# EFFECTS OF SACCO SERVICES ON INVESTMENT BY HOUSEHOLDS IN KIAMBU COUNTY, KENYA

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# **DECLARATION**

This research project is my original work and has not been submitted for examination to any other university.

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This research project has been submitted for examination with my approval as the University of Nairobi Supervisor

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# **DEDICATION**

To my parents Mr. and Mrs. Benson Kamau whose foresight in education and constant encouragement drove me to this level of education. To my husband Peter Kariuki, my daughters Valentine and Elizabeth, and my son James for your love and understanding throughout the period. I love you all.

# ABSTRACT

Investment plays an important role in sustaining growth and development of any country. High rates of investments depend on high rates of saving (Pelrine & Kabatalya, 2005). SACCOs link borrowers and savers (Tache, 2006). The savers pool their money as savings and shares against which they borrow in form of loans. SACCOs are not- forprofit- organizations as their basic purpose is to help members save (Kvendo, 2011). Kenya has targeted to become a middle income country by year 2030. To achieve this it will need to increase its level of private savings, more so what is generated from the households. No known study has been conducted to determine the impact of Saccos on investment by household in Kenya Therefore the study sought to answer the following questions: what is the effect of SACCO services on investment by households in Kiambu County, Kenva? The objective of the study was to assess the effect of SACCO services on investment by households in Kiambu County, Kenya. This study used a descriptive survey (Describing the characteristics of existing phenomenon) in soliciting information on the effect of SACCO services on investment by households in Kiambu County, Kenya. The target population was all SACCOs in Kiambu County which have been in existence from 2009 to 2013. The study collected primary and secondary data. Primary data was collected using a semi structured questionnaire which contained both open and closed-ended questions. The quantitative data was analyzed by descriptive statistics, which included frequencies, percentages and measures of central tendency like means; while the qualitative data was analyzed by content analysis. The study also used multiple regressions to help determine the relationship between the variables under study. From the above regression model, the study found out that there were factors influencing investment by households are total savings by households in SACCOs and total credit to members (loans). They influenced investment by households positively. The study found out that the intercept was 1.298 for all years.

The two independent variables that were studied (savings by households and total credit to members (loans)) explain a substantial 72.3% of investment by households as represented by adjusted R2 (0.723). This therefore means that the two independent variables contributes 72.3% of investment by households while other factors and random variations not studied in this research contributes a measly 27.7% of investment by households. The study established that the coefficient for savings by households was 0.271, meaning that savings by households positively and significantly influenced investment by households. Since financial literacy and experience affect the Personal Saving Rate among the Sacco members; the study recommends that it's important that the management of Sacco's in collaboration other financial institutions initiates' financial management training programs amongst the residents of Kiambu.

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# LIST OF ACRONYMS AND ABBREVIATIONS

- ACCOSCA African Confederation of Co-operative Savings and Credit Association
- FOSA Front Office Services Activity
- GoK Government of Kenya
- KUSCCO Kenya Union of Savings and Credit Co-operatives
- MCDM Ministry of Cooperative Development and Marketing
- MFIs Micro Finance Institutions
- **ROSCAS** Rotating savings and credit institutions
- SACCOs Savings and Credit Co-operative Societies
- UNCTAD United Nations Conference on Trade and Development
- WBES World Business Environment Survey
- WOCCU World Council of Credit Unions

## **CHAPTER ONE: INTRODUCTION**

#### **1.1 Background to the Study**

Investment plays an important role in sustaining growth and development of any country. High rates of investments depend on high rates of saving (Pelrine & Kabatalya, 2005). Many scholars have written on this subject but little effort has been made in determining the effect of savings in savings and cooperative societies (SACCOs) on members' investment culture. According to Lipsey and Chrystal (1995) a high saving economy accumulates assets faster and thus grows faster than a low saving economy. SACCOs link borrowers and savers (Tache, 2006). The savers pool their money as savings and shares against which they borrow in form of loans. SACCOs are not- for- profit- organizations as their basic purpose is to help members save (Kyendo, 2011). Bailey (2001) defines SACCOs as cooperatives which provide their members with convenient and secure means of saving money and obtaining credit at affordable interest rates. Tache (2006) has shown that SACCOs were invented in south Germany in 1846 by two community business leaders: Freidrich and Herman. The two are the founding fathers of SACCO movement. In Italy, Luigi Luzzatti established saving and credit cooperatives which combined the principles established by the two business leaders. The SACCO movement spread all over Europe, Northern America, Latin America, and Asia from 1900 to 1930 and thereafter to Ghana by a catholic Bishop. Towards the end of 1950s African farmers promoted and registered cooperatives for cash crops like pyrethrum and coffee. Mudibo (2005) suggests that cooperatives have played a prime role in the development of the economies of Kenya, Uganda and Tanzania.

