

## Determinants of Savings in Calabar Agricultural Zone of Cross River State, Nigeria.

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**Abstract:** This study examined determinants of savings in Calabar agricultural zone of Cross River state. It specifically sought to identify the socio-economic characteristics of household heads in the study area, reasons for savings, factors influencing savings and constraints to savings. The study used purposive and multi-stage random sampling techniques to select 84 household heads from 3 LGAs in the zone. Data were obtained from primary source using structured questionnaire and analysed through the use of descriptive statistics measures such as frequency counts, percentages and tables as well as inferential statistics such as multiple regression analysis. The result showed that (78.6%) of the total respondent were male and they had an average age of 42 years with a mean annual income of 407,642 naira and an average household size of 6 persons. The major reasons why rural people save were for future purposes and children's education. The annual mean volume of savings was 123,130.95 naira. Four variables were statistically significant for determinants of savings, and these were gender (5%), age (5%), annual income (1%) and distance (1%). The major constraint militating against saving was ATM problems which have to do with ceasing of cards and debiting of account without actual payment and from the informal angle respondents were faced with the lack of proper accountability on the part of the operators. Therefore, household heads should be encouraged and educated on the need to increase their income since it increases their capacity to save.

**Key words:** Savings, determinants and savers

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### I. Introduction

#### Background Of The Study

Financial institutions, market regulators and instruments all comprises a set of complex and closely interconnected financial system providing financial services in an economy such as mobilization of savings. (Yahaya, 1998 & Bime, 2007).

In Nigeria, there is a lasting need to further step- up effort in mobilizing small savings both in urban and rural areas, given the poor savings culture of the Nigerian people and the theoretical link between savings and investment (Odoemenem *et al.*, 2013). Saving in the rural economy appears to be in monetized and non-monetized form. This could be attributed to the subsistent nature of the economy. It further implies that for a meaningful saving to be obtained, a sound saving mobilization must be pursued. (Odoemenem *et al.* 2013),

One of the basic problems confronting the development of the agricultural sector in Nigeria could be attributed to inadequate savings and investment by rural farmers. Despite these problems, policy makers have not really drawn up adequate and comprehensive rural saving scheme that will ginger the farmers to invest their capital production. (Ogwanighie, 1997; Odoemenem *et al.*, 2013).

Savings has strongly been noted as an important component to developing a strong rural financial system (Gonzalez-vega, 2003). Its mobilization by peasant farmers has been difficult because of the peculiarities of the sector and the condition of small- scale farmers. Agriculture is characteristically risky and the transaction cost of providing financial services to these farmers by financial institutions has remained high, this has led to exclusion of small scale- farmers by formal financial institutions (Ijere, 1992; Berko 2001). Savings is important for accumulation of capital required to generate future income, enable future consumption and to provide mechanism for managing risk. Yet inability to build appropriate levels of institutional capital from member cooperative remains a major problem hampering their development in Nigeria( Anosike., 1990).

In spite of the emergence and dominance of diversified set of formal institution, they have not been effectively involved in mobilizing saving potential of the rural sector; the reason for this mode of operation was not found on traditional system of saving and borrowing which is dependent on group dynamics. The formal institutions are therefore considered too sophisticated for the rural people ( Bime 2007). The major determinant of rural saving of the small farmer is the level of income which in turn influences the volume of savings. Due to

the low income base of rural dwellers, they have not formed the habit of saving and as a result, formal saving organizations shy away from doing business in rural areas, but even if savings bank exist in this areas; it is a well-known fact that rural people lack confidence in banks.

The formal financial institution does not really favour the poor illiterate farmers because of their location, design and bureaucratic procedures. This is usually bogged down to their functions by government regulatory control, interest rate limits, saving products etc. consequently, this has reduced the number of rural households saving with formal financial institutions causing them to resort to the informal financial institutions with the advantage of easy access, proximity, familiarity between operators and depositors etc. therefore adequate understanding of financial institutions is a prerequisite for suggesting improvement for enhancing their usefulness to rural people (Adams, and Vogel 1986; Athukorala, 1998; Bime, 2007).

