Haramaya University

DETERMINANTS OF HOUSEHOLD SAVING :IN KOLEFE KERANIYO SUBCITY, ADDIS ABABA, ETHIOPIA

BY:

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

DETERMINANTS OF HOUSEHOLD SAVING :IN KOLEFE KERANIYO SUBCITY, ADDIS ABABA, ETHIOPIA

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DECLARATION

I, the signatories, declare that this study entitled *"The Determinants of household saving, The Case Study Kolefe keraniyo Sub City, Addis Ababa, Ethiopia"* is my own work. I have undertaken the research work independently with the guidance and support of the research advisor. This study has not been submitted for any degree or diploma program in this or any other institutions and that all sources of materials used for the 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.

Paulos Asrat (PhD) _____

Advisor Signature

St. Mary's University, Addis Ababa June 2024

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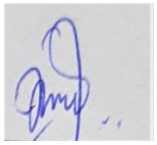

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LISTS OF ACRONYMS AND ABBREVIATIONS

AACA	Addis Ababa City Administration
AAKKSC	Addis Ababa Kolfikeraniyo Sub City
EPRDF	Ethiopian People's Revolutionary Democratic Front
GC	Gregorian calendar
GDI	Gross Domestic Investment
GDP	Gross Domestic Product,
GDS	Gross Domestic Saving
GTP	Growth and Transformation Plan
MLE	Maximum Likelihood Estimator
MoFED	Ministry of Finance and Economic Development
OECD	Organization for Economic Co-operation and Development
PPS	Probability Proportion to Size
SSA	Sub Saharan African
SNNP	Southern Nations, Nationalities, and People's
SPSS	Statistical Package for the Social Sciences
UNDP	United Nations Development Program

ABSTRACT

Savings has long been seen as a key component of growth that helps underdeveloped nations move toward development. Saving also vital component of household welfare in emerging nations besides, the objective of the study was to identify the determinants of the household saving behavior in Kolefekeraniyo Sub City, Addis Ababa, Ethiopia". Both primary and secondary sources were used, Primary data gathered by self-administered, structured questionnaires using a sample random sampling technique. It employed descriptive statistics and double hurdle model to analyze the data collected from a sample 156 of households in the study area. The descriptive result showed that about 45% percent of sampled households involved in saving of which 75% percent use formal financial institutions and the remaining use for alternative saving options. The findings revealed that there is positive and significant causal relationship between amount of saving and income, personal saving habit, level of education, additional income generating activity and home owner of the respondents. Variables such as family size, age, and expenditure and dependency ratio were found to have negative influences on respondent's decision to save. The findings implied the need for designing strategies that could improve the saving behavior, mobilization and diversification of saving by household. Furthermore, the government and other concerned bodies must become involved in creating the capacity and incentives for households to increase their saving behavior. These incentives can be achieved by lowering the rate of inflation, improving deposit interest rates, and improving service quality. They can also raise public awareness of the need to discourage negative cultural norms and discourage bad habits in order to promote household saving.

Key words: Savings, Double hurdle, household, kolikeraniyo, Ethiopia

CHAPTER ONE

1.INTRODUCTION

1.1. Background of the study

It has long been believed that saving money is essential to prosperity and the advancement of developing countries. Savings is one of the most crucial components of household well-being in developing countries. Rather, in the event of an unexpected shift in income, households are left with few other options if they do not have savings. In addition to providing households and individuals with a safety net against unanticipated catastrophes, savings also provide the nation with the funds required for development projects. (Abebe, 2017).

The part of income that is saved rather than immediately spent for future purchases, investments, or unforeseen events is known as savings. It is also utilized to enhance people's well-being and provide security for households during times of shock. Savings have a significant role in the well-being of households in developing nations. Savings for individuals and households offer a buffer against future events, while savings for the country provide the capital required for development initiatives (Gedela, 2012). Furthermore, saving helps households maintain a steady standard of living throughout life, and it is also expected that saving would help pay for children's school expenses (Yao et al., 2011). Savings is a crucial part of closing the financial gap since unforeseen events happen to people all the time (Popovici 2012).

The part of income that is set aside for unforeseen expenses, future investments, or purchases rather than being spent right away. In times of shock, it's also employed to improve people's wellbeing and give households security. In emerging countries, household well-being is significantly influenced by savings. While national savings provide the funds needed for development projects, personal savings serve as a safety net against unforeseen circumstances (Gedela, 2012). In addition, saving helps families sustain a stable quality of living over time, and it is anticipated that saving will assist in covering children's educational costs (Yao et al., 2011). Savings are essential for bridging the financial gap because people experience unanticipated circumstances happen to people all the time (Popovici 2012).

The household savings rate determines the highs and lows of economic development as well as the overall health of the economy for both Ethiopia and emerging nations. Higher saving rates have allowed countries to lower their debt, therefore domestic funds, particularly household savings, will be utilized to finance domestic investments. (Tadele, 2015).

Between 1997/98 and 2006/07, Ethiopia's average GDP percentages for gross domestic saving and gross capital creation (investment) were 6.6% and 24%, respectively. Over the 2010–11–2017–18 era, this climbed to 16.7 and 39 percent, respectively, creating a sizable savings and investment imbalance (Alemayehu Geda, 2020).

Ethiopians' saving habits are still viewed as inadequate, according to National Bank of Ethiopia survey research, even if their performance increased from 11.1% in 2006 to 19% in 2021 G.C. Presently, barely six million households in Ethiopia save money in financial institutions on a yearly average of 875 Birr (Douglas et al, 2014).

A nation's economic growth in general and each person's financial well-being in particular will be impacted by the mobilization of savings and the development of saving behaviors within that society (Mengesh 2015).

The households' income in Ethiopia and kolfikeraniyo sub city specifically, is characterized by usual and regular; in such circumstances, savings are typically given more consideration. The primary focus of study were to find out assessed level of household saving the constraints and its main determinants.

1.2. Statement of problem

Refining mobilization of household saving might free up substantial amounts of resources for investments that can promote economic progress. Definitely, domestic savings in Africa are subject by household savings that are not sufficiently routed into productive use. Understanding why and by what means households save, anything determines their saving behavior of households can assistance find suitable policies that increase the number of resources open for development (UNDP, 2014).

economic policy-making purposes, it is important that economic planners or policy makers have to accurate and rational decision about the importance of saving and investment, the behavior of

people towards investment and saving and the method by which saving can be improved for investment. Economic planners would also need to know about the intentions of saving and investment in order to setting demands accordingly. (Assefa, 2021)

Serious problem challenging poor countries including Ethiopia is the savings and investment gap. For the reason that of this gap, these countries find it tough to finance investments needed for growth from domestic saving (Rogg 2006). It is also shared to see these countries to finance their investment in the short run partway from side-to-side domestic government borrowings otherwise foreign loan and grants but this would considerably increase the country's debt burden and would not be a solution in the long run (Girma et al., 2013).

In Ethiopia, saving is low and saving-investment gap is high. During the last eleven years of the Derg regime (1981-1991), GDS as a percentage of GDP was nearly 10 % while GDI as a percentage of GDP was on average 15%. The resource gap was, therefore, 5%. The GDS for Ethiopia during 1981-2009 was on average 8.6% while the GDI was 18.4% and hence the resource gap was nearly 9.8%. During the first eighteen years of Ethiopian People's Revolutionary Democratic Front (EPRDF), 1992-2009, GDS was on average 7.7% while GDI was 20.4% widening the gap to 12.7%. The gap is even worse when compared to the average resource gap for the Sub-Saharan African (SSA) countries, 2%, during the same period (Alema, 2015, as cited in Tewodros, 2021) Subsequently, the Ethiopian government focuses on the financial sectors to effectively exploit domestic saving potential, it has planned to increase financial sector accessibility and diversify services that are provided by financial sectors.

It is also among those very important variables to the economic growth of any country; developing or developed. The saving culture of a nation determines its growth. Evidences show that countries with high rate of household saving have high potential to growth. Economically grown countries are found to have good culture of saving. An increase in national saving has a substantial effect on investment. National saving is the sum of the weighted average of the three principal sectors of the economy: private household, business and general government (Touhami et al., 2009). However, most researches were done by using secondary data especially macro-economic variables but the shadow economy is supported by house saving.

Saving rates around the world vary widely; on average East Asia saves more than 30% while SSA saves less than 15% (Loayza et al., 2000). The level of domestic saving in Ethiopia is very low hence; it is experiencing a severe resource gap. According to Tsegabirhan (2010), Gross Domestic Saving/Gross Domestic Product ratio of Ethiopia from 1997 to 2002 was 6.6% which was lower than from the low income SSA which is 7.1%. However, the problem becomes severe recently. According to this study, the domestic saving of Ethiopia in 2007, 2008, 2009 and 2010 was 5.6%, 0.6%, 2.1% and 0.3%respectively. On the other hand, the domestic saving of the low income SSA was 9.6%, 7.3%, 7.8% and 8.6% respectively in the same years.

Halfom yigzaw (2015) examines the determinants household of saving Gedeo Zone, Southern Ethiopia and analyzes forms of savings used by urban households in the study area. Involving cross- sectional data set and, by using binary logit Regression model, found that income and interest rate has a positive impact whereas the family size has adverse impact on household saving.

Abate Tadesse (2020) found that age of household head, in occupation of the household, knowing interest rate of formal financial institution, income of the household and family size were significantly influencing saving status of the household while education level of household head, and distance from the financial institution were not significantly influence the saving status of the households and it employed binary regression model.

Many researchers have written a lot on determinants of household saving behavior. For example, Saliya, et al., 2018 Determinants of Urban Household Saving Behavior in Ethiopia Study in Mekelle City, (Girma et al., 2013) analyzed the determinants of the saving behaviors among rural households in East Hararghe Zone and (Bealu Tukela, 2016) examine the determinants of Savings Behavior among Rural Households in Case of Boricha Woreda, Sidama Zone.

These empirical studies all use the single equation Tobit model, but this research addressed a gap in the literature by using a different methodological approach (the double hurdle model) to analyze the decision of households to save and determine the factors that influence household saving in kolefekeraniyo sub city Addis Ababa Ethiopia.

In light of these issues, it is crucial to analyze household saving behavior by determining the factors that influence saving decisions as well as obstacles and challenges. Only they can

practical policy solutions to issues relating to household saving mobilization be recommended. Nevertheless, no research is done specifically on the Kolfiekeraniyo sub city. Therefore, closing this crucial gap will be another primary goal of this research.

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of this study was to identify the determinants of the house hold saving behavior by taking kolfiekeraniyo sub city in Addis Ababa.

1.4.2. Specific Objectives

The Specific objectives of this study are:

1. To assess the level of household saving in kolfiekeraniyo sub city in Addis Ababa
2. To identify the main determinants of household decision to save in kolfiekeraniyo sub city in Addis Ababa.

1.4. Research Questions

1. What is the level of household saving in kolfikeraniyo sub city Addis Ababa?
2. What are the main determinants of household decision to save kolfikeraniyo sub city Addis Ababa?

1.5. Significance of the study

The findings of the study help encourage household saving for the government of Ethiopia in general and the Kolfiekeraniyo sub city in Addis Abeba in particular. Additionally, non-governmental organizations, NGO's and institutions that deal with credit and savings (micro finance institutions) will profit from it. Furthermore, the empirical analyses provided by this study will assist policy makers in making well-informed judgments in the field, particularly with regard to domestic saving mobilization.

1.6. Scope and limitation of the study

The researcher's main goal, as stated in the aim, was to determine the factors that influence households saving behavior in Addis Abeba Kolfiekeraniyo sub city. As a result, the researcher marked off in Addis Abeba's Kolfiekeraniyo Sub City. Therefore, the researcher's primary attention was on a few variables., family size, income, education, employment status, age, gender, marital status, deposit interest rate, expenditure, personal saving habit, dependency ratio, additional income generating activity and home ownership. Furthermore, the researches will employe a cross-sectional data type. The researcher was limit on identifying the determinants of the household saving behavior in case of kolfiekeraniyo sub city in Addis Ababa and also limited due to shortage of resources such as: time, finance, and other related resources. Therefore, the study doesn't argue to provide conclusive findings on saving behavior of household in the entire regional state. The study will be conducted in the above sub city cannot be generalize to other parts of Addis Ababa city administration in particular and Ethiopia in general. Despite the limitations of the study mentioned above, the findings of this research will be much use in finding the opportunities for development and designing possible intervention strategies specifically to the study areas.

