

Savings Determinants among Rural Households in Southwest Nigeria

Ogheneruemu Obi-Egbedi¹, Olubunmi O. Alawode¹ and Adetutu E. Soneye¹

¹Department of Agricultural Economics, University of Ibadan, Nigeria
gheneobi@yahoo.co.uk

Abstract: Economic development depends largely on investment, which is hinged on savings. Rural savings in Nigeria has been low and long considered as inconsequential to national savings. The negative implications of negligible rural savings for rural and agricultural development thus require that the factors influencing rural household savings be investigated. The study therefore, surveyed 200 rural household heads in Akinyele local government area of Oyo state, Southwest Nigeria, using a multistage sampling technique. The data obtained was analyzed using descriptive statistics and multiple regression analysis. The results showed that mean age of household head was about 43 years, mean household size was about 6 persons while mean monthly income of household head was ₦16, 588.17 (\$104). The most important reason for saving among the rural households was funding children's education. Both formal and informal savings of the rural households were found to be generally low; however, mean monthly formal savings (in commercial banks) of ₦605.13 (\$3.80) was found to be highest among the rural households. The factors which significantly determine rural household savings were; years of education, occupation, income of household head and household size. Therefore, policy options should emphasize education of rural households and birth control measures.

[Ogheneruemu Obi-Egbedi, Olubunmi O. Alawode and Adetutu E. Soneye. **Savings Determinants among Rural Households in Southwest Nigeria.** *World Rural Observ* 2014;6(4):6-11]. ISSN: 1944-6543 (Print); ISSN: 1944-6551 (Online). <http://www.sciencepub.net/rural>. 2

Key words: Rural Households, Determinants of Savings, Forms of Savings, Southwest Nigeria.
JEL: E21, Q14

1. Introduction

Saving and investment are essential instruments for capital formation, investment and hence, economic growth (Mapa and Balisacan, 2004; Issahaku, 2011). Savings determine the level of economic activity of a country, to a large extent. According to economic theory, savings is the difference between income and expenditure. Since savings is income not consumed but put aside for future use, it follows that savings drive re-investment, enterprise expansion and ultimately, economic development. Similarly, within the agricultural sector, growth attained will largely depend upon what the farmers do with the seasonal additional incomes generated from their farm activities. This stems from the fact that the growth rate in the farming economy largely depends on the stock of capital built in a farm organization and the re-investment of such stocks in form of savings for further improvement of the farm organization (Akerle and Ambali, 2012). Rural savings could also be intended to address other forms of household expenditure which include children's education, smoothening consumption during off-seasons and unforeseen events such as illness and other emergencies. This implies that rural savings is critical to the welfare and development of the rural

households, although rural households differ in their reasons for and patterns of saving.

National savings statistics are usually well documented even in many developing countries however; there remains a dearth of knowledge of household savings behavior. Low level of domestic savings is a major problem in developing countries (Teshome *et al*, 2013). Moreover, the rate and level of household savings have been decreasing overtime (Besales and Mapa, 2006). Particularly in the agricultural sector of most developing economies, low wages and salaries have resulted in a decline of the labor force well-being (CBN, 2008). Given that labor welfare can be inferred from its savings and consumption status, the factors that influence savings will likely enhance welfare (Akpan *et al*, 2011). In Nigeria, high level of unemployment, low wages and low income generally limit savings. Rural households are further constrained due to seasonality of cash flow, work and income; hence, saving is seasonal and irregular in rural areas. Traditionally, rural households are viewed as incapable of making significant saving and investment choices hence, aggregate level savings have been calculated without proper accounting for the rural household sector in Nigeria.

The savings behavior of rural households has been found to be less dependent on absolute aggregate

income (Ayanwale and Bamire, 2000). Moreover, in a macro level study, Obi-Egbedi *et al* (2012) found that rural households basically have lower incomes and dis-savings relative to their urban counterparts, implying a poor state of rural household savings in Nigeria. However, there is evidence in the literature, at the micro level, that rural farmers have savings (Adeyemo and Bamire, 2005; Akerele and Ambali, 2012; Odoemenem *et al*, 2013) howbeit, these savings are relatively low. Given that rural savings have the ability to drive rural development, a value-added understanding of the social and demographic factors that determine rural household saving is imperative. This will not only inform relevant policy formulation by government but also serve as a guide to various development initiatives for proper targeting and enhancement of rural household saving.

