

Entrepreneurial Productivity: Sectoral Contribution To The GDP Of A Developing Economy

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ABSTRACT

Using macroeconomic data for the period 1992-2004, this paper applies Granger's causality adjusted regression model to examine the sectoral contribution to the gross domestic product, as a proxy for entrepreneurial productivity in Nigeria. The study found that only agricultural production and industrial/service output Granger caused changes in GDP, whereas oil production, capacity utilization and non-oil exports had no causality with GDP. The study concludes that oil output and non-oil exports are not significantly contributing to the economy and manufacturing capacity is grossly underutilized. The study recommends increased promotion of non-oil export; an improved operating financial environment; and, greater Nigerian content in the oil sector for increased entrepreneurial productivity.

Keywords: GDP, entrepreneurial productivity

INTRODUCTION

With the disintegration of the Soviet Union, the socialist states of the Soviet Union and Central Europe entered a transition from a centrally planned to a market led economy.

In Nigeria, the central government applied the tool of National Development Planning to chart the course of the nation's economic progress. A major facet of this developmental paradigm is the annual budget that projects the economic objectives of government in the short-term. Prior to the establishment of the Structural Adjustment Programme (SAP) in 1986, the government relied heavily on the national plans to direct resource allocation while politicians and bureaucrats as well wielded enormous influence in the administration of the economy.

The manifest weakness, brought to the fore during the oil glut of the late 1970s, was undue reliance on crude oil as the mainstay of the economy. As crude oil prices plummeted on the world market, Nigeria's foreign reserves nose-dived. As the country struggled to meet its international obligations, the attendant massive backlog of unsettled foreign debts stemmed the flow of new credits and severely curtailed the nation's imports of raw materials and essential goods and services. At the end of the 1980s, the government responded by instituting various job creation policies with a focus on establishing small and medium scale enterprises (SMEs) by entrepreneurs. This reflected the emerging consciousness of the potential of SMEs as economy growth spinners.

Over 20 years have elapsed since the Nigerian state opted for a free enterprise economy. Today, Nigeria is still confronted with dismal economic indices: high unemployment; poverty; and a weak exchange rate. Despite the Nigerian economy's advertised impressive growth rate—reportedly about 8 percent annually in recent times—the economic impact of entrepreneurial development is relatively low. No systematic study has been conducted to examine the implicit contribution of entrepreneurs to the growth. This study examines the contribution of entrepreneurship to Nigerian economic productivity from a structural standpoint; assesses the role of the oil sector; and explores the role of innovation in developing economic policy. The paper is organized as follows: Section 1 introduces the paper; Section 2 presents highlights of historical Nigerian economic policies; Section 3 discusses

entrepreneurship and the industrial and services sectors; Section 4 describes the research methodology; Section 5 analyzes and interprets the data and discusses the results; and Section 6 offers conclusions and recommendations.

LITERATURE REVIEW

The Nigerian government employed National Development Planning (NDP) to chart the course of the nation's economic progress while the former socialist states abandoned their central planning strategies and embraced the practices of the dominant market economy. Continuing the use of NDP, the oil dependent economy was in shambles after crude oil prices fell sharply in the early 1980s,

The resultant economic crisis informed the choice of SAP as the panacea, while the World Bank and International Monetary Fund (IMF), prodded its selection. The major thrust of SAP was the adoption of a market led economy by gradually loosening the administrative controls that tightly gripped the economy.

Some of the policies geared towards broadening Nigeria's economic base included the following: a) liberalizing trade; b) dismantling commodity boards; c) stimulating export trade; d) providing easy access to foreign exchange; and, e) local sourcing of raw materials. Between 1983 and 1994, such government projects as the moribund National Directorate of Employment (NDE), the defunct Directorate of Foods Roads and Rural Infrastructure (DFRRI), the Peoples Bank of Nigeria (PBN), Better Life for Rural Women, and the Family Economic Advancement Programme (FEAP) were established to stimulate entrepreneurship and enhance economic growth.

