Determinants of saving in selected Woredas of Kaffa Zone

abiyot Alemu (✉ abiyot123alemu@gmail.com)

BONGA UNIVERSITY

Lidiya J.

Research Article

Keywords: household saving, macro-economic variables, demographic variables, average monthly net deposit

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BONGA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING AND FINANCE

RESEARCH PAPER ON

DETERMINANTS OF SAVING IN SELECTED WOREDAS OF KAFFA ZONE

PRINCIPAL INVESTIGATOR: Abiyot A. (MBA, Specializing in Finance)

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Abstract

Saving is one of the most important variables in the macro-economic theory. Different studies revealed that there is a significant relationship between income, saving, and investment, though they can determine the economic level of nations. This study was designed to capture the constituents of saving under different categories in Southern nations, nationalities, and peoples region with special reference to South west Ethiopia, Kaffa Zone. Three different models were adopted from a number of econometric and regression models adopted by different scholars depending on the country's and regional economic and socio-cultural behavior. The panel approach (panel data) and cross-sectional data was adopted to measure the determinants of saving. The data utilized for this study was collected from both primary and secondary sources. The average monthly net deposit (AMND) was the dependent variable and the independent variables can be taken in two forms. The first category includes the macro-economic variables as (per capita income, employment, rate of inflation, interest rate ...etc) and the second category addresses the demographic variables as (age, gender, education, occupation...etc) which can be entertained at micro level. The reason behind using both panel approach and cross-sectional data is to make the study focus more on individual level variables those are not addressed by most of the studies conducted at macro-level. In addition to this cross-sectional data can support the panel data and helps for comparison of individual level variables with the variables at macro-level. According to the results obtained from the analysis income of the individuals is the most significant variable with cv (). Gender and age are another significant variables affecting saving behavior of individuals with cv (). Consumption pattern and preferences of the individuals are the most significant variable determining the level of saving with significant level of 0.672.

Key words: household saving, macro-economic variables, demographic variables, average monthly net deposit.

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LIST OF ACRONYMS

AMND: Average Monthly Net Deposit

Y_i : household saving

X_i : vector of independent variables affecting household savings

ZH_{it} : house hold saving taken as the difference between income and expenditures

$\ln Y_i$: logarithm of household savings

$\ln INCO_{it}$: logarithm of income of households from different sources

I_t : individual household at time t.

Pec: primary education completed

Jec: junior secondary education completed

Sec: secondary education completed

Tec: technical and vocational education completed

Bac: batchler education completed

Maph: master and above education completed

Frs: farmers

Trs: teachers

Trds: traders

Csrs: civil servants

Sts: students

CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

The living standard of the people can depend on the level of the income they are generating. All people in the world like survival and for the sake can do many things depending on the economic condition of the nation, educational level of the people, qualification or specializations of the people, age, and other important parameters. Whatever the above parameters can impact the people they always engaged in any economic activities to generate income. The income generated from any source of occupation can be used for either consumption or saving and investment activities. The consumption, saving or investing activities of the people was determined by different factors. The factors may be economic or non-economic. The level of income generated from any source can determine what to do? Either to consume, save, or invest the money, even for which area. The level of generating income was also determined by different economic and non-economic factors. Income may be determined by our educational level, national economic condition, type of work we are engaged, place (compare rural with urban), policies and regulations..... and other multiple of factors. It may be better to compare the income generating pattern, consumption pattern, saving, and investing pattern of the rural and the urban society. The people who were living in urban or metropolitan areas may generate higher level of income and spend out higher amount of money for their expenditures to the opposite people who were living in rural areas may generate lower level of income and spend out less amount of money from the income they generated (Subhashree,2013).

Most of the people in developing and under developed countries have generating lower level of income in any occupational areas they are engaged. This is due to the above discussed factors and other macro-economic, political, and socio-cultural barriers. According to the economist walker money was defined in very simple terms as “money is what money does”. From this simple functional definition of money it may be important to understand the function of money. Understanding this definition clearly shows or gives answers for why people are engaged in any economic activity or occupation. People may answer as for buying food, buying clothes, medicines, home, entertainment, vehicles.....and hundreds of materials. All the above interests of

the people were determined by the level of income they are generating and other economic and non-economic factors. At the individual level such decisions of the person was not institutionalized and considered at macro level. Individually, a person may be unemployed, employed, earn higher income, earn lower income, poor, rich, educated, illiterate, young, aged, or other different characters or nature (YesiakeErgecho ,etel, 2015).

People can save or invest their own income that was the amount remained from their consumption needs. In any economy of the nation, income of the people can affect the consumption pattern, saving, and investment at any level.

In developing or under developed economy the living standard of the people was very poor, the behavior of saving is also very poor, and the behavior of investment has similar nature due to different economic and non-economic factors. The people may be challenged with cost of expenditures (food, clothes, shelter, education fees... etc.) in such economies in which the government was not or unable to solve such problems. If people are unable to afford the current living expenditures the nature of saving and investment will be highly challenged and the people was always thinking about what to do? What to eat? What to wear? Where to accommodate? What to pay for education? ...etc. than where to save or invest.

The notion behind that people living in rural areas were generating lower level of income but spend less amount of money was due the occupation they are engaged in i.e. agriculture which is dominated by ancient traditional techniques limited the level of production. Where ever some of them are engaged in business activities and animal husbandry their practice was highly traditional and not supported with advanced methods of production which limit the level of production (Negussie, 2017).

In countries like Ethiopia more than 85% of the population is living in rural areas and their source of income was agriculture which is more of traditional and less productivity was achieved are the parts of the above problems.

The accumulation of only natural resources or wealth does not bring development and change the living standard of the people without fair distribution of the resources or wealth. People may live in rural, semi-urban, urban, or metropolitan areas depending on the educational level, level of income, occupational pattern, and other multiples of factors. The consumption, saving, and

investing behavior can also be affected by the geographical factors of the nation. Conceptually saving can promote the economic status of the people and the economic growth of the nation in general but this theory may be determined by a number of factors depending on the above discussed categories of the people and other economic factors.

In addition to the above factors, the development of efficient financial institutions and markets can be the other factor in affecting the behavior of consumption, saving, and investment. In developing and under developed economies the development of financial institutions and financial markets is very weak and the availability and access to the system is very limited.

Most of the studies revealed that efficient financial institutions and markets can improve the consumption, saving, and investing behavior of the people. People can make different decisions under different conditions of the economy, consumption, saving, investing, working, learning, and other numbers of decisions in their daily activities. All of the decisions are determined by different factors and challenging them specially the low income rural and urban societies for improving the standard of their actual life. In the economies of developing and under developed nations in which the financial sector was dominated only by the banking sector cannot solve the problems of the lower income group of the society because of the issues related with the complexity of procedures, access to finance, inadequate income or lack of income, awareness problems, and other similar factors. Similarly, in such economies the development of micro financial institutions and other saving and credit institutions was very limited.

