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RESULTS & DISCUSSION

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

**UNPUBLISHED DISSERTATIONS AND THESES**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

# REAL INCOME, INFLATION, AND INDUSTRIAL PRODUCTIVITY IN NIGERIA (1970-2005)

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**ABSTRACT**

*The study empirically examines the effect of real income, inflation, and industrial productivity in Nigeria, in line with the objectives of this study, secondary data were obtained from central bank of Nigeria statistical bulletin covering the period of 1970 to 2005. In concluding the analysis, multiple regressions were employed to analyze data on such variables as real income, inflation, wages, manufacturing output and consumer price index were all found to have significant effects on the Economics Growth with the Adjusted $R^2$ of 72%. Following the outcome of this study, it is therefore concluded that an increase in real income resulted in an increase in the unit cost of labour and cause firms to substitute capital for labour, which reflected in an increase in the marginal productivity of labour. The result suggest that the government should continue to import few but only essential commodities, a large number of imported goods and raw material should be cut down to eliminate imported inflation.*

**KEYWORDS**

Real income; inflation; industrial productivity.

## BACKGROUND TO THE STUDY

The studies of the productivity in the non-manufacturing industry and manufacturing industry have transpired in the late 1990s. For instance, Oulton (1998) studied a sample of 140,000 UK companies including both the manufacturing and non-manufacturing industry over the period 1989-93. Faggio et al. (2007) investigated the relation between productivity inequality and wage inequality by analyzing a UK longitudinal panel data covering the manufacturing and non-manufacturing sectors since the early 1980s. Morikawa (2008) empirically analyzed the relationship between union presence and firm performance in area such as productivity and profitability by using data on a large number of Japanese firms, covering both manufacturing and non-manufacturing industries.

It is almost standard in the theoretical literature to envisage that inflation and productivity growth are negatively related as workers purchasing power affects motivation and effort, but also because inflation affects firms' investment plans, influences capital depreciation rates and induces changes in the choices of production techniques (Wakeford 2004). Growth in productivity is the key driver of growth in per capita income and living standards in the long run. The trend in productivity growth is determined by the development of new technologies and how efficiently resources-labour, capital and fixed resources (such as land) – are organized in the production process. These are factors that determine the capacity of the economy to supply goods and services and are not directly responsive to monetary policy in the short run. Nevertheless, because inflationary pressures reflect the balance of supply and demand growth in the economy, trend productivity growth is an important determinant of the pace at which the economy can grow over the medium term without generating inflationary pressures. Understanding developments in trend productivity growth is therefore an important consideration for monetary policy formulation. Following a period in the 1990s and early 2000s when, by historical standards, Australia experienced unusually rapid productivity growth, trend productivity growth slowed over the latter part of the 2000s. The slowing in aggregate productivity growth is widely recognised, but there has been some debate about how broad based this has been across industries and about the reasons for the slowdown. Weaker productivity outcomes have been especially pronounced in the mining and utilities industries, where the level of productivity has fallen. However, there has also been a marked slowing in trend productivity growth across most other industries (Patrick D'Arcy and Linus Gustafsson, 2012).

The historically high trend productivity growth in the 1990s allowed the economy and incomes to grow at a relatively rapid pace without generating inflationary pressures. This experience was common. Two main arguments are relevant here. First, higher real income increase the opportunity cost of job loss, which can stimulate greater work effort to avoid redundancy (an efficiency-wage type hypothesis). Second, an increase in real income will result in an increase in the unit cost of labour and cause firms to substitute capital for labour, which will be reflected in an increase in the marginal productivity of labour. Gordon (1987) highlights that substitution from labour to capital in response to inexorable increases in real income has been at the heart of the economic growth process for centuries. Of course, inflation and real income are also related and Hendry (2001) shows succinctly that inflation responds to excess demands in many parts of an economy including labour costs within the labour market.