Studies on determinant of savings and savings mobilization has been carried out in various parts of Nigeria and other countries. Determinants of savings and capital formation among rural farmers in Isoko North Local Government Area of Delta state, Nigeria; Ike and Umuedafe, (2013); dual determinant of saving mobilization amongst agribusiness entrepreneurial groups in Edo state, Nigeria by Odemero,(2012); savings and investment pattern of small scale famers of Benue state, Nigeria, Odoemenem et al (2013); socio economics determinants of savings in cooperatives by farmers of selected agricultural group lending scheme in Anambra state, Nigeria, Uneze,(2013); determinant of cooperative member survey evidence from Tigray region, Ethiopia by Sebhatu,(2012); and savings mobilization and rural credit market in Cameroun by Bime,(2007) amongst others. There are seemingly few or no published work in Cross River State in general and Calabar agricultural zone in particular.

In view of this, this study intends to address the following questions:

- 1) What are the reasons for savings?
- 2) What are the factors influencing savings?
- 3) What are the problems savers encounter while saving/?

## **II. Literature Review**

### **Theoretical Framework**

Economists have developed three major theories of consumption and savings behaviour and they are;

- a. Life-cycle hypothesis (Modigliani and Brumberg, 1954; Modigliani, 1966, Ando and Modigliani, 1963)
- b. The permanent income hypothesis (Friedman, 1957)
- c. The relative income hypothesis (Duesenberry, 1949).

#### **The Life- Cycle Hypothesis (LCH)**

This study is based on the life cycle hypothesis which assumes that an individual's attempt to maximize their utility of personal- wellbeing by borrowing a life time stream of earnings with a lifetime pattern of consumption. The life cycle theory has been utilized to examine savings and retirement behaviour of older persons.

This hypothesis begins with the observation that consumption need and income are always unequal at various point in the life cycle. The younger people tends to have consumption need that exceeds their income. Their income tends to be mainly for housing and education, therefore they have little savings. In middle age, earnings generally rise enabling debt accumulated earlier in life to be paid- off and savings to be accumulated. Finally, in retirement, income declines and individuals consume out of previously accumulated savings.

#### **The Relative Income Hypothesis (RIH)**

The man who propounded the relative income hypothesis is Duesenberry. The RIH is based on the rejection of two basic assumption of the consumption theory of Kynes. Duesenberry states that every individual consumption behaviour is not dependent but interdependent on any other behaviour. Consumption relationships are irreversible and not reversible in time. It states that consumers preference are interdependent, it's however, the difference in relative income that determines the consumption expenditure of the community. A rich person will have a lower average propensity to consume because he will need a smaller portion of his income to maintain consumption pattern, but a relatively poor person will have a high average propensity to consume because he tries to keep up with the consumption pattern of his neighbour.

In the second part, he states that it is harder for family to reduce their expenditure from higher level than to refrain from high expenditure in the first place thus, as income falls consumption declines but proportionately less because consumers deserves to sustain consumption.

#### **Permanent Income Hypothesis (PIH)**

Permanent income is the main income of a family and it depends on its time of horizon and far sightedness (future expectation) the measured or current income can be smaller or larger than the permanent

income. Such differences between measured and permanent income are due to transitory component ( $Y_t$ ) of income. Transitory income may rise or fall with losses or windfalls and cyclical variation. If  $Y_t$  is positive due to the windfall gain income ( $Y$ ) will rise more than permanent income ( $Y_p$ ).  $Y_t$  can be zero (0) in which case is measured income.

In permanent income hypothesis the key determinant of consumption is an individual's real wealth and not his current real disposable income.  $Y_p$  is determined by consumers asset both physical (share, bonds, properties) and human (education, experience). This influences the consumer's ability to earn income. The consumer can then make an estimation of a lifetime.

