



**ST. MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES**

**THE ROLE OF SOCIAL CAPITAL ON HOUSEHOLD SAVING MOBILIZATION  
IN ETHIOPIA**

**BY**

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**ST. MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
INSTITUTE OF AGRICULTURAL AND DEVELOPMENT STUDIES**

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**A Thesis Submitted to Institute of Agriculture and Development Studies,  
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**ADVISOR: SISAY DEBEBE(PhD)**

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## DECLARATION

I, the undersigned, declared that this thesis is my original work and has not been presented for any degree in any other university, and that all source of materials used for this thesis have been duly acknowledged.

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## ENDORSEMENT

This thesis has been submitted to St. Mary's University, school of Graduate Studies for examination with my approval as a university advisor.

Sisay Debebe (PhD)

Saint Mary's University, Advisor

June 14/ 2021

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As members of board of examining of the final MA thesis open defence, we certify that we have read and evaluated the thesis done by Shimeles Belaso under the title “THE ROLE OF SOCIAL CAPITAL ON HOUSHOLDS SAVING MOBILIZATION IN ETHIOPIA.” we recommend that this thesis was accepted as fulfilling the thesis requirement for the Degree of Master of Arts in Development Economics.

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## **ACRONYMS AND ABBREVIATIONS**

ASE	American Stock Exchange
CPI	Corruption Perception Index
CSA	Central Statistical Agency.
EU	European Unity
GDP	Gross Domestic Product
MoFED	Ministry of Finance and Economic Development
NATO	North Atlantic Treaty Organization
NGO	None Governmental Organizations
OAU	Organization for African Unity
OECD	Organization for Economic Cooperation and Development
SC	Social Capital
SNNPR	Sothern Nations, Nationalities and Peoples Region
US	United States
WVS	World Value Survey

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## ABSTRACT

*Saving is taken as an important variable in the theory of economic growth determining, both personal and national welfare. However, saving in Ethiopia is low and little is known empirically about its behaviour and factors affecting. This study aimed at investigating the role of social capital on households saving mobilization in Ethiopia. Secondary data obtained from Central Statistical Agency (CSA) survey was applied for the study. The survey included 3,830 national-level representative households that are selected from all regions of the country. Analysis were conducted using a combination of both descriptive and econometrics model. The result of Tobit regression model showed that education, ,total wealth index, household size, social networking, social trust, participation to edir and/or equb, participation to local association/mehaber were significant and had a positive influence on the status and extent of saving in Ethiopia. However, distance from banks and micro finances had negative effect on the status and extent of household saving. Therefore, it is recommended that the government and other concerned bodies need to deliver training for households so as to raise their level in social capital/ social relations and connections hand in hand with availing banks and microfinance at short possible distance so as to increase household saving.*

**Keywords:** *Status and extent of savings, social capital, Tobit model and Ethiopia*

# 1. INTRODUCTION

## 1.1. Background of the Study

Household savings are a crucial determinant of welfare in developing countries due to the absence of efficient credit and insurance markets. On the one hand, without savings, households have few other mechanisms to smooth out unexpected variations in their income, and so, shocks may leave permanent scars, such as interrupting the process of human capital accumulation at early ages. On the other, since savings are one of the only means to accumulate assets in the absence of credit and insurance markets, the capacity to save becomes one of the main vehicles of social mobility and of enhancing future income-earning possibility. According to Deaton (2005) and Rogg (2006), serious problem confronting poor countries including Ethiopia is savings and investment gap. So promoting savings at the household level is important for narrowing the gap and economic development.

The average gross saving rate as percentage of GDP of Ethiopia was 22.12% (MoFED 2019). Thus, saving is away to smooth income and to face shocks. Hence, a better understanding of households saving behaviour is important. Most saving researches done yet in developing countries in particular in Ethiopia are not considering social capital to affect saving. The concept of social capital as an important determinant of economic development is attracting increasing attention among development economists. The concept of economic development and its factors has changed overtime. In general, economic development lies in the increase in welfare, measured as GDP per capital and its growth rate. Broader concept includes also social aspects of development-poverty reduction, better education and health, more equal income distribution and others. In the long run, economic development should be sustainable, which means that today's developments could not compromise the capacity of future generations to satisfy their needs. Traditional determinants of economic growth and development include physical and natural capacity, technology and also human capital. However, the differences in the speed of economic development among countries with similar factor endowments and production technologies have called for introduction of new factors of economic development in the last decade of the 20th century. to sustainable economic growth and development. Since earlier theories did not take into account the relational and structural aspect of economic transactions, economists have recently focused on the contribution of social capital

Social capital refers to the trust, civic norms and networks that enable collective active and improve market performance by reducing transaction costs. But less is known about the role of social capital in facilitating household savings behaviour. Due to this fact, this study attempted to analyze the role of social capital on household saving mobilization in Ethiopia.

## **1.2. Statement of the problem**

Saving is a very important component responsible for fighting any emergency accumulated by the individuals or the households or any corporate agencies. Households delay current consumption with saving, or future consumption, in response to economic incentive captured by future consumption relative to current consumption. Consumption practice formation and its resistance for change might have an important role in the process. Using recent econometric techniques, Kulikov, *et al.* (2007) identified how household characteristics affect saving behaviour. One of the area towards which public policies have been directed is improving the private saving rate of the economy. Investment would be financed from current or future saving of a national economy coupled with the imperfect international mobility of capital in general and to developing countries in particular, implies that improving Private saving rate is an important policy target. The saving level in Ethiopia is extremely low and less is known empirically about its behaviour and determinants (Teshome, Kassa e t al., 2013). The average gross saving rate as percentage of GDP of Ethiopia is 22.12% (MoFED 2019).The gaps of the previous was that it did not consider the status and extent of saving simultaneously. The other frequent gap was mostly considered Ordinary Least Square. The other most important gap was that studies not seen social capital as a factor for saving in Ethiopia. Tobit model (Maddala and Lahiri 1992, Grogan-Kaylor, Ruffolo et al. 2008, Gujarati 2009) was employed. Very importantly, concept of social capital as an important determinant of saving was now intended to study in my research. The concept of economic development and its factors has changed overtime. In general, economic development lies in the increase in welfare, measured as GDP per capital and its growth rate. This is the only study conducted in my knowledge considering the effect of social capital on house hold saving in Ethiopia.

Social capital refers to the social relationship and trust, civic norms and networks that enable collective action and improve market performance by reducing transaction costs

(Narayan and Pritchett, 1997). But less is known about the role of social capital in facilitating household savings behaviour. To this end, previous studies such as Tsege and Yemane(2014) only analyzed determinants focusing on socio-economic, institutional and demographic variables . Due to this fact, this study attempted to analyze the role of social capital on household saving mobilization in Ethiopia. Moreover, Tobit model is selected because saving tends to be censored at a lower limit of zero (Maddala and Lahiri 1992, Grogan-Kaylor, Ruffolo et al. 2008, Gujarati 2009). To explain this model, researchers continue without saving behavior of households. In the Tobit model, my interest was to find out the role of social capital on household saving. Both the status and extent of savings were analysed the sum a household keeps on saving in relation to different factors. So aiming at increasing the household saving level in Ethiopia and filling the previous research gaps and also to lay base for other upcoming researchers were the igniting fire of my study.

### **1.3 Objective of the Study**

The main objective of this study is to analyse the effect of social capital role to household saving in Ethiopia.

The specific objectives of the study are:

- To measure the status and extent of household saving;
- To describe the demographic, socio-economic, institution and social capital across and its role to household saving; and
- To identify the role of social capital and other factors in influencing household saving in Ethiopia.

### **1.3 Research Question**

This study sought to see weather social capital has effect on household saving in Ethiopia besides other known factors affecting saving in economics theories. The main research questions are:

- Do demographic, socio economic, institution and social capital affect the status and extent of saving in Ethiopia?
- Do social capital of household head affected status and extent of saving in Ethiopia?

### **1.5 Significance of the Study**

The economic factors affecting household savings are clear. But studies are not made on whether social capital has effect on household saving or not. Therefore, this study aimed to are stated below in detail:.

The study has different practical significance for different people. But some specific significance of the study are the followings for different people: For individuals, groups and communities, its finding will lead them to correct the building up of social capital with others. For researchers, since this study is the first study, aiming the effect of social capital on household saving in Ethiopia, it will serve as a reference material for further research. For policy makers, its findings may influence development policy makers to consider the role of social capital in enhancing the household saving in Ethiopia besides other factors stated in economic theories.

### **1.6 Scope and Limitation of the Study**

The geographic scope of this study was that it was undertaken at national level. Despite the fact that there are various factors that determine household saving, its focus was on the role of social capital on household saving in Ethiopia in addition to some socio-economic, demographic and institutional factors. Regarding the limitation of the study, since the paper considering social capital as a factor for household saving in Ethiopia at any level is new, it faced absence of related literatures. Time was the limiting factor since I am currently working as a civil servant to cover the living costs of me, my family and who ever need and expect my hands.

### **1.7. Organization of thesis**

The study was organized into five chapters; The first chapter deals with the introduction having back ground of the study, statement of the problem, objective of the study, research question, scope and limitation of the study and significance of the study. The second part of the paper was about the theoretical and empirical literature including basic concepts and definitions of social capital, roots of the social capital, views of social capital scope and dimensions of social capital and indicators of social capital

The third chapter consists of the research methodology part that introduces data type and source, sampling design, method of data analysis and econometric model specification.



Chapter 4 contains the descriptive and econometric analysis on the role of social capital and other demographic, institutional and socio-economic factors of household saving. The last Chapter is about conclusion and recommendations of the study.

## 2. LITERATURE REVIEW

### 2.1 Theoretical Literature

#### 2.1.1 Definition and concepts of Social Capital

In colloquial speech, the aphorism “It’s not *what* you know, it’s *who* you know”, sums up the traditional interpretation of social capital. It is common wisdom of all times that when it comes to getting a job, arranging housing or making a business deal, having well placed contacts indubitably helps. In hard times, our family and friends represent our safety net, our lender of last resort or our security cordon. Other norms and values exist, distinct from rationality, which is supposed to be our principal driving force according to conventional economics. And these norms overcome the weaknesses of pure self-interest, by providing an incentive to reach a cooperative social out come. What can be labelled nepotism by some or a substitute for a dysfunctional public safety net by others, is in fact a combination of those social interactions that allow us to get by and get ahead. Hence social capital, like all forms of capital, is not unconditionally beneficial or detrimental, but it can certainly contribute to expanding people’s capabilities and must be considered in light of this significant attribute (Narayan and Pritchett, 1997).

