



# DETERMINANTS OF SAVING BEHAVIORS OF HOUSEHOLDS: IN THE CASE OF ROBE, GINIR AND DELLOMENA: SOUTH EAST ETHIOPIA

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## ABSTRACT

### KEYWORDS:

*Saving, descriptive survey, sampled households*

*The purpose of the study is to assess the determinant of saving behavior of households in the three selected woredas of Bale zone, Robe, Ginir, and Delomena. Descriptive survey research design is used and 700 sampled respondents were selected purposively from three woredas. And multiple- regression model was used to know the relationship and significance level of variables. The finding of the study revealed that among the study variables five of them are found to be significant at 5% significance level, these are educational background, occupation are negative significant variable in determining the saving behavior of households while access to credit and saving institution and access to training in the previous trend has positive relationship with the saving behavior of households where as the remaining variable are remain insignificant in explaining the saving behavior.*

## INTRODUCTION

Household savings is defined as that part of current income, after the payment of direct taxes, which is not consumed or transferred for future consumptions. Besides, household saving includes regular and recurring employer and employee contributions to pension and insurance funds and the interest earned on those funds (Cronje 2009).

As per Gokhale (2000) Personal saving has two primary functions; firstly saving provides the economic security of a safety net. By transferring resources from the present to the future via savings, individuals are prepared to face unexpected and irregular financial circumstances. Secondly, saving leads to accumulation of wealth that enables individuals to improve their living standard and to respond to new opportunities. Everyone agrees that starting to save early has merit in it and "Money grows on the tree of patience" and there are benefits of "power of compounding", but few actually practice it. Also Saving is an important macroeconomic variable to be studied under the purview of the economic arena on an individual as well as household basis. The issue of low levels of domestic savings is a major problem in developing states due to high levels of unemployment, low wages, the engagement of a large proportion of the population in the informal sector, and poor performance of the economy (Reddy, et.al n.d.).

Prinsloo (2000) states that, the low level of domestic saving limits the country's rate of investment; restrain the rate of economic growth and make the country more vulnerable to international capital shifts.

Karim (2010), people in general and the poor in particular might not be completely rational and completely knowledgeable. There is a growing recognition of the importance of financial education as it relates to saving (Greenwald et al., 2001; Gill, 2004). Financial education is one way of increasing savings and asset accumulation. Sherraden et al., (2007) say that the extent to which an individual understands the process and benefits of asset accumulation is likely to affect their willingness to save. Shaw (2007) stated while other ingredients might be equally important (e.g., education, economic attitudes, resource management), continued economic development is generally believed to be difficult to maintain without savings. Despite this, the basic problems confronting the development of agricultural sector in Ethiopia could be attributed to inadequate savings and investment by the small scale farmers.

As per the MOFED(2010) one of the major challenges encountered in the past five years of PASDEP implementation is low level of domestic savings to support the huge demand of the country's investment for accelerating growth and development in the process of eradicating poverty. The national saving was 9% of GDP at the beginning of the growth and transformation plan in 2010/11. Because of the low level of saving, the national investment of the Ethiopia is dependent on foreign direct investment rather than domestic investment. Mauri (2001) during yield season after selling of its product most households spend their money without any plan. Even they would be faced problem to purchase fertilizer and other input for the next harvest season, hence this study this study

aimed to assess the determinants of household saving in the three selected areas of Bale zone, Ethiopia.

### OBJECTIVE OF THE STUDY

The concern of this study was to assess the determinants of saving behaviors of household in the case of Robe, Ginir, and Delomenna, Bale zone, Ethiopia.

### SIGNIFICANCE OF THE STUDY

This research was expected to identify factors that determine the saving behavior of households and greatly contribute to the existing knowledge in the areas of this title. Its finding is highly important for households concerned with small business and small farmers.

### SCOPE OF THE STUDY

This study was limited to investigate the determinants of saving behavior of households in the three selected areas of Bale Zone, specifically; Robe, Ginir, and Delomenna, south East Ethiopia.

### LITERATURE REVIEW

Saving can be defined as cash held back from day-to-day spending by an act of a will. It transforms small cash flows into useful large lump sum. Savings are fundamental to sustainable economic development. Savings enable households to smooth consumption in the face of uneven income flows, to accumulate assets for the future, to invest in education, and to better prepare for emergencies. As of Schultz, 2005; Nga, 2007; Cronje, 2009, household saving is defined as that part of current income, after the payment of direct taxes, which is not consumed or transferred for future consumptions.