2. Forms of Rural Savings in Nigeria

Although, saving behavior of households vary differently (Issahaku, 2011); frequency of saving usually is a combination of daily, weekly, and or monthly pattern based on the level of their earnings and reasons for saving. The forms of saving and savings outlets a household engages in and the factors influencing these decisions also vary. Generally, savings outlets where rural households deposit their savings are of two main types: formal and informal financial institutions (Ahmad *et al*, 2006; Aryeetey & Gockel, 1998; Bautista and Lamberte, 1990). Formal savings outlets include commercial banks, mobile banking or daily savings enterprise, microfinance and micro credit banks, Nigerian Agricultural Co-operatives and Rural Development Banks (NACRDB) and Co-operative societies. The mobile banking is an innovation of the commercial banks whereby trained bank staffers meet the rural workers in their shops and business locations to collect their savings and take to the bank.

The informal savings outlets include mutual savings, Susu and self-saving which basically involves keeping the money at home or with a trusted member of the community. Susu is a form of saving undertaken by a group of people with a common interest. The group could consist of co-workers, traders in the same area or even neighbours who agree to make contributions periodically (daily, weekly or monthly) and the total sum is given to one of the members at a time at the end of a defined period (usually a month) until the cycle goes round every member. Susu enables the rural households to acquire capital intensive items which they might have had difficulty in making personal savings towards.

On the other hand, mutual savings is a thrift form of arrangement where an individual makes a daily or weekly round and collects contributions from

individuals who want to save. At the end of each month, the collector gives each contributor his/her contributions less one day's contribution as his service charge. This form of savings is usually adopted by people in the informal sector who receive their incomes on daily basis. Hence, they can accumulate funds to undertake capital projects. The third form of informal savings considered in the study is self-saving which is basically keeping money at home. Self-saving is usually the option of rural people who either do not have access to other financial institutions or do not trust them. Most of rural households find it more convenient to save with the informal financial intermediaries due to the unavailability of formal financial institutions in the rural areas.

3. Materials and Methods

The data for this study were collected in 2013 from two hundred (200) rural households in Akinyele Local Governments Area (LGA) of Oyo State, Southwest Nigeria. The major occupation of people residing in the area include farming, carpentry, trading, food vendor, fish smoking, hairdressing, sewing, marketing, as well as food processing. Agriculture provides employment for the majority of the people with respect to production of food crops such as yam, maize, cassava, soybeans, plantain, and melon; tree crops such as cocoa, citrus, and oil palm, and leafy vegetables such as amaranthus, celosia.

A multistage sampling technique was used for the study. First Akinyele LGA was selected purposively out of eleven LGAs in Ibadan, the state capital. This was followed by the random selection of five villages within the LGA; Moniya, Olorisa-oko, Ajibade, Alabata, and Ijaye. The third stage was the random selection of forty households from each of the selected villages giving a total sample size of two hundred households. Structured questionnaire was used to collect information related to savings and savings behavior of the rural households. Other information included socio-economic factors such as household size, sex, age, occupation, years of education, marital status, working experience, income of household head, number of dependents and consumption level of household.

The socio-economic variables generated from the data were analyzed using descriptive statistics such as percentages, frequency distribution and means. The multiple regression technique was used to show the effects of the variables on household savings. The relationship between savings and the socio-economic variables is specified implicitly as $Y = f(X_1, X_2, X_3, \dots, X_n, \mu)$.

Where Y = Savings of household heads (₦),
 X_1 = household head, Gender (male = 1; female = 0)

- X_2 = Age of household head (years)
 X_3 = Marital status of household head (married = 1; otherwise = 0)
 X_4 = Years of education of household head
 X_5 = Occupation of household head
 X_6 = Household Size (Number of persons)
 X_7 = Income of household head (₦)
 X_8 = Consumption level of household (₦)
 μ = error term.

Four functional forms were used which included: exponential, linear, semi log and double log functions but the linear form was chosen as the lead equation for this study due to the higher value of the coefficient of multiple determination (R^2), number of significant variables and the level of the significance, and the significance of the model (F – statistics). The parameters of the model were estimated using the SPSS 17.

4. Results and Discussion

4.1 Socio-economic characteristics of rural household heads

The figures in parentheses represent the standard deviation.

