African Journal of Basic & Applied Sciences 4 (4): 115-123, 2012
ISSN 2079-2034

DOI: 10.5829/idosi.ajbas.2012.4.4.212

Saving Behavior of Rural Households in Kwara State, Nigeria

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Abstract: Savings are very imperative for supporting and developing rural enterprises. The inability of households to save over time can significantly influence the rate and sustainability of capital accumulation and economic growth in developing countries. This research therefore assessed the level of savings and its correlates in rural areas of Kwara state, Nigeria. Data were obtained using multi- stage sampling techniques and analyzed using descriptive statistics the tobit regression model. The result showed that rural enterpreneurs (81.0 percent) were mostly male-headed and the household heads (73.5 percent) that combine farming with other non-farm activities had higher income and savings compare to household heads with only one source of livelihood. Also, most household heads spent their income on food and majority (88.7 percent) save for investment purposes but their average monthly savings was less than five thousand naira. The result further showed age squared ($p<0.10$), farming experience ($p<0.10$) and diversification into non-farm activities ($p<0.05$) positively influence rural saving rate.

Key words: Rural enterprises · Household savings and saving rate

INTRODUCTION

Savings are very imperative for supporting and developing rural industries. They provide several benefits for households. Directly, saving could be used for investment. Indirectly, saving indicates repayment ability, also increase credit rating and as a collateral in a credit market [1]. Savings is both a risk management strategy and determinant of magnitude of investment but its determinants and mobilization strategy are controversial issues in literature Mkpado and Arene [2]. The source of own capital clearly is household savings. However, this financial source is limited. Not surprisingly that in many cases, rural entrepreneurs meet their financial need through informal credit market although its interest rate sufficiently high [3, 4]. Household saving is usually the largest component of domestic savings in developing countries, especially the lower-income, predominantly agrarian LDCs. This contrasts with the much greater importance of corporate saving in developed countries. The inability, willingness and opportunity of households to save over time can therefore significantly influence the rate and sustainability of capital accumulation and economic growth in developing countries [5].

In Nigeria, where rural farmers account for over 80 percent of the farmers in the country and produce 95 percent of the domestic food production in the country [6, 7], majority of rural households are small-scale farmers and as such a significant part of their non-farm income comes from small and medium enterprises (SMEs). Rural enterpreneurs are characterized by poor access to credit, poor saving rate, risk and uncertainty, poor weather condition, focusing of information on technology and not on pricing. The inability of rural enterpreneurs to access credit has restricted their potential to expand their enterprises especially in diversifying into nonfarm activities and end up with low income and hence poor savings [8]. This has led to low standard of living and inability to break the vicious cycle of poverty for the rural dwellers.

Recently, there has been an upsurge of interest among development economists, governments and international donors to increase financial savings in developing countries, particularly in rural areas and among poor households. However, a large number of developing countries are unable to mobilize the potential savings of the non-corporate sector because the structure of their financial institutions, financial instruments and financial policies are not sound [9, 10]. Deaton [11] highlighted four reasons for studying savings in developing countries. First, at the microeconomic level, households tend to be large and

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poor with income prospects more unpredictable than in developed countries. Second, at the macroeconomic level, few developing countries have fiscal systems that allow deliberate manipulation of personal disposable income to stabilize output and employment. Third, saving is too low in developing countries and this slows down development. Fourth, saving is even more difficult to measure in developing countries than in advanced economies. Thus, understanding the nature of household savings behavior is pivotal to designing policies to promote savings and investment [12]. This study therefore aims at examine the effect of rural enterprises on saving rate and to identify the determinants of household savings.

Literature Review: Three traditional theories have been widely used in empirical studies on household saving behavior in developed and developing countries. These are The Life Cycle Hypothesis (LCH) propounded by Modigliani [13], Kynesian theory by Kynes [14] and Permanent Income Hypothesis (PIH) by Friedman [15]. The Life Cycle Hypothesis (LCH) states that the motivation of saving is smoothing lifetime consumption. Individuals save to prepare for their retirement when they must dissave and consume. An individual's savings will peak in his or her prime earning years and fall as the savings are drawn down to finance consumption during retirement years. Theoretically speaking, the marginal utility of consumption at a time of lower income is higher than that at a time of higher income [16].