According to the study of Tsega H. and Yemane Michael (2014) the main causes to not save their money was due to low income, inflation, low interest rate, cultural background, education, social affairs and unemployment. The findings of other researchers, Gina A. and Chowa (2006) demographic factors that affect the savings of the households in Sub-Saharan Africa were gender, marital status, age, educational level, and type of work. These factors had shown higher differences in different groups of age, gender, level of education, and type of work analyzed as independent variables those affect the average level of deposit by the households. In their study age and gender can influence the performance of saving that means young groups can deposit more than the elders due to different factors, females can also save more when compared to males in the study groups. In general the age group, marital status, gender, level of education, type of work can determine the level of income, ultimately the performance of saving. The level

of saving is the indicator of the economy of different nations. According to the World Bank report of 2016 Ethiopia is the second largest populous country (about 100 million) in Africa which makes it the 6th largest economy in sub-Saharan Africa with its population but the per capita income of Ethiopia is less \$1000 which is about \$550. People can consume what he/she earn, people can save from its earnings, and people can invest what was left from its consumption and saving. It is clear that in Ethiopia a number of people have no occupation, unemployed, have no permanent income though these factors highly affect the level income and savings of households. It is better to compare or do an analysis between the per capita income of Ethiopia and the average rate of deposit. People are in lack of fulfilling their food, cloth, shelter, education, and a number of needs and wants of the people are under a question for a number of years due to low level of income or even no income. If people are in lack of money for their current consumption how they think of savings and investment. Income can determine a number of decisions of the households than other factors.

According to the study of Subhashree (2013) the rural household's decisions to consume can be influenced by the current or permanent income. The significance of 'incentives' as a determinant of savings is that although there has been a long footing fight about the effects of the level of per family income upon proportion of income that is saved, there has been no comparable concern about the effect of variation in the relative prices of new income streams upon savings and investment. Subhashree, in his study confirm that there are a number of factors that can determine the rate of household savings. The most important determinants studied in the paper are real per capita income, demographic features, (as gender, age distribution, number of dependents.....etc), share of agriculture to GDP, social barriers, and real interest rate.

The current studies of Nigussie (2017), on the farmers/cooperative associations in Ethiopia revealed that “ apart from the supply side gap to access to credit there was a demand side gap and other external factors those affect access to credit and financial services. Countries those are dominated with the banking sectors may lack access to credit and financial services in rural areas, though it highly affects the small holders of the poor living in the rural areas. Other studies also support the ideas of the above studies but there was difference in model specification and the variables those actually affect the saving behavior of the people.

In this study the factors affecting the saving behavior of the society will be identified and

analyzed.

1.2. Objectives of the study

This study has both general and specific objectives.

1.2.1. General objective

The general objective of the study will be to identify and analyze the important macro- economic and non- economic factors those affect saving in Kaffa Zone selected Woredas.

1.2.2. Specific objectives

Specifically this study was designed:

- ✓ To identify the factors affecting saving.
- ✓ To test the relationship between the level of income and saving.
- ✓ To test the relationship between macro-economic variables and saving.
- ✓ To analyze the impact of institutional framework on saving.
- ✓ To compare the behavior of saving within different groups of the society.
- ✓ To identify the benefits of non-bank financial institutions in promoting saving in the study area.

1.3. Research questions

- ✓ What are the factors affecting the savings of the people?
- ✓ What is the relationship between level of income and saving?
- ✓ What is the relationship between the macro-economic variables and saving?
- ✓ How the institutional framework can affect saving?
- ✓ How the behavior of saving differs within different groups of the society?
- ✓ What are the benefits of non-bank financial institutions in promoting saving?

1.4. Purpose of the study

The results of this study hopefully benefit the number of peoples specially the households and others concerned with saving. Any research or study can be expected to benefit three major groups: practitioners, policy makers, and potential researchers for further study. Practitioners who were involved in the areas of financial institutions can be aware about the behavior of saving. Policy makers can utilize the recommendations gained from the findings of the study as a feedback in improving and amending policies related to this area. Finally, the results of this study may be used as a reference in the area to fill a gap that was not addressed by this study.

1.5. Expected benefits /out comes/

This study was expected to bring the following main outcomes that are important for the stakeholders:

- Create awareness for savers, lenders, borrowers, and (financial institutions) by finding important factors hinders saving,
- Expected to bring improvement toward the behavior/performance of saving by the society,
- Expected to recognize the relationship between the level of income, education, gender, marital status, and other factors those determine the savings of the people in the area,
- Expected to recognize and improve the institutional problems those hinder access to finance and financial institutions by promoting the development of financial institutions in such areas,

- Expected to maintain smooth relationship between the financial sector and savers by identifying the factors of the habit of saving in the particular area.
- It contribute for the improvement of the living standard of the society at micro level and economic growth at macro level,
- Helps in identifying and improving the socio-cultural barriers hinders the performance of savings,

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. INTRODUCTION

In his section different theories and concepts about saving and the factors affecting saving should be discussed. It consists of both empirical and theoretical findings revealed by different scholars related with the behavior o saving. The theoretical parts should be focused on stating different theories about the study and the study variables while the empirical one should reveal about the empirical evidences about different contextual studies previously concluded by different writers.

2.2. Empirical evidences about the concept of saving

2.2.1. Linking Poor Rural Households to Microfinance and Markets in Ethiopia

The RFA recognized that without the additional OFSP packages, such as microfinance and complementary market development interventions, PSNP households were unlikely to move out of poverty (USAID, 2008).

Although the PSNP was established with the assumption that OFSP interventions would complement the program, evaluations of the PSNP highlighted the limited uptake of microfinance or credit amongst PSNP households (USAID, 2008). The RFA was launched therefore in order to demonstrate that “adoption of market-led livelihood options for the persistently poor through

sustainable links to markets and microfinance services... [leads to] ...increased assets at the household level and therefore more resilient households.”

(USAID, 2008: 18). The RFA also suggests that the value chain approach be considered as an appropriate methodology for linking poor households to markets.

The RFA called specifically for projects that would contribute to the following higher goals (USAID, 2008: 18-19):

- Reduced food insecurity and improved resiliency in vulnerable households;
- Increased rural economic growth opportunities for the poor, to diversify livelihoods;
- Demonstrate a new market-driven approach to poverty reduction in Ethiopia;
- Expanded adoption and scaling up of market-driven approaches by new actors such as the Government of the Federal Democratic Republic of Ethiopia (GFDRE);
- Improved access to microfinance services through a graduated assistance program.

The RFA also required that proposals demonstrate how project results, outcomes, and the ‘replicability’ and sustainability of interventions would be measured and documented. Consistent with this, the RFA called for a preliminary causal model presenting the logic of how the project would achieve the desired outputs, outcomes and impacts, and how these would be measured (USAID, 2008).

Consistent with the objectives of the RFA, the PSNP Plus project was designed to facilitate the graduation of poor rural households from the PSNP through the provision of microfinance services and market-driven interventions aimed at building assets and diversifying livelihoods.

The project, which is being led by CARE, was launched towards the end of 2008 and is being implemented by CARE and Catholic Relief Services (CRS) working with partners in Oromia including the Relief Society of Tigray (REST) in Tigray and Save the Children UK (SCUK) in Amhara. The project will be implemented in ten woredas across the three regions.

