# THE DETERMINANTS OF CONSUMPTION PATTERN AMONG RURAL DWELLERS OF ONDO STATE (CASE STUDY OF AKOKO NORTH WEST LOCAL GOVERNMENT)

# Fasoranti Mary M.

Department of Economics, Adekunle Ajasin University, Akungba Akoko, Nigeria

#### Abstract

This study, which was conducted in Akoko North West Local Government Area of Ondo State, examined the determinants of consumption among rural dwellers. The study considered the influence of some selected variables as identified by literatures related to consumption on the level of consumption in the study area. Data was obtained through primary and secondary sources. A well structured questionnaire was administered on 100 respondents randomly selected from the study areas. Data obtained was analysed with the aid of simple multiple regression analysis. Result showed that current income, expected pension fund, shares and durable assets are positively related to consumption while expected future income and deposits in banks are negatively related. Among other things, study revealed that expected future income, deposits at banks and shares are significant determinants of consumption in the study area. To raise consumption in the study area, respondents should be enlightened on how they can invest in shares. On the other hand, consumption can be reduced in the study area if interest rates on deposits are increased.

Keywords: Consumption patterns, Rural dwellers, Ondo State

#### Introduction

Consumption is simply defined as the total demand for all consumer goods and services. Anyanwu (1995) and Frank and Bernanke (2001) defined consumption as the spending by households on goods and services such as clothing, food items, entertainment, health services and acquisition of assets among others. Arising from this definition is the concept of consumption function which shows the relationship between consumption and disposable income.

The term "consumption" originates from Lord Keynes psychological law which says that men are disposed as a rule and on the average increase their consumption as income increases but not by as much as the increase in their income. This law is known as the absolute income hypothesis (AIH). However, further investigation into the determinants of consumption expenditures have revealed that consumption expenditures is determined by many other factors aside income. Colander (2001), Jhinhjan (2002), Koutsouyiannis (2001)

and Iyoha (2001) identified interest rate, relative prices, capital gains, wealth, liquid assets, attitude and expectation and availability of consumer credit among others as determinants of consumption expenditure.

Consumption is a major component of aggregate demand. A little disturbance in this component will have a far reaching effect on the nations aggregate demand performance. Literatures on the determinants of consumption have been majorly on aggregate national consumption without clear demarcation between consumption of the urban and rural dwellers. In Nigeria today, a high percentage of the nation's population reside in the rural areas. A country cannot be adjudged developed without significant improvement in the standard of living of the rural dwellers. Given the importance of the rural areas in nation's development and the significance of consumption as a major component of aggregate demand, this paper is set to examine the determinants of consumption expenditures of the rural dwellers in Ondo State with particular reference to Akoko North West Local Government Area. The study also considers the pattern of consumption and the applicability of the permanents income hypothesis in the rural areas. The identification of the determinants of consumption will assist policy makers in improving the living standard of the rural dwellers.

#### Literature review

There have been various conceptual frameworks as regards the determinants of consumption expenditures. Lord Keynes (1936) postulated the Keynes psychological law otherwise known as the absolute income hypothesis (AIH). The law says that current consumption expenditures is a function of current disposable income and that as income increases, consumption expenditure increases but at a decreasing rate. According to him, the marginal propensity to consume (MPC) is less than the average propensity to consume (APC) and that APC falls as income increases. Keynes proposition can thus be summarized as follows:

- i. The MPC is positive but less than one
- ii. The APC falls as income increases

The inadequacy of Keynes hypothesis led to more investigations on the determinants of consumption expenditures.

Duesenbarry (1949) developed the relative income hypothesis (RIH). The hypothesis says that the APC of a family depends on the family's level of income relative to the income of the neighbourhood with which he identifies. The idea is that a family with any given level of income spends more on consumption if it lives in a community in which the income is relatively high. This is probably due to pressure on the family to keep up with other families in the environment. Hence consumption is a function of the income of the individual and the average income of the group he belongs. Moreover, Duesenberry argued that current consumption depends not only on current income but also on the history of income. More often than not, individuals build up consumption standard that is geared towards their peak income level. When therefore income declines, the attained consumption standard will not be immediately sacrificed. This is called the 'ratchet effect' phenomenon and is based on two facts.

- i. Individual's consumption behaviour is not independent of the behaviour of every other individual
  - ii. Consumption relations are irreversible over time.

Summarily, the RIH postulates that one's consumption behaviour is influenced by that of his neighbour or his environment.

Milton Friedman (1957) propounded the permanent income hypothesis which says that consumption is a function of permanent income rather than current disposable income. The permanent income is the income an individual is expected to receive over a long period of time. Friedman believes that transitory income or temporary unexpected income does not affect consumption.