Keynes [14] also identified absolute disposable income as the important determinant of saving. He defined savings as the amount left over when the cost of consumer expenditure is subtracted from the disposable income that he or she earns in a given period of time. Permanent Income Hypothesis (PIH) differentiates between permanent and transitory income and indicated that saving is influenced by both permanent and transitory income as well as present level of wealth, both human and non-human. In developing countries, like Nigeria, the income plays a significant role in determining household saving as the desire and ability to save depends on having more than the resources dedicated basic needs [17]. Recent studies have confirmed that savings is highly influenced income [18, 19]. Browning and Lusardi [18] found that saving rates are higher for the higher income or wealthy, or the more educated households. It is likewise easy to observe that the saving rate increases with age until the period around retirement after which it decreases.

Gersovitz [16] identified several reasons why saving behaviour in developing countries may diverge from what is observable in developed countries. The reasons are: (a) households are dynastic and survive beyond individual members; (b) a household is an indecomposable unit and savings are decided at the household rather than individual level; (c) households have lower and more uncertain income; (d) borrowing constraints may be much more pervasive; and (e) saving to provide a buffer for uncertain and unpredictable income rather than intertemporal consumption smoothing. Who also noted that families that earn low income from their rural enterprises either as a result of engaging in either farming or non-farming enterprises only, have little or no savings compare to farmers with high income from combination of both farming and non farming enterprises. The determinants of savings will include but not limited to the income of the household.

Kulikov *et al.* [20] concluded that there is no significant effect of ownership of real estate on saving, while ownership of durable consumer goods reduces household saving. Ownership of stocks of various financial assets and liabilities and accessibility to liquid assets affect saving negatively. Nevertheless, if wealth is in the form of productive assets such as farm land, it can have a positive impact on saving. Larger land ownership helps the farmers to benefit from economies of scale and, hence, higher production and earning. Khan *et al.* [21] found that apart from vital importance of disposable income, support ratio, gender of household head, ownerships of livestock and land were major determinants of household savings in rural Pakistan. In India, Pailwar *et al.* [19] also posited that apart from income other variables, such as dependency ratio, membership of financial institutions and location explained significant proportion of the variation in financial rural households saving.

Several explanations have been offered on the effect of family size on the household saving. On one hand consumption theory explains that consumption is directly proportional to the number of household members. Literature from developed countries is consistent in showing the negative relationship between family size and household savings. Studies by Browning and Lusardi [18]; Loayza and Shankar [22]; Gardiol [23] and Orbeta [24] point out that larger family size has negative effect on household saving. Conversely, in developing countries due to large family size, the intergenerational links are

particularly strong, which lengthen the effective planning horizon of households [25] and reduce the need for saving for retirement or for intergenerational transfers [26]. Like in many other issues, the empirical evidence on the impact of children on household savings is relatively scarce in developing countries [27].

Horioka and Wan [28] conducted a dynamic panel analysis of the determinants of the household saving rate in China using a life cycle model and panel data on Chinese provinces for the 1995-2004 period from China's household survey. They concluded that China's household saving rate has been high and rising and that the variables relating to the age structure of the population have the expected impact on the household saving rate in only one of the four samples. These results provide mixed support for the life cycle hypothesis (with the positive and significant coefficient of income growth supporting the life cycle hypothesis and the mixed performance of the demographic variables being unfavorable to the life cycle hypothesis) and provide some support for the permanent income hypothesis (with the positive and significant coefficient of the interest rate supporting this hypothesis). In Estonia, Kulikov *et al*. [20] found that saving rates depend more on the transitory income than regular income. Among the others variables, the labour market status or the non financial assets ownership (real estate for instance) and credit access have not significant effect on the household saving behaviour; the durable goods possession (in particular cars) has a negative impact on the saving rate.

Adeyemo and Bamire [29] examined the pattern of saving and investment among four hundred cooperative farmers in southwestern Nigeria. Results showed that the average annual savings was low (N31,572.00) and this increased in proportion to annual incomes in the area. Age, income, household size, farming experience, loan repayment and amount of money borrowed were significant variables that influenced saving patterns while the fund borrowed significantly influenced savings.