Development theory has been back and forth about the causes of the differences in development levels across individuals, communities, countries and regions. Why do countries grow at different speeds? Why do some maintain high levels of infant mortality and low literacy rates? After conceding that endowments in material resources did not manage to explain these variances, the concept of human capital was admitted into the arena of economic thought. The key role of knowledge and competence in development has been unanimously recognised and incorporated into developmental models. The education level of women relates closely to infant mortality rates, just as a high-skilled labour force translates into higher economic performance (George, 2001). However, human capital approach, considerable unaccountable differences persisted. Social capital emerged as a phenomenon that could further explain these macro and micro differences in economic as well as social achievements. Social capital can also be perceived as, at least, a part of the parameters of

other forms of capital, since it is likely to affect the productivity of the latter under certain conditions (Grootaert and Van Basterlaer, 2002).

Parents who help their children with their homework and inculcate education as a valuable achievement, are responsible for higher human capital levels, for example. Given the multi-faceted nature of social capital, it is vital that we define what we mean by it, what its causes are, how we think it could affect equitable human development and how it can be measured, before proceeding to the research (Smith, 2004).

#### ***2.1.1.1 Roots of social capital of various definitions***

The spirit of social capital, as it is currently understood, can be traced back to the work of several 19th century political philosophers, such as Tocqueville, Marx, Durkheim, Weber, Marshall and Dewey. Alexis de Tocqueville is often cited in this context for his theory expounding the political function of social capital in a modern society. In his eminent *Democracy in America* (1840), the “patron saints of contemporary social capitalists” (as Putnam refers to him) demonstrated how modern democracy destroys social class and inherited status to a great extent, leaving men equally free, but weak due to the absence of conventional bonds. The resulting vice of modern democracy to encourage excessive individualism was combated in America by a high propensity for voluntary civil association, also referred to as the “art of association”.

In other words, the unwillingness to get involved in public affairs, inherent to modern democracy, was redirected toward the establishment of an active civil society. Tocqueville attributed an important role to the latter in the development of trust and cooperation, necessary components of a flourishing society. The concept of social capital, without the term, is further to be found in the writings of Hume, Smith and Mill on the function of civil society in capitalism. Marx referred to social capital as we know it today, when he magnified the absence of “manifold relations” between the French peasants in the nineteenth century as the cause for their inability to overthrow capitalism. The absence of networks had thus prevented collective action, implying that its existence could have transformed history.

Social capital was to be understood as a function of human work and cooperative associations, based on the principle of solidarity, and not on commodities fetishism. In general, the term ‘social capital’ emerged in the 19th century, at a time when classical

political economy was being challenged on many fronts and when an alternative approach was being sought to the dominating capitalist one. Social capital came to be considered rather broadly as “capital from the social point of view” (Farr, 2003) as opposed to the rational individual capitalistic point of view. Therefore in essence, social capital materialised following dialectic logic, as the anti-thesis of economic capital, just as the human development approach emerged as the anti-thesis of the economic development and growth doctrine.

Another early social capitalist, Emile Durkheim (1858-1917), one of the founders of modern sociology, analysed different societies through their networks and roles. In his opinion, social and economic conventions were held together by social networks, which varied greatly due to the division of labour. In tribal societies, shared experience was the glue of social life, whereas in industrial societies, interdependence was (Dobbin, 2004). Durkheim regarded modernisation as the transformation from collective consciousness and shared norms based on common experience to individual consciousness and “organic” solidarity based on interdependence. Durkheim focused on this rapid transformation and the resulting breakdown of those social norms regulating society. Network theorists and social capitalists built on Durkheim’s concept of norms and networks as societal glue. Clearly, social capital appears to be an early notion in the history of social sciences (Platteau 2000; Woolcock, 2000).

Finally, the fact that social relationships can also produce negative externalities has generally been acknowledged. In this paper, I have chosen to appropriate the definition suggested by the OECD, according to which social capital is “networks together with shared norms, values and understandings that facilitate co-operation within or among groups” (OECD, 2001). In line with the World Bank’s Social Capital Initiative’s definition, we include those features of both civil society and government that facilitate collective action. In order to clarify this stance, we will present the related dimensions, scope, forms and channels of social capital.

### **2.1.2 Dimensions of Social Capital**

There are three basic dimensions of social capital to speak of: bonding, binding and linking social capital (Woolcock and Narayan, 2000). *Social bonds* are those homogenous networks between family members and ethnic groups, based on trust and reciprocity. This kind of social capital is typically leveraged to “get by” in life on a daily basis and is considered to enhance a strong sense of identity and common purpose. *Bridging* social capital refers to

social relationships with somewhat distant friends and colleagues, that is used to “get ahead” as it transcends social divides, such as ethnicity, socioeconomic status or economic activity. Such social capital allows for overlaps between networks and increases the accessibility of respective resources to members of each network.

Therefore it can be said that heterogeneity of networks enhances the bridging capability of social capital. The different combinations of bonding and bridging capital can account for the range of outcomes and, interestingly, the optimal combination changes over time, incorporating the dynamic characteristic of social capital. Finally, *linking* social capital refers to relations with upper levels of administration or authority. Linking can be understood as the capacity of individuals and communities to accrue resources and information from formal institutions.

One must realise that although bonding social capital can promote trust and entail positive externalities, a restrictive trust in a closed, exclusive network can be too intent on pursuing narrow interests and thus less beneficial for cooperation on a broader community level. Homogenous groups can foster high trust and cooperation within the group, but low cooperation with the rest of society (Portes and Landholt, 1996). This can have serious consequences when one group is founded on perverse values and aims at excluding certain members of society, such as the Mafia in Italy, the Interahamwe in Rwanda, the Ku Klux Klan in the U.S or Al-Qaida. By focusing exclusively on group interests to the detriment of public interests, such networks can promote destructive rent-seeking activities (Olson, 1982). In this sense, social capital, like all other forms of capital, can serve different purposes, some of which are socially regrettable. Nevertheless, the benefits of bonding and bridging capital definitely outweigh the costs (OECD,2001).

### **2.1. 3 Scope of social capital**

The unit of observation of social capital starts at the micro-level and has been expanded to the macro-level (Grootaert and van Basterlaer, 2002). The political researcher, Putnam, began with a *micro-analysis of horizontal associations* in Italy, proving that various types of associations and civic traditions had a considerable impact on the implementation of administrative reforms and thereby on economic and political performances. This focus on networks of individuals or households had already been expanded to relations among groups, in Coleman’s work (1990). The latter introduced a vertical component to social capital,

allowing for a *meso* interpretation. *Vertical associations* become an integral part of the concept, with their unequal power distribution and hierarchical structure.

The behaviour within and among entities gains importance, including unconventional entities such as firms. Finally, the *macro-approach* to social capital incorporates the *social and political environments* and their capability to mould, encourage and develop certain social structures and civic norms.

Formal institutions and structures are included, such as political stability, the rule of law, civil liberties, control of corruption... The New Institutional Economics, represented by Douglass North (1990) and Mancur Olson, becomes an integral part of the notion of social capital and more precisely of government social capital. Paul Collier's (in Grootaert and Van Bastelaer, 2002) disaggregating into government and civil social capital is justified by the inherent differences between the two. The government is a hierarchical non-market organisation and the most dominant organisation at that, with the legitimate power of coercion. Civil society is not directly dependent on the government, but directly influences social interaction, as well. Civil social capital excludes the organisation of government, as well as the internal organisation of firms and households, but includes interactions among households, among firms, and between households and firms. The different scopes of social capital are hardly mutually exclusive, in fact they are highly complementary and it is by considering them in their entirety that the impact of social capital can be optimised. There is also a certain degree of substitutability, which will be discussed below, according to which a macro-institution, for example, can substitute for a micro-association aimed at ensuring the rule of law. Similarly, in times of instability and government failure, horizontal associations can provide security. Given the complementary and substituting characteristics of the different scopes of social capital, in this paper we take all levels into account; the household, the community and the nation.

#### **2.1.4 Forms of social capital**

There are two categories of social capital: *structural* and *cognitive* (Krishna and Shrader, 2000, Structural social capital encompasses the rules, procedures and precedents that shape social networks and roles. This form of social capital facilitates mutually beneficial collective action. Cognitive social capital on the other hand, refers to shared norms, values and beliefs that predispose people toward such action. The former is relatively objective and includes

visible elements, whereas the latter is rather subjective and internal as it influences people's thoughts and feelings. Both determine and affect social interactions and expectations. Take the example used by Krishna and Shrader (2000); someone's house burns down at night. The next day the neighbourhood comes to help the family rebuild it.

This type of collective behaviour is to be found in diverse communities all over the world. But this action can be based either on structural entities or cognitive norms and values. In the first case, the community association utilises strong leadership to achieve this collective action. In the second case, no such structural capital is present and the neighbours' personal norms drive this cooperative behaviour. Obviously these two forms of social capital are not necessarily substitutes, they can also be complementary, since the rules, roles and networks governing the community tend to reflect its values and social norms. Therefore, both cognitive and structural social capital must be considered if one aims to evaluate the potential of collective action as a whole.

## **2.1.5 Views on Social capital and Development**

### ***2.1.5.1 Communitarian view***

*This* view perceives social capital as the number and density of local organisations, such as clubs, associations and civic groups. Their sheer quantity and presence are expected to involve development qualities and improve the community's well being. The focus has been on the effect of these organisations of collective action on poverty and assisting the poor to manage risk and vulnerability. Indeed, it is claimed that communities with extensive social networks and organisations and thereby a large stock of social capital, are better equipped to deal with poverty and vulnerability (Moser, 1996; Narayan, 1995), conflicts (Varshney, 2000) and new opportunities. Similarly, lacking social capital is a characteristic of being poor and can be seen as a lack of capabilities.

