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IMPLICATION OF (RURAL) PRICING PATTERN ON THE INCIDENCE OF POVERTY IN NIGERIA (1979-2002)

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Abstract

This paper seeks to determine the implication of rural poverty in its entirety. World Bank (1995) and FOS (1993) in their study, highlighted that "poverty was more pronounced in rural areas than urban areas; the southern part of the country had less poverty than either the central or northern parts of the country". Based on the above statement the paper discovered that the rural southern price index greatly influence the incidence of poverty between 1979 and 2002. The paper also recommends that efforts should be geared by public and private spirited individuals to establish more cottage industries in rural areas to improve income and also allow for the forces of demand and supply to determine price levels within their environment, as Adam Smith had noted "No society can surely be flourishing and happy, of which the greater part of members are poor and miserable".

Introduction

The trend in price movement in the rural areas relative to the urban areas is seen as one of the fundamental phenomena responsible for increase in the poverty level in the economy. Rural areas are characterized by low income, poor health, low level of literacy, lack of infrastructures and social amenities. (Ekot, 2000 :54). These factors bring about low production capacity and thus increases in the prices of agricultural product which can be attributable mainly to factors such as rising transportation cost, occasioned by bad roads, upward adjustment of prices of petroleum products, etc., with its enormous implications on

the incidence of poverty.

Poverty and underdevelopment of the economy are thus synonymous. A country is poor because it is underdeveloped. On the other hand a country is underdeveloped because it is poor and remains underdeveloped as it does not have the necessary resources for promoting development. Poverty is a course, but a greater curse is that it is self-perpetuating, it is an hydra headed plague that influences its victim. Poverty is the inability of an individual or family to command sufficient resources to satisfy basic needs (Fields 1994: 22). Therefore, poverty can be seen as the absolute lack of the basic necessity of life. Mohiro, (2000: 63) puts it that 'a poor person is a battered 'Economic man' who is trapped in a battle for survival".

Poverty is an endemic disease and like any other disease, it has to be treated, because if left unchecked, it will spread so fast such that one man's poverty will generate to the poverty of the entire society. In contemporary times, emphasized by government has been poverty alleviation, which is aimed at putting a concerted effort to reduce the level of poverty and improve the living standard of it's citizens. Ibanga (2000: 74), asserts that "poverty eradication is a responsibility which the government must assume under the rules and principles of current international human rights law".

It is widely accepted that over 80% of Nigerians (88.5m) reside in the rural society and are engaged in agriculture and related fields (Mabogunje, 1981: 100). In Nigeria, the existence of two major economic environment – urban and rural, has contributed immensely to the distortion in the flow of economic resources. The rural area is at the receiving end, because of urban pulling of resources from the rural areas, consequently leaving the rural areas poorer. Lack of social amenities and economic infrastructure and the lack of appropriate institutional framework to effectively and efficiently mobilize, allocate and utilize resources have equally left the entire system poorer.

Poverty is as well synonymous with low savings, as low savings gives rise to low investment, which in turn gives rise to low income, low consumption and of course low savings again, thereby completing the vicious circle theory of poverty.

This study however, attempts to bring into focus the effect of pricing patterns on the incidence of poverty, while demarcating rural from urban pricing patterns (price index) in Nigeria.

Theoretical Framework

The vicious circle of poverty is one of the most widely known theories based on the notion that lack of capital is the key factor preventing growth and development. It is a theory explaining economic stagnation of very low levels of per capita output. At the time it was formulated in the early 1950s, the model seemed to be an accurate description of conditions in many countries. Since then, however, most developing countries have achieved higher per capita GNP and improvements in other socio-economic indicators, and there is nothing in the vicious circle model to indicate why this growth and development have occurred. Nurkse (1969: 30) puts the theory simply thus:

"It implies a circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty". For instance, a poor man may not have enough to eat; being underfed, his heath may be weak; being physically weak, his working capacity is low, which means that he will not have enough to eat; and so on. A situation of this sort relating to a country as a whole, can be summed up in the proposition "A country is poor because it is poor".

The basic circle stems from the fact that in Least Developed Countries (LDCs) total productivity is low due to deficiency of capital, market imperfections, economic backwardness and underdevelopment.

