ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY
SCHOOL OF GRADUATE STUDIES

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

DETERMINANTS OF HOUSEHOLDS SAVING AND CREDIT USE IN HORO DISTRICT OF HORO GUDURU WOLLEGA ZONE

BY: GEBEYEHU JELDU

AUGUST, 2015
ADAMA, ETHIOPIA

DETERMINANTS OF HOUSEHOLDS SAVING AND CREDIT USE IN HORO DISTRICT OF HORO GUDURU WOLLEGA ZONE

BY:

GEBEYEHU JELDU

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ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY SCHOOL OF GRADUTE STUDIES

DEPARTMENT OF ECONOMICS

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Advisor	Date	Signature
______________________	____________	___________
Internal examiner	Date	Signature
______________________	____________	___________
External examiner	Date	Signature

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ACRONYMS

ACORD	Agency for Cooperation in Research and Development
ADLIS	Agricultural Development Led Industrialization Strategy
AEMFI	Association of Ethiopian Micro Finance Institutions
Br	Birr
CBE	Commercial Bank of Ethiopia
CFSDP	Credit Financial Sector Development Project
DBE	Development Bank of Ethiopia
EEA	Ethiopian Economic Association
EPRDF	Ethiopian People Revolutionary Democratic Front
FAO	Food and Agricultural Development
HWRDO	Horo Woreda Rural Development Office
IFAD	International Fund for Agricultural Development
LPM	Linear Probability Model
MLE	Maximum Likelihood Estimator
NBE	National Bank of Ethiopia
NCAER	National Council of Applied Economic Research
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development Cooperation
OCSI	Oromia Credit and Saving Institute
OLS	Ordinary Least Square
PA_S	Peasant Associations

RHH	Rural Household
ROSCA$_S$	Rotating Saving and Credit Associations
SME	Small and Medium Enterprise
SoBE	School of Business and Economics
SPSS	Statistical Package for Social Sciences
TLU	Tropical Livestock Unit
UNCC	United Nations Conference Center
UNDP	United Nation Development Program
VIF	Variance Inflation Factor
WB	World Bank
WCSI	Wassasa Credit and Saving Institute
WMFI	Wassasa Micro Finance Institute

ABSTRACT

In Ethiopia, among other things, lack of finance is one of the fundamental problem hampering production, productivity and income of rural farm households. Since access to institutional finance is very limited, the majority of the poor are forced to search financial services through informal channels. The study is sought to assess and identify factors that determine rural household's savings and credit use in the study area. A two stage random sampling method was employed to select four peasant associations out of twenty-two. Structured interview schedule was developed, pre-tested and used for collecting quantitative data from196 rural households. Focus group discussion, group interview and field observations were also held to generate qualitative data.

Descriptive statistics and logit model were used to analyze the data. The output from the study indicates that 110(56.12%) of the sampled ruralhouseholds were formal credit users, whereas the remaining 86(43.88%) were non-credit users. It is also found out that credit use to rural households is still limited and the difference between the two groups in use of credit from the formal sources was also statistically significant. Rural households acknowledge group lending that solves the problem of collateral requirement by lending institutions and the provision of saving services by MFIs while strongly criticizing the isolation of the very poor rural households the group formation. A total of fourteen explanatory variables were included in the empirical model out of these, nine were found to be statistically significant. Age, gender, level of income, year of schooling, number of livestock in TLU, distance, off-farm income, group lending and saving experience were as evidenced by the model output. Therefore, policy aimed to accelerate mobilization of savings and credit use in the area could be successful if these factors and problems are taken into consideration to save and use credit from the formal financial sources.

Declaration

This is to certify that this thesis **entitled "Determinants of Rural Households Savings and Credit Use in Horo District of Horo Guduru Wollega Zone"** submitted in partial fulfillments of the requirements for the award of the degree of M.Sc in Development Economics to the school of graduate studies, Adama Science and Technology University, through the department of Economics, done by Mr. Gebeyehu Jeldu. It is an authentic work carried out by him under my guidance. This work has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

Name of Candidate; - Gebeyehu Jeldu

Signature________________________________

Date____________________________________

Name of Adivasor:-________________________________

Signature____________________________________

Date_______________________________________

Appendix I: Summary of Survey Questionnaire

Dear respondents:

I am a student of Degree of Masters (MSc.) program in Development Economics study at Adama Science and Technology University. I am undertaking a research on"Determinants of Rural Savings and Credit access in Horo district of Horo Guduru Wollega Zone ".The research exclusively relies on data collected through survey questionnaires. Thus, your respectful response to the question will have great value on the result of the study. Finally, I assure that all personal information obtained from you will be kept confidential.