The effect of inflation on real income is reflected especially where there is a change in the expected inflation rate. If the earning streams of an individual remain unchanged and inflation changes from expected, real income will experience a decline. According to Milton (2007), Nigeria's long-run growth performance has been extremely poor. For the 1960-2000 period, real income per capita grew at only 0.43% per annum at constant domestic prices, and in PPP-adjusted terms average income actually fell. The importance of economic growth for poverty reduction has been established by numerous empirical studies and has recently been underscored by the phenomenal progress of China and other countries in East Asia and Pacific region. In Nigeria, the consequence of long-run stagnation in average income was a sharp cumulative increase in poverty, both in terms of absolute numbers and as a share of the overall population. Nigeria's long-run stagnation has occurred in a context of acute short-to medium-run volatility. Nigeria was a poor country at independence in 1960, with a per capita income in constant 2000 U.S. dollars of less than $250 at official exchange rates (about $1000 in PPP-adjusted terms). Real per capita income rose impressively between 1960 and the mid-1970s, with the exception of a brief but sharp interruption immediately before and during the civil war of 1967-70. In the mid-1970s, income fluctuated with little overall trend, but then it plummeted in 1981 with the onset of an acute economic crisis. Between 1981 and 1984, real output fell at an annual average rate of nearly 6%. The Structural Adjustment program adopted in 1986 brought about temporary relief, with real growth averaging over 5% per annum between 1988 and 1990. The 1990s, however, witnessed nearly complete stagnation, with average income growing at a rate of less than half a percentage point per annum. Note that while the growth rate of real income per capita averaged 0.43% between 1960 and 2000, it averaged a robust 3.4% between 2001 and 2006, and the average growth rate of real per capita income was an outstanding 4.2% between 2003 and 2006. The first decade of the 21st century was then a period of unprecedented growth spurt in Nigeria.

Recognition and strong evidence of real income, inflation and industrial productivity interrelationships can help shape policy formation for industrial productivity enhancement, inflation control or consumption stimulation. Although some studies have focused on this set of interrelationships using a range of co-integration techniques, none have controlled for structural breaks and, therefore, may provide misleading results.

## STATEMENT OF THE PROBLEM

In relation to these and other earlier empirical studies the following three points must be stressed. First, most studies used standard time series or panel data techniques but failed to consider structural changes in the co-integrating vector. Since the early 1980s many countries, including Australia, have undergone significant structural changes and, therefore, it has become necessary to test for structural breaks in co-integrating relationships. Second, some of the previous empirical studies have been conducted using co-integration analysis with small sample sizes. This may significantly distort the power of the standard tests and lead to misguided conclusions. Third, most empirical studies have ignored the role of real income on the relationship between inflation and productivity. Given these empirical concerns the remainder of this paper seeks to empirically investigate the effect of inflation and real income on productivity for Nigerian economy over a 40 year period using a comprehensive set of empirical tests which include the explicit inclusion of a structural change test.

## OBJECTIVES OF THE STUDY

The main objective of this article is to examine empirically the effect of real income and inflation on industrial productivity for the Nigerian economy over the period 1970 to 2010 using a comprehensive set of empirical tests. The objectives are broken down into the following specifics:

(i) To evaluate the effect of inflation on Nigerian economy,
(ii) To examine the relationship between real income and industrial productivity.
(iii) To assess the effects of inflation on Industrial Productivity either positively or negatively.

## LITERATURE REVIEW

The relationships between real income, inflation, and productivity growth have received much attention in the empirical literature. This literature is characterized by the application of a variety of different empirical tests on data sets corresponding to a variety of economies.

Inflation has been low when industrial productivity growth has been high. This occurs because the Federal Reserve has not adjusted nominal income growth in response to changes in industrial productivity growth, implying that an acceleration in trend industrial productivity growth leads to a deceleration in inflation. According to Saten *et al.* (2010), many conceive that inflation and productivity growth are negatively related (Jaret and Selody, 1982; Clark, 1982; Hondroyiannis and Papapetrou, 1997). For instance, inflation reduces the incentive to work, distorts the informational content of relative price levels (leading to inefficient investment plans), and shrinks tax reductions for depreciation (resulting in an increase in the rental price of capital); all of these will indirectly constrain productivity growth (Christopoulos and Tsionas, 2005). Narayan and Smyth (2009) surmise further possible mechanisms through which inflation can adversely affect labour productivity, including the movement towards an inefficient mix of factor inputs, an increase in buffer stocks and a reduction in R&D expenditures.