2.2.2 Microfinance Linkage Component

Under the microfinance component the project in Doba aims to improve access to financial products and services by linking participants to formal microfinance institutions (MFI). Because no MFIs existed in Doba prior to the PSNP Plus project, the project will work with the Oromia Credit and Savings Share Company (OCSSCO) to establish an office in Doba. In the interim the project will work with OCSSCO to provide credit services to project participants.

It is well-documented however that formal microfinance institutions are often unwilling to

provide savings facilities for poor households (Amha, 2008). As Dercon et al. (2008: 78) point out, *“financial savings aren’t tailored to the poor, offer low or negative returns, and involve extremely high transaction costs imposed on the saver”*.

Poor households are also unwilling to accommodate the risk of borrowing from formal loan facilities for fear of defaulting on the loan and the penalties associated with this (Amha, 2008). The PSNP Plus project acknowledges these constraints and will work with local MFIs such as OCSSCO to identify appropriate financial products and services, which will be tailored to the needs of the project’s clients. It will also advocate for PSNP households to be accepted as MFI clients. In view of this the project does not expect the microfinance linkage to take place during the first year of the project (CARE, 2009).

Preceding the launch of the MFI component and in the absence of other financial products and services in the area, the project will also promote informal microfinance based on the Village Savings and Lending Association (VSLA) model.

2.2.3 Village Saving and Lending Associations

The VSLA approach typically involves a group of between 10-25 members. The project aims to provide training and resources to these groups to enable them to manage, maintain and increase their own financial assets such as savings and loans. Under the VSLA approach, members should use their own cash resources to lend funds to one another, charge an acceptable interest rate, and re-lend funds on a rotating basis.

Other features of the VSLA approach are as follows:

Groups typically meet twice a month. Each member will contribute a specified amount of money to a savings pool and a smaller amount to a social fund. After a certain amount of capital has accumulated in the savings fund members can take out loans, which they are obliged to repay with interest within a certain time period. Group members will collectively agree upon the contribution amounts, interest rates and repayment periods. The approach is intended to be flexible and for some groups, individuals can contribute whatever amount they can afford. In such cases the amount they can borrow is proportional to their accumulated savings.

Group members will collectively decide which members can borrow during a given loan disbursement cycle. In order to borrow, a member will present a proposal to the group, outlining what they intend to use the loan for and how they will be able to repay it. For example in Doba, members might use the loan to invest in petty trading or other income generating activities. In

principle, members will select the person with the most convincing proposal. However it is also not uncommon for loans to be given to the person who appears to need it most, for example to cover medical expenses, as long as the members are confident that the person can repay the loan. Penalties are imposed on members who fail to repay their loans within the specified time period, which is usually between 1-3 months.

In some cases, a group may also decide not to disburse loans on an individual basis, but to collectively invest their savings in a group business venture and then share the profits. However, the study rarely came across this in Doba.

After a certain period, usually between 9-10 months, the group will share the savings and any interest accrued with all the members. VSLA members can earn dividends on their savings whether they borrow from their group fund or not.

The social fund is typically meant to provide group members with insurance against idiosyncratic shocks such as illness, though it can also be utilized in other ways. No interest is applied to social fund disbursements and again group members will collectively decide who receives this support. Given that the social fund is smaller than the savings fund, members may in certain cases be allowed to borrow from the savings fund to pay for medical expenses or other contingencies. Some groups may decide to use the social fund for other activities of benefits to the whole group. Each group select a chairperson and a treasurer. A secretary is also selected to keep records on savings and loan transactions. The savings are kept in a wooden or metal box; with either two (sometimes three) padlocks. The keys for these locks are given to different members, selected by the group based on their honesty and standing within the community. The box cannot be opened by any individual group member and would only be opened in the presence of the entire group during the bimonthly meetings. In Doba VSLA participation is not limited to PSNP households and anyone in the community is eligible to join the groups. Under the PSNP Plus the VSLA activities include the establishment of new VSLA groups, as well as providing support to re-form or strengthen existing groups that were established under earlier projects.

In terms of inputs, the project pays community facilitators to provide support to the groups. The project also provides training in the VSLA methodology to community agents or ‘animators’. Training in business development skills and adult literacy is also provided to selected VSLA members. Physical inputs include the savings boxes, padlocks, and a registration/savings book.

In the absence of other financial services, one of the key objectives of the VSLA activities is to provide saving and loan services for participating households. The project also aims to use these groups as a vehicle to link VSLA members to formal microfinance initiatives. By demonstrating that group members 'financial literacy and savings knowledge increases over time, the project aims to convince MFIs to accept groups and individuals as clients. The VSLA groups are used as a catalyst to encourage linkages between informal and formal microfinance initiatives (MDTCS, 2010).

2.2.4 Sources of Savings Contributions

Participants indicated that one of the main sources of income for VSLA contributions came from firewood sales. This activity is considered a 'coping' mechanism in the project area and involves an extremely time-consuming process involving wood collection, transportation to the market, finding a potential buyer, and negotiating a price. While this illustrates the effort members will go to remain in the groups, the concern is that this activity comes at the expense of other productive activities. This activity also appears to have created tension between some of the project communities. Reports from two of the PAs visited indicate that VSLA members had come into conflict with communities from neighboring PAs for collect firewood from their areas. The project would hope to avoid this kind of social conflict as well as the potential negative environmental impact.

2.2.5 MFI Loans

The results from this baseline assessment suggest that basic loan products that are large enough to enable people to effectively engage in activities such as grain and livestock trading, and livestock production and fattening, would meet the demands of project clients. Although the risks faced by poor households pose a threat to any kind of business activity, arguably these types of investments are less risky than crop based production, and could potentially translate into a significant impact on income and other financial assets.

2.2.6 Cattle Credit

Participants repeatedly mentioned the success of the World Bank/OFSP cattle credit program in the area and this particular financial product should be considered under the formal microfinance component of PSNP Plus. There are certainly risks involved; livestock mortality in 2009 was high and some participants sold their 'World Bank cattle' in order to cope with 'rain-failure'.

Nonetheless, the experience of the World Bank/OFSP livestock credit program indicates that this specific microfinance product be considered in Doba, particularly given the demand and potential returns that could be derived from cattle fattening. Cattle credit should however be complemented with the provision of animal health services, with such loans contingent on the availability and utilization of a set of basic minimum standards in animal health care.

2.2.7 Micro Insurance

A recent report commissioned by the PSNP Plus project defines a number of different financial products for the project's formal microfinance component. Aside from savings and loan services, the report recommends a number of micro-insurance products. These include human health insurance and drought insurance (MDTCS, 2010). When analyzed through the SRM framework it logically follows that micro-insurance products would help the poor engage in riskier and more productive activities, which could potentially translate into financial asset accumulation within a relatively short period of time. Certain types of micro-insurance products, such as life and health insurance, would also provide considerable psychological benefits. Even though the potential benefits of micro insurance might be considerable however, the challenges of providing micro-insurance for the poor have been well-documented. One of the main challenges with micro-insurance for the poor is the cost. For the insurance provider the initial costs of providing these products demands high premiums at a time when demand is low as potential clients are unfamiliar with and even suspicious of the concept (Mosely, 2003). An initial subsidy may be required to bring the insurers' costs down to a point where it becomes viable (Mosely, 2003, Yunus, 2007). Similar challenges exist when MFIs diversify into new financial products and the evidence suggests that the cost of insurance increases exponentially as the number of risks covered by different products increases (Mosely, 2003).