MATERIALS AND METHODS

The multistage sampling procedure was used to collect the data from Kwara State. The first stage was the purposive sampling of Irepodun Local Government Area of Kwara State. The second stage was the random selection of five wards in which its people were actively involved in rural enterprises. At the third stage, two villages from each ward were randomly selected to ensure adequate representation of each category. For the fourth stage, households in each village were randomly selected proportionately to size. The justification for the sampling technique used was to ensure adequate representation of each category thereby providing greater reliability and it will also ensure the precision of sample estimate. In all, a total of 120 household heads were sample of which 116 gave consistent responses.

Analytical Techniques: The saving rate of the households was analyzed by using:

$$\text{Saving rate} = \frac{\text{Total income} - \text{Total Expenditure}}{\text{Total income}} \text{ x } 100$$

The tobit regression analysis was used to identify factors determining saving rate. The implicit form of the regression model is presented as:

$$Y = f(X_i, Ui)$$

Where:

- Y = Household saving rate;
- X_1 = Age of Household Head squared;
- X_2 = Gender (Male headed household =1, 0 if otherwise);
- X_3 = Share of income from crop production;
- X_4 = Share of income from livestock;
- X_5 = Non-farm diversification (1= Yes, 0 if otherwise);
- X_6 = Share of expenditure on food;
- X_7 = Household Size;
- X_8 = Farming Experience;
- X_9 = Membership of local institution (1=Yes, 0 if otherwise);
- X_{10} = Land Ownership (1=Yes, 0 if otherwise);
- X_{11} = Years of formal education;
- X_{12} = Per Capital expenditure of household.
- Ui = error term.

RESULTS AND DISCUSSION

Results on Table 1 reveal that the minimum age of household heads was 30 years while the maximum age was 70 years. The average age of the household heads was 50 years. This implies that the household heads were in their productive age. The average income earned from crop production stood at N25, 353.46 per month and the average income from livestock, non-farm activities were N4, 814.65 and N23, 945.68 respectively. Thus the average income from crop production was the highest. The average expenditure on food and expenditure on non-food were N9, 642.24 and N30, 392.58 respectively.,

Table 1: Summary statistics of rural households

Household characteristics	N	Minimum	Maximum	Mean	Std Deviation
Age of Household head	116	30.00	70.00	50.6207	7.63
Income from crop production	116	.00	110000.00	25353.46	28113.82
Income from livestock	116	.00	120000.00	4814.65	18056.25
Income from non farm	116	3000.00	151000.00	23945.68	17866.28
Expenditure on food	116	500.00	50000.00	9642.24	7723.14
Expenditure on non food	116	11200.00	99200.00	30392.58	17436.56
Household size	116	.00	25.00	9.71	4.70
Farm experience	116	.00	43.00	17.69	12.77
Savings	116	.00	80000.00	13605.60	16499.05
Saving rate	116	.00	0.69	0.21	0.16

Table 2: Types of Savings

Where household saves	Frequency	Percent
Self	114	98.3
Rotatory	26	22.4
Bank	79	68.1
Cooperatives	61	52.6
Daily savings	42	36.2
Others	16	13.8

Table 3: Saving rate and Age

	Age in years					
	30-45		46-65		>65	
Saving rate (%)	Freq	%	Freq	%	Freq	%
0.00-0.20	21	65.6	38	45.8	0	0.0
0.21-0.40	8	25.0	26	31.3	1	100.0
0.41-0.60	3	9.4	15	18.1	0	0.0
0.61-0.80	0	0.0	4	4.8	0	0.0
Total	32	100.0	83	100.0	1	100.0

Table 4: Saving rate and Gender.