All three theories have their conceptual roots in the micro economic theory of consumer's choice. However, the life cycle and permanent income hypothesis are the most similar, both theories assume that individuals attempt to maximize their utility or personal wellbeing by trying to balance a lifetime stream of earning by a lifetime pattern of consumption. The relative income hypothesis is quite different. Duesseberry theorized that individuals are less concerned with their absolute level of consumption than with their relative level-the idea of "keeping up with the Joneses"

## **Review Of Related Studies**

### **Determinants Of Savings**

Overtime, many researcher have tried to analyse the determinants of savings behaviour in rural areas (Zeller, 1997; Ike & Idoge, 2006).

Uneze, (2013), in his study on socio-economic determinants of savings in cooperatives by farmers of selected agricultural group lending schemes in Anambra state, Nigeria using descriptive statistics and regression analysis. Results showed that value of assets, off-farm income, age of household head, level of farm diversification and total value of farm loan were the significant variables affecting deposit mobilization.

Value of Asset: the result implies that the coefficient for value of asset is positive which suggest that the more the farmer acquires, owns or uses assets that are productive, the more his savings with cooperative increases.

Off-Farm Income: this had a negative co- efficient; off-farm income of respondents did not improve the farmer's ability to make deposit with their society. When off-farm income increases saving with cooperatives decreases showing an inverse relationship between saving and off-farm income.

Age of Household Head: this had a negative coefficient which implies that aging will bring about a decline in savings with cooperatives.

Total Value of access to loan: it was found to be positive which shows a direct relationship with savings with cooperatives. It can be concluded that total access to loan has a net effect on savings such that an increase in access to loan will cause a rise in savings by farmers with their cooperatives.

Another study carried out by Sebhato (2012), on determinants of savings behaviours of cooperative members survey evidence from Tigray region of Ethiopia using least square method shows that gender, household income, amount of loan borrowed and year of cooperative membership significantly raise household savings .Household income positively related to the amount of savings mobilized showing that as income increases so will the amount of savings increase. Income positively influences savings. Hence, low saving level is as a result of low income level.

Amount of loan borrowed was found to be significant and positive in this study, it can be concluded that credit access has a net positive effect on savings such that an improvement in credit access will bring an increase in savings. The result of this study also shows that increased year of member stay in cooperative are significant and positively related to amount of savings. This is because inbuilt mechanism that existed among the cooperative members enables them to be able to mobilize savings more than non-cooperative members.

Odoemenem, (2013) in his studies on saving and investment pattern of small-scale farmers of Benue state, Nigeria using multiple linear regression model results showed that two variables were satisfactorily significant in determining savings were; income and sex. The result implied that income has a direct influence (positive) on the savings of small-scale farmers in Benue state. The positive sign of income confirms that income is in line with the a priori expectation that savings is a function of income. The ability to save depends on the level of income, other things being equal.

Sex was positively related to the savings of small-scale farmers of Benue state and the result also shows that male farmers save more than the female farmers.

Another study by Ike and Umuedafe, (2013) on determinant of savings and capital formation among rural farmers in Isoko North Local Government Area of Delta state, Nigeria using descriptive statistics and multiple regression analysis showed that volume of savings is based on rural farmers' farm income, non-farm income, age of the farmer and the distance to formal financial institutions.

Another study carried out by Odemero, (2012) on dual determinants of savings mobilization among agribusiness entrepreneurial groups in Edo state, Nigeria using descriptive statistics and multiple regression

analysis showed that interest rate, farm income and age distribution of savers contributed significantly to savings mobilization.

Interest rate was significant and positively related to savings among agribusiness entrepreneurial groups in Edo state. The positive sign shows a direct relationship between interest rate and savings, that is, at a higher interest rate savers will save more. Savings was influenced by multiplicity of economic variables, such as: the level of income, the accepted minimum living standard, inflationary expectation, taxation, and the level of interest rate a confidence in saving institutions.