However the basic (human) needs approach, argues that economic development should be seen in terms of progress towards reducing the incidence of poverty, unemployment and income inequalities. Poverty is defined under the basic human needs approach not in terms of income but rather as the lack of good nutrition, good health, educational opportunities, and similar dimensions of welfare.

The basic needs' approach emphasizes the need for development to provide the necessities for a decent livelihood to the largest majority of the population. These necessities are defined to include adequate food and shelter, adequate clothing, access to health facilities, access to education, and greater employment opportunities. The lack of all theses basic necessities is both a symptom and a cause of absolute poverty.

This is often the result of low levels of income. A family living below the poverty line could only survive on a meagre food supply. It would have no means of providing enough clothing or shelter or medical

care for its members. At such low levels of income, good clothing and adequate shelter become luxuries in the family's budget. Education, even where it is free, becomes inaccessible because that family may not be able to afford letting its members spend part of their time in educational institutions. Employment is also difficult to seek because of the cost of searching.

On the other hand, family which cannot provide these basic necessities for its members is likely to remain poor. The productivity of family members will be very low because of poor nutrition and poor health. Since in poor families, the only income earning asset is the labour of members, the lack of education and good health is a virtual guarantee for the perpetuation of poverty.

Poverty is however seen in three different perspectives namely: income, extreme and absolute. A person that is poor is considered as not having adequate financial resources to support a minimum standard of decent living. Engalama and Bamidele (1997) and Anyanwu (1997) look at poor people as those living below a specified minimum level of income.

Furthermore, Anyanwu (1997), Sen (1983), Streeten (1994), World Bank (1990) consider a person in the extreme poverty region once he cannot have a minimum food in take for survival; whereas a person that is below the one dollar a day in internationally acceptable poverty line is in the absolute poverty category, Atoloye (1997) and Atteh (1999).

It is obvious that urban areas are more developed than the rural areas and the rush to the urban areas (rural-urban migration) is causing severe rural poverty. This renders hitherto employed resources unemployed. It therefore becomes necessary to identify the poor from the non-poor, so as to be able to alleviate poverty through proper strategies designed mainly for the poor. The existence of great affluence side by side with abject poverty is one of the phenomena characterizing a state of economic under-development. In corroborating the above statement, Townsend (1970) asserts that "to understand the poor we must then study the affluent". The study of the poor is dependent on the understanding of the level of living of the affluent, since it is these conditions relative to each other that are critical in the conception of inequality. Such inequality tends to have negative psychological effects on the poor. In every society, an important component of the good life is self-esteem. When individuals have a sense of personal worth and

respect, their own evaluation of their lifestyle tends to be high. Where self-esteem is a function of one's material well-being relative to others in the society, the existence of sharp economic inequalities reduces the self-esteem of the poor.

Explaining Rural Poverty in Nigeria

Poverty though a national issue, rural poverty constitutes one of the most critical socio-economic problems in Nigeria. The poor could actually be found in both urban cities (urban poor) and rural communities (rural poor). The dividing line is that the opportunities for alleviating the poor is better spread in the urban areas than in the rural areas, which ought not to be so. The rural sector is expected to be treated uniquely in terms of poverty alleviation strategies. This is because, in most developing countries like Nigeria, a disproportionate high percentage of the poor live in the rural areas. Furthermore food which is the most essential of Basic Need Approach (BNA) is mainly a rural business in developing countries and the rural sector is usually a weaker sector relative to urban sector. In fact, the rural population constitutes the real labour force in the economy. It is on this premise that successive governments have been making attempts to redress problems of the rural population and most often the policy thrust covers areas like: education of illiteracy through Universal Basic Education Programme (UBE), Community Development, Diversification of the economy through Integrated Rural Development and boosting of food production through agriculture (Ekot, 2000).

The particular strategy which has received most attention is the Integrated Rural Development Strategy (IRDS) which involves a simultaneous, holistic and intersectoral manipulation of all necessary variables which together could alleviate poverty (Socio-economic profile of Nigeria, 1996).

Adelekan (1989), Okiebuma (1994) and Modo (1996) in Ugbara and Ukwayi (2000: 100) asserts that "Rural poverty tops the inventory list of social problems for action and research." The Family Economic Advancement Programme (FEAP), and the Better Life for Rural Women Programme (BLP) where programmes established by government aimed at supporting the rural poor by alleviating or reducing the poverty level.