Four important empirical studies suggest there is a *negative* relationship between inflation and productivity. Bitros and Panas (2001) examined the effect of inflation on total factor productivity across Greek manufacturing industries between 1964 and 1980. They found that the acceleration of inflation from the period 1964-1972 to 1973-1980 led to a significant slowdown in total factor productivity in 16 out of 20 manufacturing industries. Tsionas (2003) also found a negative relationship between inflation and productivity for fifteen European countries over the period 1960-1997. While their application of Bayesian techniques revealed no co-integration, their application of the Vector Error Correction Model (VECM) technique did suggest a negative relationship between inflation and productivity for most countries. Further, their causality test results imply that there is bi-directional causality between inflation and productivity for five countries while one-way causality exists for two countries. Christopoulos and Tsionas's (2005) application of panel co-integration techniques to European data over the period 1961-1999 also imply a long run negative relationship between inflation and productivity growth in seven of the fifteen countries.

Mahadevan and Asafu-Adjaye's (2005) application of Granger causality tests to domestic inflation and mineral product price data for the Australian mining sector provides results that imply a negative unidirectional causality ran from prices to mining productivity growth between 1968 and 1998. However, Freeman and Yerger (1998), who utilized Engle and Granger (1987) and Hsiao's (1981, 1982) Granger causality tests to examine the link between inflation and productivity using data from 1955-1994 for 12 OECD countries, argue that the correlation between inflation and productivity is spurious due to the cyclical movements between them. One main reason for a lack of consensus behind the inflation-productivity relationship may be the omission of an explicit consideration of real wages. For instance, using US data Mehra (1991) examined the relationship between inflation and productivity adjusted wages and found that in the long run inflation had a positive effect on per-unit labour costs. Mehra's (1993, 2000) own re-examinations assert that in the long run there is a bi-directional relationship between these variables.

That inflation has costs is widely accepted. What is less clear is the path by which inflation generates these costs – there are many alternative theories. The interaction of inflation with the tax system, the reduction in the value of the price mechanism, the diversion of resources from productive activities to managing inflation, or even the cost of adjusting prices on menus have all been posited as costs of high inflation. However, quantifying these channels empirically is much harder than describing them theoretically. Regardless, whatever the channel of effect, they must all ultimately reduce output. And inflation's negative effect on output is most likely to be reflected in lower productivity growth.

## REAL INCOME AND INDUSTRIAL PRODUCTIVITY

Sharpe 2002 defined Productivity as the relationship between output and inputs. Partial productivity indicators may be defined in terms of output per unit of labour, per unit of capital, per unit of land, and per unit of raw materials or intermediate goods. Total factor productivity growth is defined as output growth in relation to a weighted average of the growth of inputs (usually labour and capital) where the weights are the income shares of the factors of production. The productivity measure that will be used is industrial productivity, as industrial productivity is much more closely related to potential increases in real income and living standards than total factor productivity growth. Productivity also refers to the efficiency with which an economy employs resources to produce economic output.

Productivity refers to the efficiency with which an economy employs resources to produce economic output. Growth in productivity is the key driver of growth in per capita income and living standards in the long run. The trend in productivity growth is determined by the development of new technologies and how efficiently resources – labour, capital and fixed resources (such as land) – are organised in the production process. These are factors that determine the capacity of the economy to supply goods and services and are not directly responsive to monetary policy in the short run. Nevertheless, because inflationary pressures reflect the balance of supply and demand growth in the economy, trend productivity growth is an important determinant of the pace at which the economy can grow over the medium term without generating inflationary pressures. Understanding developments in trend productivity growth is therefore an important consideration for monetary policy formulation(Patrick and Gustafsson 2012).

Again according to Saten Kumar (2010), a positive relationship between real income and industrial productivity is often hypothesised because higher real wages increase the opportunity cost of job loss and stimulate greater work effort to avoid redundancy. This positive relationship is also hypothesised because higher real income put upward pressure on labour costs and cause firms to substitute capital for labour, thereby increasing the marginal industrial productivity of labour (Wakeford, 2004). The relationship between real income and industrial productivity is also based on the concept that greater capital stocks increase the demand for labour, thereby increasing the real income, and stimulating industrial productivity. Similarly it is possible that domestic pressures on real income stimulate movements towards the adoption of capital thereby increasing measures of industrial productivity.