On the other hand, Ando and Modigliani (1963) in the life cycle Hypothesis (LCH) postulated that an individual plans his/her consumption and savings over a long period of time that is over their entire life time. In this case, all resources available to the consumer are relevant to consumption decision. The consumer allocates his income so as to maximize satisfaction over his life time while saving is to enable him to secure the most desirable level of consumption in old age. The crux of the LCH is that consumption is a function of life time expected income of consumers. Consumption depends on the resources available to the consumer, the rate of return on capital, the spending plan and the age at which the plan is made. For simplicity, the hypothesis is built on the assumption that price is constant, interest rate is stable and that consumer does not inherit any asset and that his net assets are the result of his own savings.

According to Franco Modigliani, the consumer's life time can be split into three periods viz

The young age when little or no income is earned.

: A relatively long years of working life when income tends to rise with experience and seniority in the place of work.

: The period between retirement and death when income drops to near zero.

The Modigliani theory can be criticized on the basis of the underlying assumption. In real life, commodity prices and interest rates are not stable. Moreover, the issue of property inheritance is an acceptable norm in the capitalist economies.

Other studies on consumption such as Deaton (2001), Hall (2001), Flavin (2003), Zeldes (2005) and Eswaran and Kotwai (2006) have identified savings, unanticipated shocks, and attitude of consumers and presence of liquidity constraints as important determinations of consumption. In Nigeria, study by Adedotun (1978) showed positive correlation between consumption expenditure and per capita income. On the other hand, Uwujaren (1977) related consumption in Nigeria to Friedman's permanent income Hypothesis and his findings showed that consumption is a function of current and permanent income. In a similar vein, Iyoha (2001) perceived consumption as a function of disposable income and lagged value of income.

All studies identified above did not emphasize the determinants and pattern of consumption in the rural areas. Hence this paper aims at bridging this gap by examining the determinants and pattern of consumption in the rural setting of Akoko North West Local Government Area of Ondo State.

#### Materials and methods

#### Study area

The study was carried out in Akoko North West Local Government Area of Ondo State. The study area is bounded in the North and East by Kogi and Ekiti States respectively. The area covered about five hundred and twenty square kilometres. The terrain is undulating and in most cases surrounded by hills. By the 2006 population census, the population was estimated at 213,792. The area consisted of eighteen towns and villages with the headquarter at Okeagbe. The towns and villages include Okeagbe, Arigidi, Ese, Afin, Iye, Ogbagi, Irun, Erusu, Ibaramu, Ikaram, Ase, Igedegede, Ajowa, Igasi, Eriti, Oyin, Iyani and Surulere. The area is blessed with mineral resources like gold and limestone. The major occupation in the area is farming and the major crops include coffee, Cocoa, plantain, kolanuts, cassava, maize, yams and vegetables.

#### Sources and nature data, simple size and sampling method

Data was sourced from both primary and secondary sources. The primary data was sourced with the aid of a well structured questionnaire administered on One hundred respondents randomly selected from the study area. Data was also sourced from relevant text books, learned journals and central Bank publications. Data collected were consumption expenditure, income, naira value of assets, amount of savings, value of shares, expected income, expected pension, and Bank deposits all measured in naira. Other information included family size, age, occupation, length of service, sex, education.

#### Method of analysis

Data collected were analyzed with the aid of qualitative and quantitative methods. The quantitative methods involved the use of tables, frequency distribution and percentages while multiple simple regressions was used to analyse the factors that determine consumption of the rural dwellers.

## **Model specification**

Model for the study was specified using the variables identified by the Absolute income hypothesis, Relative income hypothesis and the life cycle hypothesis, taking clue from the Ando and Modigliani specification, the model for the study was specified as follows:

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C = (CI, EIF, EPF, DB, SHARES, ODB) ......(1)
= a_0 + a_1 CI + a_2 EIF + a_3 EPF + a_4 DB + a_5 shares + a_6 ODB + \mu.....(2)
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In its linearised form, the model assumes the followings

 $Ln\ Ci\ =\ a_0+a_1\ LnCI+a_2\ LnEIF+a_3\ LnEPF+a_4\ LnDB+a_5\ Lnshares+a_6$ 

 $LnODB + \mu_{i}.....(2)$ 

Where C; = Total consumption of the  $i^{th}$  respondent

CI = Current income

EIF = Expected income in the future

EPF = Expected Pension Fund

DB = Deposits in bank

SHARES = Shares

ODB = Other durables

 $a_0 + a_1$ , ....,  $a_6$  are parameters to be estimated.