Thank you very much in advance for your kindly cooperation !

General Information

Date ____________________

Code: _________________________

Name of the Enumerator:______________________

Peasant Association:______________________________

I. Households Background

1.Age : Between 0-14 years □

Between 15-64 years □

Above 65 years □

Between45-53 years □

Above 54 years □

2. Martial Status: a) married b) single c) divorced

3.Eductional level: -University □ -College □ -Grade 9-10 □

-Grade11-12 □ -Grade 5-8 □ - Grade 1-4 □

-Unable to read& write □

4.Experiance 0f households in credit use.

No.	Years of participation	Formal credit	Informal credit
1	1-3		
2	4-7		
3	8-11		
4	Above 12 years		

5.Households Farming Experience. Mark “X” in the table.

Year/Hectares	Households experience on farming(in years)	Land holding size(in hectare)
1/2		
1-2		
3-5		
6-10		
11-20		
Above21		

6.Households Family size in2014/15.

Family Size				
Sex	Age			
	Under15years old	15-64 years old	65and above years	Total
M				
F				
Total				

7. In which of the following social organizations do you participate in your locality and how often? Mark “X” in the table.

Social organization	sometimes	Frequently/Usually	Seldom
‘Idir’			
‘Ikub’			
‘Mahibar’			

Others(Specify)____
____

8.Source of Income.

8.1 Crop production.

8.2 What is your annual average income from the total crop yield you are produced in one year? A) In 2006 E.C B) In 2007 E.C

8.3Use this information to fill the household respondents annual average income/crops in pre-2006,2006& 2007 E.C in the table below.

8.4 Do you own farm land? A) Yes B) No . A) If you say “No” what is the option to have farm land? Specify.

C) Is the alternative way costly? a) yes b)no

D) What is the financial source for this expense? i) Borrowing/credit ii) Contracting the land iii)Selling oxen &other animals

E)Do you feel that your land holding is adequate to satisfy your families need? a)yes B)No

8.5-If you say “no” which of the under listed activities will be considered as an option to raise your income? i)Wood work ii)selling family labor

iii) selling fire wood and charcoal iv)Borrowing/lending

E. If othersspecify____

8.6 Livestock Rearing

8.7 How many pair of oxen you owned for draught activities? I) 4 and above ii) 3 iii) 2 iv)1 v)none

8.8 Number of cattle, goat, sheep and other animals all together you owned. i)0-10 ii)11-20 iii)30-60 iv)70-100 v)above 100

9. Credit Acquisition Mechanism.

9.1 What type of credit did you received in 2006-2007?

a) Formal b)Informal c)Both d)If others specify______________________.

9.2 If you say ‘Formal’. From which institute did you received? a)CBE b)DBE C)OCSI d) Wasasa e)If you said all or either of the two

/others(specify)____

9.3 The form of credit you received is? a) in cash b) in kind c)other

9.4 How could be the credit disbursed to individual households? a)in group b) individually

9.5 How long is the credit term? a) Long b)Medium c)Short

9.6 Do you have cash saving habit from the income you earn? A) Yes B)No

9.7 If you say “yes” Where do you save the income you received? A) In formal financial inistitutions B)in undisclosed place C)both

9.8 If you say “no” the main case for this is: A)unavailability of financial institutions B)distance C)lack of confidence on institutions D) lack of awareness

9.9 The main purpose why you saved your income? A) for investment B) for precaution in case of disaster C) for personal consumptions D) for transaction purpose

9.10 How often do you save? A) monthly B) annually C)no D) some times in a month E) some times in a year

9.11 Have you ever been attended in any training programs regarding rural saving and credit mobilization? A) yes B) no

9.12 What is your view on the difficulties and determinants of rural households saving and access to credit from the formal financial sources?

