

## Empirical Investigation into Industrial Relations and National Productivity in Nigeria

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### Abstract

*This paper investigated the impact of the poor industrial relations on the National productivity in Nigeria. The paper is a contribution to the often debated issue of privatization of the proliferated public parastatals. In the study, time series data over the period 1970 – 2004 was used and the modified Least Square was employed as analytical tool. The study found that trade disputes and work stoppages negatively affect the growth of national productivity; proxied by per capita income. Evidence also suggests that the shock received by the economy through trade disputes is mostly felt in subsequent year – a phenomenon known as J – Curve. The policy implication of the study was that government should seek possible ways to improve workers productivity especially in those establishments and parastatals which can not be privatized.*

**Keywords:** Industrial Relations, Productivity, Nigerian Economy

### Introduction

Productivity may not be far from the nascent realization of the primary and centrality of humans in economic development and growth process of a nation (Anyawu, 2003) Productivity can be defined as output per unit of input in a production process. Productivity is a matter of concern to government bodies, private firms, trade unions and other institutions not minding the disagreements over its conceptualization by different groups and individuals. Hence, discussing productivity at all levels is common because of the direct relationship between productivity and the standard of living of a people.

In effect, productivity becomes the attainment of the highest level of performance with the lowest possible expenditure of resources. It represents the ratio of the quality and quantity of products to the resources utilized. The Nigerian Employers Consultative Association (NECA , 1991) observed that it is more common in productivity studies to see emphasis placed on labour productivity. By coincidence, at the National level, labour productivity translates to what is known as human productivity. Even though, other factor productivity exist, like capital labour productivity is the type of productivity that affects directly the purchasing power of the population since

$$\text{National Productivity} = \frac{\text{Gross National product}}{\text{Working Population}}$$

From this relation then, any factor that can hinder the Gross National product ( the numerator) holding the working population constant, will definitely hinders National Productivity. One would expect such negative factor as industrial action to reduce the National Productivity or at least hinders the achievement of planned economic growth. Industrial actions emanate from trade disputes leading to work stoppages and making the economy to lose labour productivity in form of

man-days lost. The Nigerian economy has suffered a lot from trade disputes in the last two decades due to the dominance of the public sector in the economy.

The oil sector for example, prior to the deregulation of its downstream sector, has a chain of production and distribution which was weak at every joint. Any player in the distribution chain has the tendency to hold the nation into ransom through industrial actions leading to scarcity of petroleum products, hoarding, black on parallel marketing. This was so because of the monopoly of the Nigeria National Petroleum cooperation (NNPC.)

Such can also be said of other sectors of the economy like education, where the public sector dominates. Thus, the deregulation of the economy and such policies as privatization could be justified based on the negative impact of trade unions on national productivity in a public dominated economy.

It is therefore obvious from the above synopsis that productivity or real output in Nigeria may be faced with the problem of labour loss and wastes if the economy is left solely in the hand of the government ( the public sector) or, if the issue of incessant work stoppages is not well addressed by the government. According to Adam Smith, (1776) who first advocated for privatization, “privatization is a means of eliminating waste and maximizing the value of assets”. In effect, privatization may not give room for a very strong trade union, hence, trade disputes and work stoppages would be reduced as wages and value of labour will be based on the marginal productivity of labour.

Trade dispute does not only affect productivity through labour loss alone. When there are incessant work stoppages, machines and other fixed and variable capitals are not fully utilized, thereby reducing the level of output and increasing average cost (Humphrey, 1991)

This paper investigates the effects of trade disputes on the Nigerian economic growth. The questions are: “Is the National Productivity really constrained by the public - dominated nature of the Nigeria economy? “Is there a sense in the policy of privatization of the Nigerian economy? “Will privatizing the economy reduces the negative effects of trade unions on productivity in Nigeria. Or “Is privatization, the only solution to improving labour productivity in Nigeria”?

