

Accounting for Economies of Underground Business Sector amidst the Crave for Entrepreneurship Development in Nigeria

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Abstract

The study examined the accounting for economies of underground business sector amidst the crave for entrepreneurship business in Nigeria. The specific objectives were to ascertain the effect of underground economy on real gross domestic product. The study adopted ex-post facto research design. The study period covered from 2000 to 2022. The stated hypotheses were analysed with simple regression. The findings of the study revealed underground economy has negative and insignificant impact on real gross domestic product. It was recommended that government should come up with policy that will reduce underground to the barest minimum that will enhance the economy.

Keywords: *Accounting for economies, entrepreneurship business, and underground business sector in Nigeria*

Introduction

Underground economic activities are concepts that are as old as government itself. It springs from human nature that makes man choose between given alternatives since man is under the watchful eyes of government. Guided by ancient notions and prejudices that their rulers are tyrant, when government intervention fails to satisfy him he may seek to avoid the ill-effect through circumvention, evasion and escape. He may find his way to the “black market” where economic transactions take place in violation of price and government control measures. He may also descend to the “underground” where political edits are ignored and taxation avoided (Abdih & Medina, 2016). The emergence of the underground economy is of great implications. One of the major implications is loss of government revenue that would have been used to improve public services. Thus the apriori expectation is that the larger the underground economy the lower the government revenue. However, if the tax base or tax compliance is eroded governments may respond by raising tax rates and this will invariably encourage a further flight into the underground economy and tax evasion that will further worsen the budget constraints (Anwar, Akbar, Akbar, & Azhar, (2017)..

The phenomenon of underground economy is defined under various names in the literature, indicating various aspects of it: underground economy, informal economy, unobserved economy, shadow economy, second economy, parallel economy, hidden economy, illegal economy, unrecorded economy, marginal economy, unreported economy, unofficial economy, dual economy etc. This variation makes it difficult to develop a common definition. In academic studies the term “underground economy” is considered as the most comprehensive definition, as it includes the illegality. (Kök and Şapçı, 2006). Informal economy refers to all economic transactions and activities that are entered in official records, cannot be documented through legal documents and are not taken into account in calculations of Gross Domestic Product (GDP). (Buehn, Dell’ & Schneider, 2021)

They are informal in the sense that they are mostly unregistered, unrecorded in official statistics; and participants have little or no access to organized markets, to credit institutions, to formal education and training or to many public services ((Buehn, *et al.*, 2021).

Parallel market activities are alternatives of legal market activities. It includes illegal production and trade of goods and services that are legal in their nature. Finally, black market activities consist of production and/or distribution of market and non-market goods that are forbidden by government. So different definitions of these three concepts reveal that using aforementioned names of underground economy interchangeably is misleading. (Del, Boca & Forte, 2021).

The shadow economy includes all market-based legal production of goods and services that are deliberately concealed from public authorities for the following four reasons:

- to avoid payment of income, value added or other taxes,
- to avoid payment of social security contributions,
- to avoid having to meet certain legal labor market standards, such as minimum wages, maximum working hours, safety standards, etc.,
- to avoid complying with certain administrative obligations, such as completing statistical questionnaires or other administrative forms. (Del, *et al.*, 2021). Hence, the study examines accounting for economies of underground business sector amidst the crave for entrepreneurship business in Nigeria. The specific objectives were to ascertain the effect of underground economy on real gross domestic product.

LITERATURE REVIEW

Concept of underground activities

The underground economy refers to economic transactions that are deemed illegal, either because the goods or services traded are unlawful, or because transactions fail to comply with governmental reporting requirements, alter-natively referred to as the shadow economy, the black market, or the informal economy, the underground economy in the United States mainly comprises the sale of street drugs and illegal prostitution. Other primary examples of underground economic activity include untaxed labour, the untaxed sale of physical goods, and the smuggling of goods into a country to avoid paying duties at the border. Human trafficking operations also comprise the under-ground economy, as do the markets for copyrighted materials, endangered animal species, antiquities, and illegally-harvested human organs (Elgin, & Birinci, 2015).

Eurostat (2021), defines the underground economy as an economic activity that does not appear in the statistics of the National Income and Gross Domestic Product (GDP). This definition presumes that, while illegal activity lies within the hidden economy, many legal ones may fall within the economy. Thus, one who gets extra income working in his spare time but does not report this income is said to participate in the underground economy.