According to the Republic of Uganda report of 2008, cooperative movement in Uganda was started in 1913 to involve Ugandans in domestic and export marketing. SACCOs emerged in Kenya in the years 1965- 1970 (Chao-Beroff, et.al, 2000). The SACCOs came as a result of the credit systems of the farming cooperatives. In these cooperatives farmers would access financial services through the union's banking sections. In the cooperatives' banking sections farmers saved and obtained advances that were serviced from income earned from the harvest. The SACCOs' banking services are provided even today in Kenya with already 219 SACCOs that offer banking services spread all over the country (Kyendo, 2011). The first co-operative society in Kenya was Lumbwa cooperative society (Bottleberge & Agevi, 2010). In 1908 the European Farmers made this cooperative formal. Its main objective was marketing and purchasing of farm inputs. According to KUSCCO report of 2011 cooperatives in Kenya have led to the development in agriculture, storage, housing, fishing and credit. The Ministry of Cooperative Development and Marketing (MCDM) conference report of 2010 indicates that there are currently over 5200 registered SACCOs with over 5.6 million registered members in Kenya.

Like in most African countries, cooperatives in Kenya have developed through two main eras, that is, the era of state control and the era of liberalization (Wanyama, 2009). According to Wanyama, the first era made cooperatives platforms for implementing socio-economic policies to the extent that failure of state policies expressed themselves in the cooperative movement. The failures saw the need for the liberalization of the cooperative movement in early 1990s (Porvali, 1993). Wanyama (2009) argues that the new economic environment that Africa experienced in the 1990s steered Kenya to formulate new policy and legislation framework in 1997 in order to liberalize cooperatives.

The Government of Kenya recognizes cooperatives as the major contributor to national development with the total population of Kenya estimated at 37.2 million people (Republic of Kenya [RoK], 2008a). The ministry of cooperative development and marketing [MCDM], 2008) estimates that 63 % of Kenya's population participates directly or indirectly in cooperative based enterprises. Thus, the remaining Kenyans which constitute 37% do not take part in cooperatives. Kenya's vision 2030 for financial services is to create a successful and globally competitive financial sector capable of promoting high levels of saving and financing for Kenya's investment needs (Adam, Collier & Ndungu, 2011). The county's vision 2030 recognizes the role of financial services in mediating between borrowing and investment. The move to attain the vision 2030 has lead to the government through the act of parliament to establish a regulatory body to oversee the operations of all Saccos that operate FOSA accounts.

However, access to financial services is a stumbling block which has led to low investment culture in Kenya. This is confirmed by the World Council of Credit Unions [WOCCU], 2008) that 38.3% of the Kenyans are still not included in financial services and use. Kenya's deteriorating infrastructure and rising costs has made many foreign investors to divest or consolidate their activities outside Kenya (United Nations Conference on Trade and Development [UNCTAD], 2005). Moreover, the World Bank's World Business Environment Survey [WBES], 2000) indicates that investors rated the infrastructure quality very poorly, especially roads, water and telecommunications. The

vision 2030 for financial services in Kenya can be fully achieved if SACCO members can transform their savings into viable investments. Hence, this study sought to determine the effect of savings in SACCOs on members' investment culture in Kenya.

#### **1.1.1 SACCO Services**

Savings and Credit Co-operative Societies (SACCOs) are started locally and have solid bases of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs. More so, SACCOs are able to advance loans at interest rates lower than those charged by other financial providers. In addition, SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks, such as rural or poor areas (Branch, 2005). This has made SACCOs more attractive to customers, thus deeply entrenching themselves in the financial sectors of many countries (Munyiri, 2006). In fact, the core objective of SACCOs is to ensure members empowerment through mobilization of savings and disbursement of credit (Ofei, 2001). SACCOs have been efficient in achieving this objective. In Kenya, for instance, SACCOs have mobilized over Kshs.200 billion in savings, accounting for over 30% to National Domestic Saving (Co-operative Bank of Kenya, 2010).