1.7. Organization of the study

The paper was organized into five main chapters. The first chapter was focused mainly on the background, statement of the problem, objectives, significance and scope and limitation of the study. Relevant literatures related to the study were reviewed in chapter two. Chapter three was deals with methodology, description of study areas, with sampling design, methods of data collection and analytical techniques. Chapter four were present results and discussion. Finally, chapter five present conclusions and recommendation

CHAPTER TWO

2.REVIEW OF LITERATURE

The review of numerous related studies and the theoretical framework were included in this chapter. factors affecting growth to lead the developing countries to the path of development. In developing nations, saving plays a significant role in the well-being of households. Savings is therefore essential to contemporary macro theory. As a result, the topic received a lot of attention in the literature review. For a better understanding, these chapters will provide a brief review of the various advancements in saving theories.

2.1 Coceptual definition

Saving refers to the fraction of income not instantly consumed but kept for future investment, consumption or for unforeseen contingencies in the future. It is crucial for enhancing people's wellbeing and acting as a safety net for households during unexpected events. Saving is thought of as a precautionary measure to reduce the danger associated with not knowing what the future holds. According to Popovici (2012), saving is a crucial component in closing the financial gap when unforeseen occurrences occur in an individual's lifetime. The goal of household savings could be to cover household expenses however, rural households face challenges from seasonality in income, work culture, and cash flows, saving is also seasonal and erratic. Mobilizing savings is also essential for personal well-being since, it allows households to moderate their spending and make profitable investments Karlan et al. (2013).
Since saving might occur on an informal basis in developing nations, it is challenging to fully quantify it through national accounts. Conversely, savings in OECD nations are primarily comprised of real estate, financial, and monetary assets. In Ethiopia, valuable or semi-precious items are routinely accumulated and exchanged against liquidities to cover lifecycle expenses (marriage, schooling, immigration, etc.) or urgent needs. Along with housing properties, other types of ownership (land, cattle, machinery, etc.) comprise the non-financial household savings.

Saving has a multidimensional benefit both for the saver himself, and for the nation at large. Individuals get benefited from saving in case of emergency funds, retirement benefits, payment for house, buying new car, entitlements of sinking funds, and education. Also states that savings not only allow for growth in income and increases in consumption,but also for the smoothing of consumption in the presence of various uncertainties. Saving behavior can only

be understood fully after the sources of uncertainty facing decision- makers and their opportunities for responding to them are specified (Melaku, 2017).

It is also one of those crucial factors that determines how quickly a nation's economy grows, developed or developing. A country's growth is determined by its saving culture. Research indicates that nations with high rates of household saving have significant economic potential. Economically developed nations are known to have strong saving cultures. Investment is significantly impacted by a rise in national saving. The total of the weighted averages of the three main economic sectors—private households, businesses, and general government—is known as national saving. Nevertheless, because family saving plays such a significant role in determining national saving, the great majority of studies on saving behavior focus on household saving (Touhami,et al., 2009).

Girma et al. (2013) also pointed out that saving is the cornerstone of investment, capital development, and economic expansion. Achieving macroeconomic balance, financial stability, and price instability all depend in part on a high enough saving performance (Adeolu et al., 2006). The rate of savings needs to be increased in order to guide the developing nations toward progress. But the truth is that there is a significant disparity between the amount of national savings used to fund investment and the amount of national investment needed in many developing nations, including Ethiopia (Girma et al, 2013).

In the event that a country lacks sufficient national savings to fund its investment, it may resort to borrowing from the national or local government, as well as foreign loans and grants. However, this will result in a significant debt load and cannot sustainably propel the nation's economic growth. Ethiopia has one of the lowest rates of saving among all of Africa's countries, while East Africa has one of the lowest rates overall. Regarding its pattern and determinants, very little empirical research has been done (Girma et al., 2013). People with low incomes are not allowed to access fundamental services, information, or resources that might otherwise enable them to save and accumulate assets. Institutional theorists believe that the most significant variables that motivate households and individuals to save money are those at the institutional level. The Main hypothesis of the institutional theory is that institutional factors like access, information, incentives and expectation determine the household or individual saving than any other (Gina et al., 2012).

2.1.2. Theoretical determinants of household saving

Savings, in general, is essential to a rising economy since it frees up resources for the creation of physical capital, for the research and development that drives economic growth, and for improving our standard of life, as outlined by Delafrooz and Laily (2012). Given the significance of saving and lawmakers' concerns, it is not unexpected that lawmakers have supported tax amendments meant to do rid of the code's alleged anti-saving biases. Various authors use terms such as saving behavior, saving propensity, saving practice, saving likelihood, and saving habit interchangeably, depending on whether they define saving as a behavior or a practice. For instance, (Fisher et al, 2012) used the term saving likelihood to indicate savers the intensity where people are willing to save some portion of income; used the term propensity to save to refer the intensity of setting aside a portion of income as saving, or an inclination to save, use savinghabit to express the regularity of saving over periods.

Classical economic theory postulates that households save a portion of their disposable income according to their preference for private profit – a gradual increase of income over time and their time preference (Smith, 1789). In order to maximize their total profit, households save in time *t* in order to consume more in *t* + 1. The main determinant of their saving behavior is the real interest rate. Given a rising real interest rate, the opportunity cost of current consumption rises and households save more (Smith, 1789; Ricardo, 1821). As household savings depend positively on the real interest rate it holds that S=S(r), Where S represents household savings, r represents the real rate of interest, and $\frac{ds}{dr} > 0$ so

That S is an increasing function of r. Keynesian economic theory suggests that a household's propensity to save depends on one or multiple saving motives. Keynes (1936) identifies eight motives, including the classical preference for private profit (*improvement motive*) and time preference (*inter temporal substitution motive*). Moreover, households safeguard themselves against expected labor income decreases after retirement (*life-cycle motive*), or unexpected future income losses (*Precautionary motive*). They may strive for (financial) independence (*independence motive*) or participation in potential business

Projects (*enterprise motive*), leave bequests (*bequest motive*), or save out of greed (*avarice motive*). Keynes (1936) assumes that saving motives change only slowly so that thepropensity to save is relatively stable over time. Keynes (1936) suggests that a household'sability to save

depends positively on the level of current disposable income. Thus, the impact of saving ability and saving motive on total household savings can be approximated by the linear relationship

$$S_t = a + bY_t + s$$

Where a<0, 0<b<1 and ε is the residual. S_t Represents the saving level in period *t*, and Y_t

represents the disposable income in the same period. The negative intercept an indicates that households dis save when their level of disposable income is zero. The marginal propensity to save (b) represents a household's motivation to save, indicating that an increasing income corresponds to increasing household savings. The average propensity to represents the disposable income in the same period. The negative intercept an indicates that households dis save when their level of disposable income is zero. The marginal propensity to save (b) represents a household's motivation to save, indicating that an increasing income corresponds to increasing household savings. The average propensity to save (F (t) + b) indicates that household savings rise with the level of disposable income.

A household's preference for liquidity affects the way that households save (Keynes, 1936). Households with a high preference for liquidity hoard cash, those with a low preference deposits their savings at a bank. The liquidity preference depends on the degree of precaution and preference for private profit (Keynes, 1936). At times of great economic uncertainty, precautious households may have a high liquidity preference. At times of economic certainty, rising real interest rates encourage households to deposit their savings at a bank due to the interest profit. Thus, Keynes (1936) acknowledges that household savings also depend on the real rate of interest as households strive for private profit (*improvement motive*).

Neoclassical economic models treat household savings exogenously or endogenously. In the Solow growth model, households save a portion of their disposable income according to an exogenously imposed, fixed saving rate s (Solow, 1956 and 1957; Swan, 1956). Lacking a behavioral component to household savings, the model does not permit conclusions regarding a household's savings motives and ability. Economic policies, such as tax policies, are the only possible determinant of *S*. If policy makers know that there is asaving rate S* (0< S*<1) that maximizes steady-state consumption (golden rule savings), they may introduce tax

incentives for household savings at S* to maximize savings and investment.

In neoclassical models that endogenize household savings, households face an inter temporal optimization problem. Households save to maximize their lifetime utility, subject to their constraints (Ramsey, 1928; Cass, 1965; Koopmans, 1965). Their savings preferences correspond to the life-cycle and permanent income hypotheses (Modigliani and Brumberg, 1954; Friedman, 1957). Both resemble Keynes‟ (1936) life-cycle motive of saving, according to which households bridge income differences over their life-cycles. In contrast to Keynes, however, the hypotheses postulate that households also consider their expected life-time income growth for their savings decisions.

When households know their point of retirement, they save according to their finite lifecycle so that consumption is stable, but not smooth (Modigliani and Brumberg, 1954). Assuming a constant real interest rate, individual household savings depend on the current life stage, the initial wealth endowment, and lifetime income. Households borrow when young (given their initially low income), repay their debts and save during their working age, but dis save and run down their assets after retirement (Ando and Modigliani, 1963). Thus, population growth pushes the aggregate saving rate up if there are relatively more working-age households than retired households in society. However, households may also save to leave bequests, so that retired households may still have a high saving rate (Modigliani, 1970, 1986). An initially low wealth endowment also affects the household saving rate positively as households save more to accumulate wealth for their retirement (Ando and Modigliani, 1963).

The effect of lifetime income on household savings is twofold since total household income consists of two observable components: labor income and the value of assets. On the one hand, household savings depend positively on the life-time labor income, defined as the current level and the expected growth rate of labor income (Ando and Modigliani, 1963). A household's labor income rises with growing labor productivity. Owing to the wage bargaining involved in this increase, the household anticipates the rising income and expects future consumption to rise along with it. In order to accommodate for this, household savings increase (Ando and Modigliani, 1963). On the other hand, household savings depend on the value of assets. Similar to an initially low level of wealth endowment, a currently low asset value encourages households to increase their savings for retirement (Ando and Modigliani, 1963).

However, the effect of lifetime income on household saving is ambiguous if the real interest rate changes. For example, a falling interest rate decreases the opportunity cost of current consumption relative to future consumption so that current saving is less profitable than future saving. Thus, households would want to save less at a given labor income (*substitution effect*). In contrast, the present discounted value of expected future consumption rises, making future consumption more expensive and encouraging households to save more (*income effect*). An interest-rate decrease also changes the present discounted value of assets. Accordingly, future income, such as pension earnings or capital income, rises, encouraging households to currently save less (*wealth effect*) (Ando and Modigliani, 1963; Elmendorf, 1996).

In contrast to the life-cycle hypothesis, the permanent income hypothesis suggests that households save according to an infinite life-cycle (Friedman, 1957). Since they do not know their time of death, households wish to smooth their consumption pattern in a stable manner over time. Assuming a constant real interest rate, they consume according to their average lifetime income, which is based on the moving average of their previous income (permanent income). One-off income fluctuations (transitory income), such as bonus payments, are saved (Friedman, 1957). Changes in the real interest rate alter the permanent part of household lifetime income and thus do not affect household saving behavior(Friedman, 1957).

In the presence of uncertainty, neoclassical models predict that household savings diverge from the predictions of the life-cycle as well as permanent income hypotheses, and that households save out of precaution. If inflation in an economy is unstable, rational households become uncertain about their job security and future income. This induces precautionary household saving against unexpected income losses (Leland, 1968).

Precautious households do not borrow when faced with income uncertainty (Carroll, 1997). Instead, they match their consumption and savings with their current incomes, even if they expect their income to grow over time. Thus, savings of precautious households depend on current income, similar to the Keynesian (1936) model. The same applies to households that are severely liquidity or credit constraint, and hence cannot borrow (Deaton, 1991; Carroll, 1997).Changes in household saving behavior may only materialize gradually, suggesting the presence of inertia due to habits or customs.

2.3. Empirical Literature Review

Girma et al. (2013) analyzed Ethiopian household saving factors using a single equation Tobit model and household survey data. Their findings suggested that the size of the household's land holding, annual income, and level of education of the head of the household all favorably impacted household savings. The findings also showed that households primarily use unofficial savings organizations, making it difficult for the national accounting system to track their funds.

Raba (2013) states that while age, the dependence ratio, and the real interest rate have a major negative influence on savings in Ethiopia, growth in income, the level of financial depth, and the saving interest rate have a large positive impact on the mobilization of savings. Multiple regression analysis was used by Obi-Egbedi et al. (2014) to study the determinants of saving. They discovered that education, occupation, household head income, and household size have a substantial impact on saves in rural households.