Income correlates positively and significantly to savings of financial self-help group in the area of study. The positive sign implies that increase in income of rural savers will translate to increase in the savings of self-help savings institution in the study area. Hence, income is a determinant of savings, the higher the income the higher the savings.

Age of rural savers correlated negatively and significantly with the amount of savings among self-help groups in the area of study. This result agreed with the life cycle theory which explains the significance of age in savings, it follows that people are likely to earn and save more during working age until they attain a maximum at retirement age, that is, savings is likely to drop after retirement.

A study by Bime (2007) on savings mobilization and rural credit market performance in the North West Province of Cameroun using regression analysis (OLS) results showed that sex, income, interest rate and distance to savings institutions were the significant variables that affected savings. Sex of an individual was significant at 10% and was directly related to the amount saved, distance was significant at 5% level and inversely related to savings and in agreement with the a priori expectations, it therefore implies that the farther away the saving institution the less an individual is likely to save. Interest rate was significant at 1% level and directly related to savings.

A study conducted by Beverly and Sherraden (1999), in their study on household behaviour in Africa states that three factors were found to be determinants of savings behaviour of household in Africa. One of these was the ability to save which in turns depends on household disposable income and expenditure. The second was the propensity to save as influenced by socio-cultural and economic factors like the family's obligation to educate children. The third one was the opportunity to save and the returns on savings.

Browning and Lusardi, (1996) also revealed that high cost of living and social responsibility (20%) of rural respondents and (25%) urban households were responsible for not saving. Besides they found out that family size affects savings in a negative form, that is, people with large families do rarely save compared to those with smaller families. Furthermore, it was also found out that land holdings strongly influences savings positively. Bhalla. (1978) and Orebiy and Fakayode, (2005) in another study asserts that dependency ratio, resource ownership and expenditure pattern affects the decision of household savings significantly. Overall socio economic variable like income, level of education, interest payment, farm size, distance and household size where the major determinants for informal savings amongst vegetable farmers (Christensen,1993).

### **III. Methodology**

#### **Study Area**

The study was carried in Cross River State, which is a coastal state situated in the South-South geopolitical zone of Nigeria, it is located between latitude 4° 28' & 6° 55' North of the Equator & longitude 7° 50' East of the Greenwich Meridian. It shares common boundaries with the Republic of Cameroun in the East, Benue state in the in the North, Ebonyi and Abia state in the West and Akwa Ibom state, Atlantic ocean in the South.

The vegetation spans from mangrove swamps and rainforest in the South to derived savannah in the North. The vegetation and climate are therefore very diverse and so are the crops grown. There are lots of natural resources and great tourism potentials that have attracted international attention. The ethnic group in the states are many so are the dialects. There are eighteen Local Government Areas in the state and three agricultural zones. Zone one comprises of Calabar Municipality, Calabar South, Akamkpa, Biase, Odukpani, Akpabuyoand Bakassi LGAs (southern agricultural zone). Zone two comprises of Yakurr, Abi, Obubra, Ikom, Etung and Boki LGAs (central agricultural zone) and zone three comprises of Ogoja, obudu, Bekwara, Obanliku and Yala LGAs (northern agricultural zone) (CRADP,2010)

Agriculture is the mainstay of the people, the crops grown by farmers in the state include rice, yam, plantain, cassava, maize, melon, pumpkin, pepper, waterleaf, cocoa, oil palm, rubber etc. in the northern part of the state a common mixed cropping system that combines yam, cassava, melon, and maize is practiced. There are also rice farms in swampy areas, these rice plots may also be cultivated in the dry season as upland rice. Rice is a major revenue earner for the people. In Ikom, Etung and Boki LGAs and its environs cocoa production is the main cash crop, though plantain and banana are also produced, maize and melon are also important to the people of these areas. They also have diverse forest products from their surrounding forest. In the southern part of the state, oil palm, plantain, maize, cassava and vegetables like pumpkin, water leaf are important crops.