	Gender			
	Male		Female	
Rate (%)	Freq	Percent	Freq	Percent
0.00-0.20	46	48.9	13	59.1
0.21-0.40	27	28.7	8	36.4
0.41-0.60	17	18.1	1	4.5
0.61-0.80	4	4.3	0	0.0
Total	94	100.0	22	100.0

Table 5: Saving rate and Household Size

	Household size					
	0-10		11-20		>20	
Rate (%)	Freq	Percent	Freq	Percent	Freq	Percent
0.00-0.20	31	44.3	27	60.0	1	100.0
0.21-0.40	23	32.9	12	26.7	0	0.0
0.41-0.60	13	18.6	5	11.1	0	0.0
0.61-0.80	3	4.3	1	2.2	0	0.0
Total	70	100.0	45	100.0	1	100.0

Table 6: Saving rate and Farming Experience

	Farming experience							
	0-10 yrs		11-20yrs		21-30yrs		31-40yrs	
Rate (%)	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
0.00-0.20	30	85.7	10	62.5	15	28.3	4	33.3
0.21-0.40	3	8.6	2	12.5	27	50.9	3	25.0
0.41-0.60	1	2.9	3	18.8	11	20.8	3	25.0
0.61-0.80	1	2.9	1	6.3	0	0.0	2	16.7
Total	35	100.0	16	100.0	53	100.0	12	100.0

Table 7: Saving rate and Membership of Savings

	Members		Non- members	
Rate (%)	Freq	Percent	Freq	Percent
0.00-0.20	24	40.0	35	62.5
0.21-0.40	17	28.3	18	32.1
0.41-0.60	15	25.0	3	5.4
0.61-0.80	4	6.7	0	0.0
Total	60	100.0	56	100.0

The average household size was ten which implies availability of family labour for the households' enterprises. This explains the reason for the high food expenditure (N30,392.58 per month). Also, the average years of farming experience of household was 17 years which implies that a typical household head is well experienced in farming. Average saving rate of the households was 0.21 percent. This implies that the level of savings among the household heads was low despite their high income.

Results reveal that majority (98.3%) of the household heads saved with themselves (personal) while (68.1 percent) saved in the banks (Table 2). Also, about half of the respondents saved with cooperative societies. The reason for increasing personal savings may be for easy access to savings for immediate use. The result also shows a moderately high level of formal savings (Bank and cooperatives) among the rural entrepreneurs. This might increase their access to formal loans to boost their level of rural enterprises.

The study further reveals that household heads within the age bracket of 45-65 years had the highest (65.6 percent) saving rate of 0.00-0.20 percent and the least (9.4 percent) saving rate of 0.041-0.60 (Table 3). The household heads within the age brackets of 45-65 years had the highest (45.8 percent) saving rate of 0.00-0.20 percent and the least (4.8 percent) of 0.61-0.80 percent. The household heads with age bracket > 65 years had the highest and least (0.9 percent) saving rate of 0.21-0.40 percent. The high savings of the 45-65 years households' age bracket was likely to indicate that the household heads were able to save more because they were in their economically active age bracket. This is consistent with life-cycle hypothesis that the individuals in their middle age save more than others while their savings decrease as they attain old age.

Table 4 reveals that a higher proportion of female-headed households (59.1 percent) fell within the saving rate of 0.00-0.20 percent than male-headed households (48.9 percent). However, a higher proportion of male-headed households fell within the saving rate of 0.61-0.80. This indicates that more male-headed households fall within the higher saving rate threshold than their female counterparts. This suggests that female-headed households that have lower saving rate are not likely to invest in their livelihood as their male counterparts. Thus, the thrust of policy should be to improve the saving rate of women in the rural area.

The results revealed that saving rate falls with increase in household size (Table 5). The highest proportion of households with 11 to 20 members had a low level of saving rate. A larger proportion was higher among households with zero to ten members 0-10 had the highest (44.3 percent) saving rate of 0.00-0.20 percent and the least (4.3 percent) saving rate of 0.61-0.80 percent. The household heads with household size of 11-20 had the highest (60.0 percent) saving rate of 0.00-0.20 percent and least (2.2 percent) saving rate of 0.61-0.80 percent while those with household size of 21-30 (100.0 percent) had saving rate of 0.00-0.20 years. This implies that households with lower household size had highest saving rate and this could have reduce the household

expenditure on food and education and hence their high saving rate. Thus, like in Philippines [24] saving rate decreases with increasing household size.