Kibet et al. (2009) used multiple regression analysis to examine the factors that influence smallholder farmers' and businesses' saving in Keyna. According to one of his findings, farmers' savings are somewhat influenced favorably by deposit interest rates. Farmers should be encouraged to save as interest rates rise because it suggests they will receive higher returns on their investments. In order to encourage people to save, the rate of interest impacts how much each individual saves (Nayak, 2013). Workineh (2013) empirically investigated the significance of some macroeconomic variables in determining domestic saving in Ethiopia by using times series data from 1970/71 to 2010/11.The results shows that growth rate of income play a stronger positive role in determining both the short run and long run behavior of domestic saving in Ethiopia. The saving decision may depends onincome, wealth, real interest rate and other potential factors such as individuals habit, such as preferences for spending now, or postpone their consumption, so that they can have a greater consumption in the future period (Ahmad and Hussin, 2010).

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regression analysis was used by Obi-Egbedi et al. (2014) to study the determinants of saving, and they discovered that education, occupation, household head income, and household size have a substantial impact on saves in rural households.

Schultz (2005) analyzed the demographic determinants of saving in a group of Asian countries by using econometric methods and found that dependence ratio has a significant negative effect on saving across counties. The mean saving of middle age, early and old age household heads is about Birr 360.6, 206.2 and 244.6 per month respectively and also the mean saving of illiterate household heads is Birr 58.57 whereas household heads with primary education, secondary education and tertiary education on average saves Birr 261.8,Birr 269.93 and 546.65 per month respectively. Hence, as the educational level increases saving also increase (Halefom, 2015).

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 tothe poor (Birhanu, 2015).

According to Woldemichael (2010) access to deposit services in financial institutionsenables 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 nstitutions, among others (MoFED, 2014)

Egwu and Nwibo (2014) investigated the determinants of saving capacity of rural women farmers in Ebonyi State of Nigeria using multi-regression analysis. They found that lack of access to productive resources and low returns to agricultural production has been identified as a bane to the saving capacity of the rural women. Michael (2013) conducted study using multivariate regression analysis (binary logistic and Ordinary regression least method) and found that savings habit of households are versatile and are influenced by demographic and economic factors based largely on income. The findings showed that the main predictors of the probability of an individual to have savings account were income, locality, and national health insurance registration, place of accommodation, sex, age and education. On the other hand, the main determinants of the level of savings were namely income, locality, and sector of employment, national health insurance registration, age, education, household size and marital status.

Family structure and composition is another important factor at influencing saving of households. Families with higher number of active working members involved in economic activities save much more than others (Popovici, 2012). The sex parameter of the household head indicated that male headed households are more likely to save money more as they are more frequently involved in different occupations (Nayak, 2013). The dependence ratio is another important factor influencing saving in many empirical studies. The elderly and young are expected to consume out of post saving while those within the working age are expected to accumulate saving (Quartey & Blankson, 2008).

McKinnon (1973) and Shaw (1973) postulate that households save according to their time preference so that their savings depend positively on the real interest rate. Under financial repression, the real interest rate falls below its market equilibrium, affecting the quantity and quality of household savings (Gemech and Struthers, 2003). On the one hand, a government may keep interest rates artificially low to allow cheap refinancing of government debt. This discourages household savings, with a negative impact on the household saving rate, investment and economic growth (Stulz, 1999; Mishkin, 2001). On

the other hand, if a government prevents the interest rate from clearing the market, non-market-based forms of saving will emerge, such as the rationing of available credit via auctions or quantitative restrictions on the credit volume by the government. This fosters the rise of investment projects with low profitability, resulting in an inefficient allocationof household savings (Obstfeld, 1998; Gemech and Struthers, 2003; Galindo et al., 2007).

Delafrooz (2011) Examined the effects of demographic characteristics (gender, marital status, ethnic, age, level of education, income) on saving behavior and to determine factors (demographic variables, financial management practice and financial literacy) affecting the saving behavior among Malaysian employees. Results of the study indicated significant differences of saving behavior according to age, level of education and income. Furthermore, income, age, financial management and financial literacy were found to be the most influential predictors of saving behavior.

Amsalu Bedemo (2015) conducts 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.

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 Intuitions. 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 oftrust due to awareness problems by households and inadequacy of formal institutions (Birhanu, 2015).

The saving mobilization and development of saving habits of a given society will have an

impact on capital accumulation and thus on economic growth of a country in general and on the financial well-being of the individuals in particular. Countries having higher level ofsaving rates have managed to reduce the burden of foreign debt and thus domestic investments will be financed by domestic saving especially household sectors (Toddle, 2015).

(Tarekegn and Geremew, 2017) examine major determinants of households saving behavior in East Gojjam Zone, Ethiopia used binary logit regression model. Results of the study indicate that the desire of household to save was significantly determined by the personal saving habits of the household head; existence of financial planning; and annual income of the household. Household head with positive personal saving habits has more probability to save than household head with negative personal saving habits.

(Abate Tadesse, 2020) examine household behavior and determinant of saving in financial institution in Derra oromia region. Results of the study indicate that by used the logit model it identified that the variables such as age of household head, main occupation of thehousehold and knowing interest rate of formal financial institution, income of the household and family size were significant determinants of saving status of the household.

The empirical literature review revealed that there are different factors that affect household savings. Most of these empirical studies focus on aggregate national savings using macro data and some others are employment of data obtained from urban households and cooperative members. The saving practices of urban households and non-memberof cooperatives will also address by these studies. And also, most of the studies are used single equation Tobit model. Besides, there is no study conducted on microeconomic level on the determinants of household saving in kolfikeraniyo sub city and therefore, this study attempts objectively to identify major micro level determinants of savings at household level focusing on the effects of the socio-economic characteristics of the households on saving behaviors.

2.4 Conceptual Framework of the study

The framework is formulated to explain the relationship of the independent variables (family size, income, and Educational level, Age, Sex, Marital Status and Deposit Rate, Employment status, Expenditure, Dependency ratio, Personal saving habit, additional income generating activity and home ownership) and dependent variable (saving behavior).

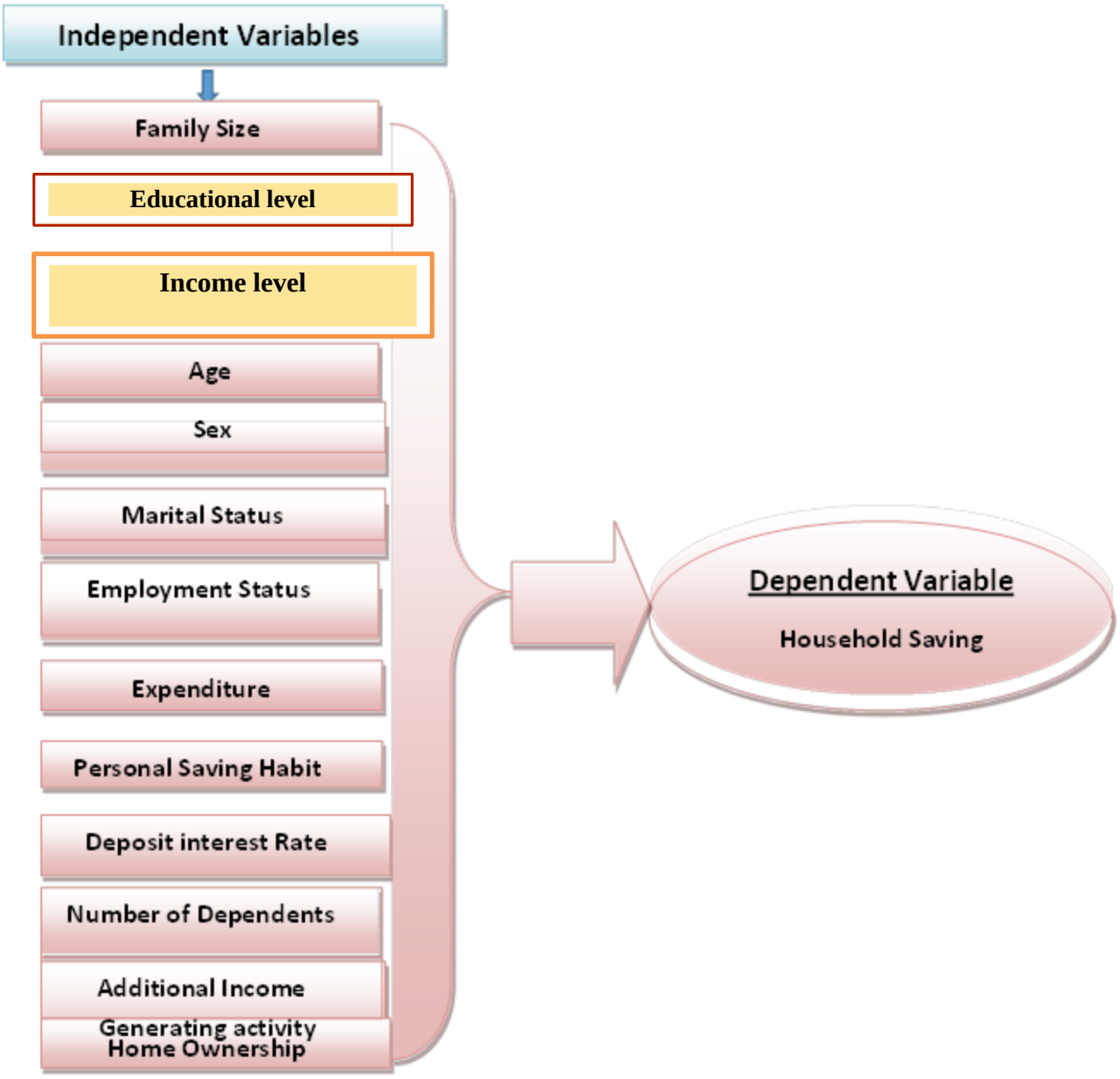


Figure 2.1 Conceptual Framework Source: Own construction

CHAPTER THREE

3.RESEARCH METHODOLOGY

In this chapter, researcher was discussed about the data that researcher used for this paper. Research methodology was discussed the Research Design and approach, Data Collection

Method, and Interpretation to achieve the aim of the study.

3.1. Description of the study Area

Kolfe Keranio sub-city, which is the focus of this study, is one of the established eleven sub-cities of Addis Ababa. The district is located in the western suburb of the city, near the Gefersa Reservoir. It borders with the districts of Gullele, Addis Ketema, Lideta and Nifas Silk-Lafto. Kolfe Keranio Sub-City is located in the western part of the city between 8° 57' 00" North and 9° 05'24" North latitude and between 38° 39' 36" East and 38° 43' 12" East longitude. It is about 9.6 kms away from the center of the city and the total area of the Kolfe Keranio sub-city is estimated to be about 6400 hectares. In Kolfe Keranio sub-city area emergence of squatter settlements is a recent phenomenon. In the years before 1994, the area had predominantly been agricultural land and some areas close to the river gorges were covered with natural vegetation. After 1994 squatters have begun to settle in the area by changing agricultural lands and areas covered with natural vegetation to urban use. the majority (92.6 percent) of the housing units were built after 1994. In comparing the two kebeles of the study area, squatter settlements in kebele 05 are more recently emerged than squatter settlements in kebele 04. The growth of squatter settlements increased until 1998 and the highest growth rate occurred during the period between 1995 and 1998. The majority (82.3 percent) of the household heads are male. About 88.8 percent are between 20 to 40 years of age, and about 83.6 percent of them are married. About 7.8 percent of the household heads are illiterate while 92.2 percent are literate. Almost half (49.6 percent) of the squatter household heads are Muslims; about 43.0 percent are Orthodox Christians followed by Protestants and Catholics which constituted 4.8 percent and 2.6 percent respectively(https://en.wikipedia.org/wiki/Kolfe_Keranio,2024)

3.2. Research Design and Approach

The study investigated the determinant of household saving in kolfekeraniyo sub city Addis Ababa; therefore the study was employed both quantitative and qualitative approaches. Considering the research objective and problem along with the perspective of the different research approaches both qualitative and quantitative research approach is found to be

appropriate for this study. Quantitative research is a logical and scientific investigation of quantitative properties and phenomena and their relationships, and also qualitative method also used for statistical analysis of the data (C.R. Kothari, 2004).

