors like tax burden interest rate, unemployment rate in the formal sector trade openness of the entire economy and Real Government Expenditure. Ogbuabor & Malaolu (2013), discovered that these variables had a positive and significant impact on the size of the informal sector.

Some schools of thought also shed light on the subject matter, and delved into understanding the informal sector. Some of these theories have done well in evaluating the root causes behind its incessant rise. The most striking of these theories include the neoliberalism theory, capitalism as proposed by Adam Smith, and the Modernization theory.

A. The Neoliberalism Theory

Peruvian economist Hernando De Soto after publishing his treatise on Latin America's informal sector, caused a paradigm shift of some sort (Henken, 2005). Neoliberalism is an economic ideology and policy model that brings to light the beneficial aspects of free market competition. It is greatly related with laissez-faire economics. Neoliberalists strongly believe that resources can only be efficiently allocated by market mechanisms, and government's interventions in the economy should be at the barest minimum. Although closely related to modern liberalism with both having a common root in the 19th century classical liberalism. Liberalism in any form is mostly associated with Adam Smith, who in 1776 postulated that an economy is guided by an invisible hand, therefore, advocating the need for minimal government intervention in the economy. However, the idea began evolving into various variants. The modern liberalism developed from social liberalism which centred on the resulting disadvantages (wealth and income inequality, exploitation, poverty, discrimination etc) of the uncontrolled individual freedom that came along with capitalism. This made the government to get involved and prompted them to begin regulating the economy. By the late 1970s, the persistent rise in government's debts, economic stagnation, and the increasing attempts made by entrepreneurs to avoid the numerous government's regulations on various economic activities, prompted some economists to advocate a return to classical liberalism, which was then called neoliberalism in its revived form.

The informal economy is believed to be a remnant of the pre-modern production that was disappearing with the increasing totalitarianism and hegemony (Boeke, 1942; Geertz, 1963; Williams, 2013). Neoliberalism has painted informality to be an integral part of modern capitalism and a core feature of the new outsourcing, downsizing and subcontracting practices that have come to be under deregulated global capitalism. In view of this, workers are considered to seek employment in the informal sector out of necessity not by individual choice (Castells and Portes, 1989; Davis, 2006; Gallin, 2001; Taiwo, 2013). Neoliberalism also assumes that business activities in the informal economy are undergone on the basis of self-employment, which argues that such endeavor is conducted as a result of rational economic decisions of workers to make profits from business activities by exiting the formal economy forced out by high taxes, a corrupt bureaucratic system alongside a burdensome regulatory environment (Nwabuzor, 2005; Savvy, 1984). Therefore, Neoliberalism suggests that the persistent increase in the size of the informal sector is as a result of burdensome government's regulations which is inevitable when the state regulates and restricts economic activities. In an attempt to remain in business and to earn a living, producers opt for a safe haven which they find in the informal sector where no form of regulations or restrictions exists allowing only for competition. Scholars from this perspective, takes note of the creativity, entrepreneurship, and rationality of employees in creating new income sources, and upgrading their economic status in the light of high cost of legality. Therefore, informality is considered to be the product of the responses of free market forces to the failure of government intervention.

https://doi.org/10.38124/ijisrt/IJISRT24MAY1094

ISSN No:-2456-2165

According to Selwyn (2013), most entrepreneurs that are primarily profit driven seem to lack the motivation to improve the working conditions of their employees.

B. The Modernization Theory

Rostow (1960), in his book, The Stages of Economic Growth: A Non- Communist Manifesto in the aftermath of World War 2, suggested the modernization approach to solving the issue of national development. He considered the underdevelopment of Third World countries as a social problem caused by internal phenomenon such as the backwardness of socio- economic systems (Walton, 1981). Thus, according to him, the solution to this problem was by acquiring 'modern' values, 'modern' legal institutions and a 'modern' political system. Therefore, the problem of informality was not a result of capitalist exploitation but rather, a result of a country's inability to sufficiently incorporate into the modern world or global economy.