The poor are typically excluded from bridging and linking social capital, which contributes to keeping them where they are. On the other hand, bonding social capital in the sense of social ties and solidarity networks is usually relatively large in poorer communities, prompting Dordick's (1997) statement that the poor have "something left to lose", i.e. each other. The communitarian view is certainly relevant in the poverty discussion for taking local 'protectional' and 'promotional' initiatives into account. Protectoral factors of development

being those that stimulate labour market dynamism and productivity gains, and promotional factors being those that enable poor households to develop asset-building strategies against risk and shock (Mosley, 2004). However, this restrictive approach to the role of social capital in development has two limitations; first it neglects the meso and macro scopes of social capital, and second it does not distinguish good from bad social capital.

Putnam's initial perspective of social capital in Italy fits this view, since it focused on horizontal associations and considered them as indubitably good. Empirically however, this hypothesis is rejected since associational activity cannot invariably be coupled with development, prosperity or stability. In 1989, Rwanda had more than 3,000 registered cooperatives and farmer groups as well as 30,000 informal groups, according to a World Bank report. This did not prevent the subsequent genocide. Also, the wealth of social capital, thus defined, in Haiti (White and Smucker, 1998) and Kenya (Narayan and Nyamwaya, 1996) has not led to significant improvements in welfare or well being.

As mentioned above, certain associations can generate large negative externalities for society when they subsist on crime, corruption and discrimination. It is further assumed by the communitarians that communities tend to be homogenous and collective action therefore benefits all its members. Or in other words, the benefits of social capital are expected to be neutrally distributed. Clearly, the evidence on inequality and ethnic exclusion, as well as on perverse social capital that generates excessive costs on certain groups due to detrimental community expectations, proves the opposite. To summarise, the communitarian view equates bonding social capital in the form of associational activity to risk managing and resource sharing and thereby to poverty reduction. This development is not viewed as potentially harmful in terms of inequality.

#### ***2.1.5.2 Networks view***

The main difference between this view and the communitarian one is the inclusion of vertical networks and the recognition of 'perverse' social capital (Rubio, 1997). Based on Granovetter's (1973) work, the network view acknowledges the importance of both bonding and bridging social capital, respectively representing horizontal and vertical associations as well as the networks within and between organisational entities, like community groups and firms. The networks view displays a more nuanced approach to social capital, since it



recognises its virtues and vices as integral parts of the concept. Indeed, network theorists (Burt, Fafchamps, Minten, Massey, Espinosa, Portes, Sensenbrenner) rely on two propositions, the first being this ‘double-edged sword’ nature of social capital.

Social networks can provide valuable services and resources, but they can also place non-economic claims on individuals in the form of community obligations or group loyalties that can have negative economic and social effects for the individual in question.

The second proposition is the one made by Glaeser, Bertin and Sirven in their will to separate the sources of social capital from its effects. By concentrating on the positive consequences of social capital (such as trust) the possibility that these outcomes came at the expense of other groups (present and future) or that they may be sub-optimal is neglected. Interestingly, the networks view strongly distinguishes between intra-community ties (bonding social capital) and extra-community networks (bridging social capital) in order to account for the different possible outcomes of social capital. As Woolcock and Narayan (2000) deduce, without either, a group is an outcast, and with a high degree of both the members of the community are potentially successful members of micro finance programs.

In conclusion and in line with the networks’ view two-faced coin approach, social capital can have developmental attributes as well as regressive ones. Bonding social capital has potential in reducing poverty and expanding people’s freedoms, under certain conditions of integrity. However, it is of fundamental importance that social capital be diversified to include bridging social capital and allow the poor to access formal institutions to ‘get ahead’.

#### ***2.1.5.3. Institutional view***

The institutional view considers social capital as a dependent variable, that is the outcome of the legal, political and institutional environment. Whereas the former views treat social capital as an independent variable that enables economic development, the institutional view claims that social capabilities enabling collective action are the result of formal institutions (North, 1990). Hence social capital becomes an intermediate variable, resulting from institutions and leading to economic development. The credibility, competence and external accountability of institutions, by which we mean governments and firms, are significant factors of this institutional capital, closely linked to government social capital. Woolcock and Narayan (2000) distinguish between two variants of this approach. Firstly, a number of

studies argue that civil society flourishes where it is actively promoted by the state and not, as some have claimed, to substitute for a retreating government. Skocpol (1996) and Tandler (1997) can be mentioned for their comparative historical analyses of this process. The second variant, of growing importance, is based on quantitative cross-country studies observing the relationship between macro-level, institutional factors on economic growth (Knack and Keefer, 1997). Social capital is thus perceived as institutional quality and uses a broad range of indicators, including trust, the rule of law, civil liberties, bureaucratic quality and the control of corruption.

Empirical evidence makes strong claims on the influence of institutional elements on social capital and thereby on economic performance. Widespread corruption, bureaucratic inefficiency, high inequality, human and civil rights violations and ethnic tensions hamper human and economic development. Furthermore, the World Bank (1998) has reported on the significance of these impediments on development projects. Indeed, institutional failure predisposes development projects to failure, meaning that institutional (government and civil) social capital represents a fundamental form of capital, accounting for effective investment. The weakness of this approach is that it largely ignores the micro-dimension of social capital, which is after all embodied by social interactions between people and groups.

#### ***2.1.5.4. Synergy view***

The last view elucidated by Woolcock and Narayan also represents the latter's comprehensive perspective of social capital. As its name implies, the synergy view merges the three aforementioned views into a composite concept. The empirical basis of this view can be found in the World Bank's World Development Report (1996) in which the case is made for alliances and partnerships between the state and various stakeholders, including civil society. Three main conclusions are made in the report that summarise the stance of the synergists quite adequately. First of all, the two-sided nature of social capital is acknowledged as well as the variable effect of societal organisations (governments, firms and civic groups). Secondly, sustainable development involves all actors at all levels of society to collaborate and these partnerships should be promoted. Thirdly, the fundamental role of the state is recognised as the most important for development in providing public goods, arbitrating and enforcing the rule of law and in encouraging alliances between groups.

The much-acclaimed collaboration between state and civic action relies on their complementarity and embeddedness (Evans, 1996). Public actors have to be embedded or rooted in the community and the actions of both players have to be mutually supportive for such partnerships to reap the desired benefits. In acquiescence of the institutional view, the synergy view maintains the complementarity characteristic of the relationship between state and civil social capital. Nevertheless, certain manifestations of social capital do reveal a substitution mechanism, such as mafia type groups that emerge to enforce property rights and security in the absence of public dispositions.

Narayan (1999) depicts the different scenarios obtained for the various combinations of government functioning and the level of bridging social capital, subcategorised according to their complementary or substitutive roles. As can be seen in Figure 2.5, in well-functioning states with high levels of bonding social capital, or extra-community networks, social and economic well-being are achieved. In the opposite case, conflict breaks out and state authority is typically replaced by warlords, the mafia or guerrillas (as was the case in Rwanda). Certain states manage to function relatively well despite low levels of bridging capital that usually translate a high degree of inequality and exclusion. Latin American countries embody this situation where the ruling power group excludes majority indigenous groups, signifying latent conflict. The last scenario is that of a dysfunctional state and a society with widespread extra-community networks. In such societies, social capital substitutes for poor government quality by enhancing a coping mechanism by which individuals and communities establish informal systems to provide needed services. In Benin and Togo for example, women created revolving credit groups, because they were not granted access to official credit. In Tanzania, villagers implemented their own security system to replace non-existing police protection (Narayan, 2000)

By referring to complementarity and substitution as inherent characteristics of social capital, synergy theorists imply that the latter reduces conflict, increases stability and enables long-term development by counteracting state failures or by complementing state action. Synergy involves all members of society and their organisations in the development process, which is both top-bottom and bottom-up. Indeed, institutions shape and enable grassroots activities and social interactions. Development is needed in both directions and social capital, defined broadly, supports both. Complementary action between institutional social capital and civil society is the optimal development strategy.

### **2.1.6. Social Capital Indicators**

Social capital has received considerable criticism on account of its broad and seemingly all encompassing definition, which makes it difficult to measure. The very fact that different researches measure social capital in different and, to some, inconsistent ways has further spurred critique. Due to its sheer breadth and the fact that it is a multifaceted phenomenon, it does not seem like social capital can be measured by one single measure that would incorporate all its dimensions, forms and mechanisms.

We can refer to the ‘Vitamin model’ (Halpern 2005), according to which a healthy community, like a healthy individual, needs a mixture of vitamins (social capital) to function effectively. By equating the vitamins to types of social capital, it becomes clear that the multidimensional nature of the concept cannot and indeed should not be neglected. Moreover, this concept is truly cross-disciplinary, bringing together political scientists, economists, psychologists, sociologists and pedagogues, making it even more complicated to reach a common definition or measure. Additionally, the complexity of the notion is exacerbated by its intangible nature. Indeed, reciprocity, civic norms and values, bonding, bridging and linking social capital are difficult, if not impossible, to adequately quantify. Despite these inherent problems of measurability, a number of indicators have emerged from the body of research that appear to satisfy the conditions of a ‘good measure’, i.e. reliability, surface validity, criterion-related validity and predictive validity (Halpern 2005). We will deal with a number of them that we decided to include in this research.

#### **2.1.6.1. World Values Survey (WVS)**

The last wave of the World Values Surveys (2000-2001) published survey data for thousands of respondents in 80 countries worldwide, sampling for countries containing more than 80% of the world’s population (Inglehart 2003). Pioneered by the renowned sociologist Ronald Inglehart, these surveys provide a useful start for measuring different types of social capital and aggregating the individual data in order to determine a country-level indicator. The limitations of these indicators and this methodology include translation problems, sampling errors as well as response bias (Knack and Keefer, 1997), but these surveys contain the most data for the most countries to date and as Solow states, if social capital is to become more than just another buzzword it “should somehow be measurable, even inexactly” (quoted in Knack and Keefer, 1997). Nevertheless, as Knack and Keefer have shown much of the data that tends to be translated into a social capital proxy is consistent with data from independent sources, making it reliable and valid. The specific survey questions we have focused on in

this research are based on Van Schaik's (2002) four-dimensional measurement model, encompassing interpersonal trust, institutional trust, participation in civil society and the trustworthiness of the respondent.

