Consumption pattern and rate of poverty in Developing Countries: Evidence from Nigeria

Akpan, Patrick L. and Bassey, Jude U. and Riman, Hodo B. and Edu, Benard

Cross River University of Technology, Calabar, Nigeria, University of Calabar, Nigeria

13 November 2010

CONSUMPTION PATTERN AND RATE OF POVERTY IN DEVELOPING ECONOMIES: EVIDENCE FROM NIGERIA

PATRICK L. AKPAN, Ph.D
patricklinusonline@yahoo.com
+23408033373788

JUDE U. BASSEY
judeubassey@yahoo.com
+23408033399187
FACULTY OF MANAGEMENT SCIENCES
CROSS RIVER UNIVERSITY OF TECHNOLOGY
OGOJA CAMPUS

H. B. RIMAN
+23408033528539
DEPARTMENT OF BAKING AND FINANCE
UNIVERSITY OF UYO

AND

BERNARD EDU
DEPARTMENT OF ACCOUNTANCY
CROSS RIVER UNIVERSITY OF TECHNOLOGY
OGOJA CAMPUS
ebogipo@yahoo.com

ABSTRACT

This paper examines the consumption pattern, trends and rate of poverty in developing economies with particular reference to Nigeria. Low level of income has impacted on the rate of consumption vis-à-vis economic growth and improved standard of living. The ordinary least square (OLS) technique was adopted with the use of time series data on consumption rate, unemployment, inflation, economic growth, dependency ratio, adult literacy as well as poverty. The study reveals that these macroeconomic fundamentals have relationship and impact on consumption rate. In view of the plagues associated with poverty, dynamic poverty alleviation policies devoid of conflict of goals should be sustained in line with meaningful income equality put in place by government so as to avoid the evils of poverty and poor standard of living. A negation of this, the paper argues, impacts on the consumption pattern of consumers and leads to poor standard of living.

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INTRODUCTION

The literacy level and the consumption potential of consumers are veritable variables in consumer behaviour and characteristics amongst others. Thus consumer behaviour is associated with the decision process in relation to the physical activities normally engaged by consumers when acquiring, and disposing of products and services. Acquisition of the products and services is characterized by complex interaction of beliefs and environmental events as popularized by (Weaver 2004). Consumer behavior then could fundamentally be analyzed as the process by which consumers decide on whether, what, when, where, how, and from whom to purchase products and services based on their income level which ultimately impact on the behaviour of the consumer in the face of scarce resources. This leads to acceptance and or rejection of the products and services depending on the literacy level, income level, consumption and price level in the circumstances.

Put simply, the poverty level equally has linkage with this articulations. Poverty therefore is a situation of low income and low consumption. The poor have no access to basic facilities and their consumption potential is influenced accordingly. Human Development Report (2001) maintains that poverty is a situation where consumers (individuals) are faced with economic, social, political, environmental and cultural deprivations. The incidence of poverty impacts on both urban and rural dwellers. Thus one of the major problems faced by poor independent African countries is how to improve the standard of living of the people most especially the rural dwellers. By rural dwellers we are referring to those living outside the urban areas and lacking basic amenities of life such as food, shelter, clothing, social and infrastructural facilities.

This paper in its four sections focuses on the introduction in section one. Section two presents the stylized facts associated with consumption pattern, rate of poverty and basic macroeconomic variables. Analytical methodology forms the tenet of section three while discussion of result and data analysis form the features of section four. The paper terminates with brief concluding remark in section five.

Stylised fact on consumption pattern, rate of poverty and macroeconomic fundamentals

The table on stylized fact stated in table 1 below reveals government spending on some sectors and the spread of poverty for each of the years commencing 1980 to 2005 For year 1980 expenditure on health sector recorded #1,147.2 million, education sector #952.6 million, aggregate poverty rate was 2.7 per cent and a consumption rate of 42.3 per cent. The incidence of urban poverty, rural poverty and core poverty was 17 per cent, 27 per cent and 6 per cent respectively. For 1990, the situation had changed as consumption rate had risen to 293.2 million with health expenditure of #275.0 million, Education expenditure of #331.7 million, Exchange rate of #8.0378, aggregate poverty rate of 43.8 per cent and rural poverty rate of 48.47 per cent. The situation has been fluctuating in the various indices over the years up to year 2005.