These set of theories was not exactly a coherent set of ideas but rather a variety of theories that came from a wide range of social disciplines. Modernization theory considers development as a uniform growth process that once followed will automatically lead any economy to development i.e. once an economy follows a predetermined steps it will eventually attain development. It therefore believes that the informal economy will eventually transition into the formal economy. Under these perspectives, the formal economy is considered to be a thriving sector with a promising future where it could attain development, modernity, and advancement while the informal economy is considered to be a traditional activity which signifies backwardness, underdevelopment and pre modernity (Williams. CC. et al, 2007). Workers in the informal sector were considered to be trapped outside the modern economy due to their lack of proper education, skills and value orientation. Given the dualistic nature of the economy, the modernization approach is also related to dualism, which is grounded in the works of Lewis, Todaro and Harris. Based on these theories, the informal economy is expected to shrink as a country attains advancement and development. This suggests that the informal economy is expected to experience a fall proportional to an increase in the per capital gross product of a country (Schneider. F, 2012). These theories points out that the persistence of the informal economy results from the failure of the formal economy to provide job opportunities. Therefore, there are chances for the informal economy to grow when the unemployment rate rises (Chaudhuri. S, 2000; ILO, 2002; Elgin. C. et al, 2013). These theories also proports that an increase in the level of rural to urban migration would result in the growth of the informal economy given the limited employment opportunities in the formal economy.

C. The Capitalism Theory

Although, capitalism according to history dates back to the 16th century, antecedents of this economic system existed in the ancient world and this system even flourished in Europe in the middle age. Adam Smith (1776), in his book An Inquiry into the Nature and Causes of Wealth of Nations, expressed the ideology of classical capitalism, which advocated for freedom of self-regulating market forces to

make economic decisions. This economic freedom would result in massive profitability for capitalist firms. However, after the great depression, a number of scholars began advocating for the intervention of the government in the economy in order to regulate the excesses of the capitalists. With existence of restrictions and regulations in the economy, producers are still interested in producing in an economy without regulations or restrictions because profitability will be greater in such an economy. These qualities only exist in the informal sector. Therefore, capitalism suggests that the continuous expansion of the informal economy is as a result of entrepreneur's bid to increase profitability, thereby, opting for a sector with almost or no regulations or restrictions of any sort.

These varying views reveal that several authors have examined the management of the informal sector as regards either its effect or its driving factors. Therefore, this study will attempt delving into this issue to understand the true cause behind the increase in the size of the informal sector and the role played by government policies in this. To achieve this, the methodology that will guide this study will be specified below.

III. METHODOLOGY

This research work seeks to examine the role of government policies in the persistent expansion of the informal sector of the Nigerian economy, using Ikwo a city situated in Ebonyi state as a case study. This study adopts a population based cross-sectional data which will be obtained utilizing a properly designed questionnaire distributed in Ikwo Local Government Area of Ebonyi State, Nigeria. This study will employ an inductive research design given the difficulty to cover the entire Ebonyi state in terms of data collection.

Ikwo Local Government Area is a city which is situated in the eastern part of Ebonyi state will be utilized as the case study in this research. Ebonyi state is one of the 36 states in Nigeria and is made up of 13 local governments areas. Ikwo has a landmass of about 500km², density of 463.5km² alongside an estimated population of 320,200 (NPC, 2022). Ikwo is bordered by Abakaliki, Izzi and Ezza Local Government Areas as well as Cross-river state. The city comprises of both indigenes and non-indigenes which include both unemployed and employed, corporate workers, selfemployed, civil servants, traders, farmers, students, artisans, public servants and so on. The population of this study was selected from the informal sector of the LGA which is our primary focus for this research. The study has it primary focus on the informal sector which has an estimated population of 13,000.

The issue of sample adequacy has generated differing opinions from several sample experts. Therefore, for this study, the sample size determination technique proposed by Israel (1992) & Cochran (1977), will be employed and its equation is stated below:

$$=\frac{N}{[1+N(e^2)]}\tag{1}$$

Where:

N = Population of the informal sector

S =Sample size

e = Level of Significance (7% in this case, indicating 93% level of confidence)

Hence N from the population of the study given above is 13,000 persons (respondents) and the level of significance 'e' is 0.07 (7%), then the sample size 'S' for this study is determined thus:

$$S = \frac{13,000}{[1+13,000(0.07^2)]} = 204 \tag{2}$$

Equation 2 above clearly indicates that the sample size for this study at 93% level of confidence is 204 respondents. The multistage sampling technique will be employed to select the required number of respondents for this study.