Savings mobilization should be backed by adequate institutional capital which ensures permanency, provide cushion to absorb losses and impairment of members' savings (Evans, 2001). The institutional capital, which comprises the core capital and less share capital, is mainly accumulated from appropriation of the surpluses. Therefore, SACCOs should strive to maximize on the earnings to build the institutional capital (Branch & Cifunentes, 2001; Ombado, 2010). This institutional capital ensures the permanence and

growth of the SACCOs even in turbulent economic times (Evans, 2001). In fact, it helps the SACCOs to grow and, remain economically and financially viable (Gijselinckx & Devetere, 2007). Such growth is enhanced by effective financial practices.

#### **1.1.2 Investments by Households**

Household's investments are an important component of individual's and society's wellbeing. Households save owing to the following reasons: to build a reserve against unforeseen contingencies; for smoothing consumption at different stages in life cycle due to income fluctuations ; to enjoy interest and appreciation (inter-temporal substitution motive); and to enjoy a gradually increasing expenditure. In addition, they save to enjoy a sense of financial freedom and independence; to secure finance to carry out speculative or business project; to bequeath a fortune; to satisfy pure miserliness; and finally, to accumulate deposits to buy houses, vehicles and other durables (down payment motive) (Ando and Modigliani, 1963).

Households' investments in financial institutions take the form of savings account, treasury bonds, corporate bonds, shares and stocks, mutual funds, cash value of life insurance, retirement plans and in non-financial assets such as land, houses, vehicles and other real property. Household savings in non-financial assets can be partly explained by the lower transaction costs of acquisition as compared to financial assets, and also households'' perceptions that real assets have higher real rates of return as compared to bank deposits (Carpenter and Jensen, 2002). In addition, real assets can help households to hedge against domestic inflation (Kiiza and Pederson, 2002). Financial savings can be held in formal institutions such as banks, in semi-formal financial institutions such as

Savings and Credit Cooperative Societies (SACCOs) and Micro Finance Institutions (MFIs), and in informal financial institutions such as rotating savings and credit institutions (ROSCAS). The place where savings are held has a great impact on their transformation into productive investments.

# 1.1.3 Relationship between SACCO Services and Investments by Households

The Savings and Credit Cooperative Societies play a very significant role in moneylending to their members. Following liberalization in the financial sector, many Saccos now provide financial products that were traditionally reserved for large commercial lending institutions. This development has forced banking institutions to relax their lending terms and conditions in order to remain competitive. Customers including Sacco members seeking financial products such as a range of products offered, cost of the product, time taken to process the application, disbursement mode of the funds and service delivery. Savings mobilization is a key component in any development endeavor as it is believed to be the surest way of increasing income and boosting productivity in attempt to eradicate poverty. Through savings there will be capital accumulation leading to investments hence economic growth and ultimate development. A high saving economy accumulates assets faster, and thus grows faster, than does a low saving economy (Lipsey and Chrystal, 1995). SACCOs are intended to offer an alternative to improving the desirable situation in low income countries. SACCOs as community membership based financial institutions promote their members economic interests. It can also contribute favorably to Human Integrated Development (Syed, 1991).

#### **1.1.4 Households in Kiambu County**

Kiambu County has a population of 1.5 million as per the recent census results. The county covers an area of 1,207.4 km2, it has 235,417 households and it has a population density of 417.5 persons per km2. The county is in agro-ecological zone 2–4 in the Central Kenyan highlands. In Kiambu County, over 30% of the people depend on agriculture for a living due to the fact that land is fragmented into small economical farm sizes thus affecting productivity in the agricultural sector.