Another challenge is the type of insurance products that MFIs are willing and able to provide. For example, although both micro and macro level drought insurance have received much attention in recent years (and it would be difficult to argue against the need for this product), in reality it is unlikely that insurance markets will provide this kind of coverage. Micro-insurance typically covers insurable risks that can be predicted with a certain degree of reliability (Mosley, 2003). As othercommentators point out:

“Insurance contracts are most easily offered if risks within the relevant population are not covariate that is risks do not affect a large proportion of the population at the same time.

Insurance for rare and infrequent events is also typically more difficult to offer. Taken together, insurance contracts are less likely to be on offer for rare and covariate shocks.(Dercon et al, 2008:70)

Although drought (or at least rain-failure) is not rare in Doba and can be predicted with some degree of reliability, it is covariant in the sense that it affects a large number of people at the same time.

Even in high-income countries insurance against covariate shocks is rarely provided. In low-income countries MFIs often have to rely on external support or subsidies to cover the costs of providing certain types of financial products. Financial sustainability therefore remains one of the biggest challenges facing micro-insurance and microfinance providers in general, particularly when they try to balance this with their social mission of helping the poor (Greeley, 2003).

Daunting as these challenges are, the potential for certain types of micro-finance products in Doba (and possibly some of the other study areas) warrants consideration.

2.2.8 Savings Products

Savings products also provide a form of self-insurance for the poor and there is room for the project to improve access to savings products through formal microfinance. Some analysts argue that savings instruments have been largely undervalued as a risk management tool for the poor (Dercon et al, 2008). The results from this study support this argument in the sense that VSLA members use their savings (and loans) to cope with unexpected shocks such as medical expenses and food shortages (see figure 4.10). While the VSLA groups currently provide participants with a valuable savings instrument, there may also be a demand for other types of savings products. Although this demand would need to be assessed, examples might include long-term savings options. There may even be the potential for clients to use MFI savings as collateral against MFI loans.

2.2.9. Informal Financial Products

For the VSLA groups a number of immediate actions may be undertaken to address some of the challenges identified. The notion of uniform contributions may need to be re-visited, as there is a possibility that over time the poorest members will drop out as they can't make the required contributions. Although some groups have lowered the interest rates, groups with excessively high interest rates should be encouraged to lower rates to the point where members are willing to borrow.

Groups with very low interest rates should be sensitized to the risk of inflation and encouraged to increase the interest rate reasonably. Project staff and community facilitators could address these issues with group members through participatory dialogue.

Another idea that might be explored with group members is the possibility of pooling savings to purchase an asset or invest in an activity that would benefit the group as a whole. Given that the loan amounts are too small to invest in high return activities; this option might allow groups to quickly increase their overall savings. For example, a group loan could be used to invest in livestock trading, with the profits either being shared or put back into the savings box.

There is also a need to carry out the planned business skills training activities as soon as possible. Many participants were reluctant to take loans due to the limited business opportunities that can be carried out with small loans, but also due to having to deal with the stiff competition for the limited business opportunities that exist. Training will need to be well planned, as not everyone can be a petty trader. Although there seems to be room for more people to expand into cereal and livestock trading, the current loan amounts would seem to exclude this possibility. One option might be to discourage groups from sharing their savings at the end of the cycle, but to keep contributing with a view to increasing their overall savings and borrowing capacity. For example, if groups could double the current loan amounts to 200 birr, this would open up a number of new investment opportunities such as grain and livestock trading.

For the honey producers there may be opportunities to develop cottage industries for beeswax products. Small-scale poultry production might also be considered. This is an activity that members are already actively engaged in and participants indicated a desire to invest in improved poultry species. Egg sales already provide one of the major sources of income for VSLA contributions and the expansion of poultry production could reduce people's dependency on firewood sales (thus minimizing unintended negative impacts from this activity).

2.3 Nature of Saving

Savings can be known as the cash or physical products set aside for future use. People in rural and other low-income communities can save when they are guided and encouraged by the Government and financial institutions. The people in rural region, savings are made through traditional credit rotation groups, or purchase of domestic animals (goats, pigs, chickens or cows). Gradually, the traditional way of saving in rural region has been abolished; the people shifted their saving pattern to save in form of physical assets, like gold, land and durable goods and

financial assets like shares, stocks, and bonds.

The Micro Finance Institutions (MFIs) and micro-enterprises are playing a major role in recent years in rural region by encouraging the people to save more. MFIs need to inject capital or funds which may be the owner's of money or loan. When a loan is used, it is someone else who has done the saving. Micro enterprises, like other businesses, convert savings (of the owners and of others) into investment, in the creation of wealth. Variations in the saving pattern is mostly found in different societies, as there exists, a difference in environmental, social, economic and cultural contexts. Human wants get transformed as the society grows and in turn cause substantial changes in the outlook of the people towards saving. In low-income communities, the ability to save is low and often is in cash or kind. Saving in cash is cheap and convenient. Variations in saving is visible in different communities as there exists difference in income levels, consumption pattern, awareness of the saving benefits, family size, investment opportunities, etc. Human attitude towards saving has been changed through decades as in the remarkable growth in the society.

2.4. Determinants of Savings Rate

The rural household's decision to consume present or in the future is influenced by the current or permanent income. The significance of 'incentives' as a determinant of savings is that although there has been a long footing fight about the effects of the level of per family income upon proportion of income that is saved, there has been no comparable concern about the effect of variation in the relative prices of new income streams upon savings and investment. There are number of factors which determine the saving rate in an economy. Some of the important determinants are discussed below:

2.4.1 Real Per Capita Income

The real per capita income of the individuals proves to be a foremost determinant of saving rate. When the income of an individual increases the consumption pattern improves which in the sense some part is left out which goes to saving as to secure one's unforeseen future. As rightly pointed out by the neoclassical growth model (Solow, 1956) that higher savings rate will lead to higher steady situation levels of income (or output) per capita, while the endogenous growth theory models imply that higher savings rates would lead to higher levels of growth of income per capita. Thus in common, both the variables should be well thought-out. The real (in stable domestic prices) Gross Domestic Product (GDP) per capita is used as an estimation of real

income. These two indicators rightly give an outlay to the saving pattern.

2.4.2. Demographic Features

The saving can be most often determined by the demographic features like the sex ratio, the age distribution, and the rate of dependant population. Saving is highly determined by whether the female's contribution towards saving is more or the male is contributing to its highest level and again if the problem of the age distribution in the family contributing to the saving is optimum then the saving rate is determined in a different perspective. Aggregate savings is exaggerated by the age distribution of the population if the curve up of dependent population is high than the income earning groups, the savings ratio will be low. According to the life-cycle hypothesis a larger working population next of kin to the older population contributes to raise the savings rate. In an instance if the income earning population is comparably high to that of the dependant population then the saving rate will experience a hike which in some way will lead to income propagation in a country in a long term basis.