In defining the underground economy, the ethical judgment of different societies and governments are brought to bear. For instance, while in countries such as Netherlands, Nevada and Italy, prostitution is legal, official and taxable activities, in other countries such as Nigeria it is not. Similarly, while some countries approve the sale of alcohol as legal activities, other countries such as Islamic countries do not. The lack of consensus in formulating a precise definition of components that comprise underground economy suggests that important questions remained unanswered (Fleming, *et. al.*, 2000). While agreeing to the definitions given above, this study adopts the definition of the shadow economy as one that includes all unreported in-comes from production of legal goods and services, either from monetary or barter transactions-and so includes all economic activities that would generally be taxable were they reported to the state (tax) authorities. Within the meaning conveyed in this definition, Feige and Urban, (2018), concludes that both legal and illegal activities can exist underground noting that it is the unregulated and unreported nature of a transaction that puts it outside the dragnet of government agencies and this is essential in classifying an activity/transaction as underground and not its legality.

Main Causes of Underground Economy in Nigeria

In the economic literature, the most important causes of underground economy are increase of the tax burden and social security contributions, increased regulation in the official economy especially in labor markets, forced reduction of weekly working hours, earlier retirement and the declining of tax morale. The increase of tax burden and social security contributions is the most important factor behind the increasing underground economic activities. As it is known, taxes affect labor-leisure choices of economic agents and also encourage labor supply towards the underground or untaxed sector of economy. As the difference between total cost of labor for employers in the official economy and after tax earnings of labor increases, we expect increasing underground economic activities. (Goel, Saunoris, & Schneider, 2017)

The intensity of regulations is also one of the causes of a degenerated underground economy. The increase of the number of laws, regulations and license requirements are evidence of increase of the intensity of regulations and decrease of freedom of choice of economic agents. Generally, the regulations can increase legal burden of employers and employees can transfer their burden onto employees' wages and so it can create an incentive for employees to resign into the underground economic business. High regulation can also cause employers to stay in the underground part of economy to avoid higher and nontransferable legal burden. Many studies in the literature revealed positive relation among underground economy and intensity of regulation .The principal causes behind the existence of informal economy can be summarized as follows

- Economic causes (unjust distribution of income, inflation, tax system,unemployment)
- Fiscal causes (high tax rates, deficiency in auditing, insufficient accounting services)
- Legal causes (complicated and unclear laws, frequent change in regulation, degeneration in unitary structure)

- Administrative causes (organization of tax authority, technical structure, personnel profile and auditing mechanism)
- Social and psychological causes (tax ethics, taxpayer psychology and historical causes)
- Political causes (Goel, Saunoris, & Schneider, 2019).

Effects of Underground Economy

There are both positive and negative effects that an underground economy has on the official or registered economy. Primarily underground economies have a negative effect in the process of economic policymaking. Due to large underground economies, the measured macroeconomic aggregates, such as the unemployment rate or income level, become unreliable. As a result economic policy based on this data is likely to be ineffective. Underground economies, on the microeconomic side, have significant advantages over official firms and creates unfair competitive conditions. Underground economy firms follow no legal regulations and are more free to set a competitive price than registered firms. Those firms can increase their sale volumes and profit levels by providing their products and services at a price lower than the general market. Social security institutions are also affected by an underground economy and may suffer a deteriorating financial situation. Firms operating in the underground economy decrease tax revenue and do not contribute to the overall social welfare distribution (Goel, Saunoris, & Schneider, 2019).

Following a decrease in welfare distribution, communities may have an increase in social tension as individuals on low-income will have an decreased living standard. Being a phenomenon that affects the economy in general, informal economy destabilizes economic and social balances, and harms macroeconomic indicators and monetary and fiscal policies. The negative consequences of informal economy can be summarized as follows: (Saraç & Başar, 2014).

Underreported GNP and growth rates (real levels are usually much higher).

- Deceptive tax burden and therefore, tax injustice.
- Inadequately calculation of public sector volume.
- Budget deficit due to insufficient taxation
- Instability in economic balances due to high borrowing or issuing money
- Inadequate assessment of creditworthiness of firms due to inadequate financial reporting
- Overreported unemployment rates
- Overreported inflation rates
- Inadequate reporting in export, import and current balance indicators
- Inadequate reporting in productivity indicators Dollarization
- Deviation from economic policies
- Welfare loss
- Unjust income distribution
- Corruption in the society
- Inefficiency in the legal system
- Consumer damnification due to nonstandard, poor quality products
- Unjust competition

Despite the many negative effects, an underground economy does contribute to the registered economy in a positive way (Goel, *et al* 2019).

How Underground Activities are good for the Nigerian System

Firms that operate in an underground economy have lower production costs, hence there is an increased labour demand when compared to the registered economy. As a result of this increased employment, dependancy on social welfare will decrease. As mentioned previously, the firms operating in the underground economy can provide their goods and services at lower costs. This allows members of the society with lower incomes to access goods and services that were previously inaccessible.