The objective of this research will be met by adopting the logit regression model. The Logit model is as adopted from Gujarati (2013) and specified as:

$$Pi = \frac{1}{1 + e^{-Zi}} = \frac{e^Z}{1 + e^Z} \tag{3}$$

Where,

$$Zi = \beta_1 + \beta_2 X_i + \beta_3 X_i$$

Equation 3 represents the cumulative logistic distribution function. We can verify that as Pi ranges between 0 and 1, Zi ranges from $-\infty$ to $+\infty$ and Pi is linear in parameters

If Pi, the probability that respondents who prefer the informal sector is 1 and respondents who did not prefer the informal sector is (1-Pi), therefore, the probability of the perception is given as:

$$1 - Pi = \frac{1}{e^z + 1} \tag{4}$$

We rewrite the equation as

but non-linear when related to Zi.

$$\frac{P}{1-Pi} = \frac{e^z}{e^z + 1} * \frac{e^z + 1}{1} = e^{Zi} \tag{5}$$

 $\frac{P}{1-Pi}$ This is the odds ratio in favor of the informal sector

Taking the natural log of the equation (4) we have

$$Li = Ln\binom{Pi}{1-Pi} = Zi \tag{6}$$

Zi remains defined as above. Zi = function of N-explanatory variables for the sake of this study, the logit model will be run for two regressions which is the preference for the informal sector which is used as a proxy for the size of the informal sector and the loss of tax revenue as it is used as a proxy for the management of the informal sector.

$$Li (Preference of the informal sector) = ln \frac{Pi}{1-Pi} = \beta_1 + \beta_2 Xi + \beta_3 Xj + \mu i$$
 (7)

The models will be explicitly stated as:

 $Preference\ of\ the\ informal\ sector = \beta_0 + \beta_1 Gender + \beta_2 Taxrate + \beta_3 HHSize + \beta_4 ProdCost + \beta_5 RegBureau + \beta_6 EDU + \mu_i \tag{8}$

For the above parameters, where β_0 is the intercept, β_1 is gender, β_2 is tax rate, β_3 is household size, β_4 is production cost, β_5 is registration bureaucracies, β_6 is education and then μi is error term.

Data was sourced primarily from three major categories (petty traders, commercial drivers and hair stylists) served as the direct primary providers of information for the study.

IV. RESULT OF ANALYSIS

Before the Binary Logit Regression analysis was done, a descriptive analysis was done to understand the nature and distribution of the data obtained. From the descriptive analysis, three major sections in the informal economy were surveyed which is depicted in figure 1; with petty traders constituting 58% of the respondents, transporters constituting 26.5%, and hairstylists constituting the remaining 15.5%.

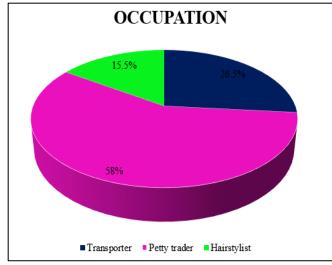


Fig 1: Occupation Distribution amongst the Respondents

Figure 2 depicts that about 62% of the respondents were males while about 38% of the respondents were females which depicts that the male gender is the dominant gender in the informal sector.

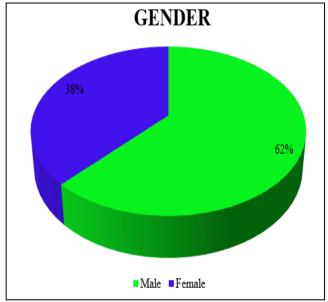


Fig 2: Gender Distribution of Respondents

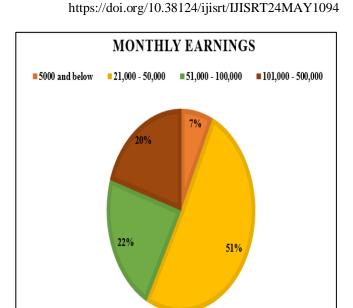


Fig 3: Monthly Earnings Distribution of the Respondents

In figure 3, it is vivid that the vast majority of informal workers in Ebonyi State are middle income earners, earning within 21,000 to 50,000 monthly as about 51% of the respondents earned within 21,000 to 50,000 monthly. About 22% of the respondents earn between 51,000 to 100,000 per month and 20% are high income earners earning between 101,000 and 500,000 on a monthly basis. About 7% are low-income earners, earning from 5,000 and below per month.