2.4.3 Share of Agriculture to GDP

India is an agriculture dominant country where most of the people are engaged in agricultural activity in which the concentration of the rural population is more. As because of some way or the other the production level decides the fate of the individual farmers which sometimes experiences a high production level will have more income and will automatically encourage the people to save more and if the production is less than the income will have a fall resulting in a sharp fall in the saving rate. The rural or agricultural sector of the economy can display different savings behaviour than the urban/industrial sector, especially in the case of developing countries, with large agricultural sectors. The agricultural sector could have a different savings rate due to a lower access to the banking system and because of lower and unbalanced incomes in the agricultural sector and sometimes due to lack of access to other financial institutions nearby also determines the saving rate. Proper awareness and education is needed to have a proper understanding of the saving rate of a country with a remarkable share in the GDP.

2.4.4. Real Interest Rates

Every banking institution including other financial institutions encourages people to save with an expectation of giving a considerable amount of rate of interest on the saving amount. This rate of interest determines the saving rate of the individuals on a view to encourage people towards

saving. When the rate of interest is high people are more interested to save rather than invest and when the rate of interest is less people are less inclined towards saving rather than they are likely to invest more in an expectation of getting more rate of return. There is a negative and an inverse relationship between savings and rate of interest. Critically, an increase in interest rates will have an indefinite effect on savings because of a positive substitution effect towards future consumption and a negative income effect due to increased real proceeds on saved wealth.

2.4.5. Social Barriers

The society we live in is full of constraints likely due to variations and distinctness in the age, sex, culture, tradition, social taboos, and many more which by playing an important role determines the saving behaviour of any region, state or country. Income plays a major role in identifying the saving distinctness among different groups but income cannot always remove all the barriers for availing the opportunities because of the variations offered in the context of culture, gender, class etc. People belonging to diverse ethnic groups can have a refutation to the equal admittance to education, employment, and other basic services by the social and financial institutions as well as the investment opportunities available.

2.5. Theories of saving

2.5.1 The Life-Cycle Hypothesis (LCH) is an economic theory that pertains to the spending and saving habits of people over the course of a lifetime. The concept was developed by Franco Modigliani and his student Richard Brumberg. LCH presumes that individuals base consumption on a constant percentage of their anticipated life income. An example supporting the hypothesis is that people save for retirement while they are earning a regular income (rather than spending it all when it is earned). This simple theory leads to important and non-obvious predictions about the economy as a whole, that national saving depends on the rate of growth of national income, not its level, and that the level of wealth in the economy bears a simple relation to the length of the retirement span. , the life-cycle hypothesis remains an essential part of economists' thinking. With population growth, there are more young people than old, more people are saving than are dissaving, so that the total dissaving of the old will be less than the total saving of the young, and there will be net positive saving. If incomes are growing, the young will be saving on a larger scale than the old are dissaving so that economic growth, like population growth, causes positive saving, and the faster the growth, the higher the saving rate. In fact, it doesn't much matter whether it is population growth or growth in per capita incomes, what matters for saving is simply the rate of growth of total income. The

relationship between saving and the age-structure of the population is also a current topic of debate. Cross-country regressions regularly find that aggregate saving rates are lower when the population share of the elderly is high and when the population share of children is high, predictions that are in accord with the life-cycle theory if saving takes place in middle-age when earnings are high, after the child-rearing ages, but prior to retirement. (subshree,2015)

$$C = (1/T) W + h(R/T) Y$$

2.5.2 Relative income hypothesis states that the satisfaction (or utility) an individual derives from a given consumption level depends on its relative magnitude in the society (e.g., relative to the average consumption) rather than its absolute level. It is based on a postulate that has long been acknowledged by psychologists and sociologists, namely that individuals care about status. In economics, relative income hypothesis is attributed to James Duesenberry, who investigated the implications of this idea for consumption behaviour in his 1949 book titled *Income, Saving and the Theory of Consumer Behaviour*. At the time when Duesenberry wrote his book the dominant theory of consumption was the one developed by the English economist John Maynard Keynes, which was based on the hypothesis that individuals consume a decreasing, and save an increasing, percentage of their income as their income increases. This was indeed the pattern observed in cross-sectional consumption data: At a given point in time the rich in the population saved a higher fraction of their income than the poor did. However, Keynesian theory was contradicted by another empirical regularity: Aggregate saving rate did not grow over time as aggregate income grew. Duesenberry argued that relative income hypothesis could account for both the cross-sectional and time series evidence. Duesenberry claimed that an individual's utility index depended on the ratio of his or her consumption to a weighted average of the consumption of the others. From this he drew two conclusions: (1) aggregate saving rate is independent of aggregate income, which is consistent with the time series evidence; and (2) the propensity to save of an individual is an increasing function of his or her percentile position in the income distribution, which is consistent with the cross sectional evidence. Relative income hypothesis has also found some corroboration from indirect macroeconomic evidence. One of these is the observation that higher growth rates lead to higher saving rates, which is inconsistent with the lifecycle/permanent-income theory since the lifetime resources of an individual increases as growth rate increases. The RIH is formulated as:

$$C_t/Y_t = a - b(Y_t/Y_0)$$

2.5.3 The permanent income hypothesis was formulated by the Nobel Prize winning economist Milton Friedman in 1957. The hypothesis implies that changes in consumption behavior are not predictable, because they are based on individual expectations. This has broad implications concerning economic policy. Under this theory, even if economic policies are successful in increasing income in the economy, the policies may not kick off a multiplier effect from increased consumer spending. Rather, the theory predicts there will not be an uptick in consumer spending until workers reform expectations about their future incomes. A theory of consumer spending which states that people will spend money at a level consistent with their expected long term average income. The level of expected long term income then becomes thought of as the level of “permanent” income that can be safely spent. A worker will save only if his or her current income is higher than the anticipated level of permanent income, in order to guard against future declines in income. PIH divides income into permanent income and transitory income:

$$Y = Y_P + Y_T$$

2.6. Relationship between Saving and Income

The present study empirically examines the relationship between saving, income and consumption showing a positive relationship between saving, income and consumption. As the income of the individual increases, consumption increases and simultaneously saving also increases. Economic studies have shown that income is the primary determinant of consumption and saving. Rich people save more than poor people, both absolutely and as a percent of income. The very poor are unable to save at all. Instead, as long as they can borrow or draw down their wealth, they tend to save. That is they tend to spend more than they earn reducing they're accumulated saving or going deeper into debt. So we can say that there is a deep relationship between consumption, income and saving and they all affects to each other which can be shown with the equation:

$$C = f(Y)$$

$$Y = C + S$$

$$S = Y - C$$

Here,

C = Consumption

S = Saving

Y = Income

2.3. Overview of the Banking System in Ethiopia

According to GebeyehuAyichile as cited in Habtamu (2012) Traditional financial system in Ethiopia has long history and paramount contribution to economic betterment and social wellbeing of the society. Traditional institutions organized with a sense of cooperation and risk sharing has enabled Ethiopians to experience saving and financial management within its cultural context. Eqqub and Edir are some of the informal financial institutions that shaped the social bond and interaction.