Household heads with 0-10 years of farming experience had the highest (85.7 percent) saving rate of 0.00-0.20 percent and the least (2.9 percent) saving rate of 0.61-0.80 percent. The household heads with 11-20 years farming experience had the highest (62.5 percent) saving rate of 0.00-0.20 percent and the least (6.3 percent) saving rate of 0.61-0.80 percent. The household heads with 21-30 years farming experience had the highest (50.9percent) saving rate of 0.41-0.60 percent and the least (28.3 percent) saving rate of 0.00-0.20 percent. The household heads with 31-40 years farming experience had the highest (33.3percent) saving rate of 0.00-0.20 percent and the least (16.7 percent) saving rate of 0.61-0.80 percent. The result implies years of farming experience could enhance increased productivity and higher income and consequently higher savings.

Table 6 reveals that the household heads that belong to a savings society had the highest (40.0 percent) savings of 0.00-0.20 percent and the least (6.7percent) saving rate of 0.61-0.80 percent. The household heads that do not belong to any society had the highest (62.5 percent) savings of 0.00-0.20 percent and the least (5.4 percent) saving rate of 0.41-0.60 percent. This indicates that the household heads that are members of savings society could have access to loan with or without collateral to diversify in their enterprises and they could be encouraged to save.

Further, household heads that owned land had the highest (48.1 percent) savings of 0.00-0.20 percent and the least (3.8 percent) saving rate of 0.61-0.80 percent (Table 7). The household heads that do not own land had the highest (80.0 percent) savings of 0.00-0.20 percent and the least (20.0 percent) saving rate of 0.21-0.40 percent. This implies that land could serve as additional income to households through rent and this would have increased their source of income and savings. This is consistent with the submissions of previous studies [30, 31, 32, 10] that if wealth is in the form of productive assets such as farm land, it can have a positive impact on saving. Larger land ownership helps the farmers to benefit from economies of scale and, consequently, higher production and income. Secured land ownership is a form of collateral for loans by the farmers. Credit if utilized efficiently for improving land productivity enhances the income level of the households, resulting in higher saving. Thus, land ownership can significantly and positively affect saving of farm households.

Table 8 reveals that the household heads that combines farming and non farming activities had the highest (48.2 percent) savings of 0.00-0.20 percent and the least (4.7 percent) saving rate of 0.61-0.80 percent. The household heads that are involved in non farming activities only had the highest (58.1 percent) savings of 0.00-0.20 percent and the least (9.7 percent) saving rate of 0.61-0.80 percent. This implies that the households that diversified were able to increase their sources of income and spread their risks. This also proves the hypothesis that the diversification into non-farm activities could improve the level of saving rate.

Additional family members will expose these rural families to the risk of income deficit, especially for poorer households. They also deprive households of the prospect of exploiting investment opportunities that come their way. At the aggregate level, additional children contribute to the reduction in saving rates further depressing the already low savings rate of the country [24].

Determinants of Saving Rate: The relationship between savings and its determinants was estimated using tobit model (Table 9). The model was significant at one percent ($p<0.01$) suggesting that all the independent variables jointly explain level of savings in the study area. The coefficients of interactions of saving rate with household size ($p<0.05$), livestock share of income ($p<0.10$) primary occupation ($p<0.05$) and food expenditure share ($p<0.10$) were negative but positive for age squared ($p<0.10$), farming experience ($p<0.10$) and diversification into non-farm activities ($p<0.05$). The positive relationship between saving rate and age squared implies that in the long-run, the proportion of savings to total income increases as the household head grows older. This follows the findings of Adeyemo and Bamire [29] and Orbeta [24] but inconsistent with the life cycle hypothesis of savings that a person is expected to save up to a point and then start dissaving as he grows old. Also the years of farming experience is positively related to saving rate. As farming experience increases, farmers are expected to be more efficient in their farm operations, earn more income and consequently increase their savings [29]. Further, diversification into non-farm activities would increase the proportion of savings to total household income. Also, a unit increase in household size, food share of total expenditure, share of income from livestock, would result in about 0.01 unit, 0.20 unit and 0.26 unit decrease in the likelihood of saving rate respectively.