This paper will therefore, delve into the issue above whereby conscious effort would be made to justify the government stand on privatizing and deregulating the economy and possible alternatives to privatization.

## **Theoretical Framework**

### **Productivity Concept**

A number of factors affect productivity Major among these are the complementary factors of production as well as technology / innovations, institutional back-up, workers motivation, the quality of labour, environment etc. These are simply represented in the implicit functions in equation (1) (Anyawu, 2003).

$$P = f(L, L_b, K, T, MC, W_m, I_b, E) \dots (1)$$

Where

P = productivity

L = Land

Lb = Labour

K = Capital

T = Technology / Innovation

Mc = Managerial Competence

Wm = Workers' motivation

Ib = Institutional backup

E = Environment

To discover the effect of each of the cooperating factors on productivity, we have to go into a hypothetical world where we can hold other things constant while varying each of these factors one after the other.

It is very common to see emphasis placed on labour productivity in both the public and private organizations or firms. One justification for this special emphasis on labour productivity is, perhaps, because labour is a universal key resource (Oyeranti, 2003). Other reasons put forward to justify the use of labour input for purpose of partial productivity measurement are:

- i. labour is regarded as the most important factor of production;
- ii. labour is the most easily quantified factor of production;
- iii. labour is the only factor of production that has conscious control over its contributions to output (I.L.O, 1996).

### **Industrial Relations Concept**

Industrial relations have been argued to mean the same thing with labour relations. This shows that industrial relations contain the attitudes among the management and workers. One can equally argue that industrial relation is a major factor that affects directly or indirectly, productivity through such variable as managerial competence, workers motivation, institutional backup, and environment as identified in equation 1

According to Englama (2001), industrial relation refers to the combination of interactions that take place between the employee and employer in an organisation. He believed that the fundamental problem in all organisation, whether business, educational, local or national, was in developing and maintaining a dynamic and harmonious relationship. To achieve this, group dynamics, policy making by consultation, diffusion of authority, delegation, vertical and horizontal communication, have to be ushered in.

### **Literature Review**

According to Uwen (2000), motivation is a process by which worker internal energies are directed toward various goals and objectives in an industry. Similarly, it is the drive, energy of degree of activity an individual displays. We can not search too far to note the brutalizing effects of poor reward system on the society. Admittedly, a reward is something that is given in return for some service or attainment. As it relates to employment, it is pay for the job held; pay for the individual's capabilities; and pay for results (Greene, 1991). That means, appropriate reward often motivates people to perform better.

Donaldo (1992) describes motivation as the art of stimulating someone to action by creating a safe environment in which their motivation can be unleashed and through providing a reason or incentive for people to produce. Employee motivation causes one to abandon its own goals for the goals of the organisation.

Dike (2005) describes workers morale as the mental and emotional condition (as enthusiasm, confidence, or loyalty) of individual or group with regard to the function or tasks at hand. According to him, humans are goal driven, it has been documented that once a goal is set, behaviour aimed toward the goal persists until the goal is reached. But more often than not, a Nigerian worker works all his life without coming close to achieving his life goals. This sad situation is rampant today where an average worker cannot afford to meet his or her family's basic needs (food, clothing, water, decent shelter and healthcare according to Maslow, 1943). The lack of these basic needs have negatively impacted their productivity.

With all the material resources available in Nigeria it is unbelievable that their workers lack the necessary motivation to perform their jobs duties. Many workers are owed arrears of wages and salaries. The issue of resources mismanagement seems unsolvable in the society. And the issue of low productivity, which is caused by in-effective management, is common in government – owned organizations. Oddly enough, many managers in the society lack the skills necessary to lead a productive work force. Despite their poor performances, the managers of these inefficient institutions still get their salaries with the aid of subsidy. This is unthinkable in a serious society, a good wage is normally tied to productivity (Dike, 2005).