Modern banking in Ethiopia was introduced after the agreement that was reached in 1905 between Emperor Minilik II and Mr.MaGillivray, representative of the British owned National Bank of Egypt. Following the agreement, the first bank called Bank of Abyssinia was inaugurated in Feb.16, 1906 by the Emperor. Within the first fifteen years of its operation, Bank of Abyssinia opened branches in different areas of the country in Harar (Eastern Ethiopia), Dire Dawa, Dessie and Djibouti. By 1931 Bank of Abyssinia legally replaced by Bank of Ethiopia shortly after Emperor HaileSelassie came to power. The new Bank, Bank of Ethiopia, was a purely Ethiopian institution, was the first indigenous bank in Africa, and established by an official decree on August 29, 1931 with capital of £750,000. In 1941, another foreign bank, Barclays Bank, came to Ethiopia with the British troops and organized banking services in Addis Ababa, until its withdrawal in 1943. Then on 15 April 1943, the State Bank of Ethiopia commenced full operation after 8 months of preparatory activities. In 1945 and 1949, the Bank was granted the sole right of issuing currency and deal in foreign currency. The Bank also functioned as the principal commercial bank in the country and engaged in all commercial banking activities. The National Bank of Ethiopia with more power and duties started its operation in January 1964. Following the incorporation as a share company on December 16, 1963 as per proclamation No.207/1955 of October 1963, Commercial Bank of Ethiopia took over the commercial banking activities of the former State Bank of Ethiopia. It started operation on January 1, 1964 with a capital of Eth. Birr 20 million. In the new Commercial Bank of Ethiopia, in contrast with the former State Bank of Ethiopia, all employees were Ethiopians.

There were two other banks in operation namely Bancodi Roma S. and Bankodi Napoli S.C. that

later reapplied for license according to the new proclamation each having a paid up capital of Eth. Birr 2 million. The first privately owned bank, Addis Ababa Bank Share Company, was established on Ethiopians initiative and started operation in 1964 with a capital of 2 million in association with National and Grindlay Bank, London which had 40 percent of the total share. In 1968, the original capital of the Bank rose to 5.0 million and until it ceased operation, it had 300 staff at 26 branches.

Following the declaration of socialism in 1974, the government extended its control over the whole economy and nationalized all large corporations. Organizational setups were taken in order to create stronger institutions by merging those that perform similar functions. Accordingly, the three private owned banks, Addis Ababa Bank, Bancodi Roma and Bancodi Napoli Merged in 1976 to form the second largest Bank in Ethiopia called Addis Bank with a capital of Eth. birr 20 million and had a staff of 480 and 34 branches. Then Addis Bank and Commercial Bank of Ethiopia S.C were merged by proclamation No.184 of August 2, 1980 to form the sole commercial bank in the country until the establishment of private commercial banks in 1994.

The Savings and Mortgage Corporation S.C. and Imperial Saving and Home Ownership Public Association were also merged to form the Housing and Saving 12 Bank with working capital of Birr 6.0 million and all rights, privileges, assets and liabilities were transferred by proclamation No.60, 1975 to the new bank. The financial sector that the socialist oriented government left behind constituted only three banks and each enjoying monopoly in its respective market, the following was the structure of the sector at the end of the era: the National Bank of Ethiopia (NBE), the Commercial Bank of Ethiopia, and Agricultural and Industrial Development Bank. Following the demise of the Dergue regime in 1991 that ruled the country for 17 years under the rule of command economy, the Ethiopian People's Revolutionary Democratic Front declared a liberal economy system. In line with this, Monetary and Banking proclamation of 1994 established the national bank of Ethiopia as a judicial entity, separated from the government and outlined its main function. Monetary and Banking proclamation No.83/1994 and the Licensing and Supervision of Banking Business No.84/1994 laid down the legal basis for investment in the banking sector. In 2014, the total number of Banks get license from the national bank of Ethiopia were reached 19. (Ibid).

2.6. Deposit and Economic Growth

According to TuuliKoivu (2002), there were a two-way causal relationship between growth and

financial development. In their model, the lack of a financial sector means that every investor must individually monitor projects, so that the costs of monitoring are excessive. With a well developed financial sector, monitoring tasks are delegated to intermediaries. Transaction costs are reduced and more savings can be allotted to investments that produce new technology. Ultimately, this promotes economic growth.

Blackburn and Hung (1996) as cited in Tuuli, 2002 also show how a country might become trapped in a vicious cycle of sluggish economic growth and weak financial development. This situation occurs when the initial level of technical development in the country is very low and the expected flow of new technology remains low. Monitoring costs remain so high that financial intermediation is never organized. As a result, transaction costs remain high and economic growth remains low.

Harrison et al (1999) as cited in Tuuli, (2002) construct a model in which causality runs both ways between economic growth and financial sector development. Basically, they argue, economic growth increases banking activity and profits, which promotes the entry of more banks. The greater availability of banking services reduces the non-physical and physical distance between banks and client, which, in turn, lowers transaction costs. Endogenous growth theory argues that a higher savings rate leads to higher economic growth.

Generally speaking, development of financial sector affects the savings rate in three ways. First, financial markets can reduce idiosyncratic risks and thus lower the level of precautionary saving by households and slow down growth (Tsuru, 2000). Second, a reduction in rate-of-return risks by portfolio diversification has ambiguous effects on saving (Tsuru, 2000). Third, lowering liquidity constraints in the financial sector may lower the savings rate. For example, Jappelli and Pagano (1994) as cited in Tuuli, 2002 develop a model in which the younger generation borrows extensively when no liquidity constraints accompany the liberalization of consumer credit and mortgage markets.

Deposit and lending rates are unavailable for identical periods for each country. The overall size of the margin, however, should not be affected significantly by lending/deposit periods. Moreover, the differences in margins between and within countries are large, so a small error in the margins should not disturb the results. The IMF has reported lending and deposit rates, but this information is not available for all transition countries. Using the IMF data where possible, the results correspond to the EBRD data. (Tuuli, 2002)

2.7. Interest Earned by Banks and Economic Growth

According to Haron& Ahmad (2002), cited in Aurangzeb (2012) investigates that The Effects Of Conventional Interest Rates And Rate Of Profit On Funds Deposited With Islamic Banking System In Malaysia by using ‘Adaptive Expectation Model’ to measure the effects of rate of profit declared by Islamic banks on the level of deposits placed by their customers. Data Variables are saving deposits, Interest-free, Rates of Profit, results shows that relationship between the amounts of deposits placed in the Islamic banking system in Malaysia and returns given to these deposits hence which are guided by the profit motive. It is recommended that these doctrines require that Muslims should not placed profit maximization as the sole factor in establishing relationship with Islamic banks.