Within the state the livestock kept includes; poultry, goat, pig etc. This is engaged by relatively small portion of the population. Poultry (layers and broilers) are the most common of the three.

**Population Size**

It comprises of all the household heads in Calabar Agricultural Zone

**Sampling Procedure**

The population was sampled using a purposive and multi-stage sampling techniques .In the first stage, Calabar Agricultural Zone was randomly selected from the three agricultural zones. In the second stage, three LGAs were randomly selected in the Calabar Agricultural Zone that is, Calabar municipality, Akpabuyo and Akamkpa LGAs. In the third stage two communities each were randomly selected from the three Local Government Areas which gave a total of six communities. 10% of the total household heads in each community were purposively selected (those house hold heads that saves part of their income) giving a total of 84 household heads that were used in the study. This was done in proportion to size. The population list for the various communities was gotten from the village heads.

LGAs/Communities	NO. OF HOUSEHOLD HEADS	PERCENTAGE (%)
1. Calabar Municipality		
Eyo Etta	100	10
Asim Ita	200	20
2. Akpabuyo		
Idebe	100	10
Ikot Asuquo	150	15
3. Akamkpa		
Oban	200	20
Osomba	90	9
TOTAL	1,640	84

Source: Field survey, 2014

**Method Of Data Collection**

Data were obtained from primary sources through the use of structured questionnaire. They were administered to the household heads in the sampled households. The questionnaires were drawn to elicit information on the socio economic characteristics of rural households, reasons for savings, determinants of savings and constraints to savings.

**Data Analysis**

The data were analysed using descriptive an inferential statistical measures such as frequency counts, mean, percentages, tables and Multiple Regression Analysis. The socio-economic characteristics of household heads was analysed using descriptive statistic, the reasons for savings was analysed using descriptive statistics, , the determinant of savings was analysed using regression analysis and finally, constraints to savings was analysed using the descriptive statistics.

**Model Specification**

The Multiple regression analysis was used to determine factors which influenced savings. Four functional forms namely, the linear, semi-log, double –log and exponential were tried out and the one that gave the best fit was chosen.

This model was implicitly stated as;

$$Y=F(x_1, x_2, x_3, x_4, x_5, x_6, x_7,x_8)$$

Where Y= Annual amount of savings per household head in Naira

x<sub>1</sub>= gender (0, if female, 1 if male)

x<sub>2</sub>= age in years

x<sub>3</sub>= educational level in years of schooling

x<sub>4</sub>= annual income in naira

x<sub>5</sub>= household size (number of dependant)

x<sub>6</sub>= membership in organization (if yes, 1 and if no, 0)

x<sub>7</sub>= distance to savings institution in km

x<sub>8</sub>=interest rate in percentage

**IV. Results And Discussion**

**Socio-economic characteristics of the respondents**

The selected socio-economic characteristics of respondents as presented in table 2

**Gender:** Table 2 shows the distribution of respondents by gender. As depicted by the table, majority of the respondents within the Calabar agricultural zone where male (78.6%) while 21.4% were female. Thus in the study area more men were involved in saving than women.

**Age:** Of the 84 household heads, 6 of them were between the age of 21-30 (7.1%), 27 were between 31- 40 (32.1%), 36 were between 41- 50 (42.9%), 15 were between the ages of 51- 60 (18.0%). The mean age was 42 years. This implies that majority of savers were in their active and productive age.

**Educational level:** 97.6% of household heads had some form of education while 2.4% had no formal education. Marital status: majority (75%) of the total respondents were married, 4.8% were single, 14.2% were widowed, and 2.4% were divorced while 3.6% were separated.