Because of the inefficiencies and incompetent parastatals, the workers are not well motivated, hence low productivity results. The government pursue the privatization programme that have been trumpeted in the country . Some of the institutions that are undergoing re-structuring and privatization are National Electric Power Authority (NEPA) now Power Holding Company of Nigeria (PHCN), Nigeria Telecommunication (NITEL), Nigeria National Petroleum Company (NNPC), Nigeria Post Office (NIPOST), government breweries. As noted by Dike (2005) it is sad to see that in many instances expatriates workers are better rewarded than local employees with the same or those with better qualifications. This is demoralizing.

Akintade et al (2000) maintained that industrial disputes occurred as a result of non-realisation of worker's aims and aspirations. Such disputes are then expressed in many ways such as strike actions, lock-out, go-slow, work-to-rule and overtime ban according to Yesuffu (2000). The overtime ban is the refusal of Union members to work over time, in most cases this is meant to increase the production cost of the firm since the machine will be underutilized. The work-to-rule, on its own, is when workers follow the rule strictly to the extent that output is affected. This also serves to increase the production cost.

A "Go-slow" action is where workers deliberately slow down the pace of their work or where the workers continue to work but at a reduced rate so that output is affected. While lock-out is the action of the employer taken to prevent workers from entering the premises. This usually occurs at the same time as a strike. The employer is not allowed, in law, to lock out its workers. By far, the most common industrial dispute is the strike actions.

The present civilian administration has recorded some achievements in some areas it was inaugurated, but not much has been achieved in the area of labour relations and dispute management. Industrial actions are still crippling the economy as workers are still fighting for their survival. For a university professor a car is a luxury; universities are often closed as the teachers are always fighting for their survival.

Sadly, the average salary of a Nigerian lecturer remains the lowest in West Africa. How then does one expect a professor who has the important responsibility to train the nation's labour force to put in his best in the classroom?

There are discussions in the literature of the determinants and constraints to raising firm-level productivity in Sub-Saharan Africa. Various studies using firm-level data that look at the determinants of productivity in Sub-Sahara Africa reveal the importance of education, new technology, and skill level of the labour force in raising productivity (Collier and Gunning 1999, Pack and Paxson, 1993). In general, the results of these studies are similar to productivity studies in other part of the world. A study by Biggs, Shar and Srivasta (1995) shows that job training of workers, new technology and information brought in by foreign firms technical assistance constraints, and licences arrangement all have significant impact on firm productivity.

In Nigeria, The Regional Programme on Enterprise Development (RPED). (2001) survey, reveals some interesting results with regard to productivity. Using the private sector as a case study, RPED interviewed over 200 firms in Nigeria. These firms are spread over nine sectors – chemical / pants, food / beverages, metal, non-metal, paper – printing – publishing, pharmaceuticals, plastics, textiles, and wood.

Value-added per worker (measured in US dollars) reveals the importance of labour in productivity. Value –added per worker is driven by firm size and levels of workers morale. The smallest firms have the lowest value-added and the very large firms where workers are well treated have value –added per worker significantly greater than other types of firms. Local firms have less than half the valued-added of firms with foreign equity and firms owned by Black African entrepreneurs have a lower value-added than firms owned by reneurs of Indian, European, and Middle Eastern descent.

Also, the result of the survey further showed that inputs of labour and capital are highly significant in determining value –added per worker. As presented in table 1, the ratio of skilled to unskilled workers is significant at 10 percent level of confidence, as are capacity utilization and age of firm. But the magnitude of labour is the highest signifying that labour and improvement of labour is crucial to improving productivity (RPED, 2001).

**Table 1: Determinants of Productivity in Nigerian Private Sector**

Int.	Ln K	Ln L	S R	C	AF	FE	M	AE	N	R <sup>2</sup>	F-std
6.92	0.25	0.99	2.18	0.007	0.11	0.007	0.006	-0.552	134	0.73	42.92
(1.05)	(0.06)	(0.12)	(1.31)	(0.004)	(0.009)	(0.003)	(0.002)	(0.211)			

*Source: (RPED, 2001)*

**Note:** Standard Deviation in parenthesis

Where

Ln = Natural log

K = Capital

L = Labour

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SR = Skill ratio

C = Capacity

AF = Age of Firm

FE = Percentage of firm Equity

M = Import

AE = Age of Equipment

N = Number of Sample

Source World Bank, RPED Nigeria, 2001.