#### Data presentation and analysis

### **Regression results**

VARIABLE	COEFFICIENT	STD ERROR	T-STATISTIC	PROB
C	13259.19	8661.39	1.531	0.013
CI	1.021	0.608	1.679	0.001
EIF	-1.072	0.396	-2.705	0.054
EPF	0.081	0.597	1.351	0.007
DB	-0.329	0.134	-2.457	0.069
SHARES	0.164	0.041	3.945	0.017
ODB	0.001	0.014	0.048	0.003

 $R_2 = 0.969$ 

Adjusted  $R_2 = 0.923$ 

DW = 1.838

F - Statistics = 21.074

A close inspection of the results shows that Current Income (CI) had the most significant and positive impact on level of consumption, followed by Other Durables (ODB) and then, Expected pension Fund (EPF) (all at 1% levels of significance). The results also revealed that all the variables except Expected Income in the Future (EIF), maintained right direction of sign. In general, the descriptive statistics for this model (R<sup>2</sup>, F-Stat and DW-Stat) are within acceptable bounds. Further, the results of the diagnostic tests indicate the absence of error of auto-correlation and conditional heteroscedasticity as the value of DW test is tending to 2, hence the errors are normally distributed.

The Regression results above showed that current income, expected pension fund, shares held by respondents and durable assets were positively related to consumption in the study area. This implies that the higher their values, the higher the level of consumption in the study area. From the consumption function, when the current income of a rural dweller increases by 1%, the level of consumption will increase by 1.021%. This finding do not support Keynesian postulate that marginal propensity to consume is less than one. This result reflects the fact that the income in rural areas is low, thus they spend every extra naira they receive.

Similarly, deposits in bank is negatively related to consumption which has an elasticity of -0.329 i.e a 1% increase in deposit in bank will lead to a reduction of almost

0.33% in level of consumption. The plausible explanation for this inverse relationship might be that the money in bank deposit is a form of savings.

The R<sub>2</sub> of 0.969 shows that 96 percent of total variations in consumption are explained by the variation in the variables included in the model. The implication is that the model captured almost all the determining factors of level consumption in rural area.

The negative value of expected future income could be due to the fact that most rural dwellers are farmers who may not have future income as soon they retired from farm works.

#### Summary, conclusion and recommendation

The study examined the determinants of consumption in the rural areas. The study considered the influence of current income, expected future income, expected pension fund, deposits in banks, shareholdings and durable assets in the consumption of rural dwellers. Data was obtained through primary and secondary sources. The study made use of well structured questionnaire to obtain information from 100 respondents randomly sampled from the study area. Data collected was analysed through simple multiple regression analysis. Results showed that current income, expected pension fund, shareholdings and durable assets are positively related to consumption in the study area. On the other hand, expected future income, deposits at banks and shares held by respondents are statistically significant determinants of consumption in the study area. Given that shareholding is positively related to consumption and that it is statically significant, rural dwellers should be educated on how they can invest in shares. This will help to ensures table consumption expenditure in the future. The monetary implication of the findings is that to reduce consumption in the rural areas respondents should be encouraged to raise their deposits in banks. This can be achieved by raising interest rates on bank deposit.

#### Reference

Adetotun, P. (1978): "Nigeria's Public Consumption Expenditure", *The Journal of Economics and social Studies* 20 (3), 13 – 15

Anyanwu, C, (1995): Revenue Allocation and stable Fiscal Federalism in Nigeria." *Journal of Economic Management*, 2(2),1-28.

Colander D.C (2001): Economics McGraw – Hill publishers, 4<sup>th</sup> Edition.

Deaton (2001): Understanding Consumption, Clarendo Press, London. Pg 40 - 45

Eswaran, M and A Kotwal (2006): Credit as Insurance in Agrarian Economies", *Journal of Development Economics*, 2(1),11-17.

Flavin (2003): "Excess Sensitivity of Consumption of current Income: Liquidity Constraint or Myopia", *Canadian Journal of Economics*.

Hall (2001): "Stochastic Implications of the Life-cycle permanent. Income Hypothesis: Theory and Evidence". *Journal of Political Economy*. 2(3), 10–4

Iyoha, M.A. (2001): "Policy simulation with Macro Econometric models of the Nigerian Economy" Economic *and Financial Review* 2 (1), 21 – 25.

Jhingan, M.L (2003): *Macroeconomics Theory*. New Delhi, 12<sup>th</sup> enlarged revised edition Keynes, J.M (1936): *The General Theory of Employment, Interest and Money*. London Press. 113

Koutseyiannis A. (2001): *Theory of Econometrics*. Palgrave Publisher, 2<sup>nd</sup> Edition, Pg 105

Milton Friedman (1957): Inflation: Causes and Consequences

Uwujaren G. (1977): "Specification and estimation of an economy-wide macro econometric model of Nigeria". *Nigerian Journal of Economic and Social Studies*, 19 (2) 23 – 25

Zeldes (2005): Consumption and Liquidity Constraints: An empirical investigation". *Journal of Political Economy*, 2(3),15-20.