**Occupation:** Majority (40.5%) of savers were civil/public servants and this was their primary occupation, 19.8% were farmers, 4.8% were traders and others 23.8%.

**Annual Income:** From the table it can be seen that majority (50.0%) of savers earned above 500,000 as their annual income 10.7% earned income ranging between 401,000- 501,000, 10.7% earned income ranging between 301,000- 400,000, 8.3% earned income ranging between 201,000-300,000, 15.5% earned income ranging between 101,000-200,000 while 4.8% earned income ranging between 11,000- 100,000 annually. The mean annual income was 407642 naira

**Household size:** 56.0% of the total respondents had household size that ranged from 1-5, 33.3% had 6-10, 8.3% had 11-15, and 1.2% had household size ranging from 16-20 while 1.2% had household size ranging from 21-25 persons. The mean household size was 6 persons.

**Membership in organization:** Table 2 also depicts distribution of savers based on membership in an organization. Majority (63.1%) of the respondents indicated they were members of various organizations in the study area while 36.9% were not members of any organization.

**Table 2:** Distribution of Respondents Based on Socio Economics Characteristic

Variable	Frequency	Percentage
<b>Gender</b>		
Male	66	78.6
Female	18	21.4
<b>Age</b>		
21-30	6	7.1
31-40	27	32.1
41-50	36	42.9
51-60	15	17.9
<b>Total</b>	84	100
<b>Mean</b>	42	
<b>Educational level</b>		
No formal education	2	2.4
FSLC	25	29.8
SSCE/GCE	13	15.5
OND/NCE	17	20.2
B.Sc/HND	23	27.3
M.Sc	3	3.6
Ph.D	1	1.2
<b>Total</b>	84	100
<b>House hold size</b>		
1-5	47	56.0
6-10	28	33.3
11-15	7	8.3
16-20	1	1.2
21-25	1	1.2
<b>Total</b>	84	100
<b>Mean</b>	6	
<b>Primary occupation</b>		
Farming	16	19
Trading	14	16.7
Civil/public servant	34	40.5
Others	20	23.8
<b>Total</b>	84	100
<b>Annual income in 000</b>		
1-100	4	4.8
101-200	13	15.5
201-300	7	8.3
301-400	9	10.7
401-500	9	10.7
Above 500	42	50
<b>Total</b>	84	100

<b>Mean</b>	407.642	
<b>Membership</b>		
<b>Yes</b>	53	63.1
<b>No</b>	31	36.9
<b>Total</b>	84	100

**Reasons for Savings**

Table 3 depicts the distribution of respondents based on their reasons for saving. 33.0% of the respondents saved for future use, 18.4% saved for their children’s education, 13.6% saved for contingencies, 7.8% saved for emergency purposes, 5.8% saved for eventualities, 4.9% saved for rainy day, 3.9% saved for consumption, 2.9% saved in order to re-invest in their businesses, 2.9% saved for security and for financial cover, 1.9% saved to help themselves and their family members while 4.9% saved for other reasons.

**Table 3:** Distribution of Respondents According to Reasons for Savings

<b>Variables</b>	<b>Freq.</b>	<b>%</b>
<b>Reasons for Savings</b>		
i. Future Use	34	33
ii. Children’s Education	19	18.4
ii. Contingencies	14	13.6
iii. Emergencies	8	7.8
iv. Eventualities	6	5.8
v. Rainy Day	5	4.9
vi. Consumption	4	3.9
vii. Re-Investment In Business	3	2.9
viii. Security/Financial Cover	3	2.9
ix. Self-help/Family members	2	1.9
xi. Others	5	4.9
<b>Total</b>	103*	100

Source: field survey, 2015

\*Multiple responses

**Volume of Savings**

Table 4 shows distribution of respondents based on their volume of savings. Majority (64.3%) of the respondent had volume of savings ranging from 1000-100,000, 21.4% had volume of savings ranging from 101,000-200,000, 7.1% had savings between 201,000-300,000, 3.6% had volume of savings ranging from 301,000- 400,000, 2.4% had volume of savings ranging from 401,000-500,00 and 1.2% had volume of savings above 500,000. The mean volume of savings was 123,130.95