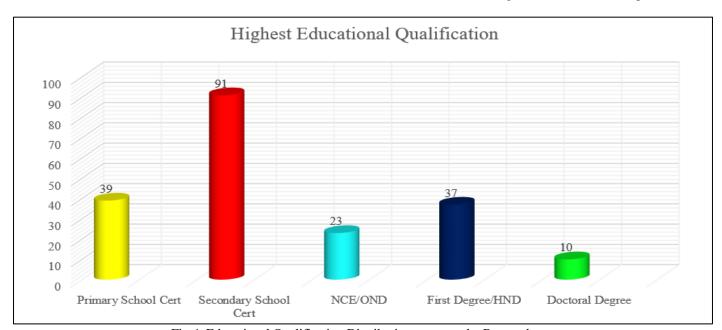


Fig 4: Educational Qualification Distribution amongst the Respondents

According to figure 4, in terms of educational qualification, 91 respondents from the total 200 respondents, had their secondary school certificate as their highest educational qualification; while 39 respondents had only their primary school certificate. 37 respondents had their first degree, 23 respondents had either NCE or OND certificate and then 10 had attained their doctoral degrees. This implies that the informal sector in Ebonyi State, is dominated by

secondary school certificate holders as compared to any other educational level.

Having gotten a vivid understanding of the characteristics of the data, the result of the regression analysis to evaluate the level of effect that government policies has on the size of the informal sector, is presented below.

Table 1: Binary Logistics Regression Result

Tuble 1. Billing Bogistics Regression Result							
Number of Obs =	umber of Obs = 200						
LR chi ² =	32						
$Prob > chi^2 =$	0.000						
-2 Log Likelihood =	72.651				Nagelkerke R ² =	0.823	
PreferInf	Coef,	Std. Err,	Z	Prob	[95% Conf. Interval]		
					Lower	Upper	
Gender	-0.897	0.991	0.408	0.365	0.059	2.844	
HH Size	22.140	31299.379	412481	0.999	0.000	0.000	
Highest Edu Qualification	-3.879	1.661	0.021	0.020	0.001	0.536	
Bus. Reg	-2.424	1.564	0.089	0.121	0.004	1.902	
Bus. Reg Fee	2.494	1.932	12.106	0.197	0.274	534.048	
Bus. Reg Period	1.001	0.680	2.721	0.141	0.718	10.309	
Govt Policies Effect Extent	2.953	1.117	19.172	0.008	2.148	171.081	
Govt Control	-0.881	1.325	0.414	0.506	0.031	5.564	
Levy Payment	-40.388	13111.586	0.000	0.998	0.000	0.000	
Levy Cost	0.008	0.038	1.008	0.838	0.937	1.085	
Levy Effect	1.858	1.138	6.414	0.103	0.689	59.704	
Hiding Trade Exp	-1.205	1.183	0.300	0.308	0.030	3.043	
Hiding Trade Reasons Levies	3.729	1.358	41.629	0.006	2.906	596.340	
Bus. Expenses	-0.238	0.513	0.754	0.581	0.278	2.059	

From the table above, the dependent variable used for this analysis was preference for the informal sector proxied by government's policies effect as the effect of government policies on business determines their willingness to operate in the informal sector. The independent variables were gender, tax rate (proxied by levy payment, levy cost, levy effects and hiding to trade because of levies – hiding trade reasons levy), household size, production cost (proxied by hiding to trade expenses and business expenses), Registration bureaucracies (proxied by business registration, business registration fee, business registration period, government's policies effect extents and government control – i.e., the willingness for government to control their business) and educational level.

The probability value on the omnibus test result depicts that the model is fit given that the pvalue which is 0.000 is less than 0.05 (5% level of significance). The Nagelkerke R^2 of 0.832 which is greater than 0.05 significance level shows that the predictor variables adequately predict the model (dependent variable).

The variable 'gender' is negative (-0.897) and not significant as 'P>z' = 0.365. Therefore, gender will negatively affect the preference for the informal sector but not significantly. Household size is positive (22.140) but also insignificant at 5% level of significance (0.999). This implies that a one unit increase in household size while holding all other variables constant, will result to a 22.140 increase in the informal sector preference (PreferInf). Educational qualification is negative (-3.879) and statistically significant (0.02). This implies that a unit increase in educational qualification, will negatively impact the PreferInf significantly. BusReg is negative (-2.424) but statistically insignificant (0.121); which implies that a unit increase in BusReg will negatively influence PreferInf but not in a significant way. BusReg Fee is positive (2.494) but also statistically insignificant (0.197); meaning that a unit increase