Difficulties and Determinants

No.	Determinants& Difficulties	OCSI Yes/ No	CBE Yes /No	NGOs Yes/No	If others
1	Group lending				
2	Individual Collateral				
3	interest rate asked from borrowers				
4	Time of credit availability				
5	Repayment time				
6	Repayment period				
7	Non-membership of farmers multipurpose cooperatives				
8	Lack of opportunity to take a second loan				
9	Distance from lending institutions				
10	Working time of the institutions				
11	Working ethics and efficiency of the employs of the organization				
13	Preparing an application letter and				

	filling different formats				

9.13 What is your perception about formal financial institutions?

No	Topic score	Agree	Neutral	Disagree	Strongly Disagree
	Female headed households are major targets of credit by OCSI				
1	Female headed households are major targets of credit by OCSI				
2	The very poor are the main credit targets by OCSI				
3	The very poor are the main credit targets by cooperatives				
4	The loan size from OCSI did not satisfy farmers needs				
5	The loan size from cooperatives did not satisfy farmers needs				
6	OCSI control loans not to be used for quite different ends				
7	It is convenient to save in formal financial organization				
8	Formal financial institutions encourage people to save				
9	Time and distance is a problem to save regularly in the organizations				
10	Sufficient interest rate is paid for depositors				

Appendix II

Gaaffii Qomaa Yaada Kennitootaf Qophaaʼe

Yaada dimshaashaa

Guyyaa_______________

Koodii____________

Maqaa gaafataa___________________________

Ganda Qonnaan bulaa______________________

I.Seenduuba Abbootii warraa

1.Umurii______________ 2.Haala maatii: Mallattoo/X/ fayyadami: Fuudhera/Heerumteetti

□ Hin fune/hin heerumne □

2.1Haala qabeenya abbootii warraa: a) Sooressa □ b) Gidduugaleessa □ c) Harka qalʾeessa □

3. Sadarkaa barumsaa: Yunvarsiitii □ kollejii □ 12 kan xumure □ 10 kan xumure □

Kutaa 5-8□ kutaa 1-4 □ kan hinbaranne □

4. Muuxannoo liqaatti fayyadamuu abbootii warraa

Lak.	Waggoota itti hirmaatan	Liqaa idilee	Liqaa al-idilee
1	1-3		
2	4-7		
3	8-11		
4	waggoota 12 fi ol		

5.Muuxannoo abbootin warraa qonnrratti qaban. Mallattoo/X/ taasisaa.

Waggaan/hektaaraan	Muuxannoo abbootiin warraa qonnarratti Qaban/waggaan/	Qabiyyee lafaa/hektaran/
1/2		
1-2		
3-5		
6-10		
11-20		
21 fi ol		

6.Baayina maatii abbaa warraa tokkoo

Baayina maatii	
Saala	Umurii

	Umurii 15 gadi	15-64	65 fi ol	waliigala
Dhiira				
Dhalaa				
waliigala				

7.Haala qabeeny lafaa: a)Lafa qaduu? Eeyyee □ Lakki □

1) naaf kennameen qaba 2) dhaalaanan fudhe 3) nan kireeffa dha 4) qixxeen qota

5) nama biroofan qota

8.Horii qabduu? Eeyyee □ Lakki □

8.1.Horii hammam qabdu?____

8 .2 Horii keessan gurgurtanii beektu? Eeyyee □ Lakki □

-Sababiin gurgurtaniif sadarkaan hamma sadiit/3/ 1)Calla gudistuu bituuf 2) Humna namaatiif 3)Nyaata maatiif 4)Liqii kaffaluuf 5) Baasii mana keessaf 6) Ijoolle barsiisuuf 7)Horii kan biro bitachuuf 8) Waantootni biroon yoo jiraatan ibsaa___________________________________

9. Dhiheessi Liqaa.

9.1 Liqaa fudhachuu barbadduu? Eeyyee □ Lakki □

9.2 Eeyyee yoo jettan Maddi liqaa irraa argattan eessa? A) WLQO B)WASSA C)Baankii D)NGO E)Kanbiroo ibsaa____---

9.3 Yeroo meeqa liqeeffattanii beektu?_________________________

9.4 Maallaqa liqeeffattaniin maal gootu/sababa/? A) humna namaa hojjetuuf kaffalla b) xaa'oo fi sanyii filatamaaa ittiin bitna c) meeshaaleee qonnaa ittiin bitna d) baasii adda addaa kaffalla e) horii ittiin bitanna f) baasii mana keessa ittiin cufanna g) daldalaaf olchina h) horii ittiin furdifnna

9.5 Liqaa hamma barbaddaniifi yeroo barbaaddan itti argattuu? Eeyyee □ Lakki □

9.6 Liqaa attamitti argattu. a) gareetiin b) qofaaqofaatti

9.7 Gareen yoo jettan maaliifidha gareen ijaaramtu?_____________________________________

9.8Yeroo liqeeffattan qabeenya qabsiisuuf waldichaan gaafatamtuu? Eeyyee □ Lakki □

9.9 Soressii fi hiyyeessi waliin ijaaramee fudhataa? Eeyyee □ Lakki □ Lakki yoo jette,maaliif____

9.10 Dhiirriifi dubartiin mirga walqixaan ijaaramanii liqaa fudhachuu qabuu? Eeyyee □Lakki□

10.Haala sodaa abbootii warraa liqaa liqeeffachuu.