From 1994 to 2002, the National Economic Empowerment and Development Strategy (NEEDS) and its complement, National Agency for the Eradication of Poverty (NAPEP), the consolidation of the banking industry and the Micro-Credit initiative were all designed to achieve notable economic objectives: a) to create a friendly environment for entrepreneurship; b) stem the downward slide of the economy; and c) ensure more robust economic growth and development. In short, the underlying intention behind the various policy tools was to cede more economic power to the entrepreneurial-led private sector. The privatization policy in particular, has remained the focus of the federal government since about 1990. Although Nigeria went into a free enterprise economy expecting significant economic growth and expansion rates, it has not materialized.

The role of the entrepreneur as an agent of economic growth and employment generation in the society has gained considerable attention both in the literature and the policy thrust of well-developed and developing economies (Lauder, Bookcock, and Presley, 1994). Some economic literature (Kemerschen, Mckenzie, and Nardinelli, 1986) recognizes the vital importance of entrepreneurship, by calling it the fifth factor of production. What makes entrepreneurship significant is the ability to create a commercial or industrial enterprise, and this can be very crucial to the advancement of social progress. The creation of small and medium scale enterprises and their subsequent expansion through successful development adds to the productive capacity of a nation. Moreover, it takes the growth of successful SMEs to grow into large and multinational corporations (Sum, Kow, and Chen, 2004).

Entrepreneurship has been characterized as productive and unproductive (Baumul, 1993). Productive entrepreneurship contributes to economic growth while unproductive entrepreneurship results in net reduction in social income and wealth. Unproductive entrepreneurship is viewed as the manifestation of rent, seeking behaviors that add no positive value to society. Thus, only when entrepreneurship is productive can it make positive contribution to a nation's output.

Research has shown that that small scale businesses play crucial roles in the economic development of countries (Ogundele; 2006). They are more likely to employ more workers than their large scale counterparts. They complement large scale organizations as training workshops for skills development of industrial workers as well as establish forward and backward linkages to economic activities in the society. Malaysia and Indonesia as examples of countries whose spectacular economic development were attributed to the rapid development of the small and medium scale enterprises. Consequently, many countries now see small business as instrument for fighting poverty and under – development and are paying more attention in their economic policies toward the development of this class of enterprises.

Marketing and innovation are the two key entrepreneurial functions of a business enterprise, according to Drucker (1981). The primary function of marketing is the creation of a customer. To the extent that customer patronage sustains a business enterprise, the managers of the business are required to produce what society wants; this promotes social welfare and progress. Innovation can be viewed as the source of sustenance to the business enterprise. Without the innovative conduct, business enterprises will find it difficult to compete in the market place and may be doomed to extinction. It therefore takes the innovative spirit in a business firm to always strive for new and better ways of doing business and ensuring its long-term survival (Geus, 1997). Drucker (1981) suggests some ways for a business to be innovative: producing at a lower price; inventing new and better products; creating new conveniences and even designing a new organization.

Basically, the Nigerian private sector can be categorized into these broad industrial spheres: Oil, Agriculture and Industrial/Services (including non-oil mining). The Nigerian economy has depended largely on crude oil for its sustenance, which contributes over 90 per cent of its foreign exchange. Diversification of the resource base of the economy informed the establishment of SAP and the orientation towards a market-led economy. But in terms of entrepreneurial development, it can be argued that the oil industry has minimally contributed. This is because its Nigerian content has been estimated at less than 5 per cent. Most of the entrepreneurial activities of the oil industry are initiated outside the country's boundaries, with Nigerians playing a passive role, at best.