in BusReg Fee will positively impact PreferInf but not in a significant way. BusReg Period is positive (1.001) but statistically insignificant (0,141). This implies that a unit increase in BusReg Period will increase PreferInf by 1.001 but the increase will not be significant. Govt Policy Effect Extent is positive (2.953) and is also statistically significant (0.008); which implies that Govt Policy Effect Extent will positively and significantly influence PreferInf. Govt Control (the willingness to be controlled by government) is negative (-0.881) and is insignificant (0.506); which implies that a unit increase in Govt Control will result in a reduction in PreferInf but this reduction will be insignificant. Levy payment is negative (-40.388) but insignificant (0.998); which implies that a unit increase in levy payment will influence PreferInf negatively but not in a way significant way. Levy Cost is positive (0.008), although insignificant (0.838); which implies that a unit increase in levy cost, will result in a 0.008 increase in PreferInf. Levy Effect is positive (1.858) and insignificant (0.103); which depicts levy effect positively but insignificantly affects PreferInf. Hiding Trade Exp is negative (-1.205) but is insignificant (0.308). This imply that a unit increase in hiding trade expenses will result in a 1.205 decrease in PreferInf. Hiding Trade Reasons Levies (i.e., hiding to trade because of levies) is positive (3.729) and is statistically significant (0.006) which implies that a unit increase in Hiding Trade Reasons Levies will increase PreferInf by 3.729. BusExp is negative (-0.238) and is insignificant (0.581). This implies that BusExp has a negative impact of 0.238 on PreferInf; however, this impact is insignificant.

Therefore, from the analysis, the preference for the informal sector was utilized to capture the effect of government's policies on the size of the informal sector (which has resulted from the interest to understand the role of government policies in the continuous rise in the size of the informal sector.

V. INTERPRETATION AND CONCLUSION OF RESEARCH FINDINGS

The result reveals that the gender of a worker/producer does not make him opt for the informal sector rather his household size is one of the factors that force producers to operate in the informal sector. In addition, it is discovered that informal workers are willing to register their businesses and operate in the formal sector, however, the cost of the registration fee and the length of registration period are some factors that necessitate individuals to opt for the informal sector. This is also the situation in terms of tax rate as the existent of a levy (tax) doesn't scare individuals from the formal sector, rather exorbitance of this levy (tax rate) pushes individuals towards the informal sector. Furthermore, the production stands as a major driver of the expansion of the informal sector as the cost of operating a business or working in the formal sector makes it difficult to generate profits, thereby necessitating a switch to the informal sector where the deregulated and unrestricted business environment increases business profitability and growth. On the other hand, it was discovered that those with higher educational attainment tended to operate/work formally.

Having analysed the effect of government policies on the size of the informal sector, it can be seen from the result that government policies are one of the major factors behind the preference for the informal sector and that the size of the informal sector makes it quite difficult for the government to manage informal sector activities. This is due to the fact that government policies makes it difficult to operate in the formal sector and also reduces profitability in the formal sector. Therefore, individuals are pushed into the informal sector out of necessity inorder to survive, make profit and earn a living. This is the key reason why the informal sector have been on a persistent increase and the subsequent large size of the informal sector especially that in Ebonyi State, makes it difficult for the government to monitor, control and manage informal sector activities. The inability of government to control, restrict, regulate or manage informal sector activities is reflected in the loss of tax revenue from the informal sector.

Based on these findings, it is apparent that the government reduces the tax rate to encourage individuals to operate and carry out their business activities in the formal sector and this will have a multiplier effect on the economy as it will aid the reduction of unemployment rate which will allow producers/workers attain a reasonable level of profitability from their respective productive activities. In addition, the provision of easy access to affordable credits facilities by the government will provide an enabling environment that will spur the growth and profitability of productive activates. In line with the creation of an enabling environment, unnecessary protocols and red tapes during registration process have been identified to make business owners avoid the process which is the reason behind the unavailability of a record of businesses in the informal sector. Therefore, to avoid this, the government should reduce the red tapes encountered by individuals and business owners during registration process to encourage them register their various business activities.