Also According to Miller and VanHoose (2001) savings is a foregone consumption. They explained forgone consumption as when one does not spend all the income that is earned within a given period. As per these authors, once part of what is earned today is left for future use, there is savings. On his part, Ahmed (2002) put it in a simple language as "putting money aside for future use". He argues that savings is the result of careful management of income and expenditure, so that there is something left to be put aside for future use. Hence, saving decisions are at the heart of short and long run macroeconomic analysis as well as much of microeconomics; in the short run, spending dynamics are of central importance for business cycle analysis and the management of monetary policy. As per Goldstein (2009) one of the essential characteristics of non-financial savings is to be able to be easily used in case of social need or economic opportunity. For cereals stocks or livestock purchases, can add high motivation of economic profitability'. Therefore, livestock accumulation is a source of profit. Livestock can be easily sold; some of them produce other consumable and tradable goods (eggs, milk, wood, etc.) or can be used as agricultural inputs. Nevertheless, this form of savings present some drawbacks: cattle breeding requires resources like water, animal food, pasture, work-time and can be lost in the case of illness or natural disasters.

Many researchers indicate that many rural households in developing countries, particularly in Africa, are too poor to save (Rutherford, 2000; Robinson, 2001; Devaney *et al.*, 2007). However, as Coleman and Williams (2006) stated, the poor do save even though they do not have complete access to savings facilities in formal financial institutions. Instead, they use informal institutions for their savings.

Akpan et al. (2011) determined factors that affect household saving of rural agro - based firm workers in the south - south region of Nigeria. Two- stage least squares method of simultaneous equation model was used in the analysis. Cross- sectional data were collected from 250 randomly selected workers of five agro- based firms in the study areas. The results of the study revealed that income, tax, job experience, education, family size and membership of a social group influence saving attitude of workers. While Rehman et al. (2010) investigated the determinants of households saving in Multan district of Pakistan. Data of 293 respondents were drawn through field survey in 2009 - 2010 by adopting stratified random sampling technique. The study was raised questions directly to head of household about their education level, family status, age, region of residence, assets, income etc. Sample contains information about rural and urban households. To observe households saving behavior in Pakistan especially in Multan district, they have practiced Multivariate regression model. The finding this study supported the life cycle hypothesis and revealed that: age has positive relationship and square of age is negatively related to household savings, education of household head, children's educational expenditures, family size, liabilities, marital status and value of house are significantly and inversely affecting household savings.

### METHODOLOGY

#### Data Type and Sources

In order to attain the intended objective the researchers employed descriptive survey research design which is cross-sectional and 700 sampled respondents were selected purposively from three woredas. Hence, the data used for this study was pure quantitative.

#### Sampling Design

The target populations in this study was 700 household in the three selected woredas of Bale zone; Robe, Ginir, and Dellomenna which are purposively selected since they are highly commercial/hot trading center; relatively large number of households live there, and agricultural activities are highly performed i.e high coffee production in Dellomenna.

#### Data Analysis Procedure

The study used EpiData software as a data entry tool and the data analysis was done by using SPSS software, beside multiple regression analysis is used to identify the determinant of savings made by households and f-test is used to test the overall significance of the determinant. The regression model specification will be:

$$Y = B + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + e$$

Where,

Y= total annual saving of households

X1 = Age (1 for male, 0 for female)

X2=Sex of individual

X3= Education level

X4= Marital status

X5 = Occupation

X6= Number of dependents

X7= Size of land holding

X8= Level of income

X9= Access to credit

X10= Access to training

X11=Attitude towards saving and plan for consumption

e = Error term

## DATA PRESENTATION AND ANALYSIS

### Household saving behavior by Age

Age is an important variable that influence the saving behavior of households. As per the survey result indicated, majority of respondents (42%) belongs to age categories of 19-35 years followed by age group of 36-45(22%). This revealed that

majority of respondents were lie in the very powerful and working age group, While 10% of respondents were lie in the age group of 46-65 years. Whereas 89(14%) and 79(12%) of respondents were found below age of 18 and above age of 19 respectively and also the result shows as younger age groups are more saver and which is followed by middle aged and it is indicated in the table below;