Agriculture, on the other hand, has been the main occupation of Nigerians and engages the majority of its people. Entrepreneurially, agriculture presents far more opportunities for entrepreneurial development in the sense that it is a breeding ground for micro- business. According to the European Commission (1992) classification of SMEs, based on number of employees, a micro enterprise is a firm that has between 0 and 9 employees, and since most Nigerian farmers operate at the subsistence level, they are mainly micro-businesses. However, farming as a business enterprise, with an entrepreneurial bent is still in its infancy. The mode of farming in most communities has remained traditional. But in terms of the number of people engaged in agriculture and its Nigerian content, the agricultural sector should be a major contributor to GDP.

For the purpose of this study, the industrial/services sector encompasses all commercial activities undertaken in the country excluding crude oil and agricultural production. This is the sector where entrepreneurial talents would be expected to be markedly exhibited because of a) the vast opportunities that exist in the production of goods and services and b) the major role of agricultural is the supply of raw materials needed for the industrial production. Most references to entrepreneurship, therefore, focus on the industrial and services sector. For example, Edmondson (1997) observes, "...the Chief Executives of seven small, fast growing technology companies banded together in Paris to form an association for businesses that double their sales at least every five years". Similarly, Lauder, Bookcock and Presley 1994 report that in Germany, SMEs provide approximately two-thirds share of employment, hold two-fifths of all investments and contribute 46 percent towards GDP. Supporting the link between entrepreneurship and industrial/service business (Sum, Kow, and Chen, 2004) highlighted the attention being accorded the development of small and medium enterprises in countries like Singapore, Hong Kong, South Korea, Taiwan, Mexico and Malaysia. Recent policy measures of the Nigerian government towards agriculture and small and medium scale industries funding signify their entrepreneurial quality.

Having established the vital importance of entrepreneurship to economic growth and development, why is the Nigerian state still confronted with high levels of unemployment, poverty, weak exchange rates and inflation (Fakiyesi, 2001)? The contra-evidence of these anti-developmental indices suggests that the level of entrepreneurial development is still far less than optimal. Given that a gap could exist between the actual and potential growth in gross domestic products, for example when an economy is operating inside its production possibility curve (Kamerschen and Valentine, 1981), it then implies inefficient resource deployment and weak entrepreneurship. The often touted magic of foreign direct investment (FDI) may be a mirage where indigenous entrepreneurial seasoning is lacking.

METHODOLOGY

This study examines the impact of entrepreneurship on productivity and employed Gross Domestic Product (GDP) for the period 1992 to 2004, a 13- year data set. The year 1992 was chosen as the beginning date because it

represents six years after SAP was established, thereby allowing sufficient time to fully capture the lagged effect of SAP on the economy. Moreover, thirteen years is considered long enough for the transformation of the economy that informed the SAP experiment. Further, by 2004 Nigeria was 44 years as an independent State; so our sample size represents about 30 percent of the target population and 64 percent of the accessible population. Nigeria became an independent state in 1960: that becomes the study’s reference point for evaluating the nation’s economic policies. The interval between 1960 and 2004 is the target population. However SAP marked a watershed in the history of Nigeria, thereby making the post-SAP period our accessible population. The Central Bank of Nigeria Statistical Bulletin is the data source for provided the source for our data. Aggregate GDP and Nigeria’s product sources—crude oil, agriculture and industrial/services—and capacity utilization and non-oil exports data are shown as Table 1.

Operational variables used in this study are gross domestic product (GDP) as a measure of national productivity and crude oil, agricultural and industrial/services products, capacity utilization and non-oil exports are proxies of entrepreneurship. The model is developed as:

$$GDP = f(COP, AGP, ISP, CUZ, NOE)$$

where

- GDP = Gross Domestic Product.
- COP = Crude Oil production.
- AGP = Agriculture Production.
- ISP = Industrial/Services Production.
- CUZ = Capacity utilization.
- NOE = Non –Oil Export.

We undertook a regression analysis to enable us establish relationship between the dependent and independent variables as defined.