Erenburg (1998) examined the long run relationship between real income and industrial productivity in the US from 1948-1990 and identified a long run, counter-cyclical relationship between real income and industrial productivity once the empirical stance had controlled for capital stocks. Their main findings imply that if the public capital stock had remained constant then both real income and industrial productivity would have increased. However, using panel co-integration techniques Mora *et al*. (2005) examined the convergence in income and industrial productivity for eleven European countries for the period 1981-2001 and found reductions in the dispersion of nominal income and unit labour costs, but did not find similar dispersion reductions in industrial productivity or real income.

## INFLATION, REAL INCOME AND INDUSTRIAL PRODUCTIVITY

The concept of inflation has been define as a persistence rise in the general price level of broad spectrum of goods and services in a country over a long period of time. Inflation has been intrinsically linked to money, as captured by the often heard maxim "inflation is too much money chasing too few goods". Hamilton (2001) inflation has been widely described as an economic situation when the increase in money supply is faster than the new production of goods and services in the same economy. Piana (2001) economists usually try to distinguish inflation from an economic phenomenon of a onetime increase in prices or when there are price increases in a narrow group of economic goods or services.

Ojo (2000) and Melberg (1992) the term inflation describes a general and persistent increase in the prices of goods and services in an economy. Inflation rate is measured as the percentage change in the price index (consumer price index, wholesale price index, producer price index etc). Essien (2002) opine that the consumer price index (CPI), for instance, measures the price of a representative basket of goods and services purchased by the average consumer and calculated on the basis of periodic survey of consumer prices. Owing to the different weights the basket, changes in the price of some goods and services have impact on measured inflation with varying degrees. There are several disadvantages of the CPI as a measure of price level. First, it does not reflect goods and services bought by firms and/or government, such as machinery. Secondly, it does not reflect the change in the quality of goods which might have occurred overtime. Thirdly, changes in the price of substitutable goods are not captured. Lastly, CPI basket usually does not change often. Despite these limitations, the CPI is still the most widely used measurement of the general price level. This is because it is used for indexation purposes for many wage and salary earners (including government employees).

It is not unusual to amalgamate the above relationships for the purpose of empirical testing. For instance, Narayan and Smyth (2009) used panel co-integration techniques to examine the relationships between inflation, real wages and productivity growth for the G7 countries over the period 1960-2004. They found a positive statistically significant relationship between real income and industrial productivity growth but no statistically significant relationship between inflation and productivity growth.

Strauss and Wohar (2004) examined the long run relationship between inflation, real income and industrial productivity for a panel of 459 US manufacturing industries between 1956-1996 and found that in the long run, inflation Granger-causes productivity, while bi-directional Granger causality runs between real wages and productivity. Hall (1986) and Alexander (1993) found empirical evidence that inflation, real wages and productivity have a co-integrating relationship in the UK, with an implication that higher wage rates stimulate labour productivity via the efficiency wage argument. Finally Gunay *et al*. (2005) examined the relationship between inflation, real wages and profit margins over twenty-nine Turkish manufacturing sub-sectors over the period 1980-1996 and found that profit margins (markups) are positively and significantly affected by real wage costs and price inflation; similar conclusions were obtained for Turkey by Blanchard (1985) and Metin-Ozcan *et al*. (2002).

## RESEARCH METHODOLOGY

This chapter describes the methodology employed in this study. Methodology consists of the procedures to be used for collecting data, summarizing and analyzing the data gathered in other to answer the research questions. It is intended to applying the chosen methods in the research to minimize the costs of obtaining the data and analyzing them while maximizing the expected values of resultant information as well as association level of accuracy. For the purpose, issues addressed include; research design, study population sample and sampling technique, data collection and research instrument validation.

**METHOD OF DATA COLLECTION**

Method employed in Carrying out this research work was by secondary data. Secondary data is the name given to data that has been used for some purpose other than that for which they were originally collected. Secondary data generally used when the term manpower resource necessary for survey arc not available and of course the relevant information required. Secondary data were gotten from different sources e.g. CBN Statistical Bulletin 2005 and Nigeria Bureau of Statistics.