This study also used cross-sectional study; it is a type of research design in which you collect from many different individuals at a single point in time under this design data from house hold respondents will collect at single point in time without repetition from the target population. The reason for preferring a cross-sectional study is due to the vast nature of the study and economical to conduct in term of time and obtaining information from cross-section of the population at a single point in time is a reasonable strategy for many researches (Janet, 2006; Barley1997)

3.3. Types and Sources of Data

The study used both primary and secondary sources of data. The Primary data were collected from a household who is residents of kolfierkeraniyo sub city, the data will collect through household survey and key informant interviews from sample households using structured questionnaire. While the secondary data will gather from kolfierkeraniyo sub city offices, research papers, different journals, internet and different unpublished materials.

3.4. Sampling Design

The target population for this study is the households of kolfierkeraniyo sub city Addis Ababa. The total population of the study area is 604,226 (www.citypopulation.de,2022). Due to the inaccessibility of data for the number of households in each woreda also estimated by the sub city, the household number of each woreda is calculate by dividing the total population of each woreda by the average family size of the town that is 5. Based on this total number of projected household heads are estimated 120,446.

3.5. Sample size Determination

In order to collect reliable and representative sample out of the target population of estimated household (120,446) and the sample size will decide or determine by applying the scientific formula (Yemane, 1967) as shown below

N = the number of total households in the town n = sample size

e = level of precision which is equal to 0.08

The researcher has decided to take the true margin of error 8% with confidence level 92%.

$n =$ $\frac{120{,}446.}{1+ 120{,}446. (0.08)^2} = 156$

Table 3. 1 SAMPLE SIZE DETERMINATION

s.no	List of woredas	number of estimated HH	Selected Sample Size of HH = (156*P/100%)
1	woreda 1	10,825	14
2	woreda 2	10521	14
3	woreda 3	10990	14
4	woreda 4	10880	14
5	woreda 5	10992	14
6	woreda 6	10900	14
7	woreda 7	10957	14
8	woreda 8	10747	14
9	woreda 9	11981	16
10	woreda 10	10851	14
11	woreda 11	10802	14
Total		120,446	156

Source: Own construction (2024)

3.6. Sampling Technique

In this study households were the basic sampling units in order to get quantitative and qualitative data on the determinants of household saving in the study area. A two-stage sampling technique will employ to get the required primary data; at the first stage was stratified sampling technique from sub city as well as woredas and then the simple random sampling selection to households from those 11 woredas in kolfiekeraniyo sub city.

3.7. Method of Data Analysis

The study used both descriptive and econometrics method of data analysis by using STATA and SPSS. From descriptive statistics such as percentages, means, tabulation, charts and to analyze the determinants and to estimate values of slope and intercept coefficients the Double Hurdle econometric model was employed.

3.8. Econometric Model specification

This study used Double Hurdle Model; in a double-hurdle model the determinants of households' decision to save and the extent (amount of) household saving are estimated independently.

In the first hurdle, the decision whether or not to save is identified, and if she/he decides to save, hurdle two considered the level of household savings. The maximum likelihood estimator (MLE) in the hurdle 1 can be obtained using a binary probit regression and the likelihood estimator (MLE) for hurdle 2 can be estimated from truncated normal regression model (Mishra and Chang, 2011; Amsalu et.al,2013). Double hurdle specification is advantageous in that it permits the joint modeling of the decision to save and extent of saving. Accordingly, individuals should pass through two-step decision processes; first they have to decide to save and then they need to put some amount of money (should save).

Double hurdle specification requires two latent variables; Y1 related with binary choice model determining decision to save (which is probit model) and Y2 referring to the level (amount of saving) that is a truncated regression in nature. These latent variables are expressed as linear functions of the first and second hurdle regressors, X1 and X2, respectively, where X1 represents the regressors used to explain the decision to save and X2 shows those variables used to explain the decision regarding the amount to save.

However, Tobit specification is based on a restrictive assumption that both the decision to save and level (amount) of saving given that decision are determined by the same set of variables which implies that a variable that increases the likelihood of household to save will also increase the extent of saving. Therefore, double hurdle model is used as better alternative over Tobit specification. In a double-hurdle model the determinants of household decision to save and the extent (amount of) saving will estimate independently.

The heckit and the double-hurdle models are similar in identifying the rules governing the discrete (zero or positive) outcomes. Both models recognize that these outcomes will determine by the selection and level of use decisions. They also permit the possibility of estimating the first- and second-stage equations using different sets of explanatory variables.

However, the heckit, as opposed to the double-hurdle, assumes that there will be no zero Observations in the second stage once the first-stage selection is passed. In contrast, the Double-hurdle considers the possibility of zero realizations (outcomes) in the second- hurdle arising from the individuals‟ deliberate choices or random circumstances. This is the advantageous of double-hurdle models.

According to Cragg (1971) the double hurdle model specified as the following:

Choice model:

$Di = 1\ if Zi\delta + ui > 0$

$Di = 0\ if Zi\delta + ui \leq 0$

Outcome model:

$Yi* = Xi\beta + si$

$Yi = Yi* \qquad if Di = 1\ and\ Yi* > 0$

$ui \approx N\ 0, 1;\ si \approx N\ (0, \sigma\ 2)$

Di= βo + β1xi……βnxn + ui. Where n=1, 2, 3…

Following,

Di = β1FS+ β2IN+ β3Educ+ β4AGE+ β5SEX+ β6MS + β7DIR + β8ES + β9EXP + β10PSH+ β11DR+ β12AIGA+ β13HO + Ui

Where,

FS= Family size of the household IN=Income of household per month EDU=Education Level of household AGE=Household head age, SEX=Sex of household

MS=Marital status household DIR=Deposit interest rate ES= Employment status EXP=Expenditure

PSH=Personal saving habit of household head DR=Number of dependents

AIGA=Additional income generating activities HO=Home ownership

3.9 Variables Description, Measurements and Hypothesis

Dependent Variable

Dependent variable: - There are two components for dependent variable; the first is the decision to save. It has a dichotomous nature measuring households‟ decision to save which takes a value of 1 if the household decides to save and 0 otherwise. The second dependent variable is the extent or amount of saving by households on the decision to save and is of truncated regression.

Independent Variables: After the analytical procedures will clearly be defined, it is necessary to identify the potential explanatory variables that will influence savings behavior. Based on review of literatures, past research findings thirteen explanatory variables is identified and included in the model. The variables include family size of the household, income of household, education level of household, age of household, sex of household, marital status of household and deposit interest rate, employment status of household, expenditure of household, number of dependents of household, personal saving habit of household, additional income generating activities and home ownership.

Family size (FS): This is a continuous variable measured by numbers and in this study; family size refers to the number of individual living together in the same roof and shares everything within the household. (Zegeye, 2018) The size of household found that significantly and negatively affect household saving. This implies a household have a larger family size due to additional household member shares the limited resources that lead the household to save less.

Income (IN): income is continuous variable expressed in terms of birr and saving is generally assumed to come from what is left from consumption. Household income is expected to have positive relationship with saving. Income has significant and positive effect on saving (Halefom, 2015).

Education Level (EDU): It indicates the maximum level of education achieved by household head. It is one of the control variable included in the model. In fact, the household saving is different with different educational level of household. Formal education of the household is selected due to its effect on saving behavior. According to Bogale et al. (2017), they have found that better educated people tend to save more. This is theoretically justified from the fact that

education has the probability to increase households‟ awareness to saving and also their capacity to save as more educated households has wider possibilities of earning more income than not educated ones.

Household Head Age (AGE): It is continuous variable and measured in years and also it can be defined as the number of completed years from the time of birth till the time when the survey will be conducted. According to (Bogale Y. et al, 2017; Abate, 2020) as the ages of the households age increase, the saving behaviors of the also increase, However, Kidest A. (2019) is inconsistent with those study as the ages of the households age increase the saving behaviors of the household decrease.

Sex of household (SEX): is a dummy variable (which taken 1 value if the household is male and 0 if the household is female).Women and men have differing propensities to save due to variations in perceived risks and interests and in gender-related external factors that affect savings behavior. Saving behavior of women was better than men. Studies show that women are more conservative in their investment decisions than men. (Tsega H. et al, 2014: Abate 2020)

Marital status household (MS): is a dummy variable which indicates whether the household head is married or unmarried. It included in the model to control for the household saving of differences of household who are married and unmarried. It is a dummy variable which assumed a value of one if the household head is married, zero otherwise. According to (Tsega H. et al, 2014: Abate 2020) being married was a negative impact on saving; the main reason for the finding might be the fact that most female partners are spouses that makes their liquid money contribution very less. Furthermore, there are also social and others costs added most of the time for married individuals.

Deposit interest rate (DIR): is a dummy variable (which taken 1 value if the household is satisfied with the existing deposit interest rate and 0 if the household is unsatisfied). The deposit interest rate is the rate of interest that investors pay to borrow money, (Mankiw, 2010:63). Deposit interest rate is the price at which present and future income can be exchanged. According to classical economists, saving is the direct function of interest rate. Consequently, savings tend to rise with an increase in the rate of interest as present consumption is being shifted

to the future and vice versa. Therefore, it is expected that there is a positive relationship between interest rate and savings.

Employment status (ES): It referring to the relationship between an employee and their current or former employer. It is one of the control variables included in the model. In fact, the household saving is different with different employment status of household. According to (Haile M.et al, 2017) the saving habits of businessmen participants were 1.74 times higher as compared to government employees.

Expenditure (Exp): It is a continuous variable that refers to the sum of household expenses on food item, clothing, health, education etc. It includes not only expenditure on consumption but also different expenditures on social and religious ceremonies celebrated occasionally such as, wedding, funeral, circumcision and others. The expenses related to these ceremonies are sometimes too large relative to household income levels. According to (Bealu. T, 2016) Expenditure on social issues is inversely related to the savings.

Personal saving habit of household head (PSH): is a dummy variable (which taken 1 value if the household is positive and 0 if the household is negative saving habits). Savings habits were defined as frequently practiced behavior, done without a particular sense of awareness, with the goal of freeing up funds for saving or debt reduction. According to (Tarekegn T. et al, 2015) There is positive relationship between personal saving habit and saving practices of household. The probability of household head with positive personal saving habit is very high (0.84) to save than with negative personal saving habit. Lack of positive personal saving habit significantly harms the desire of households to save by engaging them in extravagant events. Because household head with positive personality regularly manages income, spends reasonably through planning, rigorously manages unexpected expenditures, thinks about family future, and protects him/her from adductions.

Number of dependants (DR): It is the number of people of non-working age, compared with the number of those of working age. Higher number of active working members involved in economic activities saves much more than others (Popovici, 2012). The elderly and young are expected to consume out of post saving while those within the working age are expected to accumulate saving (Quartey & Blankson, 2008). A higher number of dependents implies a

greater burden of consumption expenditure and hence, the more the allocation of household budget towards consumption expenditure leads to lower saving and it is expected to negative affect saving rate.

Additional income generating activities (AIGA): It is an activity that a person engaged in supplementary to what is already present or permanent income generating activity. According to (Haile M et al, 2017) a person who engaged in additional income generating activities than that of who only working a one work or permanent income it is better to save due to it increases their capacity to save by increasing their income.

Home ownership (HO): It indicates whether a household own a house or not. It is a dummy variable which represent the value one if the household owns house and zero otherwise. Home-ownership includes in the model as a control independent variable and household who own a house have different level of saving from household who lived rent house. According to (kidist A, 2019) it is a positive relationship between owning a house and saving and It will have expected a positive effect on household saving status.