**Table 4:** distribution of respondents based on volume of savings

<b>VOLUME OF SAVINGS</b>	<b>Freq.</b>	<b>%</b>
<b>1,000-100,000</b>	54	64.3
<b>101,000-200,000</b>	18	21.4
<b>201,000-300,000</b>	6	7.1
<b>301,000-400,000</b>	3	3.6
<b>401,000-500,000</b>	2	2.4
<b>ABOVE 500,000</b>	1	1.2
<b>TOTAL</b>	<b>84</b>	<b>100</b>
<b>MEAN</b>	<b>123,130.95</b>	

Source :field survey,2015

**Constraints to Savings**

Table 5 shows the distribution of respondents based on the constraints to save. Respondents in both sources had different constraints. From the formal institution, it can be seen that 15.6% of the respondents were faced with ATM problems which has to do with ceasing of cards and debiting of account without actual payment, 12.9% were faced with short operating hours by banks, 12.6% complained of long procedures in opening account and replacement of lost cheque books, 9.5% complained of no enough sits and having to stand till they are being attended to, 8.2% complained of preferential treatment to some customers,7.4% complained of delay in payment, 6.4% complained of long waiting hours/queue, 5.2% complained of lack of communication, 2.2% complained of no immediate SMS alert while 3.0% were faced with other difficulties. From the informal institution, majority (6.9%) of the respondents had the problem of lack of accountability on

the part of the operators, 3.5% were faced with the problem of insecurity, and 2.6% were faced with the problem of misuse and misplacement of money respectively, while 1.3% were faced with theft of money.

**Table 5:** Distribution of Respondents Based on Constraints to Savings

VARIABLES			
CONSTRAINTS TO SAVINGS		Freq.	%
<b>1. FORMAL SOURCE</b>			
ATM Problems		36	18.75
Short Operating Periods		30	15.60
Long Procedures		29	15.10
No Enough Sits		22	11.45
Preferential Treatment Of Some Customers		19	9.89
Delay In Paying		17	8.85
Long Queue/Waiting Hours		15	7.81
Lack Of Communication		12	6.30
No Quick SMS Alert		5	2.60
Others		7	3.65
<b>TOTAL</b>		192	100
<b>2. INFORMAL</b>			
Insecurity		16	41.02
Lack Of Accountability		8	20.51
Misplacement		6	15.40
Misuse		6	15.40
Theft		3	7.69
<b>TOTAL</b>		39	100
<b>ALL</b>		231*	

**Source:** Field survey 2015

\*Multiple responses

### Determinants of Savings

The variables that influence saving are shown in table 5, four functional forms of linear, double log semi log and exponential were tried and the semi log form was found to be the lead equation of the regression. This is because it gave the best fit in terms of the coefficient of determination ( $R^2$ ), adjusted  $R^2$  the statistical significance of the regression and the expected signs of the regression coefficient. The regression result was significant at 1 per cent level and the value of the coefficient of multiple determination  $R^2$  which measures the overall goodness of fit of the entire regression shows the value of  $0.375 = 37.5\%$  approximately 38%. This indicates that the independent variables accounts for about 38% of the total variation of the dependent variable. This means that the variables included in the model are major determinants of savings. Adjusted  $R^2$  was .308; the F. Ratio was 5.622 and significant at 1per cent level implying that the joint effect of the entire included variable was significant.

The gender of an individual was significant at 5 percent level and directly related to the amount saved. This implies that men save more than the women. This result is in line with the observation of Odoemenem, (2013) who asserts that gender is positively related to savings.