To list some of these positive contributions;

-It functions as a kind of “social relief valve” during crisis by creating employment and income opportunities, causing increase in supply (Guillermo & Deyvi, 2018).

- Lower prices of the products due to low production cost, flexibility in working times and conditions

- Providing dynamism to the economy and causing capital accumulation and growth

Research into the positive and negative relationship between the growth of both underground and official economies has proved to be controversial. Some researchers found that an increasing activity of underground economies would negatively affect the economic growth rate of the country. They found that increased underground activity led to a decrease in tax revenue for the government. As a result, the level of infrastructure investment, necessary for economic growth, would also decline. Among researchers, a lack of consensus exists about the relationship between the economic activity and growth of both underground and official economies (Guillermo & Deyvi, 2018).

Direct approach

The direct approach involves the use of surveys and samples which are based on the way the questionnaires are formulated and the willingness of the respondents to cooperate and provide truthful answers. Thus, it is obvious that the direct approach which has to do with the use of surveys, samples and even tax auditing may not be able to capture all informal activities. Survey-based technique is jeopardized with undervaluation of the over-all size of the underground economy due to non-response and truthful response given the complex nature of the subject matter (Hassan, 2017). The tax audit reveals the level of tax evasions and undeclared taxable income which could also be used to estimate the size of the shadow economy. Although (Putnins & Sauka, 2015), successfully used the direct approach, claiming that managers are in the position to know the level of unreported income of their firms as well as the workers’ pay that are not disclosed, Reilly and Krstic (2017), appreciated it and equally applied it in their study. However, the criticism is that the direct approach does not accurately measure the size of shadow economy existing in an economy since the estimation is dependent on the willingness of certain individuals to provide the right answers to the questions and also to grant interviews or not. Schneider, Raczkowski and Mroz (2015), explained that underground economy is a natural element of our economic and social life, so in order to have a better understanding of it, the direct estimation may be misleading and that is why a thorough evaluation of its major causes and effects becomes very necessary (International Monetary Fund, 2017).

Empirical review

Karimo, Mohammed and Ibrahim (2022), investigates the size and determinants of the shadow economy in Nigeria. It adopts an aggregation approach within the monetary framework and utilizes

the ARDL estimation technique to analyse quarterly data from 2010 Q1 to 2019 Q4. On average, the results suggest that the quarterly size of the shadow economy is about 55 per cent of the country's GDP. The findings show that government size reduces the size of the shadow economy in the short run but increases it in the long run. The study also finds that interest rate, which is the opportunity cost of holding cash, and development of digital payment system (financial innovation) dis-incentivise informality. The policy implication is that the continuous development of effective digital payment products and their use could potentially reduce the size of the shadow economy in Nigeria

Omodero (2018), examined economic and financial effect of underground economy in all emerging countries is of tremendous concern. Sometimes due to the inputs of the sector to economic growth of nations, it is usually assumed that the government has nothing to lose, meanwhile it goes beyond the seemingly economic benefits, but provides an avenue whereby the government has to suffer financial losses through unavoidable and inherent tax evasions. This study evaluates the impact of shadow economy using the transaction approach and the MIMIC approach which helped to determine the size of the shadow economy as a percentage of GDP and the tax revenue losses suffered by the government for a period spanning from 1991 to 2018. Ordinary least squares method is used to examine the impact of tax revenue earned and lost on Nigeria's GDP. The regression results indicate that tax revenue earned has a significant positive impact on economic growth, while the tax revenue loss has a significant negative influence on GDP. The study finds that underground economic activities do more harm to the government than good and is also detrimental to Nigeria's economic progress. Therefore, the suggestion among others is that the legal activities among them should be formalized and taxed while the unlawful ones should be exterminated

Benjamin (2013), examined the impact of underground economic activities on the total tax revenue generation in Nigeria, using microeconomic data for the period 1980 – 2013 extracted from National bureau of statistics and the Central Bank of Nigeria Statistical bulletin. Causal comparative design was adopted and the area of study is Nigeria. The data collected were analyzed using regression model. These data were further subjected to stationarity test using Augmented Dickey Fuller test, as well as Johanson co integration test. The result showed that there is a negative relationship between total tax revenue generation and the size of underground economy. Thus a naira increase in size of underground economy will bring about -1.520810 decrease in total tax revenue. It is therefore recommended that government should create avenue of bringing underground sector activities into the tax net by imposing minimum taxes on all unregistered business that do not pay company income tax irrespective of their actual level of operation. Secondly, there is need for accountability and transparency by the government to avoid public doubt and mistrust which triggers their willingness to go underground.