Variable	Unit of measurement	Expected sign
Household Saving Behavior (Dummy)	1 if saving 0 not saving	
Amount of saving	In Ethiopian Birr	
Family size	Number	Either negative nor positive
Income	In Ethiopian Birr	Positive
Education Level	Years	Positive
Household Head Age	Years	Either Negative or positive
Sex of household	Discrete (Male=1, Female=0)	Either Negative or positive
Marital status household (MS):	Discrete (Married=1, unmarried=0)	Either Negative or positive
Expenditure	In Ethiopian Birr	Negative
Personal saving habit of household head	Discrete (Positive=1, Negative=0)	Positive
Number of dependents (DR)	Number	Negative
Additional income generating activity (AIGA)	Discrete (Yes=1, No=0)	Positive
Employment status (ES):	Discrete (self-employee =1,	Positive

	other =0)	
Home Ownership	Discrete (house owns =1, other =0)	Positive
Deposit interest rate (DIR)	Discrete (satisfied=1, unsatisfied=0)	Positive

Table 3.2 Explanatory variables and direction of influence on dependent variables

3.9. Ethical Considerations

In terms of ethical consideration, the researcher was first request permission from respondents. The data collections were start after introduced the objectives and proceeds when informal agreement reached between researcher and respondent. Respondents invite to comfortable environment to ensure their privacy and confidentiality. Hence, the researcher will guarantee to ask and secure the respondents privacy and does not expect to mention their name. In addition, the researchers will collect original data, keep data for a reasonable period of time, and provide accurate account of the information. In general, the researcher kept the dignity of the respondent; promote moral questions and develop intimacy with the respondents of the study

CHAPTER FOUR

4.1. RESULT AND DISCUSSIONS

This chapter contains the study's results and discussion, as well as its findings' disclosure and discussion of their interpretations and importance. The study results are presented in this chapter,

beginning with descriptive statistics. With the aid of SPSS software, data analysis for descriptive statistics was made possible. Correlation and regression results were then examined using STATA, and an economic model was tested.

4.2. Characteristics of the Sample Respondents

In this sub section, the general demographic and household characteristics of the sample respondents are discussed their descriptive statistics. Tables and figures are presented to show relevant data of the household involved in the sample survey

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Age	156	24.00	81.00	46.4167	13.77139
Martial status	156	1.00	4.00	2.0641	1.01396
Family size	156	1.00	18.00	6.3013	3.08883
Valid N (listwise)	156				

Table 4.1. Descriptive analysis result

The above table shows that the descriptive analysis the mean of age is about 46.41, marital status 2.06 family size 6.30, as well as the standard deviation 13.77 or age 0.475 or gender 1.01 for marital status ,3.08 or family size 1.32 for education background respectively. in addition, this, the skewness and kurtosis the distribution of the response.

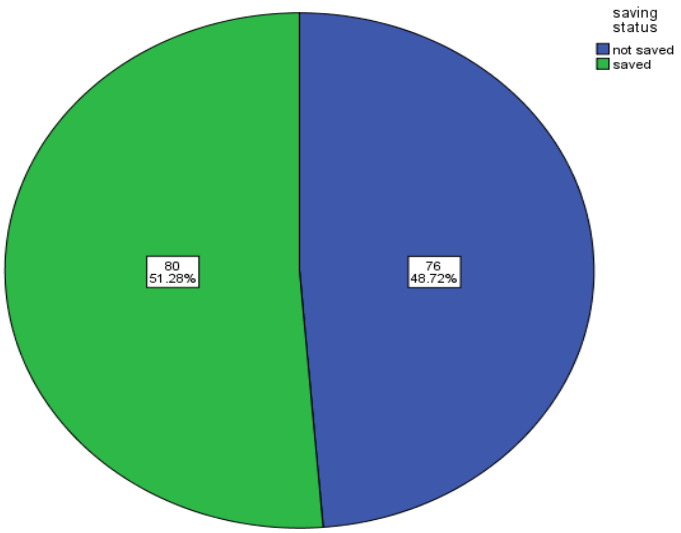


Figure 4.1 Saving status of the households

Source: Own computation from survey data (2024)

The above graph shows marital status of the respondents' determinants of household saving behavior implies 19 (12.8%) widowed, 22(14.10%) separated, 53(33.97%) um married and ,62(39.74%) o married. majority of the respondents are married. the smallest respondents were widowed.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
household saving amount	156	.00	18000.00	2861.5385	4071.35488
Valid N (listwise)	156				

Table 4.2. descriptive o household saving respondents

The data for this study contains 156 conveniently selected household of which only 51.28% involved in saving (saving be it the formal or informal institutions) and the remaining did not participate in saving practice of any type. The respondents saved amount in birr (Ethiopian currency) runs between 0 to 18000.00 birr with standard deviation 4071.35488 birr and mean monthly saved birr 2861.5385. The possible causes identified for poor saving include high

consumption expenditure, lack of incentive to save, low-income level, low current level of deposit interest rate, high inflation, and having a negative personal saving habit and others

Age * Sex * Saving status Crosstabulation

Count

saving status			Sex		Total
			Female	male	
not saved	Age	18-25	4	16	20
		26-35	8	7	15
		36-45	4	11	15
		46-55	2	5	7
		Above 56	8	11	19
	Total		26	50	76
Saved	Age	18-25	7	10	17
		26-35	2	11	13
		36-45	3	8	11
		46-55	2	9	11
		Above 56	13	15	28
	Total		27	53	80
Total	Age	18-25	11	26	37
		26-35	10	18	28
		36-45	7	19	26
		46-55	4	14	18
		Above 56	21	26	47
	Total		53	103	156

Table 4.3. Age and sex of the household head

As it was indicated in table 4.1 above, 47 of respondents were under age category 18-25 years, and their response to saving was higher than the rest of age category. It is due to youth are more productive and have a new energy to do work and getting more income than the older,7 of respondents under age category 46-55 and 19 of the respondents age greater than 65. The respondent's sex distribution had a range from the youngest (25 yrs.) to the oldest (81 yrs.) incorporating household heads having significant difference in age. Also, table 4.1 reveals 69 (57.50 %) sampled household was headed by a male while the rest 51 (42.50%) was headed a female household head. This data indicates that the majority of the sampled households were led by male household heads signifying that male has still a dominant role in household decision making than female in the city.

In addition, from the total sample respondents, 53 household heads (33.90 %) were female, 103 (66.02%) were male This data showed that the majority of the sampled household heads were male their response to saving was higher than the rest of female.

Variables		Family size			No. of dependents		
		1-4	5-6	>7	0-1	2-4	>5
Number of household head		89	48	19	90	50	16
Percentage (%)		57.17	40.00	15.83	57.6	41.67	13.33
Saving	Yes	39 (81.3%)	21 (43.8%)	7 (36.8%)	46 (85.19%)	24 (48%)	6 (37.5%)
	No	14 (18.8 %)	27 (56.3%)	12 (63.2%)	8 (14.81%)	26 (52%)	10 (62.5%)
		MEAN=5.4,STDEV.=2.1,MIN=1,MAX=9			MEAN=2.3,STDEV.=2.0,MIN=0,MAX=6		

Source: Own computation from survey data (2024)

Table 4. 3 Family size and dependents of the household

Family size is one of factors affecting saving status of households in the study area. 89 (57.17%) respondents were having family size 1 to 4 (out of these 81.3% of were saving and 18.8 % were not saving), 48 (40%) households with family size 5 to 6 out of these respondents 43.8% are saving and 56.3% were not saving and the remaining respondents 19 (15.83%) with family size greater than 7 (out of these 63.2% were not saving and 36.8% were saving. As it was clearly indicated by table 4.2 above Households with large family save less whereas households with lower family size save more. Potential explanation for the finding is for large family size, it is difficult to feed by one household head and their consumption level is greater than saving. Typically, large family size has the significant relationship with lower saving, an increase in the household size; the demand for household consumption increases and at the same time saving decreases. Further the average family size of the sampled respondents was 5.4 with the standard deviation of 2.1. The minimum household size was one and maximum was nine.

Number of dependents is other factor affecting saving status of households in the study area. The average number of dependent living in a household was 2.3 with standard deviation of 2.0. The maximum number of dependents in the sampled household was found to be six per household and the minimum was zero. 54 (45.0%) respondents were having dependents 0

to 1 (out of these 85.19% of were saving and 14.81 % were not saving), 50 (41.67%) households with a dependent family of 2 to 4 out of these respondents 48% are saving and 52% were not saving and the remaining respondents 16 (13.33%) with a dependent family that greater than 5(out of these 62.5% were not saving and 37.5 % were saving. As it was clearly indicated by table 4.2 above Households with large number of dependents save less however households with lower number of dependents save more. This means it increase to the dependents, it is tough to fulfil the need of the family by single household head and their consumption level is greater than saving.

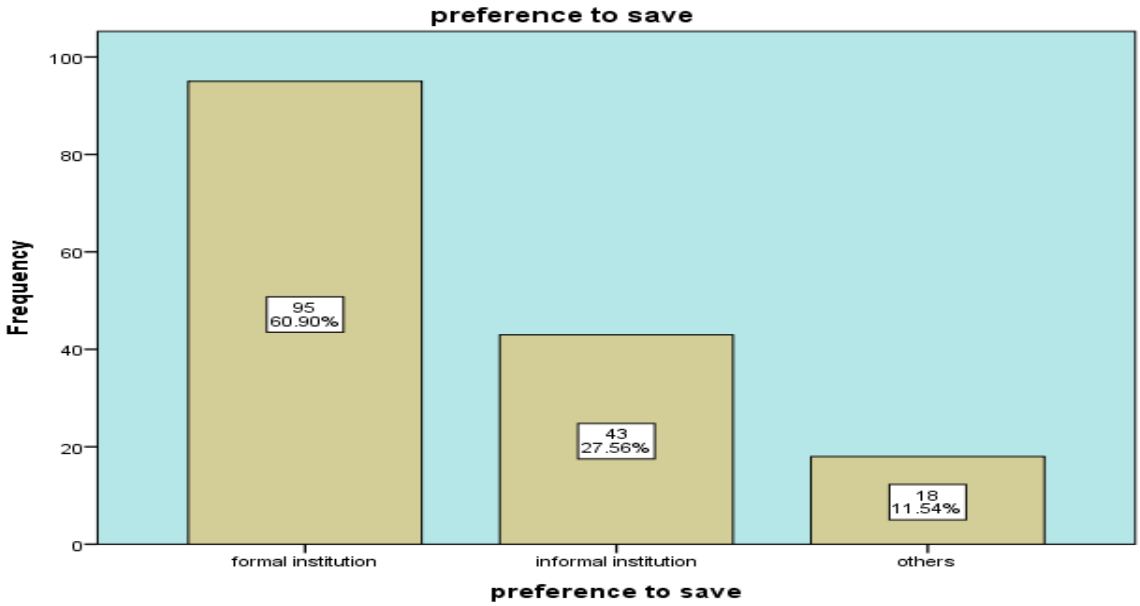
In addition, the education figures reveal that 116 (96%) had some formal education and some 4 respondents were illiterate (can't write or read). The average educational level of household heads was 10th grade, and the range was from zero years of schooling to a maximum of 18 years. On employment, 80 (66.6%) of the total 120 sampled households were engaged in salaried work, of which 41 (34.17%) were in government organizations, 20 (16.7%) in Non- Government Organizations and 19 (15.83%) in private organizations. The rest 40 (33.3%) were engaged in non-salary activities, with 35 (29.7%) respondents running their own businesses, and 5 (4.1%) unemployed.

Regarding disposable income and saving performances, the average monthly income of sampled respondents was Birr 10,676 per month and saved 2,640.8 with a minimum monthly income of Birr 3000.00 and a maximum of Birr 36,000.00. This indicates that an average household saves 24.7% of its disposal income. This implies that the overall saving performance of the sampled household is poor. In addition, the average monthly expenditure of sampled respondents was Birr 7,186.5 per month with a minimum monthly expenditure of Birr 3000.00 and a maximum of Birr 20,000. Data for the wealth of the households showed that 49 (40.8%) of the respondents owned the house they lived in. Of the remaining 71(59.2%) were living in houses rented from the government or the private house.

From this result we can infer that about 30% of the surveyed households were engaged in supplementary to what is already present or permanent income generating activity and average income from additional income generating activities were 4,569 and saved 860, which means that an average household saved were 18.8 % from additional income and the

remains 70% of the respondents were not engaged in additional income generating activity.

Figure 4.2 Place to Prefer to Save Money



Source: Own computation from survey data

As showed in the above figure the most frequently observed category where the respondent preferred to save their money was at the bank 95 (60.9%). This indicates the respondents have the knowhow about the importance of a bank service regarding saving. Of the remaining 43 (27.56%), 18 (11.54%) were did not prefer to save at bank rather in the informal institution (Equb) and at home. The reason is that received lower monthly income, preferred traditional saving mechanisms (such as Equb) and others than banks further they held that the bank and other formal institutions are hard to use them with their low-income experiences, but the informal institution like daily, and weekly Equb are easy to use, and saving at home is easy to access any time. Hence a majority number of the household prefer to save their money at the bank.