TABLE 1
Stylized facts on consumption, poveryty and selected macroeconomic variables

Year	Health	Education	Exchange Rate	Inflation	Public Investment	Aggregate poor	Urban Poor	Rural Poor	Core. Poor	Consumption Rate
1980	1147.2	952.6	0.5494	9.9	10654.1	`27	17	27	6	42.3
1981	128.4	440.9	0.61	20.9	6564.1	30	21.2	32	7.3	51.2
1982	130.2	48.4	0.6729	7.7	2998	34	25.2	37.4	9	55.1
1983	136.0	346.6	0.7241	23.2	6807.3	37	29.0	42	10	67.9
1984	141.2	102.2	0.7241	39.6	6727.8	41	33.2	46	11	94.8
1985	56.2	1081.7	9.8938	5.5	6616.4	44.2	37.0	51	12	100.0
1986	81.2	442.	2.0206	3.4	5445.9	44	37	50.	12	105.4
1987	60.5	139.4	4.0179	10.2	4759.4	44	37	49.5	12.3	116.1
1988	183.2	281.8	4.5367	38.3	10588.6`	44	37	49	12.4	181.2
1989	126.0	221.9	7.3916	40.9	9297.1	43.9	32..2	48.5	12.5	272.7
1990	275.0	331.7	8.0378	75.5	12555.6	43.8	37.2	48.47	13	293.2
1991	0136.6	289.1	9.9095	13	13085.4	43	37.2	46.4	13.4	330.9
1992	189	384.1	17..2987	44.5	15975.9	42.5	37.2	46	14	478.4
1993	352.9	156.3	22.3268	57.2	18600	48.0	42	52	18	751.9
1994	261	2405.7	21.886	57	31000	53.9	47.4	58	21	480.7
1995	175.2	3307.4	84.575	72.8	44559	59.0	52.1	63	25	2040.4
1996	1659.5	3215.8	79.6	29.3	48000	61	58.0	68	28	2638.1
1997	1623.8	3808	74.625	8.5	115990	66	58.3	70	29.4	2863.3
1998	7123.8	1279.3	84.3679	10	185375	68	60.1	70	30	3149.3
1999	73386.8	5816.6	92.5287	6.6	136984	69	61	72	31	3357.6
2000	8865.6	10529.2	109.55	6.9	311609	70	62	73	32	3590.5
2001	2612.9	10529.2	112.95	18.0	4386965	71	63	74	32	4288.0
2002	12608	9215	120.97	12.0	321398.1	72	62	75	32	4897.0
2003	6431	14680.2	129.36	14	241.7	71	62	76	33	5493.3
2004	16541	16788.0	130.0	15.0	281.9	72	63	72	31	6320.1
2005	17662	16980.0	132.5	17.9	384.8	74	64	73	34	7438.0

SOURCE: Statistical bulletin and world development report (various)

Analytical Methodology

Sources of Data

The data used for this study are mainly secondary data which are obtained from the Central Bank of Nigeria Statistical Bulletin, Federal Office of Statistics (FOS), World Bank Development Report, Publications of International Monetary Fund (IMF) and the United Nations Development Programme and the Central Bank of Nigeria major Economic, financial and banking indicators for the period under study.

Model specification

The model specification for this study is as follows:-

Poverty Equation.

RPOV = f(CON,GDP,INFLA, UNEM, DEPEN, ADLIT) …...(i)

Econometrically, the above equation could be stated thus:

RPOV = $\beta_O + \beta_1$LCON + β_2LGDP+ β_3LINFLA + β_4LUNEM + β_5LDEPEN+ β_6LADLIT + et………………………………….. (ii)

Where:

e_t represents stochastic term

β_o to β_6 represent parameter estimate

βLCON = log of consumption
βLGDP = log of economic growth
βLINFLA = Log of inflation
βLUNEM = log of unemployment
βLDEPEN = log of dependency ratio
βLADLIT = log of adult literacy ratio

Data analysis and discussion of results

The empirical data on which our analysis is premised are as presented below:

Impact of macroeconomic vairiables on poverty alleviation

VARIABLES	ESTIMATED COEFFICIENT	STANDARD ERROR	T-STATISTIC	P-VALUES
C	O.50122E-0.1	0.25497E.01	1.9658	[.599]
ΔLINFLA	-O.11862E.02	0.53031E-03	-2.2367	[.000]
ΔLUNEM	0.45619E-001	0.30349E-01	1.5031	[.124]
ΔLCONS	0.26027-	0.60190E-01	4.3241	[.0100]
ΔLGDP	0.340951	0.57190E-01	5.9618	[0.2142]
ΔLDEPEN	-0.51893	0.72344	0.71731	[0.601]
ΔLDLIT	0.39113	0.24819	1.5759	[0.402]
-2 R= 0.811078	f-Statistic = 6.43978	DW=1.8138		

DEPENDENT VARIABLE; ΔLPOOR
CURRENT SAMPLE: 1992 – 2007
NUMBER OF OBSERVATIONS: 16

Poverty equation is associated with the implications of consumption pattern and rate of poverty on the macro economy of Nigeria. The equation regresses poverty on inflation, unemployment, Consumption, Economic growth, rate of dependency and Adult literacy rate. The coefficient of the constant term is 0.50122 and is positive. This implies that at zero performance of all the independent variables rate of poverty will increase by 0.50122. The regression coefficient of inflation records negative sign signifying negative linkage between poverty and inflation in the Nigerian macro economy. The t-statistic is significant at better than 0.1 per cent level.