This is expressed as a multiple regression:

$$Y_t = a + b_1x_1 + e_i \tag{1}$$

Adapting this to suit our study, we have

$$GDP_t = a + \theta_1 COP_t + \theta_2 AGP_t + \theta_3 ISP_t + \theta_4 CUZ_t + \theta_5 NOE_t + e_i \tag{2}$$

where

- a = intercept, is the expected value of GDP when the independent variables are equal to zero.
- θ_1-5 = Coefficients of the independent variables, representing the slope of the regression line.
- e_i = Error term.

The relationship between the dependent and independent variables was tested by means of correlation coefficient. Causality tests as adopted by Granger (1969), Ezirim(1999) and Okereke (2004) were used to test the direction of the relationship. Ordinary correlation coefficient according to previous studies is incapable of providing the direction of effect of variables on a regression model. A more directional model like Granger Causality test is preferred (Okonkwo, 1989; Ezirim 1999 and Okereke 2004). Invariably, there is a flow of causality from the independent to the dependent variable if the coefficient of the combined (present and past) values of the independent variable is significant. Otherwise causality is not flowing. This implies that variations in the dependent variable (GDP) are caused by the independent variable. Thus, from equations 3 & 4, causality flows from crude oil production to GDP if the joint present and past values of COP are significant at the conventional level of significance (0.05). This indicates that COP is a significant factor affecting GDP. On the other hand, equations 5 & 6 are expressing the opposite of equations, 3 & 4, which automatically makes GDP an explanatory variable to COP. Consequently, causality flows from GDP to COP if the combined value of GDP is significant which implies that

GDP is a significant factor influencing COP. Otherwise, it is not significant. It is expected that causality flows from COP to GDP but not in the reverse order thereby giving one-way causation. It is also expected to have a direct relationship between GDP and COP. This has been applied successfully in the work of (Pierce, 1977, Ezirim, 1999 and Okereke, 2004).

Equation 2 can be transformed into:

$$GDP_t = \phi_1 GDP_{t-1} + \phi_1(COP_t + COP_{t-1}) + e_i \tag{3}$$

$$= \phi_1 GDP_t + \phi_2(COP_{t+t-1}) + e_i \tag{4}$$

$$COP_t = COP_{t-1} + \phi_2(GDP_t + GDP_{t-1}) + e_i \tag{5}$$

$$= COP_{t-1} + \phi_2(GDP_{t+t-1}) + e_i \tag{6}$$

$$GDP_t = GDP_{t-1} + \phi_3(AGP_{t+t-1}) + e_i \tag{7}$$

$$AGP_t = AGP_{t-1} + \phi_4(GDP_{t+t-1}) + e_i \tag{8}$$

$$GDP_t = GDP_{t-1} + \phi_5(ISP_{t+t-1}) + e_i \tag{9}$$

$$ISP_t = ISP_{t-1} + \phi_6(GDP_{t+t-1}) + e_i \tag{10}$$

$$GDP_t = GDP_{t-1} + \phi_7(CUZ_{t+t-1}) + e_i \tag{11}$$

$$CUZ_t = CUZ_{t-1} + \phi_8(GDP_{t+t-1}) + e_i \tag{12}$$

$$GDP_t = GDP_{t-1} + \phi_9(NOEt_{t-1}) + e_i \tag{13}$$

$$NOEt = NOEt-1 + \phi_{10}(GDP_{t+t-1}) + e_i \tag{14}$$

Where

t-1 = Value a year ago (past year's value)

t = Current year's Value.

t - 1+1 = Pass and present year's Values combined.

These (Equations 3 –14) are modified versions of our operational models, which are regressed using Xlstat Pro 7.8.2 version. The data used are annual values adjusted to suit our causality test, and presented in Table 1.