#### ***2.1.6.2 Interpersonal Trust***

Interpersonal trust refers to the extent to which people trust others. The following WVS question is a much used proxy for this form of social capital: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The aggregate national trust indicator is thus the percent of respondents that answer, "Most people can be trusted". This measure for social trust appears to be a valid one, reflecting the level of generalised trust in a society. Fukuyama (1995) emphasises the significance of interpersonal trust for enabling quality social relationships as well as for promoting economic performance in the sense that with mutual trust, transaction costs are low making the economy more efficient. Coleman and Putnam can definitely be said to adhere to this perception, especially if one invokes the notion of generalised reciprocity as the equivalent of mutual trust. Indeed, a person does something for another in the expectation of getting something in return from that person in the future, as was already suggested in the entitlement approach.

#### ***2.1.6.3. Institutional Trust***

Paxton (1999) suggests the inclusion of institutional trust as a social capital measure. The question asked on this issue in the WVS reads as follows: "how much confidence do you have in [these organisations]: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" The organisations and institutions named are the church, the armed forces, the education system, the press, the television, major companies, trade unions, the police, the parliament, the civil service, the social security system, the health care system, the justice system, the women's movement, the environmental protection movement and the United Nations Organisation. A number of region-specific organisations are also included (e.g. the European Union, NATO, the Arab League, ASE, OAU, Mercosur, etc.). The average percentage of respondents that answered "a great deal of confidence" or "quite a lot of confidence" for each institution is then averaged to give one indicator of institutional trust. Given the variable nature of the different institutions we have further decomposed institutional trust into government trust (averaging confidence in governmental institutions) and civil trust (averaging confidence in non-governmental institutions ). The media as well as companies have been included in this last indicator.

#### ***2.1.6.4 Participation in Civil society***

Van Schaik's third dimension is participation in civil society, which can be either engagement in informal networks or engagement in formal networks. The former refers to sociability and being socially active in the form of spending time with different relations. The WVS question touching on this informal connectedness asks respondents how often they spend time with friends; colleagues or professional associates; people at their church, mosque or synagogue; people in clubs and voluntary associations.

There are four possible answers: every week; once or twice a month; a few times a year; not at all. The average percentage of respondents that answered "every week" or "once or twice a month" for each social group is then averaged to give one indicator of informal participation. This is expected to reflect the density of social interactions and thereby translate how much people can rely on their social networks. Formal participation, on the other hand, accounts for a person's formal networks. A measure that has been widely used to represent this dimension of social capital is that of associational activity, represented by the number of associations a person is active in. Putnam introduced this indicator to reflect the intensity of horizontal interaction, which he believed to be an essential form of social capital with merits in creating trust and norms of cooperation that can impact community productivity and well-being. Initially, Putnam did not detect any negative externalities related to horizontal networks and systematically associated such networks with a trust-enhancing mechanism that would benefit society as a whole.

As discussed earlier, this is quite a mistake, since such networks can be the design of tightly knit groups that want to exclude others and proceed to rent-seeking activities (Olson 1982). In order to distinguish between 'good' and 'bad' formal participation, we have followed Knack and Keefer's (1997) separation of 'Putnam-esque' and 'Olsonian' associations. The voluntary organisations and activities mentioned in the WVS are social welfare services; religious organisations; education, arts, music or cultural activities; trade unions; political parties or groups; local community action; third world development or human rights; conservation and the environment; professional associations; youth work; sports or recreation; women's groups; peace movement; consumer groups; voluntary organisations concerned with health and 'other' groups. The average number of groups a person is a member of, becomes our formal participation (or groups) variable. In accordance with Knack and Keefer, we have included trade unions, political parties and professional associations

under Olson groups, to form an Olson variable. A concomitant Putnam group has been calculated encompassing participation in religious organisations, cultural groups and youth work. Such measures of associational activity must be treated with caution for the additional reason that they do not deal with the level of involvement of the respondent, or his/her active versus passive membership in a group.

#### ***2.1.6.5 Trustworthiness***

Trustworthiness is the fourth dimension in Van Schaik's model and can also be referred to as norms of reciprocity. These civic norms of cooperation can be estimated by aggregating respondents' "own stated willingness to cooperate when faced with a collective action problem in prisoner's dilemma settings" (Knack and Keefer 1997). Interpersonal trust represented trust in anonymous others, trustworthiness reflects trust others can have in the respondent and therefore to what extent the respondent is willing to place others' interests above his own in the name of civic norms and values. These norms of reciprocity can be tapped from the questions in the WVS on the justifiability of the following behaviours: 'claiming government/state benefits to which you have no rights', 'avoiding fare on public transport', 'cheating on taxes if you have a chance', 'someone accepting a bribe in the course of his/her duties', 'buying stolen goods'. These do not fully correspond to the behaviours used by Van Schaik since his work focused on the European Values Surveys, which contain a number of questions that the WVS do not and vice versa. Each respondent had a range of possible answers from 1 to 10, 1 being that such behaviours are 'never justifiable' and 10 being 'always justifiable'. The average of the respondents aggregated answers produces the opposite of the trustworthiness indicator, which has a minimum of 4 and a maximum of 50. The higher the value, the less trustworthy the average citizen is.

#### **2.1.6.6 Institutional Capital**

The definition of institutions proposed by North (1986) and adopted by the New Institutional Economist seems appropriate and stipulates that institutions are the rules that guide how people within societies live, work and interact with one another. Two types of institutions exist: formal institutions, which include written or codified rules enforced by the government, and informal institutions, which are composed of social and behavioural norms enforced by society. Institutional social capital therefore materialises in two ways: on the one hand it encapsulates the norms and values of society promoting cooperative action, and on the other

it comprises the quality of formal institutions in terms of competence and respect of freedoms. We measure both dimensions in our research.

#### ***2.1.6.7 Values and Norms enabling collective action***

In addition to Van Schaik's measurement model, we have chosen to include a so-called values and norms variable, suggested by Guido Tabellini (2005). Tabellini begins with the influential paper by Acemoglu, Johnson and Robinson (2001) that demonstrates a robust correlation between colonial origins and economic performance through the intermediary of institutions shaped by colonial heritage. Since institutions tends to mean many things, Tabellini focuses on the view, also expressed by Glaeser *et al.* (2004), that culture is an essential channel through which history maintains its influence. Whereas Glaeser *et al.* confined their definition of culture to measures of educational attainment; Tabellini seeks to evaluate the effects of certain cultural traits, thought to be conducive to economic and institutional development, in what seems to be a Weberian frame of mind. In Tabellini's culture variable we see an amalgam of values and norms that are conducive to collective action and thus represent the cognitive dimension of social capital.

Tabellini selects four questions from the WVS to estimate individual values and beliefs for his 'culture' variable, based on an extensive sociological literature in this field (Platteau, 2000). The three cultural features promoting economic development are trust, respect for others and the conviction that individual efforts will pay off. A last trait is invoked to translate the potentially negative effect of an excessively hierarchical society where nothing good is expected to come out of individualism, stifling innovation and potentially the expansion of capabilities. The *trust* feature is measured by the WVS "Generally speaking" question and promotes cooperative behaviour, as elucidated above.

The conviction of one's control over one's life is tapped from the WVS question: "Some people feel they have completely free choice and control over their lives, while other people feel that what we do has no real effect on what happens to them. Please use this scale (from 1 to 10) where 1 means "none at all" and 10 means "a great deal" to indicate how much freedom of choice and control in life you have over the way your life turns out". The *control* variable is the average response in each country multiplied by ten. The use of this indicator as a means to collective action can be motivated by the simple reason that if one does not feel



one can influence one's future, then the stimulus to engage in collective action to achieve a certain end is bound to be limited.

#### ***2.1.6.8 Government social capital***

Public governance can reinforce social capital by providing a reliable institutional basis and promoting accountability and transparency. A competent government contributes to higher generalised trust, provides cooperation incentives and can actively complement civil social capital. Human development can be affected through several other channels, besides the social capital channel. By improving government effectiveness and regulatory quality, government social capital decreases transaction costs and increases productivity in all sectors. Besides the income channel, government competence affects development through the human capital channel given increased effectiveness in the social sectors (health and education).

The measures of government social capital were found in Kaufmann *et al.* (2002), in which the authors present six cluster indicators of governance for 175 countries in 2000-2001. The authors rely on 194 different measures drawn from 17 sources of subjective governance data, from 15 organisations. These sources are international organisations, non-governmental organisations, think tanks as well as political and business risk rating agencies. They are based on both polls of experts and surveys of citizens and business people. Five of the six relate to government social capital as defined here and one is included under civil freedoms (see below). *Government effectiveness* combines perceived quality of public service provision, the quality of bureaucracy, the competence of civil servants, public commitment to policies and the independence of civil service from political pressures.<sup>12</sup> *Control of corruption* is based on perceived corruption. Another measure we have tapped to account for corruption levels is Transparency International's respected Corruption Perception Index (*CPI*) for 1999-2001 (depending on data availability for different countries), based on surveys.

The higher the CPI the lower the perceived corruption. *Regulatory quality* relies on policy evaluations and includes measures on market-unfriendly policies as well as the perceived burden of excessive regulation. The Rule of law indicator refers to the extent to which rules are thought to be abided by and enforced, based on the perceptions of the incidence of crime, contract enforceability and the perceived effectiveness of the judiciary system. *Political stability* is considered to be government social capital because it is an integral characteristic

of the institutional environment and can reduce uncertainty as well as increase future expectations.

This variable includes measures of perceived government continuity, as opposed to the likelihood of it being overthrown or destabilised by exogenous forces. The choice of units are such that the indicators range approximately from -2.5 to 2.5, have a mean of 0 and a standard deviation of 1. For each of the Kaufmann et al. variables, a higher value implies better governance and thereby a wealth in government social capital

#### **2.1.6.9 Civil freedoms**

If, as claimed by the institutional view, collective action depends on underlying institutional factors, clearly the respect of individual rights has a decisive role to play. It is by ensuring civil, political and human rights that governments obtain credibility and can thereby encourage people to strengthen social networks and civic norms for the benefit of society as a whole. By violating these rights, the state loses legitimacy, creates instability, exacerbates poverty (since the poor are typically victims), disturbs social order and cohesion and evidently limits people's choices instead of expanding them. By respecting these rights, the state is acknowledging and enabling human agency, which further encourages the emergence of an active civil society to participate in the formulation of norms and to lobby for valuable capabilities.