Table 8: Saving rate and Land Ownership

	Land owners		Non- land owners	
Rate (%)	Freq	Percent	Freq	Percent
0.00-0.20	51	48.1	8	80.0
0.21-0.40	33	31.1	2	20.0
0.41-0.60	18	17.0	0	0.0
0.61-0.80	4	3.8	0	0.0
Total	106	100.0	10	100.0

Table 9: Saving rate and diversification of enterprises

	Farming only		Non farming		Diversified	
Rate/diversification in enterprises	Freq	Percent	Freq	Percent	Freq	Percent
0.00-0.20	0	0.0	18	58.1	41	48.2
0.21-0.40	0	0.0	10	32.3	25	29.4
0.41-0.60	0	0.0	3	9.7	15	17.6
0.61-0.80	0	0.0	0	0.0	4	4.7
Total	0	0.0	31	100.0	85	100.0

Thus, additional family members will expose these rural families to the risk of income deficit, especially for poorer households. They also deprive households of the prospect of exploiting investment opportunities that come their way. At the aggregate level, additional children contribute to the reduction in saving rates further depressing the already low savings rate of the country [24]. On the other hand, human capital (proxied by education) gives positive influence on households saving. Interestingly, rural households that diversify their livelihood into non-farm activities tend have higher saving than other households. The result also indicates that saving rate is negatively influenced by investment in livestock assets. Thus, wealth accumulation in form of livestock will reduce the probability of saving by rural households. The result further indicate that the impact of additional children on household savings is negative.

Table 8: Determinants of saving rate of rural household heads

Variables	Marginal effect	Standard error
Per capita expenditure	-2.91e-06	5.17e-060
Age squared	0.0000622**	.0000247
Gender	-0.0420092	.0404925
Livestock share	-0.2640307*	.1449897
Diversification	0.2677307**	.1044307
Foodshare	-0.2041084*	.1108145
Hhsize	-0.0092429**	.0037740
Farmexperience	- 0.0043197*	.0023847
Membassociation	0.026798	.0290214
Landownership	0.021008	.0734839
preoccupation	-0.1809722**	.0860040
Edustatus	-0.0612097	.0562274
Number of obs = 116	LR chi2(12) = 26.25	
Prob > chi2 = 0.0099	Log likelihood = 49.570664	
Pseudo R2 = 0.3601	Sigma=0.1494	
Y = Saving rate		

CONCLUSION AND RECOMMENDATIONS

The findings of the study suggest that increase in food share of total expenditure and household size would reduce saving rate. Thus, there is the need for the government to review its macroeconomic policies aimed at reducing rural consumer price index. The study also shows that reducing the number of children can help beef up savings to protect families from income shortfall. This constitutes as an important alternative to a formal safety net given the limited reach of the social security system. Thus, reproductive health policies should emphasize birth control among the rural populace. Further, diversification into non farming activities was found to increase saving rate of the rural household heads. There is therefore the need to facilitate rural investment climate in order to boost the level of productivity and consequently the level of income which translates to a higher level of saving rates and investment.

REFERENCES

1. Brata, A.G., 1999. Household Saving Behavior: The case of rural industry in Bantul. Analysis CSIS, 28(1): 75-86.
2. Mkpado, M. and C.J. Arene, 2010. Does Group Design Affect Savings Mobilization of Rural Agricultural Micro Credit Groups? Evidence from Nigeria. Economic Affairs, 55: 3-4.
3. Ghate, P.B., 1988. Informal credit market in Asian developing countries. Asian Development Review, 6(1): 64-85.