Kiambu County is rated among the wealthiest counties, but the situation on the ground paints a different picture. The county is home to some of the wealthiest people in the country but also has the poorest sandwiched between the rich. For decades Kiambu was rated the top richest region before it was displaced by Kajiado but everything in it betrays the assumption that most of its people are millionaires. Most of its inhabitants live below the poverty line, go without food and depend on manual jobs to eke a living (Kenya National Bureau of Statistics, 2013). Thousands of residents are employees in tea and coffee estates earning as low as Sh130, despite the prices of the two produces doing well internationally. Against the expectations of many Kenyans, mud-walled and grass-thatched houses dot most parts of this region. In this county, there are dozens of tea and coffee estates with each employing at least 100 workers. According to a survey conducted in 2005 by the Kenya Bureau of Statistics, poverty in Kiambu stood at 25.4 per cent. There is not enough land for farming due to the high population.

According to the Kenya National Bureau of Statistics, (2013) in Kiambu County, 34% of the residents have no formal education, 38% for those with primary education and 39%

for those with a secondary level of education or above are working for pay. A total of 40% of Kiambu County residents have secondary level of education or above. A total of 48% of Kiambu County residents have a primary level of education only. 12% of Kiambu County residents have no formal education. Only 13% of residents in Kiambu County use liquefied petroleum gas (LPG), and 23% use paraffin. 35% use fire-wood and 26% use charcoal. Firewood is the most common cooking fuel by gender with 41% of female headed households and 33% of male headed households using it. A total of 80% of residents in Kiambu County use improved sanitation, while the rest use unimproved sanitation.

#### **1.2 Research Problem**

Investment is a prime component in any development effort as it is believed to be the most certain way of enhancing income and promoting productivity with the intention to break through the vicious cycle of poverty (Keynes, 1936). However, the levels of domestic savings and investment in Kenya have been very low (Lawrence, Benjamin, Desterio, & George, 2009). The deterioration of public infrastructure, governance problems and insecurity have discouraged private investment in Kenya (UNCTAD, 2005). Moreover, some of the installed capacity has deteriorated due to lack of investment or maintenance. World Bank (2003) approximates capacity utilization in Kenya at 63%. Kenya's vision 2030 for financial services is to create a successful and globally competitive sector that drives savings and investments in the country. However, the vision 2030 argues that access to financial services still remains low (Adam et al.,

2011). WOCCU (2008) has shown that 38.3% of Kenyans are not included in financial services and use. All these indicate low levels of investment in Kenya.

The problem of low savings and investment comes at a time when African Confederation of Co-operative Savings and Credit Association [ACCOSCA], 2011) workshop has classified SACCOs as vehicles for economic growth. Moreover, the government of Kenya recognizes cooperatives as the major contributor to national development with the country's population approximately 37.2 million (RoK, 2008). Kyendo (2011) confirms that most SACCOs have been lending at 12% per annum, which is lower than what banks have offered. The basic function of SACCOs is to provide credit facilities at low cost (Saunders & Cornet, 2007). This is done through pooling together members' savings. SACCOs have been pooling together members' savings until 1990s when sector liberalization enabled them to diversify their financing sources through offering of FOSA services (Owen, 2007). According to Landi and Venturelli (2002), diversification of financing sources improves the performance of the diversifying institution. The improved performance of SACCOs is assumed to translate into improved service delivery to members including affordable loans that hopefully should enhance the investment culture which is low in Kenya (Lawrence et al., 2009).

Kenya has targeted to become a middle income country by year 2030. To achieve this it will need to increase its level of private savings, more so what is generated from the households. No known study has been conducted to determine the impact of Saccos on investment by household in Kenya Therefore the study sought to answer the following questions: what is the effect of SACCO services on investment by households in Kiambu County, Kenya?

#### **1.3 Objectives of the Study**

The objective of the study was to assess the effect of SACCO services on investment by households in Kiambu County, Kenya

# 1.4 Value of the Study

The study would help the management of SACCOs in strategic planning as it would provide some recommendations/suggestions which management may utilize. The study would help managers improve Sacco management. This would involve evaluating whether the policies and processes established by management are operating effectively and provide recommendations for improvement.

Understanding the nature of household investment behavior is critical in designing policies to promote savings and investments, more so when a country targets a certain level of growth. There is need for the government and the financial sector policy makers to implement policy measures that would promote higher level of household investments and increase the use of formal financial savings instruments. It would also guide policy makers and the government to spearhead the formation, restructuring, strengthening and development of SACCOs from an informed view point.