Table 1: Presentation of Data and Estimation Results

| Year | GDP N'm | COP N'm | % of GDP | AGP N'm | % of GDP | ISP N'm | % of GDP | CUZ % | NOE N | NOE % |
|------|------------|------------|-------------|------------|-------------|------------|-------------|----------|----------|----------|
| 1992 | 532,618.8 | 248828.0 | 46.0 | 145225.3 | 27.0 | 140560.6 | 26.0 | 38.1 | 4227.8 | 0.8 |
| 1993 | 683869.8 | 242109.7 | 35.0 | 231832.6 | 34.0 | 208927.5 | 21.0 | 37.2 | 4991.3 | 0.7 |
| 1994 | 899863.2 | 219109.3 | 24.0 | 349245.0 | 39.0 | 332509.0 | 23.0 | 30.4 | 5349.0 | 0.6 |
| 1995 | 1933211.6 | 766519.0 | 40.0 | 619806.8 | 32.0 | 546886.8 | 32.0 | 29.3 | 23096.1 | 1.2 |
| 1996 | 2702719.1 | 1167911.3 | 43.0 | 841457.1 | 31.0 | 783350.7 | 36.0 | 32.5 | 23327.5 | 0.9 |
| 1997 | 3801972.6 | 1068978.5 | 38.0 | 953549.4 | 34.0 | 794444.7 | 20.0 | 30.4 | 29163.3 | 1.0 |
| 1998 | 2708430.9 | 736795.3 | 27.0 | 1057584.0 | 39.0 | 914051.6 | 28.0 | 32.4 | 34070.2 | 1.3 |
| 1999 | 3194023.6 | 1024464.3 | 32.0 | 1127694.2 | 35.0 | 1041865.1 | 29.0 | 34.6 | 19492.9 | 0.6 |
| 2000 | 4537640.0 | 2186682.5 | 48.0 | 1192910.1 | 26.0 | 1158047.4 | 23.0 | 36.1 | 24822.9 | 0.5 |
| 2001 | 4685912.2 | 1669001.1 | 36.0 | 1594895.6 | 34.0 | 1422015.5 | 25.0 | 42.7 | 28008.6 | 0.6 |
| 2002 | 5403006.8 | 1798823.4 | 33.0 | 1885252.7 | 35.0 | 1720930.7 | 26.0 | 44.3 | 95046.5 | 1.8 |
| 2003 | 6947819.9 | 2741553.9 | 39.0 | 2136466.0 | 31.0 | 2069800.0 | 27.0 | 46.1 | 95092.5 | 1.4 |
| 2004 | 8264959.4 | 2831319.8 | 34.0 | 2578962.0 | 31.0 | 2854677.3 | 25.0 | 45.0 | 113735.3 | 1.4 |

Source: Central Bank of Nigeria (CBN) Statistical Bulletin, 2004

ESTIMATION RESULTS

$$\text{GDP}_t = 0.50 + 0.972 \text{ GDP}_{t-1} - 0.038 \text{ COPT}_{t+t-1} \tag{15}$$

t (1.099) (8.382) (-0.350)
 Sig.t 0.298 0.000 0.734
 R = 0.973 R2 = 0.947 AR2 = 0.936
 F = 88.696 F-sig. 0.000.

$$\text{COPT} = 0.864 + 0.289 \text{ COPT}_{t-1} + 1.279 \text{ GDP}_{t+t-1} \tag{16}$$

t (-1.610) (-1.292) (5.518)
 Sigt 0.138 0.225 0.000
 R = 0.971 R2 = 0.944 AR2 = 0.932
 F = 83.888 F: sig = 0.000

$$\text{GDP}_t = 0.482 - 0.073 \text{ GDP}_{t-1} + 1.042 \text{ AGP}_{t+t-1} \tag{17}$$

t (1.709) (-0.332) (4.665)
 Sigt 0.118 0.747 0.001
 R = 0.991 R2 = 0.983 AR2 = 0.980
 F = 288.962 F:sig = 0.000

$$\text{AGP}_t = -0.528 + 0.087 \text{ AGP}_{t-1} + 0.89242 \text{ AGP}_{t+t-1} \tag{18}$$

t (-0.977) (0.238) (2.300)
 sigt 0.352 0.817 0.044
 R = 0.989 R2 = 0.978 A R2 = 0.974
 F = 24.887, fig: 0.00