REFERENCES

- [1]. Agergaard, J., & Thao, V. T. (2011). Mobile, flexible, and adaptable: female migrants in Hanoi's informal sector. *Population, Space and Place*, *17*(5), 407-420.
- [2]. Agusman Aris, A., Maupa, H., Muis, M., & Idrus Tabba, M. (2019). Effects of government policy, quality of human resources and professional institutions on workforce competitiveness using welding technology as mediating variable. *Journal of Science and Technology Policy Management*, 10(5), 1121-1151.
- [3]. Alderslade, J., Talmadge, J., & Freeman, Y. (2006). *Measuring the informal economy: One neighborhood at a time*. Washington, DC: Brookings Institution, Metropolitan Policy Program.
- [4]. Arosanyin, G. T., Ijaiya, G. T., Oludoyi, S., Ajayi, M. A., & Ipingbemi, O. (2009). Government Assistance for Informal Sector Enterprises in Nigeria: A Case Study of Tire Repair Services in Illorin, Kwara State. *Ghana Journal of Development Studies*, 6(2).
- [5]. Awa, F. N. (2022). impact of informal sector tax revenue on capital growth in Ebonyi State Capital, Abakaliki. *International Journal of Development and Management Review*, 17(1), 1-15.
- [6]. Benjamin, C. N., & Mbaye, A. A. (2010). *Informality, productivity and enforcement in West Africa: A firm analysis* (No. 100). Working paper series.
- [7]. Boeke, J. H. (1942). structure of Netherlands Indian economy.
- [8]. Budiono, S., & Purba, J. T. (2019). Data panel model solution in forecasting investments through energy electricity and government policy in Indonesia. In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 1132-1132).
- [9]. Castells, M., & Portes, A. (1989). World underneath: The origins, dynamics, and effects of the informal economy. *The informal economy: Studies in advanced and less developed countries*, 12.
- [10]. Chacaltana, J., Bonnet, F., & Garcia, J. M. (2022). *Growth, economic structure and informality* (No. 69). ILO Working Paper.
- [11]. Chi, X., Streicher-Porte, M., Wang, M. Y., & Reuter, M. A. (2011). Informal electronic waste recycling: A sector review with special focus on China. *Waste management*, 31(4), 731-742.
- [12]. Cochran, W. G. (1977). Sampling techniques (3rd edn.,) Wiley. *New York*.
- [13]. Conroy, J. D. (2019). A national policy for the informal economy in Papua New Guinea.
- [14]. Davis, J. B. (2006). The turn in economics: neoclassical dominance to mainstream pluralism?. *Journal of institutional economics*, 2(1), 1-20.
- [15]. Deng, H., Hu, R., Pray, C., & Jin, Y. (2019). Impact of government policies on private R&D investment in agricultural biotechnology: Evidence from chemical and pesticide firms in China. *Technological Forecasting and Social Change*, 147, 208-215.

- [16]. Dibben, P., Wood, G., & Williams, C. C. (2015). Pressures towards and against formalization: informal employment Regulation and Mozambique. International Labour Review, 154(3), 373-392.
- [17]. Eijdenberg, E. L., Sabokwigina, D., & Masurel, E. (2019). Performance and environmental sustainability orientations in the informal economy of a least developed country. International Journal Entrepreneurial Behavior & Research, 25(1), 129-
- [18]. Fasanya, I. O., & Onakoya, A. B. (2012). Informal sector and employment generation in Nigeria: an error correction model. Research on humanities and social sciences, 2(7), 48-55.
- [19]. Fredström, A., Peltonen, J., & Wincent, J. (2021). A country-level institutional perspective entrepreneurship productivity: The effects of informal economy and regulation. Journal of Business Venturing, 36(5), 106002.
- [20]. Geertz, C. (1963). Peddlers and princes: Social change and economic modernization in two Indonesian towns. University of Chicago Press.
- Gujarati, J. (2013). An "inverse" relationship between mathematics identities and classroom practices among early career elementary teachers: The impact of accountability. The Journal of Mathematical Behavior, 32(3), 633-648.
- [22]. Gupta, K. K., Attri, J. P., Singh, A., Kaur, H., & Kaur, G. (2016). Basic concepts for sample size calculation: critical step for any clinical trials!. Saudi journal of anaesthesia, 10(3), 328.
- [23]. Gutiérrez-Romero, R. (2021). Inequality, persistence informal the economy, and convergence. World Development, 139, 105211.
- Habitat, U. N. (2015). Habitat III issue paper 22 informal settlements. New York: UN Habitat.
- [25]. Hart, K. (1990). Swimming into the human current. Cambridge Anthropology, 3-10.
- Henken, T. (2005). Entrepreneurship, informality, and the second economy: Cuba's underground economy in comparative perspective'. Cuba in Transition (Association for the Study of the Cuban Economy), 360-75.
- [27]. Horn, Z. E. (2010). The effects of the global economic crisis on women in the informal economy: research findings from WIEGO and the Inclusive Cities partners. Gender & Development, 18(2), 263-276.
- [28]. Huda, E., & Islam, M. (2020). Employment Opportunities in the Informal Sector: Evidence from Urban Areas of Bangladesh. Journal of Business and Management, 24, 33.
- [29]. Igudia, E., Ackrill, R., Coleman, S., & Dobson, C. (2016). Determinants of the informal economy of an emerging economy: a multiple indicator, multiple approach. International Journal Entrepreneurship and Small Business, 28(2-3), 154-
- [30]. ILO (1972), Employment, Incomes and Equality. A Strategy for Increasing Productive Employment in Kenya. ILO, Geneva.