The study finding would be important to scholars and researchers by adding to the body of existing knowledge on impact of Sacco savings on investment by household in Kenya. The study would also give recommendation for further researchable areas which would be useful in furthering the understanding of impact of Sacco savings on investment by household in Kenya. The study would help the researcher to acquire practical skills that would help in carrying out more researches in some future time. This is because during the process of carrying the study, the researcher would come up with new inspiring problem in the area.

### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of the literature on the topic of internal audit function from previous studies and the gap to be closed by this study. The chapter is organized as follows: first a review of theories in relation to household investments. Then a review of the empirical studies and finally determine the impact of Sacco on investment by households in Kenya.

#### **2.2 Theoretical Framework**

#### **2.2.1 Neoclassical Growth Theory**

Growth can be based on endogenous growth theory or neo-classical growth model. The neo-classical growth theory argues that the rate of growth is exogenously determined using the Harrod Damar model or Solow model. Solow-Swan class growth theory which focuses on capital and labour indicates that capital is added when SACCOs invest but is lost due to depreciation. The indication is that there is capital growth in wealth only when the investment exceeds depreciation (Gartner, 2006). The investment should insist on keeping the capital growing to achieve capital growth. That increase in capital yields leads to an increase in growth of SACCOs' Wealth. The theory explains growth as a factor of accumulation of capital. This model is strongly supported by Harrod Damar Model of development economics (1946) which explains the growth rate in terms of saving and productivity of capital. It explains that increase in investment leads to accumulation of capital.

According to neoclassical growth theory by Harrod-Dommar and Robert Solow's Savings mobilization is not an end in itself, it plays an important role in sustaining growth and development. Through savings there will be capital accumulation leading to investments hence economic growth and ultimate development. A high saving economy accumulates assets faster, and thus grows faster, than does a low saving economy (Lipsey and Chrystal, 1995). SACCOs in Africa are intended to offer an alternative to improving the desirable situation in low income countries. SACCOs are community membership based financial institutions that are formed and owned by their members in promotion of their members economic interests. It can also contribute favorably to Human Integrated Development (Syed, 1991).

Growth theory has been typically concerned with the process of physical and human capital accumulation. More recently, much attention has been devoted to the role played for growth by social capital, i.e. by those accumulated productive resources that are incorporated in the social structure of a society (rather than in physical goods or in single individuals). By its own nature, the process of accumulation of social capital is quite different from that of other forms of capital, because a large part of its payoffs is not privately appropriable. Thus, individuals may not have an adequate incentive to accumulate it.

# **2.2.2 Keynes's General Theory**

Keynes's General Theory gave a central role to the investment decision in the determination of the aggregate level of effective demand, which in turn is the primary factor generating the equilibrium level of employment and output. As the principles textbooks put it, investment is the *driving* variable that operates through a *multiplier* to establish total income. The size of the multiplier is rather mechanically calculated as the inverse of the marginal propensity to save, although more complicated expositions can take account of leakages to imports and taxes. Hence, an increase of investment causes income and thus consumption to rise until saving rises to equality to the new level of investment. The level of investment is a function of the marginal efficiency of capital (essentially the discounted future profits) weighed against the market interest rate, which equilibrates the supply of and demand for money (Keynes 1936).

The investment decision is incorporated within his liquidity preference theory of asset prices, or to put it another way, his theory of "own rates". He argued that "for every durable commodity we have a rate of interest in terms of itself, -- a wheat-rate of interest, a copper-rate of interest, a house-rate of interest, even a steel-plant-rate of interest." (Keynes 1936). Each of these own rates can be stated in terms of money, which typically carries the "greatest of the own-rates", hence, "rules the roost" because money has special, peculiar, properties. (Kregel 1997) The expected return on holding any asset measured in monetary terms is q-c+l+a, where q is the asset's expected yield, c is carrying costs, *l* is liquidity, and *a* is expected price appreciation (or depreciation). The total return is used to calculate a marginal efficiency for each asset, including money. The composition of returns varies by asset, with most of the return to illiquid assets such as capital consisting of q-c, while most of the return to holding liquid assets consists of the (subjectively evaluated) *l*. Finally, changing expectations differentially impact marginal efficiencies of different kinds of assets, depending on the composition of the returns. Increased confidence about future economic performance will raise the qs on capital assets while lowering the subjective values assigned to liquid positions, so the marginal efficiency of capital rises relative to that of assets that get much of their return from *l*. In that case, capital assets will be produced (investment rises, inducing the "multiplier" impact) and the full range of asset prices adjusts. Thus, expectations about the future go into determining the equilibrium level of output and employment.