This civil freedom is estimated by a number of measures of which we have retained three from non-governmental sources and one from Kaufmann et al. *Voice and Accountability*, from the latter, measures the extent to which citizens can participate in the political arena and the degree of independence of the media and thereby their ability to challenge as well as hold governments accountable. Freedom house proposes two measures of freedoms entitled *Civil liberties* and *Political rights*. Both indicators range from 1 to 7, where higher values represent less freedoms of each. The values are determined by the team of experts within Freedom House that fill-in a checklist for each country. Civil liberties relates to questions on freedom of belief and expression, association and organisational rights, the rule of law with respect to human rights, personal autonomy and economic rights. Political rights takes the democratic process into account, whether citizens choose their leaders and whether this is done in a fair and equal manner. So we could say that civil liberties refers to the freedom and development of civil society, while political rights evaluates the democratic atmosphere.

The Observer's reported *Human Rights Index* ranks countries based on their violations of human rights. Again, a higher value reveals more abuses. The range is between 0 and 24. This index is calculated on the basis of the intensity of ten types of violations: extra-judicial executions, disappearances, torture, deaths in custody, prisoners of conscience, unfair trials, detentions without charge or trial, executions, death sentences and abuses by armed opposition groups. The latter are compiled from Amnesty International Reports and US State Department Country Reports on Human Rights, both for 1999.

Criticism has surfaced in relation to the excessive reliance on the aggregation of micro-level data to deduce macro-level relationships (Fine, 2000; Harriss and De Renzio, 1997). Furthermore, social capitalists have been accused of leaping to grand conclusions based on limited causal evidence. It is undeniable that social capital measures tend to be characterised by subjective data and a strong assumption of sample representativeness. These indicators must be treated with caution and causal relationships should be acknowledged in their role for development guidance rather than as non-falsifiable truisms. Nevertheless, robust relationships have been established using a number of these social capital indicators, and hence we consider it to be a reasonable indication of their validity and reliability.

## **2.2 Empirical Literature Review**

Formal financial institutions that were engaged in saving and credit/loan service deliveries for both rural and urban communities include private and government banks and Micro Finance Institutions. Such institutions are formal in that they possess modern accounting and reporting systems that could help evaluate their performances every time. The banks have been considered as main type of formal institutions that have involved in saving mobilization in Africa. However, the main problems of such institutions to handle the poorer households' saving needs and mobilizing issues particularly that of the poor in rural areas of developing countries is constrained by limited access to the rural poor, lack of trust due to awareness problems by households and inadequacy of formal institutions (Birhanu, 2015)

According to Egwu and Nwibo (2014) rural women in sub-Saharan Africa found it difficult to increase their agricultural production and processing due to the lack of collateral to obtain fund from financial institutions to expand production as household property and security

belong to the man who invariably are regarded as the head of the household. Access to financial services deeply helps the pro-poor to manage their financial resources and relieve them from abject poverty. However, providing financial service requires sound and sustainable financial institution that understands the financial needs and service requirements of the pro poor. The significance of deposit service to the poor is as important as loans services if they are given due attention and tailored to the saving patterns of the poor (Woldemichael, 2010).

Most people in Ethiopia make little or no use of the formal savings and lending institutions. Some use informal institutions that occur within the informal sector of the economy. We know that saving in the informal institutions did not yield interest for the depositors and so could not help for mobilizing resource. As a result it is not used for investment to yield income and, of course, most of the time depositors have expected to pay for saving service to their changing financial needs. In developing countries we observe a variety of informal institutions that enable transactions which are particular to the poor (Birhanu, 2015)

According to Woldemichael (2010) access to deposit services in financial institutions enables the poor to efficiently manage their financial resources. It helps in consumption smoothing during economic shocks and provide an opportunity to accumulate large sums of money for future investment and household outlays. In Ethiopia, for centuries, partly due to inaccessibility of commercial bank branches, absence of postal saving services and lack of strong cooperative movement, deposit services to the poor has been largely dominated by widely accepted and practiced informal mechanisms such as '*Iqub*', '*Iddir*', buying livestock and jewelry and hiding cash at home. The aim of the financial institutions during the GTP period has been establishing an accessible, efficient and competitive financial system. In relation to this, emphasis has been given to strengthening modern payment and settlement system, developing access to financial services, supporting the bank system with modern technology and extending the information exchange system to microfinance institutions, among others (MoFED, 2014).

Haruna (2011) employed multiple linear regression analysis in determining the influence of various factors on savings behaviour. He found out that income level, educational status, assets of household heads and ages have positive significant impact on household savings

behaviour. However, household size turns to have negative significant impact on household savings.

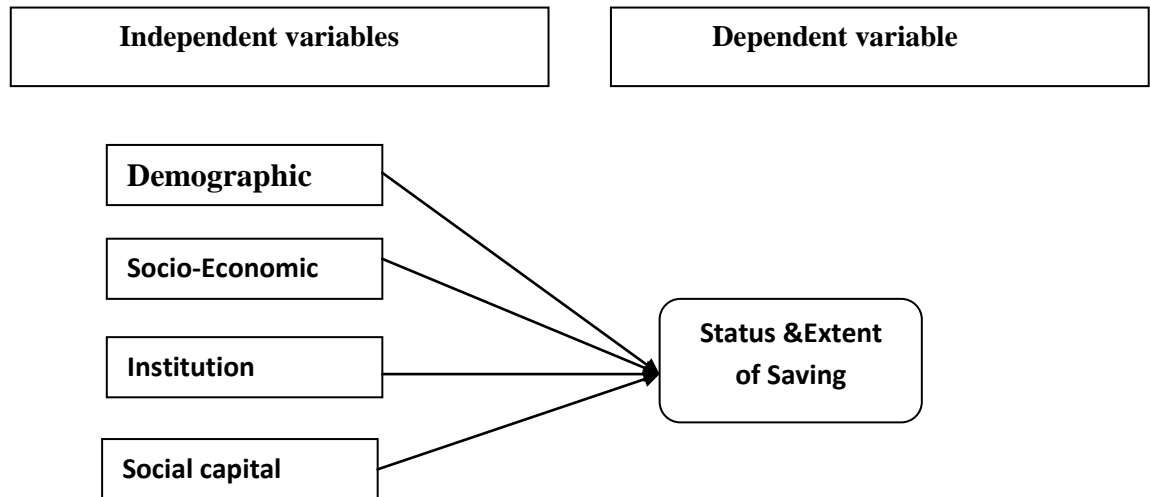
Gedela (2012) studied the determinants of the saving behavior of the tribal and rural households in the district of Visakhapatnam. The data of 120 sample households has been collected from both tribal and rural households by using interview schedule. This study has been used the Multiple Regression Model and Logistic Regression Model for finding out the determinants of saving behavior of households situated in tribal and rural areas. The results lastly revealed that the age of the head of the household, sex, dependency ratio, income and medical expenditure are significantly influencing the saving behavior in the entire study area. In the tribal area, dependency ratio and medical expenditure has severely affected of household savings. Income is the most vital factor of the saving behavior in the entire study.

Tsega and Yemane (2014) using Tobit Model to analyze major determinants of household savings in North Gonder Zone, Amhara Regional State, Ethiopia. The finding shows that income, age, Education status, forms of institutions used for saving and frequency of getting money are positively and significant determinants of household savings in the study area. This shows an increase in one of these variables led to increase to rural household saving. The empirical literature review revealed that there are different factors that affect household savings. Studies did not yet touch the determining power of social capital on households saving in Ethiopia. Even those researches that focused on the common determinants of saving give attention to aggregate national savings using macro data. Besides, there is no study conducted on microeconomic level on the determinants of household saving at national level. Therefore, this paper attempted objectively to identify the determining role of social capital to household saving besides other factors like demographic, socio-economic and institutional in Ethiopia. The study is also intended to contribute to the existing research gap through a better exploration of its determinants.

### 2.3. Conceptual framework of the study

Source: Author based on previous empirical literature

Figure 1: Conceptual framework of the study



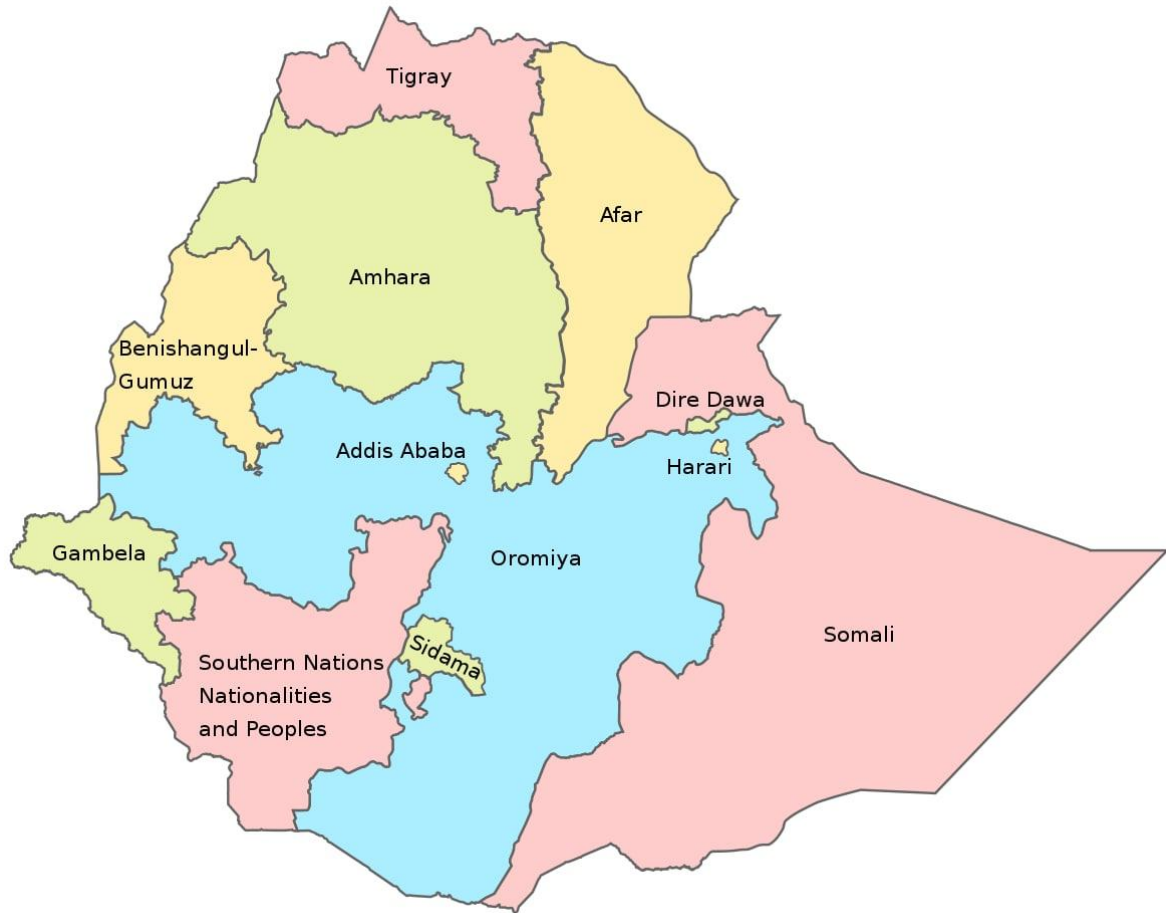
### **3. REARCH METHODOLOGY**

#### **3.1 Description of the study area**

Ethiopia is a landlocked country in East Africa occupying an area of 1,104,300 sq. km. The country has one of the most rugged and complex topographies in the continent. The five major topographic features of the country are the Rift Valley, Western and Eastern Highlands, and Western and Eastern Lowlands.