Variable	Item	Frequency	Percentage (%)
Age	<18	89	13.8
	19-35	269	41.8
	36-45	138	21.7
	46-65	67	10.4
	>65	79	12.3
	Total	642	100%
	younger	274	42.6
	middle aged	257	40.1
	older	111	17.3
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by Sex

The survey result of this study revealed as the majority of respondents are male (66%) and the remaining (34%) are female. Concerning gender; majority of respondents respond as women are more savers (64%) this is supported by kalwij (2003) study in Netherland, Canada by Gagnon et al (2006)

and Uganda by Kiiza and Pederson (2002) shows that female households had better saving behavior than males because of the life developed style by the community and they are expected to cover the principal household consumption and costs in any social interaction. And it was indicated in the table below;

Variable	Item	Frequency	Percentage (%)
Sex	Female	219	34.2
	Male	423	65.8
	Total	642	100%
	men	231	36.1
	women	411	63.9
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by their educational level

As per the survey result one-fourth of the respondents (25%) had no formal education, whereas 39% of respondents were attend 1-4 grade (first cycle education), while 26% followed second cycle education (5-8 grade) and the remaining 7.8% and 8.6% respondents were followed high school and graduated respectively. Educational background is among

factors that affect saving behavior of households and also majority of respondents (75%) replied as saving depends on educational level of individual; such that individual who attend high school and graduates are more saver, and supported as financial literacy enable people to know the risk and return characteristics of different financial products and it also enable them to understand the complex procedures used in accessing financial products (Browning 2001). And the respondents' response is given in table below;

Variable	Item	Frequency	Percentage (%)
Educational level	Illiterate	161	25.2
	1-4 grade	211	32.8
	5-8 grade	165	25.7
	High school	50	7.8
	Graduate	55	8.6
	Total	642	100%

Source: Survey result, 2017

### Household Saving behavior by marital status

For this study as is 4.4 below indicated table majority of respondents are married (42.4%) and followed by 36.2% which are single. While, 14.4 & and 7% of respondents are divorced and widowed respectively. Also the survey result revealed as the volume of saving increased after marriage, i.e. 59% of respondents replied which support the finding of

Collinsa (2005) and Sinhan (2003), marriage is important for saving performance since marriage is morally and socially responsible for collective interest and it has important factor for financial planning. The married households save more than singles due to their multiple source of income (the income of the partners) and economies of scale with respect basic expenditure.

Variable	Item	Frequency	Percentage (%)
Marital status	married	231	42.4
	unmarried	233	36.2
	divorced	73	14.4
	widow	45	7.0
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by occupation

When we see the occupation of households as per the result of table 4.5 below; majority of them are self-employed/traders (40%), while 19.4% are daily labors, 17.4% are farmers, 12.8% are employed and 11.5 of respondents were housewife. This indicated that majority of households were self employed

and traders. Also the study result show that self-employed and traders (72.5%) are more saver, this is supported by Sinha (1998), Muradoglu and Taskin (1996) shows that self-employed household has consistent saving because they have fear of work uncertainty in the future.

Variable	Item	Frequency	Percentage (%)
Occupation of households	employed	82	12.8
	daily labor	125	19.4
	self employed/trader	250	38.9
	farmer	111	17.4
	house wife	74	11.5
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by the number of dependents

Economic researchers commonly use dependency ratio or those under age 15 and over 65 as a share of the total household composition, as an explanatory demographic variable. Hence, the size and composition of dependent households may influence the demand for saving services.

In this study, respondents with number of dependents 4-5 consisted the largest share of 32% followed by 3-4 (27%), and 2-3(18%). The remaining 5-6 and above constitute dependents of 17.7% followed by 1-2(14.4%). This revealed that majority of households are live with large number of dependents, which resulted with low saving habit and as per the LCH, households with more children at home may save less until the children leave home. The result is indicated on the table below;

Variable	Item	Frequency	Percentage (%)
Household number of dependents	1-2	67	10.4
	2-3	115	17.7
	3-4	172	26.7
	4-5	194	30.2
	5-6 and above	94	14.6
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by size of land holding

The land holding signifies the economic system as it acts as an economic unit for any physical asset to be considered. This study show, majority of respondents owned 1/2hect (65%), which shows as the majority of household has very small land size which even couldn't feed their family enough. And which is followed by 1hect (25%) of ownership of land,

2,3 and 4& above hect owners are 6.2%, 1.4% and 2.3% respectively, so very small number of household own land size which could satisfy their family and enable them to save but majority of them don't have and which has negative impact of their saving. Because Land is considered as the biggest asset for the rural households as it can be accumulated in terms of money and productive asset at the time of financial emergency. The survey result given table here under.