The coefficient of age was significant at 5 per cent level and indirectly related to the amount of savings in the area of study. This implies that saving by young people would be diminishing with age as they grow towards and beyond retirement age, i.e., the older one gets the lesser he saves. This result is in line with the result of Odemero, (2012) and it also agrees with the life cycle theory, which explains the significance of age in saving, it follows that people are likely to earn and save more during working age until they attain a maximum at retirement age, that is , savings is likely to drop after retirement.

The coefficient of annual income was significant at 1per cent level and directly related to savings in the study area. This result implies that the higher the annual income the greater the tendency to save. The ability to save depends on the level of income all things being equal. This result agrees with that of Okoreun, (1981) Awosika & Nwoko (1983) who noted that the growth of income and distribution of income are the main determinants of savings. They also found out that because of low level of income there is a severe limitation on rural people's saving ability. Income age and gender were in line with *a priori* expectations.

Distance in contrast with the *a priori* expectation was significant at 1 per cent level but with a positive coefficient. This implies that the farther the distance to a saving institution the more people will save. The possible reason for this is because people want to save where they are sure that their savings will be safe. This is contrary to the work done by Ike & Umuedafe, (2013).



However, the coefficient of education, household size, membership in organization and interest rate had the expected signs but were not significant.

**Table 6: Determinants of Savings**

Variables	Linear	Double Log	Semi Log <sup>+</sup>	Exponential
<b>Intercept</b>	188328.929 (1.394)	8.285 (3.740)***	10.989 (15.309)***	329777.366 (.812)
<b>Gender</b>	69864.810 (1.530)	.697 (2.796)***	.561 (2.314)**	90500.693 (1.968)**
<b>Age</b>	-2438.690 (-1.711)*	-.403 (-1.028)	-.016 (-2.109)**	-70450.497 (-.975)
<b>Education</b>	181.889 (.034)	.180 (.785)	.007 (.249)	32735.679 (.776)
<b>Annual income</b>	.024 (.716)	.260 (2.012)***	4.464E-007 (2.477)***	-5801.922 (-.243)
<b>Household size</b>	-5837.590 (-.949)	-0.074 (-.363)	-.029 (-.892)	-14035.382 (-.376)
<b>Membership in organization</b>	13375.921 (.340)	.274 (1.287)	.266 (1.276)	14916.116 (.379)
<b>Distance</b>	1457.747 (1.417)	.021 (2.612)***	.016 (2.894)***	2485.333 (1.711)*
<b>Interest rate</b>	264609.463 (.678)	.773 (.359)	.775 (.710)	262825.612 (.661)
<b>R<sup>2</sup></b>	.174	.344	.375	.167
<b>Adjusted R<sup>2</sup></b>	.085	.274	.308	.078
<b>F. Ratio</b>	1.970*	4.911***	5.622***	1.881*

Source: data analysis, 2015

Figures in parenthesis are T- values

\*\*\*, \*\*, \* = significant at 1, 5, and 10 per cent level respectively

+ lead equation

## V. Conclusion And Recommendations

### Conclusion

Saving has both short and long term objectives. In an immediate sense, this small security can help a family maintain balance during periods of income short falls. In long term savings allows response to life cycle theory or to invest in physical, human and social capital. Savings represents a safety net against negative shocks which threaten the survival of household and also reduces the vulnerability of the poor to negative shocks. In that sense, savings replaces missing or deficient health and acts as employment insurance.

The study therefore concluded that the key determinants of savings were; gender, age, annual income and distance to savings institutions

### Recommendations

1. Banks should create a conducive environment for savers by creating friendly environments between the banks and the savers thereby strengthening savers trust on saving institutions.
2. Governments should encourage commercial banks to establish branches in the rural areas to reduce distance problems which will improve household heads savings.
3. The informal institutions like OSUSU, ROSAs amongst others should be encouraged to do proper record keeping for proper accountability.
4. Household heads should be encouraged to diversify their source of income in order to increase their income streams, this is because the higher ones income the greater the tendency to save

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