4. Nugroho, H. and V. Moeljarto, 1994. Debitur Potensial di Pedesaan Jawa. Prisma, 9: 55-69.
5. Bautista, R.M. and M.B. Lamberte, 1990. Comparative saving behavior of rural and urban households in the Philippines. Philippines Institute for Development Studies Working Paper Series, pp: 90-15.
6. Olashore, O., 1998. Perspectives on Finance, Banking and Economic Policy in Nigeria. Heinmann Education Books, Nig. Ltd, Ibadan, pp: 535.
7. Yusuf, T.M., 2000. Socio - economic analysis of poverty level among rural dwellers in Kwara State, Nigeria, Unpublished M. Phil. Thesis in the Department of Agric. Economics, University of Ibadan.
8. Albu, M. and A. Scott, 2001. Understanding livelihoods that involve micro-enterprise: markets and technological capabilities in the SL framework, Intermediate Technology Development Group, Warwickshire.
9. **Missing**
10. Reardon, T., 2000. Interactions between the agricultural system and non-agricultural activities of farm households in developing countries," In: J.P. Colin and E.W. Crawford, (eds.) Research on Agricultural Systems: Accomplishments, Perspectives and Issues. Huntington, NY:Nova. Science Publishers, Inc., pp: 163-178.
11. Deaton, A., 1990. Saving in Developing Countries: Theory and Review. Proceedings of the World Bank Annual Conference on Development Economics 1989. Supplement to The World Bank Economic Review and the World Research Observer, May 1990, pp: 61-96.
12. Muradoglu, G. and F. Taskin, 1996. Differences in household savings behavior: evidence from industrial and developing countries. The Developing Economies, XXXIV-2: 138-153.
13. Modigliani, F., 1963. The life-cycle hypothesis of saving: aggregate implications and tests. American Economic Review, 53(1): 55-84.
14. Keynes, J.M., 1936. The General Theory of Employment, Interest and Money, New York: Harcourt, Brace and Co.
15. Friedman, M., 1957. A Theory o f the Consumption Function, Princeton: Princeton University Press.
16. Gersovitz, M., 1995. Saving and Development. In: Chenery, Holli and T.N. Srinivasan, (ed.): Handbook of Development Economics, 1: 381-424.
17. Carpenter, S.B. and R.T. Jensen, 2002. Household participation in formal and informal savings mechanisms: evidence from Pakistan, Review of Development Economics, 6(3): 314-328.
18. Browning, M. and A. Lusardi, 1996. Household Saving: Micro Theories and Micro Facts, Journal of Economic Literature, 34(4): 1797-1855.
19. Pailwar, V.K., J. Kaur, K. Saxena and M. Nijhara, 2010. Impact of membership of financial institutions on rural saving: a micro-level study. 2010 EABR & ETLC Conference Proceedings, pp: 610-618.
20. Kulikov, D., A. Paabut and K. Staehr, 2007. A Microeconometric analysis of household saving in Estonia: income, wealth and financial exposure. Research Department Eesti Pank.
21. Khan, Z., A. Ullah and F. Wahid, 2009. Intra rural regional difference in household savings: empirical evidence from three rural areas of district Karak (Pakistan). Abasyn University Journal of Social Sci., 3(2): 74-78.
22. Loayza, N. and R. Shankar, 2000. Private saving in India, The World Bank Economic Review, 14(3): 571-594.
23. Gardiol, A.K., 2004. Les determinants de l'epargne et des choix d'investissement des ménages au Nicaragua, Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, March.
24. Orbeta, A.C., 2006. Children and household saving in the Philippines. Philippine Institute for Development Studies, Discussion Paper, Series, No. 2006- 14.
25. Gersovitz, M., 1988. Saving and Development, Handbook of Development Economics, H.B. Chenery and T.N. Srinivasan, (ed.), Vol.1, Elsevier Science Publishers, pp: 382-424.
26. Deaton, A., 1991. Saving and liquidity constraints, Econometrica, 59: 1121-1142.
27. Schultz, T.P., 2005. Demographic determinants of savings: estimating and interpreting the aggregate association in Asia. IZA Discussion Paper No. 1479.
28. Horioka, C.Y. and J. Wan, 2006. The determinants of household saving in china: a dynamic panel analysis of provincial data. National Bureau of Economic Research (NBER) Working Paper, 12723. pp: 35.

29. Adeyemo, R. and A.S. Bamire, 2005. Saving and Investment Patterns of Cooperative Farmers in Southwestern Nigeria. J. Soc. Sci., 11(3): 183-192.
30. Gonzalez-Vega, C., 2003. Deepening rural financial markets: macroeconomic policy and political dimensions, paving the way forward. An International Conference on Best Practices in Rural Finance, Washington D.C, June.
31. Lamberte, M.B., R.C. Vogel, R.T. Moyes and N.A. Fernando, (Eds.) 2006. Beyond Microfinance: Building Inclusive Rural Financial Markets in Central Asia, Asian Development Bank.
32. Komicha, H.H., 2007. Farm household economic behaviour in imperfect financial markets: empirical evidence and policy implications on saving, credit and production efficiency in Southeastern Ethiopia, Doctoral Thesis, Swedish University of Agriculture Sciences, Uppsala.