Variable	Item	Frequency	Percentage (%)
Size of land holding	1/2hect	65.2	65.3
	1hect	24.7	24.8
	2hect	6.2	6.2
	3hect	1.4	1.4
	4and above hect	2.3	2.3
	Total	642	100%

### Household saving behavior by level of Income

Level of income is other factor that affects the saving behavior of households. For the purpose of this study the researchers considered the monthly income of each households and 73% of respondents reported as their monthly income is Birr 1500-2000 and followed by Birr 1000-1500 which constitute 16%, and the remaining 6.4%, 4.4% are get monthly income of Birr

500-1000, and Birr 2000 and above respectively. This shows that their monthly is very limited again which has an impact on saving besides as discussed above majority of respondents are worked as self employed and traders, which their income is not stable unlike that of employed and those are very small in number. And the result is given in table below;

Variable	Item	Frequency	Percentage (%)
Level of Income	500-1000	470	6.4
	1000-1500	103	16.0
	1500-2000	41	73.2
	2000 and above	28	4.4
		642	100%

Source: Survey result, 2017

### Household saving behavior by Access to credit and saving Institution

Credit can increase consumer access to essential resources and fuel economic growth. It also enables efficient allocation of risk, costs and financial reserves. Besides, farmers can acquire inputs and equipment such as fertilizers, tractors, farming equipment and livestock that make them more productive and enhance overall agricultural productivity. So the respondents reported as their access to credit is very difficult (57%), which is followed by who has difficult access

to credit which is 33% and where as 10% of the respondents has ease of access to credit and saving institution, so this shows that there is problem in accessing and getting credit for majority of the respondents; this might be due to, lack of access to information, lack of availability of financial institution basically in remote areas, and etc. Besides, majority of respondents (39.3%) reported as they save put their money at home through acquiring jewelry, animal rearing and followed by the use of Edir (35.1%) which are not secured saving mechanism and the result is given below;

Variable	Item	Frequency	Percentage (%)
Access to credit and saving institution	Very difficult	367	57.1
	difficult	210	32.8
	easy	65	10.1
		642	100%
Type of saving institution used	Bank	72	11.2
	Ikub	91	14.2
	Idir	226	35.3
	At home, jewelery, animal rearing	253	39.3
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by access to training

As revealed on the above discussion from respondents result; majority of respondents responded as they couldn't get ease of access to credit and saving institution. And hence, giving

regular training is very mandatory basically to curbe this savior problem. The respondents reported majority of them (79.6%) couldn't get any training yet concerning saving and only 20.4 of them has gotten access to training to save which is indicated in table below;

Variable	Item	Frequency	Percentage (%)
Access to credit	yes	131	20.4
	No	511	79.6
	Total	642	100%

Source: Survey result, 2017

### Household saving behavior by attitude towards saving and plan for consumption

It is likely that individuals' attitude towards saving and their consciousness to use planning for their consumption are among the most important factors for individuals' rate of saving. In consideration of this, the sample respondents were asked to report about their attitude towards saving and their application of planning for consumption. In this regard, 59.3% of respondents have good attitude towards saving whereas

40.7% of respondents have pessimistic view towards saving due to; Lack of ability and habit of saving due to insufficiency of income, superiority of purchased assets: These respondents state that saving in terms of money is much riskier than purchase of assets due to the inflationary situation. In addition, return (interest) on saving is reported to be lower, lack of awareness and reluctance, and uncertainty about the future and pessimistic belief. And the respondents result is given below;

Variable	Item	Frequency	Percentage (%)
Attitude towards saving and plan for consumption	Good	213	59.3
	Pessimistic	429	40.7
		642	100%