The North Central massifs of the country host the highest point in the country marked by the yellow upright triangle. It is the 4,533 m high Mount Ras Dejen. Lake Tana, the biggest lake in the country is also located here at an altitude of around 1,800m. Along the border with Sudan, the Western lowlands extend north to south and have elevations of around 1,000 m and host the lower valleys of rivers like Tekeze, Blue Nile, and Baro. To the northeast is the Afar Depression or the Denakil Plain has the Kobar Sink with the lowest point in the country at -125 m. This area is part of the Rift Valley that extends into a narrower depression in the southwest. As observed on the map above, this contains the lake region of the country with numerous lakes like Abaya, Rudolf, Chew, etc., that form an internal drainage basin. The Eastern Highlands have peaks higher than 4,000 m but are less extensive than their Western counterpart. The Eastern lowlands include the Ogaden Desert and Hawd.

Ethiopia has three main drainage systems. To the east, the Genale and Shebele Rivers rise in the Eastern Highlands and drain into the Indian Ocean. To the southwest, the lakes and Awash River form the Rift Valley internal drainage system. To the west is the system formed by the Baro, Tekeze, and the Blue Nile Rivers that flow into Sudan(en.wikipedia.org)



**Figure 2 : Map of the study area, Ethiopia**

**Source: en.wikipedia.org**



### **3.2. Data Type, Sources and Sampling Design**

Secondary data obtained from Central Statistical Agency (CSA) survey was applied for the study. The survey was carried out in 2018/19, was designed in such a way that represents all of Ethiopia. The survey included 3,830 national-level representative households that are selected from all regions of the country (CSA, 2018/19).

### **3.3. Method of data analysis**

In this study, the magnitude of household saving was estimated by considering per annum income. In the first phase, the status of saving was determined. In the second stage, the extent or amount of saving is estimated by asking the estimated amount of saving per annum. Tobit model is used when both the status and extent of saving are assumed to be influenced jointly or factors affecting them are assumed to be the same. Moreover, Tobit model is more applicable in truncated distribution of observations in the data set. In this study, status of household saving has censored distributions due to the fact that a large number of household did not save income. The censored distribution is a combination of continuous and discrete distributions because of the mass of observations at zero. Since the latent variable has a normal distribution, strictly positive values of saving status have a continuous distribution. The probability associated with latent variable values below or equal to the censoring point is summed to a single discrete value. Thus, the Tobit model uses all of the information, including information on censoring and provides consistent estimates (Cameron and Trivedi, 2009; Greene, 2012).

### 3.4 Econometric Model Specification

Tobit Model Tobin (1958) was used to analyze the status of saving for values greater than 0, i.e. ‘yes’ response or save income, but if not observed, i.e. censored or no saving, then 0 or less by using Stata (Version 10). This model was chosen because amount of household savings tend to be censored at the lower limit of zero (Gujarati, 2007).

Tobit model specification is given as follows:

$$Y_i^* = \begin{cases} Y_i^* & \text{if } Y_i^* > 0 \\ 0 & \text{if } Y_i^* \leq 0 \end{cases} \quad \text{-----(1)}$$

Where,  $Y_i^*$  is observed variable and  $Y_i^*$  is latent variable which is the amount of saving which is explained by the following equation:

$$Y_i^* = \beta X_i + \mu_i \quad \text{----- (2)}$$

Where,  $X_i$  is observed demographic, socio-economic, social capital and institutional variables and  $\beta$  a vector of parameters and  $\mu_i$  is a normally distributed error term which is a normally distributed with zero and constant variance of  $\sigma^2$  which is explained by  $\mu_i \sim N(0, \sigma^2)$

Based on McDonald and Moffit (1980), three marginal effects of the model are specified as:

i). The marginal effect on the latent variable (unconditional expected value):

$$\frac{\partial E(Y/X)}{\partial X_k} = \beta_k \Phi\left(\frac{X\beta}{\sigma}\right) \quad (3)$$

ii). The marginal effect on the expected value of observations conditional on being uncensored:

$$\frac{\partial E(Y/X, Y > 0)}{\partial X_k} = \beta_k + \beta_k \frac{\partial \lambda(c)}{\partial c} = \beta_k [1 - \lambda(c)(c + \lambda(c))] < \beta_k \quad (4)$$

Where,  $\lambda(c)$  is inverse mill's ratio.

iii). The marginal effect on the probability that observations are uncensored:

$$\frac{\partial \Pr(Y > 0/X)}{\partial X_k} = \phi\left(\frac{X\beta}{\delta}\right) \frac{\beta_k}{\delta} \quad (5)$$

### **3.5. Definitions of variables, measurement and hypothesis**

#### **3.5.1. Dependent Variable**

The dependent variable, used in this study is house hold saving which is the difference between household income and consumption (Iyoha et al., 2003, Issahaku, 2011). In this study, both the status and extent or magnitude of saving was measured and hypothesised to affect a number of demographic, socio-economic, social capital and institutional variables.

#### **3.5.2. Independent variables**

The independent variables of the study are those variables which are hypostasized to have association with household saving. Therefore, based on literature and data availability 11 asset-based explanatory variables are hypnotized as factor to determine urban household's decision to participate in different livelihood strategy are explain as follows.

**Sex of household head:** it is dummy variable that takes the value 0 for female and 1 otherwise. Men and women have different access to resources and opportunities. Female-headed households are subject to discrimination in labor, credit, less access to improved technologies, land possessions, extension service and a variety of markets opportunities, they own less property as compared to men headed household. Gender affects diversification options, including the choice of income-generating activities (both farm and non-farm) due to culturally defined roles, social mobility limitations and differential ownership of access to assets (Galab et al, 2002).They also carry a greater burden of rural poverty because of their vulnerable socio-economic position. Therefore, it was hypothesized that being female household head is negatively related with households' decision to save and amount of saving (status and extent of saving).

**Educational level of household head:** It's continues variable and refers to the number of years of formal schooling the household head attended. The education level of households head in particular and the education levels of households' members in general affect households' saving (Adugna, 2010). It assumed that formal schooling is expected to enhance farmer's ability to perceive, interpret and respond to new events. The farmers with higher schooling year are in a better position to know about effective and diversified livelihood strategies and can increase their adoption rate to new information and technology. This variable is therefore, hypothesized to affect households' decision to save and amount of saving (status and extent of saving).

**Household or Family size:** it is a continuous variable that refers to the total number of persons living within a household. The family members are important in the implementation of a range of activities, such as; trade ,agricultural activities, off farm activities and nonfarm activities (Adugna, 2010; Daniel, 2009 and Akilu, 2010). Larger family size may have labour force to engage in agriculture as well as other income source. This means the larger the family size the higher the likelihood to participate in varied livelihood strategies or income sources to cover household food consumption. Thus, this variable was expected to have a positive relationship households' decision to save and amount of saving (status and extent of saving).

**Total wealth index:** it a continuous variable that measure using index capturing all the total financial and physical asset of the household head during the study year. The wealthier the household head, the higher the likelihood to save his income and hence higher probability to save income. Thus, this variable was expected to have a positive relationship households' decision to save and amount of saving (status and extent of saving).

**Access to loan credit:** it is dummy variable and takes the value 1, if they have access credit and 0, otherwise. Access to credit is one of the important institutional factors that affecting choices of livelihood. In this study, access to loan credit was hypothesized to have a positive effect with households' decision to save and amount of saving (status and extent of saving).

**Edir or equb (social network) participation:** it is dummy variable and takes the value 1, if the household participated on edir or equb social institution, otherwise takes the value 0. Participation social support institution is one of the important social capital factors that positively affecting households' decision to save and amount of saving (status and extent of saving).

**Social trust:** it is dummy variable and takes the value 1, if the household perceived that he/she trusted by the community. Otherwise takes the value 0, social trust is one of the important social capital factors that positively affecting households' decision to save and amount of saving (status and extent of saving).

**Participation of household in social network** which is the participation to local Association/Mehaber/: it is categorical variable if household participate in one of the local association/Mehaber/ they have more chance to earn income and save more as compared to those who did not participated. This might be social networks do work in different ways and for different ends. Most importantly in the urban area, they serve as “insurance” against risk

and crisis situations; further they facilitate access to shelter and job opportunities, and in some cases are used as a means of self-empowerment. Although social bonds can be crucial for securing a livelihood, the assets obtainable through dense social networks in poor communities seldom allow participants to rise above their poverty and in many cases may literally be the last resort. Finding access to greater opportunities is more likely to be successful when channelled via bridging social relations, encompassing people beyond the immediate family or community. Therefore, in this study social network positively affects households' decision to save and amount of saving (status and extent of saving).

**Position or leadership in the community at kebele level:** it is a dummy variable that takes the value 1 for household head who have a leadership position and 0 otherwise. The study hypothesized that household who are a member gets additional income and information related to the benefit of saving and hence save more than those who did not at the kebele level. Therefore, in this study household who have leadership position positively affects the decision to save and amount of saving (status and extent of saving).

**Voluntary service participation:** it is a dummy variable that takes the value 1 for household head who participate in various community services voluntarily and 0 otherwise. The study hypothesized that household who provide voluntary service gets better access to engage in other income earning opportunities and hence save more than those who did not at the kebele level. Therefore, in this study household who provide voluntary service in the community positively affects the decision to save and amount of saving (status and extent of saving).