Regarding to access to financial institutions, almost all sample household heads reported that they had access to modern financial institutions for saving. Furthermore, the respondents were asked to indicate whether they have information that they can earn interest on their saving account on Bank/ Micro Finance. The survey result showed that majority of the respondent doesn't have known that their deposit brings the opportunity to

earn interest. The result showed that only 39.2% of the respondent have the information about the interest they can earn from their saving. The remaining 60.8% have no information about the bank interest from their saving. Related with these; from the respondents which have information about the interest rate only 57% of the respondents are satisfied with the existing level of deposit interest rate.

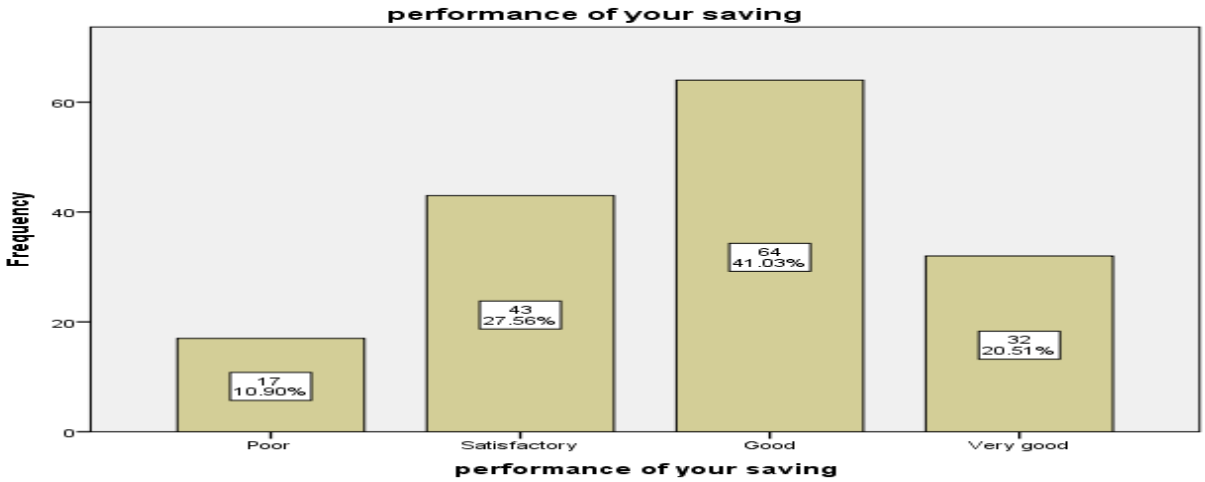


Figure 4.3performance of saving

The above graph showed that the performance of saving of the respondent in the study area 10.90% poor,27.56%satisfactory,41.03%good and 20.51% very good.

current occupation (or employment status) of the household head?

	Frequency	Percent	Valid Percent	Cumulative Percent
Government employed	97	62.2	62.2	62.2
Private employed	48	30.8	30.8	92.9
Self-employed	8	5.1	5.1	98.1
Non business	3	1.9	1.9	100.0
Total	156	100.0	100.0	

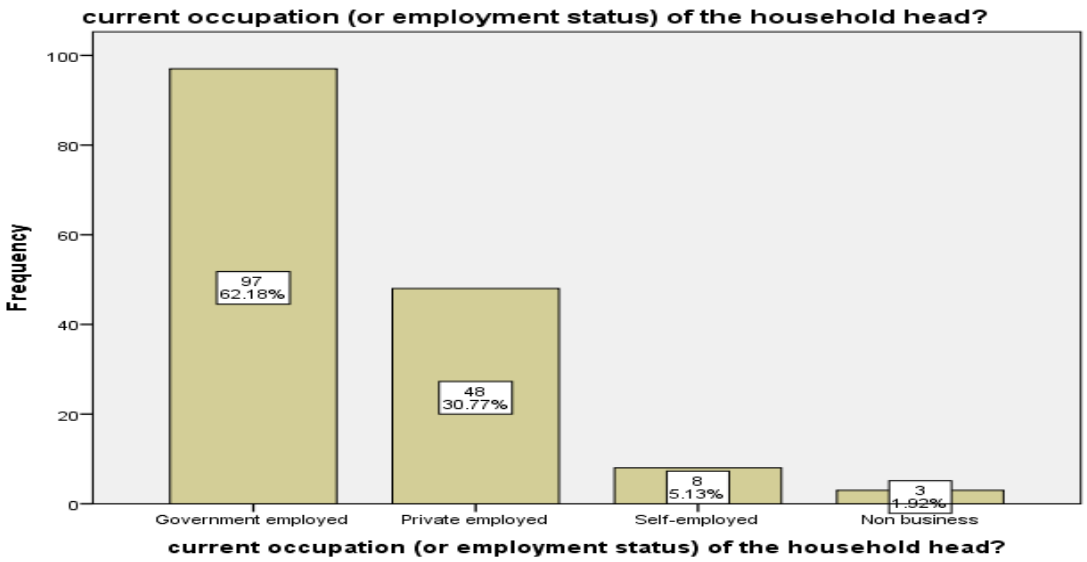


Figure 4.4. employment status or current occupation of the respondent

The graph indicates that the current occupation (employment status) of the respondents of determinates of household savings behavior 97(62.18%) are government employed,48(30.77%) of private employed,8(5.13%) of self-employed and 3 (1.92%) of non-business. This shows also that the respondents were getting more income from form working and their livelihood depends more on government employment, followed by private employed while other activities were less practiced and they can get more income if they participate in the different sectors like trading and others to improve their living standards.

other study also supported that the person who had occupation gain more income than that of the person who had no occupation and also saves more than that of person who had not occupation.

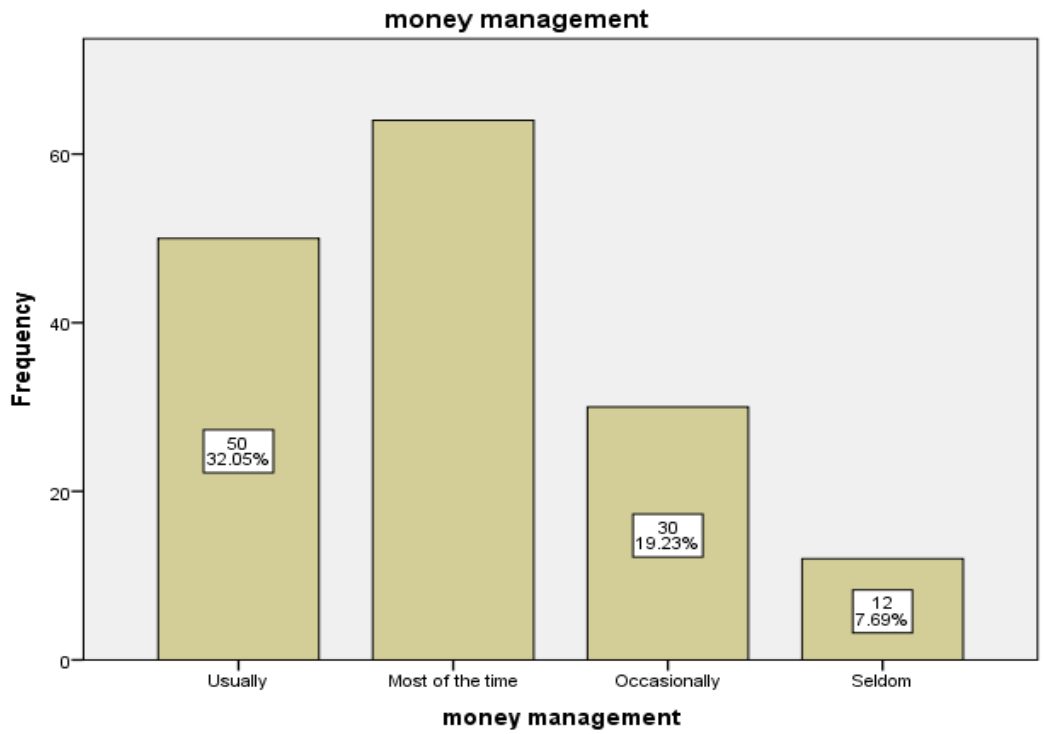
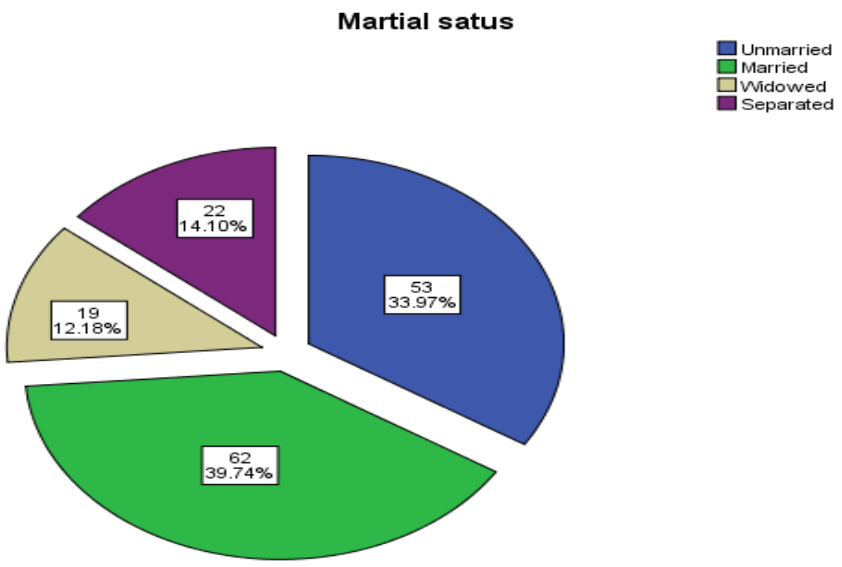


Figure 4.5. money management of the respondents

The above graph shows that the money management of the respondent's o determinates of household saving behavior 50(32.05%) manage the money usually ,30(19.23%) manages their money occasionally,12(7.69%) of manage their money seldom and 64(41.5%) are manage their money most of the time. Other researcher (NAMATE,2020) also reveals that financial literacy has statistically significant implications on saving behaviors of households. Households having higher financial literacy scores have higher probability of saving than those with lower scores, even when education and income indicators are controlled. Further, the results reveal that those people with higher income and higher education levels have higher probability to save money. As regards to nature of occupation, those households with self-employment are found to be more likely to save compared to other categories. Whereas belonging to a saving club also increase the likelihood to save money.



Source: Own computation from survey data

Figure 4.6. marital status of the respondents

The above graph shows marital status of the respondents' determinants of household saving behavior implies 19 (12.8%) widowed, 22(14.10%) separated ,53(33.97%) um married and ,62(39.74%) o married. majority of the respondents are married. The smallest respondents were widowed. Marital status is found another significant determinant factor for household savings. Since the descriptive statistics showed that 83.9% of the sampled households are male-headed households, the main reason for the finding might be the fact that most female partners are spouses that make their liquid money contribution very less. Furthermore, there are also social and other costs added most of the time for married individuals (Tsega & Yemane, Citation2014) in this study the regression employed and regressed.