The coefficient of unemployment has a positive sign as well as t-value. This shows that if unemployment increases incidence of poverty is likely to increase by about 1.2 percent. The result is not statistically significant at 0.1 per cent level. The coefficient of consumption has a positive sign. This implies that there is direct positive relationship between poverty and consumption of goods and services in the Nigeria macroeconomic environment. The t-statistic is statistically significant at 4.0 per cent level. Consumption and poverty are closely related, hence a positive relationship between consumption and poverty is established. High incidence of poverty reduces the rate of consumption of goods and services.

The coefficient of economic growth (GDP) has a positive sign and is statistically significant at 5 percent level. Economic growth and poverty are closely related as astronomical rate of poverty impacts on economic growth. Economic growth vis-à-vis improved standard of living could be influenced by a number of factors such as income level, consumption level as well as rate of inflation in the economy amongst others.

The regression coefficient of dependency ratio has a negative sign signifying the negative relationship between poverty and dependency ratio in the economy. Furthermore the regression coefficient of Adult literacy rate carries a positive sign and is statistically not significant. The adjusted R^2 is 0.811078. This implies a good fit for the model while Durbin-Watson statistic is 1.8138. The independent variables are good explanations for the implications of consumption pattern and the incidence of poverty in the country.

Recommendations and concluding remarks

This study focuses on consumption Patten, rate of poverty and macroeconomic fundamentals of developing economies with particular reference to Nigeria. As the study reveals, there exist a linkage between inflation, unemployment, consumption, economic growth, dependency ratio, adult literacy and poverty in Nigeria. The econometric model adopted here is of great significance in the explanation of the relationship. The model is found to be useful here in view of its predictive power. Economic growth and poverty are related as high incidence of poverty impacts on economic growth as well as the standard of living. Improved standard of living is influenced by factors including income level ,consumption rate as well as rate of inflation. The study maintains that in views of the high incidence of poverty consumption rate and behavior is influenced by the income level of consumers. Stability in income and reduced rate of inflation are therefore advocated. The f-statistic is 6.43978 and is the test of the overall performance of the model. In this study the value of DW is 1.813.0 and is greater than adjusted R^2 of 0.811078. This implies that there is no spurious regression. Poverty rate will be on the increase with all the attendant economic woes.

In conclusion, government policies on poverty reduction should be properly focused devoid of duplications of goals and functions. The income level should also be addressed toward stability in order to tackle the problems vigorously. A negation of this renders improved standard of living an illusion in the country thereby increasing the incidence of poverty in the mist of plenty.

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APPENDIX

Impace of macroeconomic variables on poverty alleviation in nigeria

DEPENDENT VARIABLE: DLPOOR

SUM OF SQUARED RESIDUALS =
0.104225E-01
STANDARD ERROR OF THE REGRESSION =
0.340404E-01
MEAN OF DEPENDENT VARIABLE =
0.529879E-01
STANDARD DEVIATION =
0.606456E-01
R-SQUARE = 0.811078
ADJUSTED R-SQUARED = 0.685130
DURBIN-WATSON STATISTIC = 1.8130
F-STATISTIC (6, 9) = 6,43978
LOG OF LIKELIHOOD FUNCTION = 35,9880
NUMBER OF OBSERVATIONS = 16

VARIABLE	ESTIMATED COEFFICIENT	STANDARD ERROR	T-STATISTIC	P-VALUES
C	0.50122E-01	0.25497E-01	1.9668	[.599]
ΔINFLA	0.11862E-02	0.53031E-03	-2.2367	[.000]
ΔLUNEM	0.45619E-01	0.30349E-01	1.5034	[.124]
ΔLCONS.	0.26027	0.60190E-01	1.	[.01000]
ΔLGDP	0.34095	0.57190E-01	5.9618	[0.2142]
ΔLDEPEN	0.51893	0.72344	0.71731	[.601]
ΔLADDLIT	0.39113	0.224819	1.5759	[.402]
R^2 = 0685136 =	0.811078	F-STATISTIC = 6.43978	DW = 1.8130	