Source: Survey result, 2017

## DISCUSSION OF THE REGRESSION RESULT

The study examined factors that determining the saving behavior of households from three different woredas of Bale zone and identified certain variables as; age, sex, educational level, marital status, occupation, income, number of

dependents, access to credit and saving institution, attitude towards save and plan for consumption, size of land holding and access get training in the previous trend. Based on statistical and econometric considerations, the multiple linear regression model was chosen; and hence the overall explanatory power of the model is expressed by  $R^2$  and which has the

value of 0.78 implying that the explanatory variables which accounted for about 77% of the change in saving behavior is attributed to the combined variations in the explanatory variables of the study. The overall significance of a model is measured by using F-test, which is significant at (0.000). Hence, the regression result is displayed on appendix A; As it could be observed from regression result on Appendix A, there is significant relationship between saving and factor that affecting this saving behavior of households, hence there is positive relationship between saving behavior of households and age but the result is insignificant which is in line with the finding of Horioka and Wan (2007) found that variables relating to the age structure of the population usually do not have a significant impact on the household saving rate. And also concerning the relationship, sex, access to credit, size of land holding, and access to training has positive relationship with saving behavior; which mean that sex of individual determine saving behavior of households positively; and getting access to credit and saving institution is positively related to saving behavior of households since Credit further can increase consumer access to essential resources and fuel economic growth. Beside the size of land holding has positive relationship with saving; this mean that the one that has huge land size may save more as per this relationship but also other factors matter; such as attitude towards saving and plan for consumption but which is negatively related with saving whereas access to training towards saving is positively related, whereas level of education, marital status, occupation, monthly income, and number of dependents are negatively related to saving behavior. Among eleven explanatory variables of this study only four variables are found to be significant and all are at 5% significant level.

Therefore, as per the finding of this study educational level is negative and significant at 5% level of significant(0.025) which is in line with the findings of (Kibet et al., 2009), and (Bersales & Mapa, 2006) which stated that higher education level translates to higher savings level. Furthermore, evidence also suggests that class-related factors, such as education, not only affect savings rate but also ownership of a formal savings account. In Uganda, the education level of the head of household was found to be a statistically significant predictor on whether a household will acquire a formal savings account (Kiiza & Pederson, 2001).

Also Household work status have been found to affect the saving performances of individual, and the finding of this study revealed that occupation is negative and significant at 5% level of significance (0.026) which is in line with the findings of Wolday and Tekie (2014), Sinha (1998), Muradoglu and Taskin (1996) states that Occupation, which can be predicted by a person's level of education, was found to be a significant predictor of savings rates. Beside the findings of their study revealed that self-employed household has consistent saving because they have fear of work uncertainty in the future also this result support the respondents report as self-employed/traders are more saver.

While access to credit and saving institution is found to be positive and significant at 5% level of significance (0.014), since access to credit is critical for cultivators operating in a market setting. In order to fully exploit natural, material and human resources in most efficient and effective way it is necessary for any country to have credit access via a sound financial or banking system. Also, as per this study in descriptive statistics respondents reported as they couldn't

get ease of access to credit and saving institution which may affect their saving and investment ability which further related with lack of getting information basically up-to-dated. And access to training is found to be positive and significant variable that affect the saving behavior of households which again at 5% significant level (0.003). Regular training is very mandatory to change the attitude of individual towards saving since majority of respondents reported on the descriptive statistics as they are pessimistic towards saving and plan to consumption which again highly related with lack of training concerning saving mechanism and how they save from their income whatever the volume of their income.

## CONCLUSION

Since saving play a pivotal role in the economic development and investment for the given society and investigating the areas is unquestionable; and hence, through investigation the researchers identified the following findings; Majority of households have pessimistic view concerning saving and plan for consumption; due to Lack of ability and habit of saving resulted from insufficiency of income, superiority of purchased assets, etc. There is problem in accessing and getting credit for majority of the respondents; and majority of households save their income informally, such as at home, buy jewelry, animal rearing which is not secured saving mechanism, no training was given for households before concerning saving.

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#### Appendix A; Regression Result

Dependent Variable: Annual saving				
Independent variables	Coefficient	Std. Error	t-statistics	Significant
(Constant)	.924	0.226	4.089	0.00
Age	.016	.0278	.5843	.560
Sex	.554	.2068	4.291	.668
Educational Level	-.554	.2067	-2.68	.025**
Marital status	-.005	.026	-.191	.848
Occupation	-.073	.028	-2.66	.026**
Monthly Income	-.009	.041	-.208	.835
Number of dependents	-.006	.027	-.226	.821
Access to credit & sav.Inst	.557	.183	3.05	.014**
Attitude towards save & plan for consup.	-.073	.068	-1.06	.288
Size of land holding	.052	.038	0.55	.163
Access to training	.128	.056	2.28	.003**
<b>R<sup>2</sup> = 0.78</b> <b>Prob&gt; F = 0.000</b> <b>** Significant @ 5% of level of significance</b>				