10.1 Liqaa waldoota idileerraa/formal/ liqeeffachuun soda itti gaafatamummaa/risk/ qabaa?

Eeyyee □ Lakki □

10.2 Sodaa itti gaafatamuumma irra kan ka' e liqaa liqeffachuu dhistaniittuu? Eeyyee □

Lakki □

11.Hudhaa fi rakklee liqaa irratti mudatan.

11.1 Waldaan liqaa fi qusanna naannoo jireeny keetti dhiyyoon jiraa? Eeyyee □ Lakki □

11.2Yeroo meeqa liqeeffattee beekta? a)1 b) 2 c) 3 d)4 e) 5 fi ol

11.3 Yoo waldaarra liqeeffattee hin beektu ta'e liqaa essa argatta?________________________

11.4 Liqaa waldootarraa argachuun deddebbii fi dadhabbii qabaa? Eeyyee □ Lakki □

11.5 Akka yaada keetti rakkooleewwanii fi hudhaaleen liqaa waldoolee idileerraa liqeeffachuu maalfa ti ?

Hudhaa fi rakkoleewwan	OCSI Eeyyee/lakki	Baankii Eeyyee/ lakki	NGOs Eeyyee/lakki	Kan biroo
Gareen liqeeffachuu				
Qabeenya ofii qabsiisuu				
Dhala liqaa gaafatamuu				
Yeroo itti liqaan argamu				
Yeroo itti liqaan kaffalamu				
Yeroo itti liqaan kennamu				
Maamila waldichaa tahuun				
Carraa lammaffaa liqaa argachuu				
Fageenya waldaa liqaa				
Yeroo hojii waldichaa				
Naamusaa fi gahumsa hojettoota waldichaa				
Xalayaa iyyannoo qopheessu fi foormii adda addaa guutuu				

12.Qusannoo ilaalchisee.

12.1 Qusattee beektaa? Eeyyee □ Lakki □

-Lakki yoo jette,maaliif? A)fageenya b) soda c) hubannoo dhabuu

12.2 Eessatti qusatta? a) WLQO b) Bankii c)NGO/wassa d) manuma

12.3 Qar. hammam qusattee qabda_______________________________

12.4 Muuxannoon qusannaarratti qabdan hammami? Waggaan_____________________

12.5 Qusannaa akkamii qusattu? a) qusannaa duraa/kan seeraa/ compulsory saving/ b) qusannaa fedhii/demand saving/ c) kan biro

Appendix-III Conversion Factors Used to Compute Tropical Livestock Unit (TLU)

Animal category	**TLU**
Calf	0.25
Heifer	0.75
Cow/ Ox	1.00
Horse	1.10
Donkey	0.70
Sheep/ Goat	0.13
Chicken	0.013
Bull	1.00
Mule	0.70