**SAMPLE SIZE**

The duration of my research was basically from 1970-2005 which is in the range of 35yrs. This duration was used because it is detailed enough to give a good result and analysis. This study employs annual data on the rate of inflation, real income (proxied by monthly compensation in the manufacturing sector) and productivity (proxied by output per hour in the manufacturing sector) for Nigeria over the period 1970 to 2005. Data were obtained from the Federal Ministry of Statistics (2006).

**MODEL SPECIFICATION**

**Model A**

The effect of real income on inflation, wages, consumer price index and manufacturing on Nigeria economy.

$$\mathbf{Y_t = \alpha + \beta_1 R_t + \beta_2 N_t + \varepsilon} \quad \textbf{(1)}$$

Where Y is the productivity
R is the real income
N is the inflation and
ε is an error term.

The estimates of $\beta_1$ and $\beta_2$ signify income and inflation elasticities with respect to productivity, *yt* is a vector of *I*(1), non-stationary in level form variables and **α** is a constant.

**Model B**

$$\mathbf{\ln Y_t = \alpha + \beta_1 \ln R_t + \beta_2 \ln N_t + \varepsilon_t} \quad \textbf{(2)}$$

Where lnY is the natural log of productivity
lnR is the natural log of real income
lnN is the natural log of inflation and
ε is an error term.

The causality results are obtained by regressing the respective dependent variables against their past values and the past values of other variables.

$$\Delta ln Y_t = \upsilon + \sum_{i=1}^{k} \theta_i \Delta ln y_{t-1} + \sum_{i=1}^{k} k_i \Delta ln R_{t-1} + \sum_{i=1}^{k} m_i \Delta ln N_{t-1} + \varphi_1 ECT_{t-1} + \varepsilon_{1t} \quad (3)$$

In addition to the variables defined above, the lagged error correction term derived from the long run co-integrating relationship is represented by $ECT_{t-1}$. The serially independent random error is $\varepsilon_{1t}$ and has means equal to zero and finite covariance matrices.

## PRESENTATION AND ANALYSIS OF DATA

This chapter will be used in analyzing and presentation of data collected from different reliable source like CBN Statistics Bulletin 1999, 2005. Nigeria Bureau of Statistics. This was done so as to determine the the effect of real income, inflation, and industrial productivity in Nigeria from the period of 1970 to 2005.

According to the research question, what is the effect of real income and inflation on industrial productivity for the Nigerian economy and after getting the results or answers to these questions, we can now decide if this research has affected Nigeria economy positively or negatively during the periods in which the data are used for the research.

The following tables below are actually gotten from different sources but they are answers to these research questions.

## RESULT PRESENTATION AND DISCUSSION

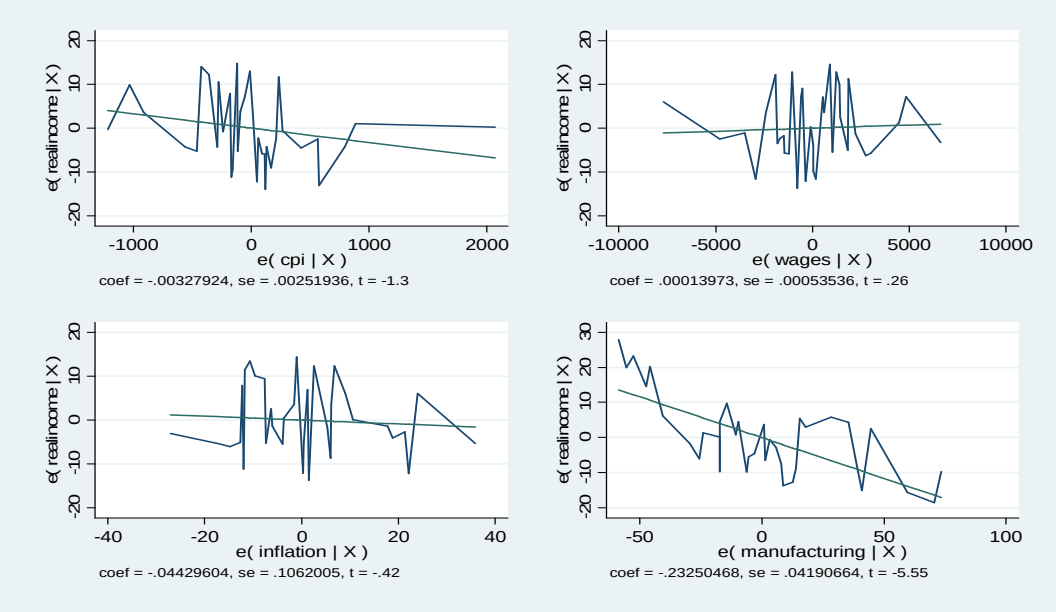
The estimated model used observations for the periods 1970 - 2005 (35years).