$$\text{GDP}_t = 0.587 - 0.179 \text{ GDP}_{t-1} + 1.134 \text{ ISP}_{t-1} + e_i \tag{19}$$

t (2.785) (-0.985) (6.252)
 sigt 0.019 0.248 0.0000
 R = 0.984 R2 = 0.989 A R2 = 0.987
 F = 449.323, fig: 0.00

$$\text{ISP}_t = -1.138 + 0.240 \text{ ISP}_{t-1} + 1.263 \text{ GDP}_{t-1} + e_i \tag{20}$$

t (-1.647) (0.483) (239.8)
 sigt 0.130 0.639 0.037
 R = 0.990 R2 = 0.979 A R2 = 0.975
 F = 286.237, fig: 0.00

$$\text{GDP}_t = 0.904 + 0.963 \text{ GDP}_{t-1} + 0.311 \text{ CUZ}_{t-1} + e_i \tag{21}$$

t (1.137) (4.892) (2.103)
 sigt 0.282 0.000 0.528
 R = 0.974 R2 = 0.948 A R2 = 0.938
 F = 91.524, fig: 0.000

$$\text{CUZ}_t = -0.082 + 0.805 \text{ CUZ}_{t-1} + 0.059 \text{ GDP}_{t-1} + e_i \tag{22}$$

t (-0.301) (4.892) (2.103)
 sigt 0.769 0.001 0.062
 R = 0.887 R2 = 0.786 A R2 = 0.744
 F = 18.112, fig: 0.00

$$\text{GDP}_t = 1.064 + 0.632 \text{ GDP}_{t-1} + 0.293 \text{ NOP}_{t-1} + e_i \tag{23}$$

t (1.891) (2.974) (1.520)
 sigt 0.88 0.014 0.160
 R = 0.978 R2 = 0.956 A R2 = 0.947
 F = 108,946 fig: 0.000

$$\text{NOPt} = -3.297 + 0.039\text{GDPt}_{t-1} + 1.124\text{GDPt}_{t-2} + e_i \quad (24)$$

| | | | | |
|---|----------|---------------------|------------------------|--------------------------|
| t | (-2.436) | (0.132) | (3.050) | |
| | sigt | 0.035 | 0.898 | 0.012 |
| | R | = 0.941 | R ² = 0.885 | A R ² = 0.862 |
| | F | = 38.381, fig: 0.00 | | |

INTERPRETATION AND DISCUSSION OF ESTIMATION RESULTS

From the results, correlation coefficient ($R = 0.973$), a measure of the degree of relationship between the dependent and independent variables shows that there is a significant relationship between GDP and COP in model 15 but without the expected sign. A priori, the expectation is for the coefficient of COP to be positive since the more oil produced the higher GDP but the inverse coefficient suggests the opposite. Reserving the equation Model 16 indicates that R is still significant at 0.971 showing a strong relationship between COP and GDP.

The causality test for Model 15 shows that the combined current and lagged value of COP is insignificant. The implication of this is that COP is not causing GDP. It indicates that COP is not a significant factor affecting GDP, though there is a relationship. With respect to Model 16 the combined present and past values of GDP is significant, implying that causality is flowing from GDP to COP. In effect, GDP is a significant factor influencing COP. This provided one directional relationship from GDP to COP.

Model 17 shows there is a significant relationship between GDP and AGP based on R-value of 0.991. The coefficient of AGP is rightly signed, since a priori one expects a direct relationship between AGP and GDP. In the reverse order, Model 18 shows that the relationship is strong; R-value of 0.977, the coefficient, is also positive, implying that both variables move in the same direction. The causality is two-way since the combined past values of AGP is significant at 95 percent confidence level. Similarly, the combined past and present value of GDP is also significant, making GDP a significant factor affecting AGP.