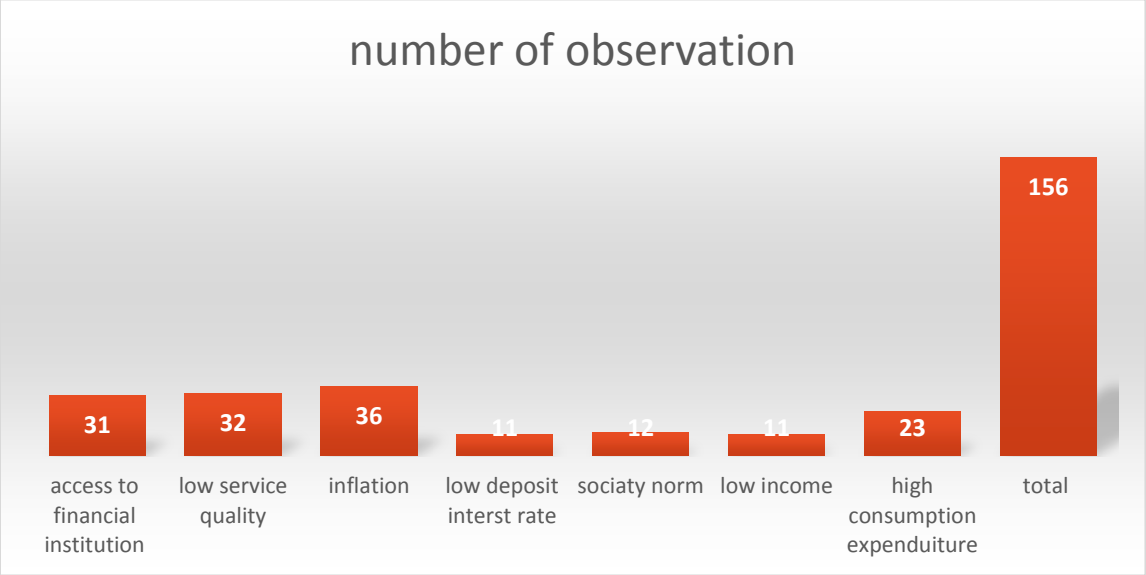


Figure 4. 7 constraint and challenges of household saving

There are internal and external factors which affect household saving behavior or culture. The survey results show that in the above figure showed that 11(7%) of the respondents are 1constrained their saving habit because of having low income and the rest 23 (14.7%) are because of having high consumption expenditure (it's predicted due to large number of family members or extravagancy including different social ceremonies such as wedding).

Compared to internal factors only 31 (19.8%) of the respondents are doesn't saved due to access to financial institution which is too low, it indicates almost all respondents are having an access implies that the number of banks" and Micro finance institutions" branches increase from time to time leads to increase access of financial institution for the public even in far remote areas or outskirt of the country which encourage the saving habit of that particular society.

From the respondents 32 (20.5%) didn't saves due to low service quality of the banks/micro finance institution and low deposit interest rate of the banks and the rest 23.07% respondents it's prefers to consumed than saved because of higher inflation and the remaining 12(7.6%) respondents not saved because of society norm or culture that discourage the saving habit of the households or it decrease the capability of saving and it

increase consumption. Maheber, Ziker, Teskar, Wedding and different yearly ceremonies are considered as obstacle for saving. However, there are a good society norm or encouraging saving practice of the society from that (equb and edir).

4.2. Econometric Model Result

The double hurdle model was used to identify the factors influencing the status and level of household saving, as described in the methodology section. By using the maximum likelihood method of estimate, the model examined the household's decision to save and the extent to which they saved in the study area.

According to Gujirat (2004) Hurdle models are applied to situations in which target data has relatively many of one value, usually zero, to go along with the other observed values. They are two-part models, a probit model for whether an observation is zero or not, and a count model for the other part.

The factors of household's decision to save and the amount of their saving are estimated separately in a double-hurdle model. The decision to save or not to save is identified in the first hurdle, and if the household decides to save, the level of their savings is assessed in the second hurdle.

To estimate the first hurdle a binary probit regression was used, and two estimates the amount of saving truncated regression was used.

According to Gujirat (2004) the advantage of a double hurdle definition is that it allows for joint modelling of the decision to save and the amount saved. Individuals should, then, go through a two-step choice process: first, they must decide to save, and then they must invest some money (should save).

Di is a binary choice model that determines the decision to save (which is a binary probit model) and $Yi*$ is a truncated regression that refers to the level (amount of saving). Saving and the amount are latent variables as explained in the methodology part.

Before directly proceed to analyzing the finding scholars (Kothari, 2004) point out that testing the reliability as well as the validity of data is mandatory. Therefor this study

conducted two basic testes and they found valid. The two tests were Wald Test and Likelihood Ratio.

The Wald test (also called the Wald Chi-Squared Test) is a way to find out if explanatory variables in a model are significant. “Significant” means that they add something to the model; variables that add nothing can be deleted without affecting the model in any meaningful way.

Type of Test	LR chi2(13)	Prob > chi2	Decision
Wald Test	3.05	0.2176	Model Accepted
Likelihood Ratio (lr test)	14.14	0.0002	Model Accepted

Source: Survey Result, 2024

Table 4.5 Test of Double hurdle Estimation

The above table shows that the result of the first hurdle has chi2 (3.05) and the critical value (0.2176). In the Z table the value of chi2 were significant (p value<0.001) and the second hurdle which tested by the Lr test showed that chi2 14.14 and the critical value 0.002. Thus, two tests revealed the acceptance of the model.

After checking the Wald Test and Likelihood Ratio (lr test) the estimation of variables was conducted. The following table showed the estimation of variables.

	Probit model		Marginal effect	
	Coefficient	Std	Coefficient	Std
Family size	-.35**	.158	-.01	.003
Income of household	.00**	.000	.00	6.82e
Education Level of household	.25**	.107	.00	.002
Household head age,	-.13**	.059	-.00	.001
Sex of household	-2.51**	1.147	-.07	.027
Marital status household	.189	.478	.00	.014
Deposit interest rate	3.91	2.796	.12	.079
Employment status	-.11	.420	-.00	.013
Expenditure	-.00**	.000	-.00	.000
Personal saving habit of household head	1.98**	.901	.13	.048
Number of dependents	-1.02***	.327	-.07	.011
Additional income generating activities	2.93**	1.412	.20	.081
Home ownership	2.41**	.963	.16	.048
	Number of obs=156		Number of obs=156	
	LRchi2(13)151.3		LRchi2(13)151.3	
	Prob > chi2 =0.0000		Prob > chi2 =0.0000	
	Pseudo R2 = 0.9166		Pseudo R2 = 0.9166	

Source: Survey Result, 2024

***significant at 1%, **significant at 5%, *significant at 10%

Table 4.6 Estimations of Probit model and Marginal effect

As described above, to estimate the first hurdle a binary probit regression was used, the coefficients of the Probit model only give the significance and the direction of the effects of each explanatory variable on saving. The marginal effect measures the impact of impact that an immediate unit change in one variable has on the outcome variable while all other

variables are held constant. This implies that the rate and level of saving will change whenever the variable factors are change. Both the coefficients and marginal effects of the Probit model are given in above Table 4.4.the

The result showed that, family size, age of the household, sex, expenditure and number of dependents were found negative and significant effect on decision to save. This indicted that the increment of those variables in the household has a negative impact on saving decision of households in the study area others were found positive.

As the above table showed that Family size, which is significant at 5% level, when household family size increase by one individual, probability of households saves decrease by 1%, other things remaining constant.

This result is due to the fact that when family size increases, households are expected to allocate more of their income on consumption expenditure and thus there will be no income left for saving. A study done by Melkamu, B et al., (2017) and Zegeye, P. (2018) found out that large family size reduces the saving rate of a household.

Income is one of the factors that determine households saving level. As it was expected the monthly income of the respondents has a positive significant effect on the decision to save and coefficient is statistically significant at 5% level. Income of household suggests that a one birr increase in the income of the household increases the probability of household saving by 0.00174%, other things being equal. Studies Abate,.T. (2020) and Abebe, A. (2017) confirmed that an increase in income was found to increase saving significantly.

Furthermore, they point out that Income and saving have a straight relationship, which means that when income rises, so does saving, but by a smaller amount. Because the proportion of income consumed drops as income rises, the proportion of income saved rises. Savings is negative at lower income levels.

As the above table showed that household income is positive and it showed that anincrease in incomes of respondents increases their tendency to participate in saving and the amount they save. This is because such respondents will have income left for saving after paying for consumption expenditure.

Similarly, Personal saving habit of household head has statistically significant at 5% level. Therefore, the marginal effect of this variable implies that having a household personal

saving habit have 13% more probability of saved than a household doesn‟t have a saving habit, ceteris paribus. This suggest that personal saving habit of household head increases, which may be related with the desired of respondents to produce more and get more incomes for saving. The study conducted by Tarekegn T. et al, (2015) point out that lack of positive personal saving habit significantly harms the desire of households to save by engaging them in extravagant events.

Education level of the respondent is another important variable at influencing decision to save and statistically significant at 5% level, which implies that years of schooling increase by one year, increase the probability of saving by 0.79494%, other variables being constant. This is due to a more educated person have an awareness to life style, awareness to Saving, involvement in other income generation activity. This finding is in line with theoretically justification that education has the probability to increase the awareness to saving and also their capacity to save as more educated has wider possibilities of earning more income than not educated ones (Fisher et al, 2012).

Researchers such as Hussein, A. (2007), Girma,T. et al.,(2013) and Gina, A., et al., (2012) asserted that education is found to be significant to determine the level of saving and those researcher were conform with this study but on the contrary Rehman et al (2010) states this variable to have a negative effect on household saving due to the fact that educated households‟ tend to spend more on the living standard and Children‟s educational advancement. Another indicator in the inconsistency of the estimation the results is the one presented by Beckman et al (2013) it indicated that individuals university degrees or medium education are more likely to save due to income effects of better education and increased financial literacy.

As shown in the above table, the age of household head has negative significant effect on the decision of household to save, statistically significant at 5% level, that is as the household head gets older his productivity decreased and going to be a retired period as a result decision to save will decreasing, this may be because his possibility of getting more income will decrease as age increases. Kidest A. (2019) was conforming to this study.
Researchers such as Bogale et al., (2017): Tewodros, S. (2021) stated that the age of respondent has positive significant effect on the decision to save, that is, as the individuals

get older their decision to save will increase; this may be because awareness about saving will increase as age increases inconsistency with this study.

The dummy variable, sex of the respondent, has a negative sign and it is also statistically significant at 5%, therefore, the marginal effect of this variable implies that females have 7% more probability than males to save, ceteris paribus. Female and male have differing propensities to save due to variations in perceived risks and interests and in gender-related external factors that affect savings behavior. Suggesting that female respondents are saving more than their male counterparts. This may be true because females are more conservative in their investment decisions than men.

The result is consistent with the study Tsega H. et al, 2014: Abate 2020. However, according to Zegeye P. (2018) female headed households in general have more dependents and thus have higher non-workers to workers ratio compared to other households, they work for lower wages and have less access to assets and productive resources compared to men, Therefore, Male headed households are expected to have better chance of earning income and when income increases saving level of the household increases.

Home ownership of the household also has statistically significant at 5% level and positive effect on the decision to save. Therefore, the marginal effect of variable implies that having a home have 16% more probability than a household that doesn't has a home to save, ceteris paribus. The reason that a household having a home it's could be decreasing a rentalexpense of the house and it's tends to shift to saving. (According to Kidest A, 2019: Ricardo B. et al, 2015) homeownership is associated with a higher saving rate.

Household engaged in additional income generating activities has statistically significant at 5% level and positive effect on the decision to save. Therefore, a household engaged in additional income generating activity have 20% more probability of saving than doesn't engaged in additional income generating activity. This implies a household engaged in additional income generating activities it increase the income base of the household and it increase the ability of saving of the households.

According to (Haile M et al, 2017) a person who engaged in additional income generating activities than that of who only working a one work or permanent income it is better to save due to it increases their capacity to save by increasing their income.

Number of dependents of the household also has statistically significant at 1% level and negative effect on decision to save. When number of dependents increase by one individual, probability of households saves decrease by 7 %, other things remaining constants. This is a result of a greater burden of consumption expenditure and hence, the more the allocation of household budget towards consumption expenditure leads to lower saving. Higher number of active working members involved in economic activities saves much more than others (Popovici, 2012). The elderly and young are expected to consume out of post saving while those within the working age are expected to accumulate saving (Quartey & Blankson, 2008), those studies are aligned to the study.

Expenditure of the household is another significant variable at 5% level and negative effect on decision to save. Expenditure of the household put forward that a one birr increases in the expenditure of the household decrease the probability of household saving by 0.00214%, other things remaining constant. This implies a higher expenditure of household's decreases saving decision. According to (Bealu. T 2016) not only expenditure on consumption but also different expenditures on social and religious ceremonies celebrated occasionally such as, wedding, funeral, circumcision and expenditure on social issues is inversely related to the savings.