[31]. International Labour Organization (2013). Global employment status of persons aged between 15 and above. ILO annual bulletin, https://www.ilo.org.

https://doi.org/10.38124/ijisrt/IJISRT24MAY1094

- [32]. International Monetary Fund (2020). The growing importance of the informal sector. IMF annual bulletin, https://www.imf.org.
- [33]. Islam, M. T., & Alam, M. J. (2019). The relationship between informal economy and GDP growth: a study on south-asian developing countries. Can. J. Bus. Inf. Stud, 1(5), 01-09.
- [34]. Israel, G. D. (1992). Determining sample size.
- [35]. Jensen, L., Tickamyer, A. R., & Slack, T. (2019). Rural-urban variation in informal work activities in the United States. Journal of Rural Studies, 68, 276-
- [36]. Kraemer, H. C. (1991). Without increasing sample size. Psychopharmacology bulletin, 27(3-4), 217.
- [37]. Kubickova, M. (2019). The impact of government policies on destination competitiveness in developing economies. Current Issues in Tourism, 22(6), 619-
- [38]. Lizina, O., Bistyaykina, D., Ermakova, E., Badokina, T., & Solovyeva, T. (2020). The informal sector in the structure of the national economy: Simulation and evaluation. Journal of Eastern European and Central Asian Research (JEECAR), 7(3), 292-304.
- [39]. Mahadea, D., & Zogli, L. K. J. (2018). Constraints to growth in informal sector activities and formalisation: A case study of Ghanaian slums. The Southern African Journal of Entrepreneurship and Small Business Management, 10(1), 1-9.
- [40]. Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In Forum qualitative Sozialforschung/Forum: qualitative social research (Vol. 11, No. 3).
- [41]. Mitlin, D., & Satterthwaite, D. (2012). Urban poverty in the global south: scale and nature. Routledge.
- [42]. Mukorera, S. Z. (2019). Willingness to formalize: A case study of the informal micro and small-scale enterprises in Zimbabwe. Journal of Developmental Entrepreneurship, 24(01), 1950001.
- [43]. National Population Commission (2022), Nigeria's Population (1960-2022). https://www.npc.org.
- [44]. Ogar, C. A., & Amanze, D. (2019). Work-Life-Balance: The Nigerian Organizational Experience (A Study of Selected Banks in Ebonyi State). Int. J. Res. Innov. Soc. Sci, 3, 145-157.
- [45]. Ogbuabor, J. E., & Malaolu, V. (2013). Size and causes of the informal sector of the Nigerian economy: Evidence from error correction mimic model.
- [46]. Ogunsade, I. A., & Obembe, D. (2016). The influence of informal institutions on informal entrepreneurship: a study of Nigeria's hand-woven textile industry. Journal of Small Business & Entrepreneurship, 28(6), 413-429.
- [47]. Onwe, O. J. (2013). Role of the informal sector in development of the Nigerian economy: Output and employment approach. Journal of Economics and Development studies, I(1), 60-74.