### **Empirical Analysis**

This study empirically investigates the relationship between industrial relations and productivity, proxied by the real GDP in Nigeria between 1970 and 2004. This period, however, covers both the pre and post – structural Adjustment Programme (SAP) periods. The pre-SAP periods witnessed a lot of industrial actions in Nigeria due to the public-controlled nature of the economy. For instance 775 trade disputes were recorded in 1975, 355 in 1980 and 258 in 1981. While the post-SAP period witnessed a reduction in trade dispute even though, man-day lost increased. This is primarily due to increases in the number of working population (Table 2) Also the period before liberalization of the economy witnessed more work-stoppages than the post-SAP period as shown in Table 2.

### **The Model**

While trying to assess the impact of poor industrial relations on economic growth and the consequent justification for privatization policy, an empirical investigation into the relationship between variables in industrial relations and economic growth was carried out.

**Table 2: Industrial Relations Statistics in Nigeria**

Year	Trade Dispute	Work Stoppages	Workers Involved	Man-day Lost
1970	165	44	14,784	27,072
1975	775	346	107,487	435,493
1980	355	265	221,088	2,356,998
1981	258	234	323,700	2,218,223
1986	87	53	157,165	461,345
1990	174	102	254,540	1,339,105
1991	204	117	460,471	2,257,382
1992	221	124	238,324	966,611
1993	160	90	880,224	6,192,167
1994	199	110	1,541,146	234,307,748
1995	46	26	193,944	2,269,037
1996	29	24	19,826	94,664
1997	31	31	59,897	359,801
1998	16	11	9,494	47,631
1999	52	27	173,858	3,158,087
2000	49	47	344,722	6,287,733
2001	51	37	259,290	4,722,910
2002	50	42	302,006	5,505,322
2003	149	669	162,199	4,518,321
2004	152	152	517,331	3,302,112
2005	155	489	872,463	2,086,903
2006	46	112	86,342	2,446,055

**Sources:** (i) CBN Statistical Bulletin Vol.17 (2006)

(ii) Federal Ministry of Employment Labour and Productivity.

Productivity in this study is proxied by the Real Gross Domestic product (RGDP). The variables in industrial relation used are the direct outcomes of poor industrial relations. These are the number of trade dispute (TRD), work stoppages (WST) and the man-days lost (MDL). The data for the study were sourced from the Central Bank of Nigeria statistical Bulletin (2006).

The technique of analysis is the use of the modified Least Square Regression technique. The modification was done by de-trending the variables by using the first difference to avoid spurious regression, through the influence of time on the variables. The model assumes a linear relationship between the variables following Yesufu (2000) and Dike (2005). The model was specified as follows:

$$\ln PGDP_t = \alpha_0 + \alpha_1 \Delta TRD_t + \alpha_2 \ln WST_t + \alpha_3 \Delta \ln MDL_t + U_t, \dots (2)$$

In order to improve the goodness of fit of the model and to examine whether there is a J-curve effect the model was re-specified to accommodate an Auto-regressive scheme one, AR (1) process as follows:

$$\ln PGDP = \alpha_0 + \alpha_1 LTRD_t + \alpha_2 LWST_t + \alpha_3 LMDL_t + AR(1) + U_t, \dots (3)$$

Where

PGDP = per capita GDP

L = Log of first difference

$\beta$  = AR(1) coefficient

Equations (2) and (3) were estimated by OLS packaged in the E-view programme. Base on economic a priori it is expected that the variables in industrial relations will reduce national productivity. That is the signs on the parameters of equations 2 and 3 are expected to be negative.