Most of the household heads in the study area were in the productive years as about 59 percent of them were between 31 and 50 years of age while the mean age was 43 years. Headship of household was male dominated and over 70 percent of household heads were married. Although the household size was also fairly large with a mean value of about 6 persons per household, the mean monthly income was only ₦16,588.17 (about \$94). As characteristic of most rural areas in Nigeria, most of the surveyed were employed in farming. In addition, most surveyed households could have three or more meals in day. This suggests an appreciable welfare status of the people which affects their ability to save. The description of the socio-economic characteristics of the farmers is shown on Table 1.

4.2 Savings pattern of rural households

The pattern of formal savings by the rural households is shown on Table 2. Most of the rural people saved weekly with the commercial bank, co-operatives and mobile banks while monthly savings, which had the highest mean value, was observed with only the commercial banks. On the other hand, Table 3 shows that the rural households under the informal savings type only saved weekly under the mutual savings while households who saved under *susu* and

self saving did so daily, weekly and/or monthly. Households which saved small amounts at a time, saved more frequently than those who saved larger amounts each time. Hence, households which saved small amounts at a time are likely to save it on a daily and weekly basis while those who saved large sums of money are more likely to save on a monthly or less frequent basis. Generally, most households that are employed in farming; save when they harvest crops from their farms while those in the informal sector; food vendors, hairdressing, hawking, fish smoking, commercial transporters have irregular stream of income.

Most rural household heads were found to save mainly to pay for their children's education (72%) and to offset the bills of unexpected illness (62.5%). Other reasons for saving by the households were to be able to access credit from the financial institution with which they saved (28.5%), unexpected financial crisis (27%), ceremonies (24%) and retirement (14%). The reasons why rural households save are presented on Table 4.

4.3 Empirical results

The determinants of rural household savings were analyzed using the ordinary least square regression technique. Variables such as age of the head of the household, sex of household head, years of education, occupation of household head, educational status of household head, household size, income level of household head and consumption level of household were used as explanatory variables and run against household savings, the dependent variable. The R^2 of 0.648 implied that 64.8% of the variation in the level of savings of the household heads is jointly explained by the independent variables. Also, the overall significant of the model as measured by the F-statistics of 17.319, showed that the model is significant at 1 percent level. This means that the overall model has a good fit.

In addition, a number of independent variables were statistically significant at various levels of significance. Years of education, occupation of household head and income of household head were statistically significant at 1% and bore a positive relationship with savings. Hence, an increase in the years of education, for example, will increase rural household savings. Household size, on the other hand, had a negative relationship with savings though it was significant at 5%. This implies that an increase in household size will decrease rural household savings.

Table 1: Description of socio-economic characteristics of rural household heads

Variables	Frequency	Percentage
Age (years)		
21 – 30	32	16.0
31 – 40	70	35.0
41 – 50	48	24.0
51 – 60	31	15.5
>60	19	9.5
Mean	42.93 (11.79)	
Sex		
Male	124	62.0
Female	76	38.0
Occupation		
Not working	2	1.0
Farming	63	31.5
Trading	47	23.5
Public/civil servant	29	14.5
Others	59	29.5
Household size		
1 – 4	69	35.0
5 – 9	115	57.5
10 – 14	15	7.5
Mean	5.51 (2.16)	
Marital status		
Married	143	71.5
Divorced	12	6.0
Single parent	23	11.5
Widow	16	8.0
Widower	6	3.0
Income per month (₦)		
0	10	5.0
<10,000	85	42.5
11,000 – 20,000	53	26.5
21,000 – 30,000	26	13.0
31,000 – 40,000	12	6.0
41,000 – 50,000	8	4.0
>50,000	6	3.0
Mean	16588.17(16614.50)	
Years of education		
0	54	27.0
1-6	63	31.5
7-12	41	20.5
>12	42	21.0
Mean	7.47 (5.71)	
Consumption level/no. of meals per day		
<3	2	1.0
3	57	28.5
>3	141	70.5

Table 2: Average amount of formal savings by rural household heads

Period	Bank	Co operative	Mobile banker
Weekly	10.00 (± 141.42)	287.00 (± 938.05)	6.50 (± 73.72)
Monthly	605.13 (± 2176.01)	0.00	0.00

The figures in parentheses represent the standard deviation.

Table 3: Average amount of informal savings by rural household heads

Period	Mutual saving	Susu	Self saving
Daily	0.00	27.00 (98.077)	29.00 (76.08)
Weekly	10.50 (141.56)	93.00 (289.95)	26.00 (108.09)
Monthly	0.00	52.00 (246.58)	7.50 (74.98)

The figures in parentheses represent the standard deviation.