Medina and Schneider (2018) estimate the average size of the Nigerian shadow economy for the period 1991 to 2015 to be 41.4 per cent and 56.7 per cent of GDP for predictive mean matching (PMM) and MIMIC methods, respectively. The study finds trade openness, unemployment, size of government, fiscal freedom, rule of law, control of corruption and government stability as the determinants of the shadow economy. Schneider (2007), employed the DYMIMIC (dynamic multiple indicator multiple cause) and currency demand approaches to estimate the shadow economy for 145 economies which also includes Nigeria and shows that the size of the shadow

economy in Nigeria in 2005 is 59.5 per cent. However, the study did not address the issue of country specific determinants.

METHODOLOGY

Research design

The study adopted *ex-post facto* research design. The data was obtained from the Central Bank of Nigeria Statistical Bulletin and Annual Reports, the National Bureau of Statistics (NBS), and other cognate publications. The data covered from 2000 to 2022. The stated hypotheses were analysed with multiple regressions. The multiple regression was used to ascertain the causes and effect of the relationship that exists between two or more variables.

Model Specification

The model specified is stated below.

$$RGDP = F(UGE) \dots\dots\dots(1)$$

$$RGDP = \beta_0 + \beta_1 UGE + U_t \dots\dots\dots(2)$$

For the variable to be at the same level, this can be transform to log

$$RGDP = \beta_0 + \beta_1 UGE + U_t \dots\dots\dots(3)$$

Where:

- RGDP = Real gross domestic product
- UGE = Underground economy
- ,Ut = Stochastic Variable (error term)
- β_0 = Intercept,
- β_1 = Parameter estimate

Presentation of Data, Analysis and Discussion

Multiple Regression Analysis for the Study

Table 4.1: Regression Analysis (dependent variable, RGDP)

	Coefficient	Std. Error	t-Statistic	Prob.
UGE	-1.043121	1.742961	- 0.598476.	0.8031
C	1.100000	1.100000	0.992163	0.5000
R-squared	0.541304			
Adjusted R-squared	0.531522			
F-statistic	0.413247			
Prob(F-statistic)	0.992163			
Durbin-Watson stat	1.782037			

Source: EViews 11 Output

From the regression results as shown in table 4.1, the adjusted R-squared of 0.531522 reveals that approximately 53% of the total variations in the dependent variable real gross domestic product (RGDP) was accounted for by the explanatory variables (underground economy (UGE)), while the remaining 47% was due to the error term. The probability of an F-statistic of (0.992163) indicates

that the entire result was statistically insignificant at 1%. The coefficient of underground economy (UGE) was - 1.043121. This implies that a unit increase in underground economy led to a decrease in real gross domestic product (RGDP), by 1.043121 units. The constant (C) implies that ceteris paribus (holding the explanatory variable constant), real gross domestic product (RGDP) increased by 1.108329 units.

Test of Hypotheses

For the hypotheses testing, the decision was based on the p-values of the t-statistic associated with each coefficient of the independent variables. If a p-value is less than 0.05 (5%), the null hypothesis is rejected. However, if a p-value is greater than 0.05 (5%), the null hypothesis is accepted.

H₀: Underground economy has no insignificant impact on real gross domestic product,

The p-value (0.8031) of underground economy (UGE) in table 4.1 is greater than 0.05. Hence, the null hypothesis (H₀) was accepted, and the alternative hypothesis rejected, that underground economy has negative and insignificant impact on real gross domestic product

Conclusion and Recommendations

Conclusion

All economic activities whether in the developed or developing economy are expected to pass through the conventional processes of gross domestic product (GDP) computation. However, a large chunk of these activities do take place or are not included in the computation, as such the value of GDP at any point in time is hardly a reflection of the true picture of the economy, particularly in the developing countries. Global economy is grinding to a standstill, the underground economy is thriving rapidly in developing countries like Nigeria. The concern here is not to demonstrate the assertion that they exist, and are growing like wild wind. But the appropriate question rather to ponder about is that, 'Is it the fault of the operators of this economy, or that of the weaknesses of laws and institutional framework that developing countries operate that continue to provide a favourable breeding ground for this system to multiply unabated.. The study examines the accounting for economies of underground business sector amidst the crave for entrepreneurship development in Nigeria. The finding of the study revealed that underground economy has negative and insignificant impact on real gross domestic product. In conclusion, effective implementation of policy will reduce underground economy to the barest minimum in the country.

Recommendations

1. Government should come up with policy that will reduce under-ground businesses to the barest minimum that will enhance the economy
2. Government should endeavor to relax some business regulations that prompt the private businesses to go into hiding, thereby not disclosing their income that should be subject to tax.

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