**Amount of income earned in a single loan in birr:** it is a continuous variable that measures the degree of social networking of the household head. Social networking is one of the important social capital factors that positively affects households' decision to save and amount of saving (status and extent of saving). The higher the social networking of the household head the higher the likelihood to save income since the household gets adequate income. Therefore, in this study household who earn more income in a single loan affects the decision to save and amount of saving.

## 4. RESULT AND DISCUSSIONS

This chapter contains both the descriptive analysis and econometrics analysis. Under the descriptive statistics the comparison of variables across the status of saving explained. The statistical tool ,tables were used to describe the variables used in the model. While, the econometrics model result presented and discussed in the second part.

### 4.1. Descriptive Statistics Results

The survey result as shown in table 1, from the total interviewed household head, 64.83% (2,483) did not save income per annum while the remaining 35.17% (1,347) save during the year.

Table 1: Demographic and socio-economic variables by saving status

Variables	Total (n = 3,830)	No saving (n = 2,483)	Saving (n = 1,347)	t-test
	% (frequency) or Mean (St.dev.)	% (frequency) or Mean (St.dev.)	% (frequency) or Mean (St.dev.)	
<b>Demographic characteristics</b>				
Sex of the Household head (% male )	50.52 (1,935)	51.62 (999)	48.37 (936)	7.55
Household size – number	3.84 (1.94)	3.73 (1.920)	4.04 (1.993)	-4.716***
<b>Socio-economic characteristics</b>				
Education level- years	4.70 (2.35)	4.56 (2.33)	4.97 (2.37)	-5.226***
Total wealth index	0.29 (0.39)	1.37 (1.67)	0.57 (5.09)	-1.297***

Note: t-test used for continuous variable, chi-square test used for categorical variable.

Source: Own computation based on CSA 2018/19 survey data

Table 1 reports the mean or proportion values of the demographic and socio-economic variables which are hypothesized to influence the status of household saving behaviour and compared using t-test for continuous and chi-square tests for categorical variables. The result of the comparison for demographic and socio-economic characteristics shows that 3.84 average size of a household member, 4.7 years of education attendance and 0.29 wealth indexes. Besides, household head who save income have significantly higher mean household size (4.04), levels of education attendance (4.97) and wealth index (0.57) as compared to those who did not with mean household size (3.73), level of education attendance (4.65), and wealth index (1.37) and all are statistically significant with a mean the difference at 1 percent level of significance.

Comparison of social capital-specific attributes explained in Table 2, the result shows the amount of income earned for loan in single request was 1.54 birr (in logarithm). Household head who did not save income per annum have earned significantly higher mean income 1.82 birr in log as compared to others with a mean income (1.39). Moreover, from the total 87.78 % of household head who have trust in the community, the proportion is significantly higher among household head who save income per annum (92.83%) than others with (7.17%) and a statistically significant proportion difference at a 5 percent level of significance. The result of comparison for the institutional characteristics shows that the proportion of household head who have participated a voluntary service in the community did not save (65.11%) and household head who are a member of local association (34.89 %) was significantly higher among household head who did not save income than others and the result is statistically significant proportion differences at a 1% level of significance.

Table 2: Social capital variables by saving status

<i>Social capital attributes</i>	Total (n = 3,830)		No saving (n = 2,483)		Saving (n = 1,347)		$\chi^2$
	% (frequency) or Mean	(St.dev.)	% (frequency) or Mean	(St.dev.)	% (frequency) or Mean	(St.dev.)	
Amount of income earned in single loan- (a proxy for networking)	1.54	(0.64)	1.39	(1.92)	1.82	(5.34)	-2.191***
Trust of the community	87.78	(3,362)	7.17	(241)	92.83	(3,121)	-3.14***
Participation to <i>edir or equb</i>	34	(1,302)	51.07	(665)	48.92	(637)	5.85
Voluntary service participation	55.69	(2,133)	34.89	(744)	65.11	(1,389)	-3.11 ***
Participation to local Association/Mehaber/	39.11	(1,498)	40.65	(609)	59.34	(889)	-3.03***
Position or leadership in the community	14	(535)	49.53	(265)	39.53	(262)	6.32

Source: Own computation based on CSA 2018/19 survey data

In table 3, the average distance from home to the near bank was 14.34 km and to the nearest microfinance institution was 59.74 km. The result further shows that household who did not save income on average travelled a longer distance to bank (15.85 km) and microfinance institution (66.20km) and both are statistically significant with a mean difference at a 1 percent level of significance.

Table 3: Institutional variables by saving status

<i>Institutional attributes</i>	Total (n = 3,830)	No saving (n = 2,483)	Saving (n = 1,347)	t-test
	% (frequency) or Mean (St.dev.)	% (frequency) or Mean (St.dev.)	% (frequency) or Mean (St.dev.)	
Distance to bank in <i>Km</i>	14.34 (21.55)	15.85 (27.96)	13.52 (17.04)	3.201***
Distance to nearest microfinance in <i>Km</i>	59.74 (47.30)	66.20 (52.48)	56.24 (43.85)	6.253***

Source: Own computation based on CSA 2020 survey data

#### 4.2. Econometrics Model Result

Tobit model results in Table 4 shows that the estimation of F statistics with a value of 13 is statistically significant at a 1% level of significance, implying the adequacy of the model to estimate the relationship between the dependent and the selected independent variables. Further, the variables included in the model were tested for the problems of multicollinearity, heteroskedasticity, and model misspecification. The problem of multicollinearity was checked using Variance Inflating Factor (VIF) and the mean value of VIF was found to be 1.19 indicating less degree of collinearity among explanatory variables. Following Breusch and Pagan (1979), heteroskedasticity problem was conducted Breusch- Pagen test ( $\lambda^2 = 0.58$ ,  $P = 0.4475$ ) implying no heteroskedasticity in the variable of the error term. Moreover, the model misspecification was carried out using Ramsey's regression specification error test (RESET), and the results revealed with value of Ramsey test ( $F = 0.78$ ,  $P = 0.4563$ ) indicating that no omitted relevant variables in the model. Finally, the results of the model showed that all coefficients of the variables hypothesized to influence saving behaviour have the expected sign and of the twelve (12) variables included in the model, nine(9) are found to have statistically significant effects on the status and extents of household saving behaviour in Ethiopia.



Table 4: Tobit model result and their marginal effects

Variables	Coeff.	Std. Error	Marginal effects
			Probability
<b><i>Demographic characteristics</i></b>			
Sex of the household head	0.26	1.705	0.0022
Household size	0.91**	0.437	0.0077
<b><i>Socio-economic characteristics</i></b>			
Education level in years	0.26*	0.144	0.0022
Total wealth index	0.075***	0.023	0.0006
<b><i>Social capital attributes</i></b>			
Amount of income earned in single loan (network in the community)	0.129***	0.047	0.0011
Trust in the community	0.01**	0.002	0.0001
Voluntary service participation	0.79	2.037	0.0067
Participation to <i>eddir or equb</i>	5.55**	2.199	0.0472
Local association /mehaber membership	0.38**	0.166	0.0032
Position or leadership role in the community	0.85	2.377	0.0073
<b><i>Institutional characteristics</i></b>			
Distance to nearest bank	-0.07***	0.009	-0.0006
Distance to microfinance institution	-0.25**	0.107	-0.0021
Constant	35.12***	6.719	
Log likelihood	-9309.29		
F (12, 2474)	13***		
Left-censored observations	808		
Uncensored observations	1678		
Right-censored observations	0		

Note: \*, \*\* and \*\*\* represent statistical significance at 1%, 5% and 10% level of significance, respectively.

Source: Model Result

### **Demographic characteristics:**

Family size in the household had a positive and significant influence on the status and extents of saving at one percent level of significance, indicating household head with more family size was more likely to save income per annum. Larger family size may have labour force to engage in agriculture as well as other income source. This shows the larger the family size the higher the likelihood to participate in varied livelihood strategies or income sources to cover household costs.. A one percent increase in family size in number would lead to increase the status and extent of saving of birr by 0.77%. The relationship between family size and household saving behaviour was also obtained a similar result by (Adugna, 2010).

**Socio-economic characteristics:**

The average years of education of the household head had positive and significant effect on the status and extents of household saving at ten percent levels of significance, implying household head who attended more education level in years better understand and implement business activates. Thus, a higher educational level attendance of the household head in years suggests as an important factor in increasing the status and extents of household saving. A one percent increase in the level of education of the household head in years would lead to increase the status and extent of saving by 0.2% (Table 4). The relationship between years of education and household saving behaviour was also obtained a similar result by Melake (2019)

The size of household wealth index has positively and significantly affected the status and extents of saving at one percent level of significance, indicating being wealthier was more likely encountered saving. This is due to the fact that wealthier household gets the required finance for engaging income earning business activities. This might also indicate the provision of credit services with small interest might encourage households to earn additional income. A one percent increases in the wealth index would lead increases in the status and extent of saving by 0.06% (Table 4).

***Social capital attributes:***

The amount of income earned in single loan which is proxy for measuring the networking in the community has positively and significantly affected the status and extents of saving at a five percent level of significance, implying households who have more social network save more than others. This is due to large size loan might be used for rendering business activates and hence earn adequate income. A one percent increases in the size of loan in birr would lead to increase the status and extent of saving by 0.11% (Table 4).

Household heads who have trust by the community has positively and significantly affected the status and extents of saving at five percent levels of significance, implying household head who have social trust also get more proportion of income in various means and hence save more as compared to those households who did not. The households who have more trust as compared with those who did not would lead to increase the probability of the status and extent by 0.01 % (Table 4).

Participation to *eddir or equb* is also used as a proxy for measuring the social capital and household who are a member of it has positively and significantly affected the status and extents of saving at five percent levels of significance. The result implies households who participate in social events save more than those who did not at all. This is because participation to social events within the community would help for creating awareness related to the importance of saving. As compared to household head who did not participate to *eddir or equb participating ones* would lead to increase the status and extent of saving by 4.72% (Table 4).

Households membership to local association or *mehaber* has positively and significantly affected the status and extents of household saving at five percent levels of significance, implying households who are members of local association or social event were more likely to save income as compared with those who are non-members. This is probably because the household who is a member of social event within the community gets an advantage of accessing information related to the benefit of saving and investment. A household who is a member of local association or *mehaber* as compared with who did not would lead to increases status and extent of saving by 0.32% (Table 4).