**TABLE 1: THE EFFECT OF REAL INCOME ON INFLATION, WAGES, CONSUMER PRICE INDEX AND MANUFACTURING ON NIGERIA ECONOMY**

| Real income | Coefficient. | Std. Err | t-statistics | P>\|t | [95%Conf. Interval] | $R^2$= 0.7559 |
|---|---|---|---|---|---|---|
| Manufacturing | -.2325047 | .0419066 | -5.55 | 0.000 | -.3179738 -.1470355 | Adj$R^2$=0.7244 |
| Inflation | -.044296 | .1062005 | -0.42 | 0.679 | -.2608934 .1723013 | F(4, 31) = 24.00 |
| Wages | .0001397 | .0005354 | 0.26 | 0.796 | -.0009521 .0012316 | Prob > F = 0.0000 |
| Cpi | -.0032792 | .0025194 | -1.30 | 0.203 | -.0084175 .001859 | Root MSE = 8.4919 |
| _cons | 51.97595 | 4.138095 | 12.56 | 0.000 | 43.53625 60.41565 | |

MS = 261.673361

The above table is represented by regression plots below:




## DATA ANALYSIS

TABLE I shows the result of the effect of real income on inflation, wages , consumer price index and manufacturing on Nigeria economy in the short run . A 1% increase in the real income reduces the manufacturing sector by 0.2 percent. This suggests an inverse relationship between the rate of income and industrial growth in Nigeria. The result is also significant. The relationship between real income and inflation is also negative suggesting that if real income increases, the inflation reduces. The relationship between real income and consumer index is also negative.

Given the adjusted $R^2$ significant 72%, it connotes the independence variables incorporated into this model have been able to determine variation of real income to 72%.The F and probability statistics also confirmed the significance of this model.

**TABLE 2**

| INreal income | Coefficient. | Std. Err | t-statistics | P>\|t | [95%Conf.Interval] | $R^2$=1.0000 |
|---|---|---|---|---|---|---|
| INmanufacturing | **.0015185** | **.0012147** | -1.25 | 0.221 | **-.0039958 .0009589** | Adj $R^2$=1.0000 |
| INinflation | **-.0000692** | **.0006217** | **-0.11** | **0.912** | **0013373 .0011988** | F(4, 31) = . |
| INwages | **1.000059** | **.001848** | **541.15** | 0. **.000** | **0.9962903 1.003828** | Prob > F = 0.0000 |
| INcpi | **-.9994806** | **.0012451** | **-802.73** | 0.000 | **-1.00202 -.9969412** | Root MSE = .00257 |
| Constant | **.0040145** | **.009546** | **0.42** | **\| 0.677** | **-.0154547 .0234837** | |

MS = 35 .651769419

The above table is represented by regression plots below:

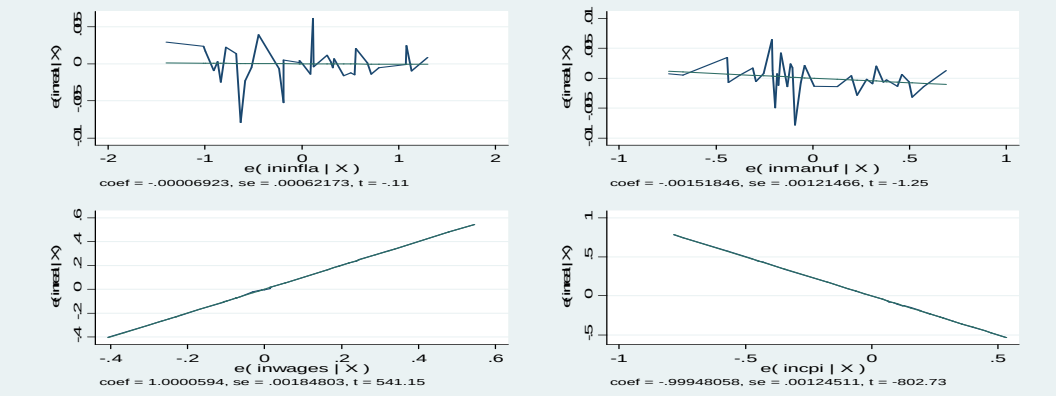


Table 2 also shows the result of the effect of real income inflation, wages , consumer price index and manufacturing on Nigeria economy in the long run by finding the log of real income compared with logarithms of on the independent variables.1% of increase in real income brings about 0.0015 % reduction in manufacturing. This also suggests an inverse relationship between the rate of income and industrial growth in Nigeria in the long run decision planning. The result is also significant. The relationship between log of real income and log of inflation is also negative suggesting that if real income increases in the long run, the inflation reduces. The relationship between log of real income and log consumer index is also negative.

Given the adjusted $R^2$ significant 100%, it connotes the independence variables incorporated into this model have been able to determine variation of real income to 100%.The F and probability statistics also confirmed the significance of this model.

Table 2 in the appendix contains simple regression results for the log of real income model. The results indicate that the coefficient of real income is statistically significant and the constant is statistically significant.

## SUMMARY AND CONCLUSION

This study has reviewed the relationship between real income, inflation, and industrial productivity in Nigeria. The links between real income, inflation, industrial productivity have assessed, tested the relationship between real income, inflation and industrial productivity by employing co integration and Granger-causality test analysis. Estimated results suggest that industrial productivity growth impacts strongly upon inflation, wages and real income. Similarly wages has a strong effect on productivity growth alone. As regard to inflationary effects, there is a negative and strong relationship with labor productivity growth. This in turn may support the view of aggregate supply approach. Including the real wage growth as opposed to the nominal one in the model eliminates the direct effect of inflation on productivity growth statistically, though direction remained the same. The findings revealed that the relationship between the real income, inflation, wages and industrial productivity is significant at the level of 5%. Real income was seen to Granger cause both output and inflation. The result suggest that monetary stability can contribute towards price stability in Nigerian economy since the variation in price level is mainly caused by real income and also conclude that inflation in Nigeria is too much extent a monetary phenomenon. The real income has a positive impact on growth after a considerable lag. The results of unit root suggest that all the variables in the model are stationary and the results of Causality suggest that real income causes inflation and not inflation causing real income. The results also revealed that inflation possessed a positive impact on economic growth through encouraging productivity and output level and on evolution of total factor productivity. The countries had low productivity growth and high inflation in the 1970s and, to a lesser extent, them1980s. Productivity growth then generally increased through the 1990s at the same time as inflation generally fell. The model explores the fact that faster wage growth now appears to cause higher productivity growth in the next quarter as well. A higher real productivity growth also affects positively the nominal wage growth. On the other hand, nominal wage growth does not cause a change in inflation rate. One simple reason for this would be wage stickiness making unit labor costs constant. As a result, inflation rate would not be affected through this period of time; a good performance of an economy in terms of per capita growth may therefore be attributed to the rate of inflation in the country.

## POLICY RECOMMENDATIONS

Based on the results of this research and the realization of the effect of real income and inflation on industrial productivity for the Nigerian economy, the following recommendations are made

1. A major policy implication of this result is that concerted effort should be made by policy makers to increase the level of industrial output in Nigeria by improving productivity/supply in order to reduce the prices of goods and services (inflation) so as to boost the growth of the economy.
2. To keep inflation low and stable, monetary policy needs to be attuned to persistent changes in productivity growth to ensure that growth in demand and nominal factor incomes remain consistent with the economy's supply potential, and hence with the inflation target.
3. The government should continue to import few but only essential commodities .A large number of imported goods and raw material should be cut down to eliminate imported inflation.
4. Government should reduce their spending drastically in the form of budget surplus. This will have a significant contracting effect on total demand in the economy.

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