- [48]. Ordonez, J. C. L. (2014). Tax collection, the informal sector, and productivity. *Review of Economic Dynamics*, 17(2), 262-286.
- [49]. Parajuli, S., Paudel, U. R., Devkota, N., Gupta, P., & Adhikari, D. B. (2021). Challenges in transformation of informal business sector towards formal business sector in Nepal: Evidence from descriptive cross-sectional study. *Asian Journal of Agricultural Extension, Economics & Sociology*, 39(2), 95-106.
- [50]. Peemans, J. P. (2013). "A political economy of rural developmentin South East Asia in relationwith the many versions of the disappearance of the peasantry (No. UCL-Université Catholique de Louvain).
- [51]. Pinsonneault, A., & Kraemer, K. (1993). Survey research methodology in management information systems: an assessment. *Journal of management information systems*, 10(2), 75-105.
- [52]. Polanyi, K. (1957). The Great. Transformation, 46.
- [53]. Portes, A. (1989). Latin American urbanization during the years of the crisis. *Latin American research review*, 24(3), 7-44.
- [54]. Prado, M. (2011). Government policy in the formal and informal sectors. *European Economic Review*, 55(8), 1120-1136.
- [55]. Pratap, S., & Quintin, E. (2006). The informal sector in developing countries: Output, assets and employment (No. 2006/130). WIDER Research paper.
- [56]. PREALC (ILO's Regional Employment Programmes for Latin America) (1985) Change and occupational polarization in Central America. Santiago, Chile: PREALC.
- [57]. Reddy, M., Naidu, V., & Mohanty, M. (2003). The urban informal sector in Fiji results from a survey. *Fijian Studies: A Journal of Contemporary Fiji*, *I*(1), 127-154.
- [58]. Ruel, E., Wagner III, W. E., & Gillespie, B. J. (2015). *The practice of survey research: Theory and applications*. Sage Publications.
- [59]. Safarzadeh, S., & Rasti-Barzoki, M. (2019). A game theoretic approach for pricing policies in a duopolistic supply chain considering energy productivity, industrial rebound effect, and government policies. *Energy*, 167, 92-105.
- [60]. Saidu, S. A. N. I., & Dauda, U. M. A. R. (2014). Tax evasion and governance challenges in the Nigerian informal sector. *Journal of Finance and Economics*, 2(5), 156-161.
- [61]. Schneider, F., Morkunas, M., & Quendler, E. (2023). An estimation of the informal economy in the agricultural sector in the EU-15 from 1996 to 2019. *Agribusiness*, 39(2), 406-447.
- [62]. Sebele-Mpofu, F. Y. (2020). Governance quality and tax morale and compliance in Zimbabwe's informal sector. *Cogent Business & Management*, 7(1), 1794662.
- [63]. Sookram, S., & Watson, P. K. (2008). Small-business participation in the informal sector of an emerging economy. *The Journal of Development Studies*, 44(10), 1531-1553.

- [64]. Sultana, N., Rahman, M. M., & Khanam, R. (2022). The effect of the informal sector on sustainable development: Evidence from developing countries. *Business Strategy & Development*, 5(4), 437-451.
- [65]. Suski, L. A. (1995). Powerful or powerless?: the impact of the formal/informal dichotomy on the analysis of women's informal labour in Latin America.
- [66]. Swain, R. B., Kambhampati, U. S., & Karimu, A. (2020). Regulation, governance and the role of the informal sector in influencing environmental quality?. *Ecological Economics*, 173, 106649.
- [67]. Swaminathan, M. (1991). Understanding the "Informal Sector" A Survey.
- [68]. Tonuchi, J. E., & Idowu, P. (2020). How large is the size of Nigeria's informal economy? A MIMIC approach. *International Journal of Economics, Commerce and Management.*
- [69]. Uchic, M. D., Dimiduk, D. M., Florando, J. N., & Nix, W. D. (2004). Sample dimensions influence strength and crystal plasticity. *Science*, 305(5686), 986-989.
- [70]. Uko, F. E., Akpanoyoro, M. J., & Ekpe, J. P. (2020). An evaluation of the contribution of the informal sector in employment and income generation in Nigeria: Thematic approach. *Management*, *1*(2).
- [71]. Van Ginneken, W. (1999). Social security for the informal sector: A new challenge for the developing countries. *International Social Security Review*, 52(1), 49-69.
- [72]. Vanek, J., Chen, M. A., Carré, F., Heintz, J., & Hussmanns, R. (2014). Statistics on the informal economy: Definitions, regional estimates and challenges. Women in Informal Employment: Globalizing and Organizing (WIEGO) Working Paper (Statistics), 2(1), 47-59.
- [73]. Wikipedia (2020). Gross Domestic Product (GDP) for states in Nigeria Ebonyi State. https://www.wikipedia.org.
- [74]. Williams, C. (2013). Tackling Europe's informal economy: a critical evaluation of the neo-liberal deregulatory perspective. *Journal of Contemporary European Research*, 9(2), 261-279.
- [75]. Wilson, D. C., Velis, C., & Cheeseman, C. (2006). Role of informal sector recycling in waste management in developing countries. *Habitat international*, 30(4), 797-808.