	Truncated regression of model		Marginal effect	
	Coefficient	Std	Coefficient	Std
Family size	-8.66	141.968	-2.65	43.444
Income of household	.50***	0.090	0.15	0.026
Education Level of household	75.79	323.687	23.20	98.933
Household head age,	-0.26	44.809	-0.08	13.715
Sex of household	-1559.16	1080.009	-620.80	346.409
Marital status household	890.98	600.950	272.72	181.234
Deposit interest rate	1478.49	2001.207	452.55	606.025
Employment status	-219.03	427.094	-67.04	130.432
Expenditure	-.00**	.000	-1103.23	477.768
Personal saving habit of household head	.92**	0.488	243.56	170.616
Number of dependents	-.78***	0.153	-207.61	36.967
Additional income generating activities	1.74**	0.696	459.69	130.084
Home ownership	3604.27**	1594.356	1103.23	477.768
	Number of obs=156 LRchi2(13)151.3 Prob > chi2 =0.0000 Pseudo R2 = 0.9166		Number of obs=156 LRchi2(13)151.3 Prob > chi2 =0.0000 Pseudo R2 = 0.9166	

Source: Survey Result, 2024

Table 4.7 Truncated regression model and Marginal Effect

As mentioned in the above, to estimate the second hurdle or to estimates the amount of saving truncated regression was used. Since the marginal effect measures the impact of the impact that an immediate unit change in one variable has on the outcome variable while all other variables are held constant. In the second hurdle, according to this study the variables that affect the amount of saving in the household are Income of household,

expenditure, personal saving habit of household head, number of dependents, additional income generating activities and home ownership respectively.

The marginal effect analysis implies that the number of dependents and expenditure of the household have negative relation with saving rate. According to the marginal effect analysis result showed that when the number of dependents increases by one individual over a household it will decrease the level of saving by 207 birr and similarly expenditure of the household increased byone birr the household saving decreased by 1103.23 of birr.

Additional factors that are positively correlated with saving include household income, property ownership, additional sources of income, and the head of the household's personal saving practice. More precisely, having a home of one's own increases savings by 1103.228 birr; participating in extra income-generating activities increases savings by 459.685 birr; the household head's personal saving habit increases savings by 243.556 birr; and, finally, an increase in household income contributes to savings growth by.154662 birr.

CHAPTER FIVE

5.CONCLUSIONS AND RECOMMENDATION

5.1. Conclusion

This thesis evaluates determinants of household saving in kolekeraniyo sub city Addis Ababa, Ethiopia. It contributes to ascertain, identify and assess determinants of household saving in order to maximizing the household saving and the economic contribution of the economy. Although, from the sub cities administration, it was found that there is no clear data that specified numbers of population and numbers of household.

The researcher goes far in stating what has been done Serious problem challenging poor countries including Ethiopia is the savings and investment gap. For the reason that of this gap, these countries find it tough to finance investments needed for growth from domestic saving.

Economists suggested people weigh trade-offs based on the marginal utility of consumption, which is highest at low consumption levels. When consumption is shifted from a high-income to a low-income time, its marginal utility rises. For instance, traders receive most of their income immediately after they whole sale, and very little at other times of the year when production decrease. They can use savings as one strategy to ensure that they are able to consume about the same amount throughout the year. For low-income countries, financial development is likely to have important implication for economic growth.

The data collected from 156 households and asked households “saved” and “not saved their income”. The dependent variable took 2 values: “0” or “1” depending on whether the respondents were saved or not saved based current income, as well identify the determinates of household from saving. 13 explanatory variables were included in the model. 6 of them are continuous variables others are nominal and the R^2 = 0.9166, that means the independents variables explained the dependent variable 91.66%.

The researcher used IBM SPSS software version 24 to describe by using Tables, charts, graphs, and show percentages were utilized to display the variables influencing household savings.

Descriptive and econometric analyses were employed in the study to determine how explanatory variables affected the dependent variable. The first hurdle a binary probit regression was used; the coefficients of the probit model only give the significance and the direction of the effects of each explanatory variable on saving.

The paper concludes the econometric results based on the findings that only 51.28% of the respondents were to have saving habit, while most 48.72 % of them were not savers at the time of the study period, this implies that the overall determinants of saving performance. The most frequently observed category where the respondent preferred to save their money was at the bank 95 (60.9%), Most o the respondents are also government employed that of 48(30.77%) out of 41.03% good performance of saving ,64(41.5%) of managing their money most of the time and the majority 62(39.74%) of the respondents are married.

The researcher finally concluded that, econometric results of determinants saving like family size, age of the household, sex, expenditure and number of dependents significant effect on decision to save.

- The researcher concluded that Family size, is significant at 5% level. The result shows negative relation to household decision to save.
- The household age is measured in years and statistically significant. the result shows, that the household head age has negative effect.

- sex of the respondent, has a negative sign and it is also statistically significant at 5%, therefore, the marginal effect of this variable implies that females have 7% more probability than males to save.

- Household head's income is the variable which highly determines household heads saving in study area. In this study household's income has positive effect on the kolfiekeraniyo sub city household head saving.

- Expenditure of the household is another significant variable at 5% level and negative effecton decision to save.

- Education level of the respondent is another important variable at influencing decision to save and statistically significant.
- Home ownership of the household also has statistically significant at 5% level and positive effect on the decision to save.
- Household engaged in additional income generating activities has statistically significant at5% level and positive effect on the decision to save.
- Number of dependents of the household also has statistically significant at 1% level and negative effect on decision to save.
- The marginal effect shows the variables that affect the amount of saving in the household are Income of household, expenditure, personal saving habit of household head, number of dependents, additional income generating activities and home ownership respectively.
- The marginal effect analysis also implies that the number of dependents and expenditure of the household have negative relation with saving rate. There are factors that are positively correlated with saving include household income, property ownership, additional sources of income, and the head of the household's personal saving practice.

5.2. Recommendation

On the basis of the study findings the following possible course of action are recommendedto policy makers to enhance household saving in the study area.

- family size has a negative impact on household savings. Family planning should be used to manage household size, and the government should develop strong policies related to family planning and spread awareness through various channels. The government and other relevant bodies, such as non-governmental organizations that work with women and children, should also strongly focus on family planning and educate society through extension programs or other means.
- The results of the study indicated a negative correlation between household age and saving, meaning that households should set aside a larger percentage of their disposable income while they are still productive. Since the domestic economy cannot absorb this enormous labor force, different policies such as skill development and

standard labor export policy should be designed to make youth fertile ground and increase productivity. Each young person must therefore engage in various legal income generation activities in order to save more for retirement age.

- Since education has affect household's savings positively this may help them to save their money income in the formal financial institutions, so priority should be given to adult education by all concerned bodies (Governmental and Non-Governmental organization which are working on youth development) to enhance the analytical capacity and awareness of households towards saving culture.
- The study result showed that female headed households are saving more compared to their counter parts, so female-oriented policies like affirmative action which contain packages related to income generation, credit access, and leadership development for women are important recommendations to empower women. When women are economically empowered, the saving performance of the country could be developed as a direct result.
- One of primary factors that can greatly impact an individual's ability to save is their expenditure. Therefore, financial institutions in the area, such as microfinance institutions, should raise awareness and provide trainings to the public about consumption planning. Additionally, savings and credit associations should be established by collaborating with local leaders and other members of the community. Personal savings has a positive effect on household savings, which encourages more relevant support for those who have a saving habit and set an example for that particular society. They can also receive advice, work with other institutions or link them to other institutions so they can share their experience with societies that have less of a saving habit than their own.
- It is anticipated that raising people's earning potential will increase their ability to save, thus employers ought to encourage staff members to hunt for part-time work without endangering their full-time position. More skills, particularly in technical and vocational trainings, are necessary to participate in more income-generating activities because most part-time jobs essentially require technical knowledge due to the structure of economic activities in that specific environment. Since the government is the last authority to protect a citizen's rights, employers of certain institutions that

firmly forbid their employees from holding additional jobs should take this into consideration. The government should also follow suit. Organizations that forbid their employees from holding additional jobs should also have a conversation and come to a common understanding.

- Home ownership has a positive impact on saving that means those who has house are save more than who has no house, this because those who have no house are forced to pay more of their disposable income to house rent. To reduce this load the governed should built and supply house in the form of rent bay equivalent price for middle- and lower-income holders in the short run. In the long run the government design policy related to housing programme such as public partnership, cooperatives and real estate owners how built and supply for lower- and middle-income holders and link them with financial institution to supply or provide mortgage loan for long period of time of and the government supply land.
- Dependency ratio of the household was shown to have a negative and significant influence on household saving decisions. This means that when the dependency rate increases the saving performance of households is reduced. Thus, this finding shows a clear need to educate households to have family's that are sized based on their total household income. This could be achieved by designing and delivering short-term training for households related with income-oriented family sizing by community leaders and development agencies. The government should also promote linked policies related to family planning and household saving. In addition, if dependent family members are not elderly, children, or disabled, they should have to participate in some income generating activities in order to support the income of the household. This may develop a work habit and create opportunities for other household members. In turn, incremented income for households and in turn savings may be enhanced.
- The researcher recommends that government policy intervention should focus on increasing the availability and accessibility of financial institutions, awareness creation and education on the importance of saving and saving modalities, planning and expenditure controlling habit, socio-cultural saving barriers, increasing interest rate, and inflation and unemployment combating strategies to augment saving capacity, investment and then economic growth.

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Appendix

School of Graduate Studies

Department of Development Economics

Introduction to the respondent:

I am a postgraduate student in St. Mary's University. The purpose of this questionnaire is to collect information on "Determinants of Household Savings in kolfikeraniyo sub city, Addis Ababa Ethiopia**."** The information that you share me will be kept confidential and only used for academic purpose and cannot affect you in any case. So, your genuine, honest and timely response is vital for accomplishment of this study on time. Therefore, I kindly ask you to give your response to each items/questions carefully

INSTRUCTION: Put a"√" mark on the responses you choose from the given alternatives and write a short and brief responses on the blank spaces for the open ended questions. If you have any question regarding on this survey please contact the owner of this research with the following address:

Name: worknesh worcho

Tel: +251 91 080 9664

Respondent's Information

Date of Data Collection _____sub city _____signature_____

Part 11: Interview Questionnaires for Households'

1. Sex of respondent's

Male ☐ Female ☐

2. Age of respondent _____

3. Marital Status

Unmarried ☐ Married ☐ Widowed ☐ Separated ☐

4. Are you the head of households? Yes ☐ No ☐

5. Sex of the household head Male ☐ Female ☐

6. What is the level of education of the head of the households?

Literate ☐ Can-not be read and write ☐ Primary level (1-8) ☐

Secondary level (9-12) ☐ Diploma ☐ Degree and Above ☐

7. How many individuals in the house households? (Including household head)_____

8. Does a dependent live in the household? Yes ☐ No ☐

9. If your response is" yes" in question number 8 how many dependents live in the household?

10. What is the current occupation (or employment status) of the household head?

Government employed ☐ Private employed ☐

Self-employed ☐ Non business ☐

11. What is your major source of income -
_____

12. What is the total?

A.monthly income of the household?

B. annual income of the household?

13. How many household _____ Are employed (number of earners)?_____

14. How many amounts of birr do you earn per month on average? (Approximation)----------

15. Do you save money from your earnings? Yes ☐ No ☐

16. If your answer is “yes” in question number 15

17, how many amount of birr do you save per month?_____

If your answer is “no” for question number 17, please justify your major reason.

_____

18. How can you measure performance of your saving?

Poor ☐ Satisfactory ☐ Good ☐ Very good ☐ Excellent ☐

19. If your response for question number 18 is “poor”, please justify your reasons.

_____

20. How many amounts of birr do you spend per month on average? _____

21. Where do you prefer to save your money?

Formal institution ☐ informal ☐ traditional ☐

22. If your response for question number 21 is informal, traditional, why? Justify your answer.

_____

23. What is your reason if your answer for question number 22 is modem or formal institution?

_____

24. How was your money management?

Usually ☐ Most of the time ☐ Occasionally ☐ Seldom ☐

25. Are you aware that you can earn interest on your saying accounts?

Yes ☐ No ☐

26. Will you decide to save more if the current interest rate rises?

Yes ☐ No ☐

27. Do you have access to credit facilities?

Yes ☐ No ☐

28. If your answer is "yes" for question number 28, what is your source of credit?

Private money lenders ☐ micro finance institutions ☐ Commercial Banks ☐

Friends or relatives ☐ not applicable D others (specify) ☐

29. If "no" for question number 28, what is your reason? _____

Lack of credit facilities ☐ have never heard of credit facilities ☐

Others' (specify) ☐

30. Do you engaged additional income generating activities Yes ☐ No ☐

31. Do you have your own home? Yes ☐ No ☐

32. What do you think about determinants household saving would you know them please list some of them?

Thank you