Table 4: Major reasons for saving

Variables	Frequency	Percentage
Children's education	144	72
Illness	125	62.5
Access credit	57	28.5
Financial crisis	54	27
Ceremonies	48	24
Retirement	28	14
Others	16	8

Table 5: Determinants of Household Savings among Rural Dwellers

Variable	Co – efficient	Std Error	t– value
Constant	-2219.431***	964.013	-2.302
Sex (X_1)	311.335	282.739	1.101
Age(X_2)	-0.174	11.115	-0.016
Marital status (X_3)	39.988	125.026	0.320
Years of Education (X_4)	77.172***	25.616	3.013
Occupation (X_5)	265.937***	103.330	2.574
Household size (X_6)	-115.565**	58.091	-1.988
Income (X_7)	0.064***	0.009	7.453
Consumption (X_8)	465.262*	252.366	1.844

R^2 0.648

F – Value 17.319***

*** implies significant at 1%; ** implies significant at 5%; *implies significant at 10%

5. Conclusion

Irregular income and low income caused irregularity in savings. Also, there exists relationship between savings and the socioeconomic characteristics of households. Savings is mainly determined by occupation, income, and years of education of household heads, household size and consumption level of households. Policy should thus be directed at increasing investment and employment in rural agricultural based industries.

References

1. Adeyemo, R. and Bamire, A. S. 2005. Saving and investment patterns of cooperative farmers in Southwestern Nigeria. *Journal of Social Science*, 11(3): 183-192.
2. Ahmad M. H. Atiq Z., Alam S. and Butt S.M. (2006). The impact of demography, growth and public policy on household saving: a case study of Pakistan. *Asia-Pacific Development Journal* (13)2.
3. Akerele, E.O. and Ambali, O.I. 2012. Consumption and saving pattern among rural

- farming households in Abeokuta local government area of Ogun state. *Journal of Agriculture and Veterinary Services* 4.
4. Akpan, S.B., Udoh, E.J. and Aya, E.A. 2011. Analysis of savings determinants among agro-based firm workers in Nigeria: a simultaneous equation approach. *Research on Humanities and Social Sciences*, 1(3): 1-11.
 5. Aryeetey E and Gockel F.A, 1998. Mobilizing domestic resources for capital formation in Ghana: the role of informal financial sectors. *AERC Research paper* 3.
 6. Ayanwale, A. B., and Bamire, A. S. 2000. Rural Income Savings and Investment Behavior among farmers in Osun State Nigeria. *The Indian Journal of Economics* 81: 49 – 60.
 7. Besales, L.G.S. and Mapa, D.S. 2006. Patterns and determinants of household savings in the Philipines. Technical Report submitted to USAID/Philipines OEDG, August 24, 2006.
 8. Bautista, R.M. Lamberte M.B. 1990. Comparative saving behavior of rural and urban households in the Philipines. *Journal of Philippine Development*, 17(2): 149-181.
 9. Central Bank of Nigeria (CBN) 2008. Annual Report and Statement of Accounts. Central Bank of Nigeria, Abuja.
 10. Issahaku, H. 2011. Determinants of savings and investment in deprived district capital in Ghana: a case study of Nadowli in Upper West Region of Ghana. *Continental Journal of Social Sciences* 4: 1-11.
 11. Mapa, D. and Balisacan, A. 2004. Quantifying the Impact of Population on Economic Growth and Poverty: The Philippine in as East Asian Context. In Sevilla, L.A. (editor), *The Ties That Bind: Population and Development in the Philipines*.
 12. Obi-Egbedi, O., Okoruwa, V.O., Aminu, A. and Yusuf, S.A., 2012. Effect of rice trade policy on households' welfare in Nigeria. *European Journal of Business and Management* 4(8): 160-170.
 13. Odoemenem, I.U., Ezihe, J.A.C. and Akerele, S.O. 2013. Saving and investment pattern of small scale farmers in Benue state, Nigeria. *Global Journal of Human Social Science Sociology and Culture* 13(1).
 14. Teshome, G., Kassa, B., Emanu, B. and Haji, J. 2013. Determinants of rural household savings in Ethiopia: the case of East Hararghe zone, Oromia Regional state. *Journal of Economics and Sustainable Development* 4(3) 66-75.

10/8/2014