According to Din and Khawaja (1995), cited in Aurangzeb (2012) investigated the determinants of interest spread of the banking industry in Pakistan. by using cross section data model, data variables Concentration, Inelasticity, Liquidity, Market Share, Equity, Non-performing Loans, Administrative cost, GDP growth, Inflation, Interest rate. Feasible Generalized Least Square (GLS) on pooled data technique has been used. Results shows that there is no evidence of interest spread which influence the performance factors of banking industry that also includes the other financial sectors example of which are DFI and investments funds that can serve as an alternate to banks for small savers, Bitzenis (2008) investigate and evaluate the banking reforms in Serbia by using survey data results. The study uses the approach of pre and post performance through many factors which are relevant to reformation of banking systems are reliability and management quality responsiveness in Serbia banking systems. Qualitative technique has been use for results however this article also concludes the different problems and challenges face by the current system and find out the result that is positive.

One of the major impediments affecting the performance and growth of many Ethiopian firms ,including those that are export-oriented, is the lack of short and medium-term finance at reasonable terms. A lending rate that has recently approached 10% in real terms (i.e. adjusted for core inflation) is jeopardizing the private sector’s international competitiveness and is not conducive to stimulating investment for increasing exports to other market.

This high interest rate level reflects the wide, increasing spreads between lending rates and deposit rates, which, in turn, are a symptom of structural weaknesses related to the financial difficulties of the most important lending institution, the Commercial Bank of Ethiopia (CBE),

currently implementing a comprehensive restructuring plan. These problems are compounded by a lack of adequate competition among banks and the absence of a financial market.

2.8. Deposit/ savingfunctionsof banks

2.8. 1. Acceptance of Deposits

Accepting deposits is the primary function of a commercial bank. Banks generally accept three types of deposits.

2.8.1.1. Current Deposits

These deposits are also known as demand deposits. These deposits can be withdrawn at any time. Generally, no interest is allowed on current deposits, and in case, the customer is required to leave a minimum balance undrawn with the bank. Cheques are used to withdraw the amount. These deposits are kept by businessmen and industrialists who receive and make large payments through banks. The bank levies certain incidental charges on the customer for the services rendered by it.

2.8.1.2. Savings Deposits

This is meant mainly for professional men and middle class people to help them deposit their small savings. It can be opened without any introduction. Money can be deposited at any time but the maximum cannot go beyond a certain limit. There is a restriction on the amount that can be withdrawn at a particular time or during a week. If the customer wishes to withdraw more than the specified amount at any one time, he has to give prior notice. Interest is allowed on the credit balance of this account. The rate of interest is greater than the rate of interest on the current deposits and less than that on fixed deposit. This system greatly encourages the habit of thrift or savings.

2.8.1.3. Fixed Deposits

These deposits are also known as time deposits. These deposits cannot be withdrawn before the expiry of the period for which they are deposited or without giving a prior notice for withdrawal. If the depositor is in need of money, he has to borrow on the security of this account and pay a slightly higher rate of interest to the bank. They are attracted by the payment of interest which is usually higher for longer period. Fixed deposits are liked by depositors

both for their safety and as well as for their interest.

2.9. Deposit Mobilization

The table 4.2.1 below shows that, the total deposit (saving, demand and time) mobilization of the banking sector has increased significantly from ETB 65.2 billion by the end of June 2009 to ETB 201.5 billion by the end of June 2013/14. The average annual growth rate in deposit was 26%. As can be observed from Table 4.1, Commercial bank of Ethiopia mobilized about 67% of total deposits mobilized by all commercial banks by the end of June 2009/10. This has shown only a small increase within the last 5 years and accounted for 77% in 2013/14. The total deposit mobilized by banks increased to 68% in 2013/14.

Deposit Mobilizations of Selected Banks (in billion ETB)

N O	Name of the Bank	2009	2010	2011	2012	2013	Changes %
1	C B E	43.5	54.7	85.2	120.1	154.4	72
2	D B	7.9	10.1	11.8	14.1	15.9	50
3	N I B	3.3	4.1	4.7	5.8	6.7	51
4	W B	4.0	6.0	5.8	7.6	8.4	55
5	A I B	6.5	8.0	9.5	13.1	16.1	60
	T o t a l	65.2	82.9	117	160.7	201.5	68

Source: NBE, Annual report of bank: own calculation (from previous study)

As shown in figure 4.2.1 deposit in 2009 was 65.2 billion ETB and in 2013 reached to 201.5 billion ETB, GDP was also 375.1 ETB in 2009 and reached to 656.1 billion ETB in 2013. It shows that both are shown significant increase at an average rate of 26% and 10% per annum for deposit and GDP respectively.

Figure 2.2.1 Growth of Deposit and GDP in billion of ETB (2009-2013 represented by case numbers 1-5)

Source: NBE and Commercial Banks annual reports: own calculation

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Design/ approach

The type of this study was designed as both qualitative and quantitative. Quantitatively the macro-economic variables were analyzed and qualitatively the demographic variables were identified and analyzed. In addition to the macro- economic and demographic variables the institutional factors affecting the performance of saving were assessed. Panel data and cross-sectional data were applied to cross check the impacts of independent variables on saving. Saving was the dependent variable (study variable) and the macro-economic variables and the demographic variables were the independent variables. In addition to these variables the institutional framework was the concentration of this study.

3.2. Population of the study and Sample

The population of this study includes different categories of the people. The classification takes place using occupation and other demographic features of the targeted population. The first category include the farmers, the second category include businesses of different forms, the

third category was include civil servants of different sectors, the fourth category includes teachers and students, the final category was include other occupational areas not included in the above category. Average monthly net deposit of the above categories of population was taken as the dependent variable taken from commercial banks, other saving and credit associations, and micro-finance institutions in the area. Informal saving bodies are not included in this study because they are difficult to capture and measure the AMND.

3.3. Sample size determination

The sample was taken from Bonga town and four other Woredas which were selected based on the convenience for study for the researcher/s. Based on this decision, the financial institutions and savers from Bonga town, Gimbo, Dechachena, and telloWoredas,are geographically included. There are different methods of sample size determination depending on the nature of the population and the objective designed. In this study the size of the population (actual) is not known. In such case of unknown population it is possible to determine the sample size given the level of prevalence, level of precision, and confidence interval. Accordingly,

$$n = \frac{Z^2_{\alpha/2} P (1-P)}{e^2}$$

Where, n = expected sample size, Z= linked to 95% confidence interval, P= level of prevalence, e = level of precision.

Estimating P = 0.05 (5%), $Z_{\alpha/2} (Z_{0.025}) = 1.96$, e = 0.01

Sample size (n) = 315

3.4. Scope of the study/ delimitation

This study was bounded conceptually and geographically. Conceptually it was try to address the macro-economic variables (like per capita income, employment, interest rate, rate of inflation...etc) and demographic variables (like age, gender, education, marital status, occupation) were addressed and geographically Kaffa Zone selected woredas and Kebeleswere included. Average monthly net deposit was the dependent variable to be addressed in this study. The reason for geographical choice is accessibility and convenience for the researcher/s.

3.5. Data analysis Design

Data was analyzed using descriptive statistics, regression model (linear), and Chi-square (X^2) was adopted to check the reliability and consistency of data (relationship). SPSS (v.20+) was used as a tool in the process of analysis.