Source: Stork, *et al*, 1991

Appendix-IV

```
. use "C:\Users\my\Desktop\Gabayyoo ststa\G.J  stata  Final Research.dta", clear

. logit loan age family_size farm_size noxen TLU

Iteration 0:   log likelihood = -134.38377
Iteration 1:   log likelihood = -45.217188
Iteration 2:   log likelihood = -43.696845
Iteration 3:   log likelihood = -43.670409
Iteration 4:   log likelihood = -43.670403
Iteration 5:   log likelihood = -43.670403

Logistic regression                               Number of obs   =        196
                                                  LR chi2(5)      =     181.43
                                                  Prob > chi2     =     0.0000
Log likelihood = -43.670403                       Pseudo R2       =     0.6750

------------------------------------------------------------------------------
        loan |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .5256537   .1034458     5.08   0.000     .3229036    .7284038
 family_size |     -.4009   .2581151    -1.55   0.120    -.9067963    .1049963
   farm_size |  -.9581569   .6995577    -1.37   0.171    -2.329265     .412951
       noxen |    -.00213   .6066706    -0.00   0.997    -1.191182    1.186922
         TLU |   -.452101    .073896    -6.12   0.000    -.5969344   -.3072676
       _cons |  -8.869977   2.105878    -4.21   0.000    -12.99742   -4.742531
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
      y  = Pr(loan) (predict)
         =  .51736619
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]      X
---------+--------------------------------------------------------------------
     age |   .1312549      .02607    5.03   0.000   .080151  .182358   36.1327
family~e |  -.1001041      .06439   -1.55   0.120  -.226303  .026095    4.7602
farm_s~e |  -.2392503      .17617   -1.36   0.174  -.584544  .106043   1.60714
   noxen |  -.0005319      .15148   -0.00   0.997  -.297431  .296367   1.84694
     TLU |  -.1128889      .01868   -6.04   0.000  -.149494 -.076284    14.602
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
      y  = Pr(loan) (predict)
         =  .51736619
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]      X
---------+--------------------------------------------------------------------
     age |   .1312549      .02607    5.03   0.000   .080151  .182358   36.1327
family~e |  -.1001041      .06439   -1.55   0.120  -.226303  .026095    4.7602
farm_s~e |  -.2392503      .17617   -1.36   0.174  -.584544  .106043   1.60714
   noxen |  -.0005319      .15148   -0.00   0.997  -.297431  .296367   1.84694
     TLU |  -.1128889      .01868   -6.04   0.000  -.149494 -.076284    14.602
------------------------------------------------------------------------------

. logit loan sex2 source_income5 source_income5 distance10 prtextnpckg11 offarm_inco
> me12 educ4

note: source_income5 omitted because of collinearity
Iteration 0:   log likelihood = -134.38377
Iteration 1:   log likelihood = -105.49368
Iteration 2:   log likelihood = -105.20947
Iteration 3:   log likelihood = -105.20891
Iteration 4:   log likelihood = -105.20891

Logistic regression                               Number of obs   =        196
                                                  LR chi2(6)      =      58.35
                                                  Prob > chi2     =     0.0000
Log likelihood = -105.20891                       Pseudo R2       =     0.2171

------------------------------------------------------------------------------
        loan |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        sex2 |  -.8074893   .3663835    -2.20   0.028    -1.525588   -.0893908
source_inc~5 |  -1.055358   .3524667    -2.99   0.003     -1.74618   -.3645356
source_inc~5 |  (omitted)
  distance10 |  -2.083677   .4865291    -4.28   0.000    -3.037256   -1.130097
prtextnpc~11 |   .3025349   .3861746     0.78   0.433    -.4543534    1.059423
offarm_in~12 |   1.030535   .5460732     1.89   0.059    -.0397488    2.100819
       educ4 |   1.089503    .423282     2.57   0.010     .2598859    1.919121
       _cons |   .8783041   .9065985     0.97   0.333    -.8985964    2.655204
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
      y  = Pr(loan) (predict)
         =  .54962786
```

```
. logit loan source_income5 educ4 savexp12 savintrate13

Iteration 0:   log likelihood = -134.38377
Iteration 1:   log likelihood = -49.314288
Iteration 2:   log likelihood = -46.288303
Iteration 3:   log likelihood = -45.932376
Iteration 4:   log likelihood = -45.931622
Iteration 5:   log likelihood = -45.931622

Logistic regression                               Number of obs   =        196
                                                  LR chi2(4)      =     176.90
                                                  Prob > chi2     =     0.0000
Log likelihood = -45.931622                       Pseudo R2       =     0.6582

------------------------------------------------------------------------------
        loan |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
source_inc~5 |  -1.116889   .4096065    -2.73   0.006    -1.919703   -.3140751
       educ4 |   1.208249   .6889831     1.75   0.079    -.1421334    2.558631
    savexp12 |   6.474407   1.091365     5.93   0.000     4.335371    8.613442
savintrate13 |   -.608217   .5754344    -1.06   0.291    -1.736048    .5196136
       _cons |  -3.159529   1.131216    -2.79   0.005    -5.376672   -.9423856
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
      y  = Pr(loan) (predict)
         =    .425454
------------------------------------------------------------------------------
```

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
source~5	-.2730156	.10138	-2.69	0.007	-.471709	-.074322	1.35204
educ4*	.2917689	.1589	1.84	0.066	-.019665	.603202	.372449
savexp12*	.8765688	.03424	25.60	0.000	.809452	.943685	.632653
savin~13*	-.1443448	.13228	-1.09	0.275	-.403607	.114917	.290816

(*) dy/dx is for discrete change of dummy variable from 0 to 1