The causality test for ISP shows that the variable is a significant factor affecting GDP, as both past and present values of ISP is significant refer to Model 19. Reserving the order Model 20 also indicates a flow of causality from GDP to ISP; thus, indicating two-way causality between the two variables. In addition, it indicates that GDP significantly affects ISP.

Testing CUZ for causality reveals that causality is not flowing from CUZ to GDP, signifying that CUZ is not a factor affecting GDP as Model 21 shows. Reversing the order, there is no casualty between GDP and CUZ. This confirms that current and past GDP values have no significant effect on CUZ, as Model 22 shows.

AGP as a causative factor for GDP is a demonstration of the long held view that it is the main stay of the economy. The reverse causality from GDP to agricultural production suggests that current and lagged outputs significantly influence future output especially where there is no natural disaster like draught. In connection with ISP as causative of GDP there is two-way causality flowing between GDP and ISP. This shows the importance of ISP to GDP.

Regarding CUZ, there is no causality with GDP and vice versa. This is a reflection of the low capacity utilization in most firms. With respect to NOE, the causality is not significant on GDP showing low level of export activity. The reverse causality of GDP on NOE shows that the level of output determines the capacity of a nation to export.

Taking NOE, one observes that it is not a significant factor affecting GDP. This is true because the joint present and past value of NOE is not significant to influence GDP. Reversing the order, one observes that GDP is significant factor affecting NOE, suggesting one way causality between non-oil export and GDP as Models 23 and 24 respectively show.

There are ten models in all, 15-24; each shows its robustness for testing causality between various dependent and independent variables as the f-ratio is statistically significant.

The focus of this discussion is to explain the flow of causality and the rationale for observed results. The negative coefficient of COP and its insignificance as causative of GDP is consistent with the common notion that Nigeria is making less effective use of her oil wealth in developing the Nigeria economy. In actual fact, COE is heavily dependent on external inputs, as Nigerian content was less than 5 per cent. Most contracts, even those done by Nigerian contractors are often paid in dollars. The technology and market for crude oil are also external, with the result that not much in terms of innovation is derived from Nigeria. Moreover, the oil industry has been accused of fostering corruption in the society. Government's strong reliance on oil revenue yielded less reliance on taxation as a revenue source. This contributed to a) the government distancing itself from its citizens, resulting in less responsiveness to their civic duties and b) minimal demands on the government to fulfil its obligations to its citizens.

The somewhat indexation of the Nigerian oil industry wages to the international standard places a veil between Nigerian oil workers and the realities of the local condition. Life styles of those who are employed in the oil sector are commonly characterized as affluent and ostentatious. Much of this may contribute to the low motivation among Nigerian workers in other sectors of the economy and their widely publicized propensity for corrupt practices.

FINDINGS AND RECOMMENDATIONS

This paper has examined the productivity of entrepreneurship using sectoral analysis of the key sectors which contribute to GDP. It was revealed that AGP and ISP have significant causal effect on GDP. COP, CUZ, and NOE do not have causal effect on GDP. This implies that Nigerian entrepreneurs have not taken full advantage of the oil sector as a vehicle for enhancing their productivity through greater innovative and enterprising spirit.

Based on the findings, we recommend these measures for greater entrepreneurial productivity:

1. The policy of enhancing the Nigerian content of the oil sector should be vigorously pursued.
2. The machinery of taxation should be overhauled and strengthened to give citizens an active role in providing public services and requiring governmental accountability.
3. AGP should be strengthened with greater emphasis on the production of raw materials for agro-allied industries.
4. **The ISP develops more entrepreneurial skills by way of** innovation and enrichment of raw material base for more production.
5. Systematic, strategic efforts should be targeted toward developing low-tech industries as potential entries into the high-tech sector.

With improvement in the ISP sector, it is expected that the capacity utilization of manufacturing companies will become more significant players in the economy. If Nigerian entrepreneurs become more aggressive with export promotion by developing more competitive products for the international market, the impact could be very positive on the Nigerian economic bottom-line.

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