3.6. Conceptual/theoretical frame work

In most studies conducted in different countries they are adopted a panel data model to measure the fixed effects of the factors on the savings of the households. This type of studies are highly centralized and national level data was applied and time-series impacts of variables are analyzed, though ignoring the factors those affect for a short period of time and individual level/ micro level impacts of the factors of saving which are more cross-sectional and analyze problems at individual/ micro level with in short period of time. The main reason for this was due to lack of data and literature to specify important model (see Tsega and Yemane, 2014), even the variables in the model are not significantly influence the behavior of savings.

As cited by Tsega and Yemane (2014) in many empirical studies, they found that the saving rates depend more on the transitory income than regular income. Among the other variables, the labor market status or the non-financial assets ownership (real estate for instance) and credit access have not significant effect on the household saving behavior; the durable goods possession (in particular cars) has a negative impact on the saving rate. The findings of Gina C. (2006), marital status and education have direct effects on savings behavior whereas work type does not in Uganda. In other studies the type of work determines the regularity of income. Wage employment, self-employment, or casual employment provides a source of income, of which a portion can be saved. Income is identified as a risk factor in precautionary savings theory. This theory predicts that risk depresses consumption and increases the accumulation of wealth (Kennickell&Lusardi, 2003) as cited by Gina A. (2006). In this study the panel data will be supported with cross- sectional analysis and a model important for less developed/developing countries will be adopted.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1. INTRODUCTION

In this section the collected data was analyzed and interpretations are given. For the purpose of presentation statistical graphs, pie charts, and other data presentation tools are adopted. Descriptive statistics and regression model was also adopted to show the impact of demographic and macro-economic variables on saving. The demographic factors included in this study include age, gender, educational qualifications, occupation, and income was presented and discussed. Under the macro-economic variables interest rate, inflation, GDP, real per capita income, and other important variables are discussed.

4.2. Demographic nature of the respondents

The demographic nature of the respondents are comprised of five main variables viz –avis- age, gender, occupation, consumption, and income.

Figure 1 age distribution

The chart above shows that the age distribution of the target group. As indicated in the figure the age distribution was categorized into four main categories which were amenable to this study. From the total of three hundred fifteen (315) thirty one (31) are under age eighteen (18), forty one (41) between age eighteen (18) and twenty five (25), sixty one (61) are between age twenty five (25) and thirty two (32), and finally respondents which were above age thirty two (32) which were one hundred eighty two (182). The percentage distribution of the respondent's age relative to the frequency shows 9.8%, 13%, 19.3%, and 57.8% respectively from below age eighteen (18) to above age thirty two (32).

Figure 2 gender distribution

In the chart above the gender of the respondents are distributed. Accordingly, one hundred (100) or (31.7%) are female respondents where the remain two hundred fifteen (215) or (68.3%) were male respondents.

The other demographic nature of the respondents was categorized based on the occupation of the respondents. Based on the data depicted in the figure above, respondents are categorized as farmers (50) students (18) of the total respondents, business men (100) of the total respondents, teachers (55) of the total respondents, and other civil servants (92) of the total respondents.

Figure 3: occupation of the respondents

The educational level of the respondents as depicted in the chart above shows five main categories described from lower level to higher level. In the first level depicted as primary education completed respondents which was about (35), the second level was depicted as junior secondary education completed respondents which was about (50), the third level shows secondary and preparatory education completed respondents which was about (150) of the total respondents, the fourth level includes technical and vocational education completed at different levels which was about (51) of the total respondents, and the final and the fifth level comprises degree completed respondents which includes bachelor degree (35), and masters and doctorate degree which was about (4) of the total respondents.

Figure 4: educational levels

Model specification and justification

$$Y = c + s, y = y_{\text{perm}} + y_{\text{trans}}$$

$$S = y - c$$

$$S = \alpha + \beta_a a + \beta_g g + \beta_o o + \beta_i i + \beta_e e + \beta_m m + \beta_{ot} ot$$

Where,

Y = income (permanent & transitory)

C = consumption (aggregate)

α = alpha (confidence interval)

β = beta (sensitivity of the variables)

a = age distribution

g = gender distribution

o = occupation

I = income

E = educational levels

M = macro economic variables

Ot = other variables

v a r i a b l e s	Coefficients	t- statistics	probability	V I F
C	0 . 7 6 1	1 2 . 4 6 5	0 . 0 0 0	2 . 4 9
A	0 . 8 2 3	6 . 0 2 1 1	0 . 0 6 6	2 . 8 9
G	0 . 8 0 7	4 . 6 5 1	0 . 0 6 0	2 . 2 4
O	0 . 8 9 1	3 . 9 5 6	0 . 0 5 0	2 . 3 1
I	0 . 7 4 2	5 . 0 4 6	0 . 0 7 5	1 . 9 9
E	0 . 6 8 7	4 . 6 1 1	0 . 0 9 6	2 . 8 9
M	0 . 4 5 2	5 . 3 2 1	0 . 0 0 2	2 . 0 5
O t	0 . 7 6 1	4 . 6 5 5	0 . 0 0 3	2 . 6 7
R - s q u a r e d	1 . 0 0 0			
Durbin Watson	1 . 9 8 9 8			
F- statistics (probability)	119.457(000)			

Descriptive statistics (summary): dependent variable against independent variable

V a r i a b l e s	C	A	G	O	I	E	M	OT
M e a n	570.20	130.30	63.55	104.66	5.92	23.13	34.61	27.27
M a x i m u m	660.50	202.20	103.35	176.05	55.20	42.51	23.52	45.31
m i n i m u m	380.50	70.50	26.50	35.05	44.62	25.34	18.35	28.34
Std. deviation	112.68	80.60	32.22	59.62	21.28	38.67	37.41	23.52
Total observations	25	25	25	25	25	25	25	25

5.1. CONCLUSION

The consumption pattern and the income can affect saving. The relationship between consumption and saving shows opposite relationship, as consumption increases saving will be decreased. In the case of income and saving the scenario can be changed, as income increases saving can also increase. This shows income and saving have a positive or direct relationship. Other demographic variables as gender, age, marital status, and educational levels and qualifications have also their own significant effect on saving. Gender can affect the choice and preferences of workers, ultimately it affects income and saving but in the sense of decreasing chasing of money and increasing saving females are more savers than males assuming other things remain unchanged(). The age of the people can determine the level of saving because it can affect the level of income and consumption pattern.

5.2. Recommendations

Saving and investment can determine the economic development of different nations by facilitating the movement of finance in the economy. According to the Keynesian (1925) economic principles the promotion of saving factors can increase investment factors in the national economy. The researcher was analyzed different variables and takes the above conclusions. Based it, the following recommendations are given.

- Promoting the existing and potential customers regarding different types of saving.
- Balancing the rate of interest in line with the inflationary situations in the country. In the current period (2020) the inflation was growing at a rate of 21%- 22% but interest rate was at 9%.
- In addition to cash saving applying the saving of other luxurious materials and belongings through locker facilities.
- Minimizing bank concentration and applying perfect competitions.
- Improving service quality guarantying the satisfaction level of customers.
- Recognizing and applying advanced technologies in the financial sector.

- Promoting access to credit and other facilities, like overdraft facility.
- Increasing core banking activities through the financial institutions.
- Promoting international banking and accepting deposit from international financial institutions and customers using hard currencies.

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