**Institutional characteristics:**

Distance from the nearest bank and microfinance institution in km has negatively and significantly affected the status and extents of household saving at a 5 and 10 percent level of significance, indicating households who live far from the nearest bank and microfinance institutions save less as compared with those who live nearer to banks and micro finances . A one percent increase in the distance to the nearest bank in km would lead to decrease the status and extent of saving by 0.21% (Table 4).

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1 CONCLUSION

Enhancing the level of household saving is crucial task to foster the level of investment throughout the county. However, lack of understanding of the extent and associated contributing factors are posing major challenges in Ethiopia. Therefore, this study assessed the extent and determinants of household savings in Ethiopia. Both descriptive and Tobit econometrics model were applied using large scale national-level representative survey data from CSA of Ethiopia.

The simple descriptive statistics result showed 25.81% annual average saving rate with considerable variation across regions. The study found that the status and extent of household saving was affected by the demographic, socio-economic, social capital and institutional attributes. From demographic variables- household size , among socio-economic variables– higher education attendance, and being wealthier. Social capital variables- amount of income earned in single loan (networking within the community), and trust within the community, participation to *eddir or equb* and local association or *mehaber* membership. Institutional variables– distance from financial institutions affected household savings.

The result of Tobit regression model showed that household size, education, total wealth index, social networking, social trust, membership/participation to edir and/or equb, participation to local association/mehaber were significant and had a positive influence on the status and extent of saving in Ethiopia. However, distance from banks and micro finances negatively affected the status and extent of household saving.

## 5.2 Recommendations

Enhancing the level of household saving and thereby fostering the level of investment throughout the country requires active involvements of the national and/or regional government in collaboration with private and NGOs -development partners. These activities include providing short and long term training on the benefit of saving in which role of social capital which is the stock of social ties and relationships might address the desired goal within short period of time, strengthening the existing institutional support system to banks and microfinance institutions by paying special attention to the public and private investment on the use of saving management practices.

Therefore, it is recommended that the government and other concerned bodies need to deliver training for households so as to raise their level in social capital/ social relations and connections so as to increase household saving

Based on the findings of the research, the following policy recommendations are suggested to each finding so as to improve the saving performance of households in Ethiopia.

- According to the findings of the research, one of the social capital variables known as social trust had positive and significant effect on the status and extent of households saving in Ethiopia. Therefore, policies and strategies that boost social trust are necessary to enhance households saving.
- The research result revealed that social networking had positive and significant effect on the status and extent of household saving, so strong works need to be done that increases social ties and relationships among the people.
- Participation in social groups/edir and equb had positive and significant effect on saving status and extent. Hence, ways have to be arranged so as to make people to participate in equb and edir.
- Education had a positive and significant effect on household savings mainly because of the awareness that occurs with higher educational levels. Though government has already provided free elementary and high school education in public schools, their outreach is limited. Thus, efforts have to be made by government, private institutions and the public to increase the number of schools.

- These days, government is increasing tertiary education by increasing the number of Universities at an alarming rate. Efforts to lower drop-outs and advocate for more students to continue and finish high schools also need to be maintained.
- Family size had positive and significant effect on the status and extent of household saving, thus efforts need to be made by both community and government to engage family members in works not be idle among the society.
- Distance from Banks and micro finances affected both extent and status of saving. Thus, mechanisms need to be found to make banks and micro finances accessible at short possible distance.

## REFERENCES

- Abu Girma Moges (2004). On the Determinants of Domestic Saving in Ethiopia; Paper prepared for the Second International Conference on the Ethiopian Economy: Ethiopian Economic Association.
- Abu Girma Moges . (2004). On the Determinants of Domestic Saving in Ethiopia; Paper prepared for the Second International Conference on the Ethiopian Economy: Ethiopian Economic Association.
- Arabmazer, A., Schmidt, P., (1984). An Investigation of the Robustness of the Tobit estimation to non-normality. *Econometric*, 50:1055-1063.
- Arrow, J.K. (1997), "Observations on Social Capital" In Dasgupta, P. et Serageldin, I. (ed.), *Social Capital: A Multifaceted Perspective*, pp. 3-5, Washington: The World Bank
- Baliamoune-Lutz, M. and Lutz, S. (2005), *Institutions, Social Capital, and Economic Development in Africa: An Empirical Study*. ICER Working Paper No. 18/2005.
- Becker, G. et al. (1990), "Human Capital, Fertility, and Economic Growth." *Journal of International Economics* 47: 399-428
- Beugelsdijk, S. (2005), "A note on the theory and measurement of trust in explaining differences in economic growth." *Cambridge Journal of Economics Advance*.
- Beugelsdijk, S., De Groot, H. and Van Schaik, A.B.T.M. (2004), "Trust and economic growth: a robustness analysis". *Oxford University Press* 56: 118-134.
- Bogale Yadeta(2017),Determinants of Saving Behavior of Households in Ethiopia: The Case Benishangul Gumuz Regional State
- Boozer, M. et al. (2003), *Paths to Success: The Relationship Between Human Development and Economic Growth*. Yale University, Working Paper 874.
- Bourdieu, P. (1980), "Le Capital social: Notes provisoires." *Actes de la Recherche en Sciences Sociales* 31: 2-3.
- Breusch, T.S. and A.R. Pagen. (1979). Simple test for heteroscedastity and random coefficient varaiation. *Econometirca*, 47(5):1287-1294.
- Brundtland Report: World Commission on Environment and Development (1987), *Our Common Future*. Oxford: Oxford University Press
- Central Statistics Agency (2020). "Integrated Survey on Agriculture: Central Statistical Agency, Addis Ababa, Ethiopia.

- Cox, E. (1998). "Measuring Social Capital as Part of Progress and Well-being." In R. Eckersley (eds) *Measuring Progress is Life Getting Better?* CSIRO: Collingwood, Vic
- Deaton, A. (1992). Saving in Developing Countries: Theory and Review. Proceedings of the World Bank Annual Conference on Development Economics.
- Deaton, A. (2012). The Financial Crisis and the Well-Being of Americans, *Oxford Economic Papers*, vol. 64, no. 1, pp 1-26
- Dordick, G. (1997). *Something Left to Lose: Personal Relations and Survival among New York's Homeless*. Philadelphia, Pa.: Temple University Press.
- Dordick, G. (1997). *Something Left to Lose: Personal Relations and Survival among New York's Homeless*. Philadelphia, Pa.: Temple University Press
- Evans, P. (1996), "Government Action, Social Capital and Development: Reviewing the Evidence on Synergy." *World Development Report* 24(6):1119–32.
- Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: Free Press.
- Fukuyama, F. (2000), *Social Capital and Civil society*. Washington D.C.: IMF Working Paper WP/00/74.
- Gedela, Sureya P. (2012.). Determinants of Saving Behavior in Rural and Tribal Households (An Empirical analysis of Visakhapatnam District). *International Journal of Research in Social Sciences*. 2(3):108-128 .
- Granovetter, M. (1973). The strength of weak tie. *American Journal of Sociology*, 78, 1360-1380.
- Granovetter, M. S. (1973). The strength of weak ties. *Collective Journal of Sociology*. 78: 1360-1380.
- Greene, W. H. (2012). *Econometric Analysis*. Fifth edition. Macmillan, New York, pp 10-83.
- Grootaert, C. (2004). Measuring social capital: An integrated questionnaire. World Bank working paper



- Grootaert, C., 1996. Social capital: The missing link?, in “Monitoring Environmental Progress: Expanding the Measure of Wealth. Indicators and Environmental Valuation Unit, Environment Department, The World Bank, 77-92
- Gujarati, D. N. (2009). Basic econometrics, Tata McGraw-Hill Education.
- Iyoha, M., S. A. Oyefusi, and D. E. Oriakhi. (2003). An introduction to modern Macroeconomics. Mindex publishing, Benin City, Nigeria.
- Krishna, A., Schrader, E., 1999. Social capital assessment Tool. Paper for IBRD (999b)
- Maddala, G.S. and Lairi (1997). Introduction to Econometrics. 3rd Edition John Wiley & Sons (Asia) pte. Ltd, Singapore.
- McDonald, J. and R. Moffitt. (1980). The uses of Tobit analysis, *Review of Economics and Statistics*,62:318-321.
- MelakeG/Michael (2019) Determinants of rural household saving: the case of Kachabira WoredaKembata Tembaro Zone, SNNPR Ethiopia.
- Acemoglu, D. *et al.* (2001), “The Colonial Origins of Comparative Development: An Empirical study review.
- MoFED. (2014). Macroeconomic Developments in Ethiopia. Annual Report 2010/11 .
- Moser, C. (1996), *Confronting Crisis: A Comparative Study of Household Responses to Poverty and Vulnerability in Four Poor Urban Communities*. Environmentally Sustainable Development Studies and Monographs Series 8. Washington, D.C.: World Bank.
- Prinsloo, J.W., (2000).The Saving Behavior of the South African Economy. Occasional Paper No 14, South African Reserve Bank. South Africa.
- Smith, A., [1776], 1991. “The Wealth of Nations, Everyman's Library, Alfred A. Knopf, Inc, New York
- Tobin, J. 1958. Estimation of relationships for limited dependent variables. *Journal of Econometrics*, 26(1): 24–36.
- Tsega and Hagos(2014) Determinants of household saving in Ethiopia: the case of North Gonder Zone , Amhara, Ethiopia
- Tsega, H. and Yemane, M. (2014). “Determinants of household saving in Ethiopia: A case of north Gondar zone, Amhara regional state”. *International Journal of Development and Economic Sustainability*, 2(4), 37-49.
- Woolcock, M. (2000). The place of social capital in understanding social and economic outcomes. *Canadian Journal of Policy Research*, 2, 11-17.

Woolcock, M., & Narayan, D. (2000). Social Capital: Implications for Development Theory, Research, and Policy. *The World Bank Research Observer*. 15(2).

Woolcock, M., 1998. Social capital and economic development: Toward a theoretical synthesis and policy framework. "Theory and Society 27: 151-208

Woolcock, Michael, and Deepa Narayan. "Social capital: Implications for development theory, research, and policy." *The world bank research observer* 15.2 (2000): 225-249.