The World Bank Atlas (2000), using purchasing power parity method ranked Nigeria as the 12th poorest Nation in the world, and asserts that Nigeria's case is a paradox, because even though it is a rich country, the people are very poor. People in Nigeria like others in sub-Saharan Africa and South Asia remain the poorest in the world.

Rural poverty is the issue of the determination of poverty, as it relates to human development (material and non-material), especially those that cannot benefit directly from rising income due to their location and also lack of access to basic necessities and thus, the means of economic development.

Lack of economic development, clearly manifests in times of economic crisis such as famine, drought, etc with the rural poor lacking the needed resources (capital) to venture into any profitable economic activity as well. Modo (1997), posits that rural poverty exists in Nigeria. Eze (1997) asserts also that the majority of those poor people live in rural areas, while Alarape (1992) fears that rural poverty in Nigeria appears to be gender related.

Gaiha and Kulkarni (1992) revealed that economic betterment of rural people, through self managed activities made possible by schemes similar to micro-credit provision has transformed the poor/women; making them better equipped to play more assertive role in their communities. The issue is the need to put in more efforts into the economic improvement of the rural sector and its environs for a better and sound future.

Poverty Index Measurement

The study of the measurement of poverty is anchored on the two conceptions of poverty. Poverty is conceptualized in terms of absolute and relative. The concept of absolute poverty views poverty as lack of resources to consume certain basket of goods and services. Besides, absolute poverty has been defined by the approximate maximum proportion of income that a family spends on certain subsistence goods (Watts, 1967: 16). Any household that spends more than the specified maximum share of their income on basic needs such as food, housing, health care, etc, is said to be poor (Ruggles 1990: 202).

The relative concept of poverty considers the living standards prevailing in a given society. It reflects changing perceptions of

acceptable minimum living standards.

However, poverty measurement ranges from relative measures to absolute measures. The relative measures of poverty as identified by Anyanwu in (Mohiro, 2000) include:

(a) Average income index. It employs the average income of a specific percentage of the population at the lowest end of the income spectrum and

(b) Number or proportion of people whose income are less or equal to the predetermined percentage of the mean income.

The following absolute measures where also identified:

(i) The head count ratios: The most widely used measure of poverty is the number of poor, otherwise called the head count. Head count ratio is the ratio of individuals whose income fall below the poverty line (Baridhan 1973 and Ahluwalia 1976).

(ii) The poverty gap/income shortfall: This is the average deviation of the incomes of the poor from the poverty line.

(iii) The physical quality of life index (PQLI): This measures the extent to which societies satisfy certain specific 'life-serving social characteristics' or achieved well-being.

(iv) Composite poverty measure under which he identified the Sen index and the Pa Class of measure of poverty technique.

(v) Disparity of income distribution: This measures the distribution of income among the poor and not of the overall population. He identified the Lorenz Cure technique and the Gini Coefficient index, as two main methods used in this measure.

(vi) The Human Development Index (HDI): This is a measurement of achievement that incorporates both income and non-income factors. The factors are longevity, knowledge and income.

(vii) The Augmented physical Quality of Life Index (APQLI): This measures the differential level of human deprivation and suffering experience by people in a particular area. This is liken to the Index of Social Progress (ISP) and the weighted index of social progress (WISP) measures.

The Index of Social Progress (ISP) was postulated by Estes (1984 and 1988). It comprises of access to education, health care, women's status, defense status, geography, demography, welfare efforts, cultural diversity and political participation (Socio Economic Profile, 1996).

Methodology

The study employed empirical method. Secondary data covering the period (1979-2002) were sourced from publications, such as Central Bank of Nigeria (CBN), Statistical Bulletin, Federal Office of Statistics (FOS) manual on selected macro-economic indicators namely: Poverty Index, Rural Consumer Price Index, Interest Rate, registered unemployment rate and GDP (income). Our null hypothesis of no significant effect of rural pricing pattern on the incidence of poverty was formulated and tested using the ordinary Least Square (OLS) regression model.