### Empirical Result

The regression results of equations 2 and 3 are presented in equations 4 and 5.

$$LPGDP_t = 12.67 - 1.68LTRD_t - 0.14LWST_t + 0.59LMDL_t + Ut \dots (4)$$

*(1.557) (0.3996) (0.3951) (0.1029)*

$$R^2 = 0.77; F = 30.44; DW = 1.94; AIC = 2.89$$

$$LPGDP_t = 11928.8 - 0.006LTRD_t + 0.038LWST_t - 0.049LMDL + 0.99 AR(1) + Ut \dots (5)$$

*(128.57) (0.1060) (0.0656) (0.0293) (0.0205)*

NOTE: Standard Deviation in parenthesis

$$R^2 = 0.98; F = 572.3; LL = 7.134$$

The regression result of Equation (4) shows that Trade dispute (TRD) and work stoppages (WST) are significantly negatively related to the RGDP. The man-day lost (MDL) is contrary to a prior expectation. The  $R^2$  suggests that about 77 percent of total variations in productivity is explained by the industrial relations indicators. The F – ratio is quite high and significant at 5 percent confidence level. Also the Durbin Watson and Akeike information criterion (AIC) value suggest that there is no serial and / or non-serial autocorrelation.

The result of equation (5) is similar to that of equation (4) but with slight improvements. The  $R^2$ , which is 0.98 suggests that 98 percent of the negative variations in productivity at the current time is jointly explained by the industrial relation indicators and the carried over shock from previous productivity decline, that is the AR(1) scheme. The impression here is that, even though the first model suggests that poor industrial relations experienced in present year, all work together to reduce productivity, the greater effect is from previous trade disputes and other relations, which always have a negative effect on the level of production. This phenomenon is called the “J – Curve” effect (Olagunju, 2004). The shock received by the economy through trade disputes is mostly felt in subsequent years.

This point is also buttressed by the high value of the log – likelihood coefficient (LL) in the equation (5). The effect of previous trade disputes and work stoppage on the economy can probably be explained from the angle of capacity underutilization when machines and labour are left unused during strike actions.

### Conclusion

It is obvious that productivity in Nigeria can be constrained by poor industrial relation. The outcome of poor industrial relations are strike actions, trade disputes and the like. The issue of privatization of some of the proliferate public parastatals is one to which the labour movement should re-orient and reconcile itself as well as help to nurture. The Nigerian labour movement should relax their opposition and look beyond the short-run mains and sacrifices from privatization



to the long-run sustained productivity increase that will benefit both the employer and employee. The fear nurtured by the trade unions on privatization may be correct but they are short-lived. Such fears as rationalization, that is staff reduction, required high standard of work performance, or greater commitment which characterize privatized enterprise.

The trade unions had called for commercialization rather than privatization, but there is a degree of profitability in privatization which cannot be achieved in commercialization. While commercialization is not necessarily equivalent to privatization, it is well to note that privatization is the most basic and most productive and profitable form of commercialization.

On the part of the government, since not all establishments and parastatals can be privatized, there is need to seek possible ways to improve workers' productivity. Based on the result of this study improving workers morale and motivation can go along way to improve workers' productivity. This can take many forms. Thus any productivity improvement programs in Nigeria should include, among other things, the replacement of ineffective and obsolete technologies, establishment of good working conditions, and the provision of appropriate technical man power and instructions.

Other suggestions are, investment in human development (employees training) taking proper interest in people. Managers of formal organization are responsible for giving directions; thus, the work climate of any unit or organization is determined, for good or bad by the work habits of that unit or organization's manager. For example, if the managers have not shown any concern for their organization how would they expect that from the workers? This tends to explain why corruption is endemic in Nigeria. For this, government (employers) should learn to implement any employment benefits agreement reached with the workers for the mutual benefit of the name and the society. For example the non-implementation of benefits agreed upon between the government and Academic Staff Union of Universities (ASUU) apparently led to the concurrent university teacher's strike actions.

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