Model Specification

Our economic model is specified in its functional form thus:

$Y = f(x_1, x_2, x_3, x_4)$.......................... (1)

Where

Y = Poverty Index

x_1-x_4 = Independent variables

f = Functional notation

Specifically we have

Pind = f(RCPI, INTR, UNEMPR, GDP)............(2)

Where:

Pind = Poverty Index

RCPI = Rural consumer Price Index

INTR = Interest Rate (Money market)

UNEMPR = Unemployment Rate

GDP = Gross Domestic product (Income)

The log linear regression equation becomes:

$\ln pind = b_0 + b_1 \ln RCPI + b_2 \ln TR + b_3 \ln UNEMPR + b_4 \ln GDP + m$..(5)

Where:

b_0 = the regression constant

b_1-b_4 = the regression coefficients/parameters of the independent variables

lnpind = the log of dependent variable (poverty index)

lnRCPI, lnINTR lnUNEMPR and lnGDP = the log of the independent variables.

The use of the log-linear model is to help reduce if not remove completely, the heteroscedastic errors that might creep into both sides of the equation as agreed by Friend and Puckett (1961), Ekpo (1997), Amadi and Osaro (2000), Boyd and Schonfeld (1977).

Data Analysis

On apriori expectation, we have b_1-b_3 > 0, b_4 < 0. The criterion for acceptance of result must be such that the pair of our dependent and independent variables must be more than 50%. The estimated log-linear regression equation is stated thus:

InPIND = 5.967 + .685InRCPI+1.340InINTR+0.116 InUNEMP – 0.500 InGDP

(9.610) (7.025) (0.290) (2.204) (-5.466)

Multiple R = 0.972

R – square (R^2) = .945

Adjusted R^2 = .933

F. Ratio = 77.952

D.W = 1.389

Note: t-values are in parenthesis

From the result, the signs of the estimated coefficient are in line with our theoretical or economic expectation. This shows a positive relationship between Rural Consumer Price Index, interest Rate, Unemployment Rate and incidence of poverty (poverty Index). A negative relationship between GDP (income) and poverty index was also noticed. The result also shows that the equation constant coefficient has the right (positive) sign and conforms to economic a priori expectation. This implies that when all the independent variables are fixed, poverty index (dependent variable) will rise by approximately 6 percent, all things being equal.

The coefficient of multiple determination (R^2), is 0.945. This means that about 95 percent of the sample variation in the incidence of poverty is caused or explained by the regression plane (the independent variables) leaving only 5 percent 'unplanned', this remaining 5 percent is assumed to be explained by other variables not built into the regression model.

Furthermore, at 5 percent significant level, f-statistics (F_{05}) is 2.93 and the calculated value (F*) is 77.952. Since the calculated F-value exceeds the critical F-value ($F^{*}>F_{05}$), we conclude that the entire model is statistically significant.

At 5 percent significant level, t-critical value is 1.717, the calculated t-values of 7.025,.290, 2.204 and -5.466 as shown in the results (Appendix), indicate that Rural Consumer Price Index, Unemployment rate and GDP are statistically significant. Since their respective t-calculated values are greater than the t-critical value. On the other hand, the calculated t-value for Interest Rate is less than the t-critical value, This signifies that Interest Rate is not statistically significant at that level.

Finally, the Durbin Watson (D.W) statistics of 1.389 shows that there is some degree of positive autocorrelation among the random variables built into the regression model.

Summary and Conclusion

We set out to determine the implication of rural pricing pattern on the incidence of poverty in Nigeria. Using the OLS regression analysis to test our null hypothesis of no significant impact of rural pricing index on poverty reduction in Nigeria. It showed that there is a statistically significant impact of rural consumer pricing patter on the incidence of poverty. It is therefore asserted here that Poverty in Nigeria greatly influenced by rural consumer pricing pattern.

Recommendations

In line with our findings from the study, we recommend that:

(i) The income pattern of rural dwellers should be improved upon by establishing cottage industries and other support programs for the rural areas. At least let their take home pay actually take them home.

(ii) The rural dwellers should be included in the preparation, design and implementation of development programs, with a stop to commonly noticeable bias for urban areas.

(iii) Micro-credit agencies should be promoted and supported. Government should co-ordinate and regulate this agencies; so that funds would be provided to them at subsidized rates for onward transmission to the rural poor.

(iv) Women are the bed rock of any nation, and their mobility is heavily constrained, so a program for an economic independence of the women will help reduce poverty level.

(v) Government should strive to carry favour from creditors to Nation's for debt cancellation.

(vi) Improve education generally.

(vii) Reduce import barriers for free trade.

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