## 2.2.3 Growth of Wealth Theory

The Savings and Credit Co-operative Society (SACCOs) system encompasses a mutual membership organization involving pooling voluntary savings together from cooperators in form of shares. SACCOs are user-owned institutions with savings accumulated to act as SACCOs' wealth. The shareholders share a common bond based on a common area of interest or purpose, namely; their geographical area, employment, community or any other affiliation. The principal services of SACCOs include savings and credit but other services such as money transfers, payment services, insurance and member development are also offered (Maina, 2007). Indeed, in the words of Branch (2005), SACCO societies are playing a very key role on savings mobilization for the benefit of the members.

The prime concern of a SACCO Society is to build the financial strength that would ensure continued service to members. Apparently, the SACCOs' wealth needs to be wellmanaged for the achievement of the SACCOs' objectives. In fact, the concern of this study was that the growth of SACCOs' wealth is grounded on financial stewardship (decision-making aspect), capital structure and funds allocation strategy. In this context, the financial practice team needs to set up the objectives of the co-operative. They should come up with alternative options to invest available funding and evaluate the core objectives by costing them. The alternatives are ranked based on cost and benefit analysis and the best fit is selected. Once the team is satisfied with the selection, a budget is established for the selected objectives. This incorporates a plan to show how much would be incurred in carrying out the chosen alternative. The common budgets include working capital, revenue, and cost of mobilizing funds, cash, and disbursement budgets (Maina, 2007).

#### **2.3 Determinants of Investment by Households**

Households, provides the bulk of investment in an economy. Households are heterogeneous in terms of size, economic activity, income, net wealth and cultural background. This means that investigating households' behavior at the aggregate level only by looking at the "average" household ignores many potentially important aspects. The analysis of determinants of household investment is important not only for understanding economic growth but also for assessing the stability of a country's financial system and its public finances.

Income has been considered as the chief determinant of investment. The exact nature of relationship between the investment and income is controversial (Zia, 1981). The study by Zia (1981) indicates that large and rapid increases in household income have a positive impact on the rate of investment. The rate of growth of income is a major determinant of investment. There is a strong positive correlation between the real rate of interest and a household investment. But this finding contradicts the other studies. The empirical studies of the investment-interest rate relationship have produced a variety of results. Some findings show significantly positive coefficients on the rate of interest to

significantly negative ones. But majority of the studies report a positive correlation between investment and changes in interest rates.

The other important determinant of household investment is inflation. Inflation according to Khan (1988) have been strongly and negatively related to household investment. Interest rate is an important determinant of household investment. It is found that there is a significant positive association between the real rate of return on deposits and aggregate household investment. The aggregate real income is also found to be a key determinant of household investment. Financial development is also found to have significant positive influence on household investment.

Khan and Nasir (1998) analyzed that dependency ratio is found to produce a negative influence on household investment. According to Khan and Nasir (1998) education also has a negative influence on household investment. Because more educated households have more consumption expenditures that's why they can't investment more. Investment is also increases with the age but decline when age cross a certain limit. Burney and Khan examine the impact of household investment along with other socioeconomic and demographic factors such as dependency ratio, education, earning status, employment status and occupation. It is found that a strong negative correlation exists between inflation and house hold Investment. It means that increased cost of any commodity reduces the Investment. It is found that a 10 percent increase in overall price level reduces investment by 5 percent. Moreover if there is an increase in income then there is also increase in household investment.

Burney and Khan (1992) obtained an inverse relationship between the dependency ratio and household investment. The dependency ratio has been defined as population aged 14 and below plus a percentage of the population aged 65 and above. But several studies contradict this finding. The difference in the several studies is due to the way by which the dependency ratio is defined. In defining dependency ratio the age is considered but if instead of age the earning status is taken then it becomes more meaningful. Because in rural areas the children also play an important role in earning activities. Kelley 1980 and Akhtar 1987 have examined the impact of level of education on household investment and their findings are ambiguous. Because on one hand educated household have higher consumption expenditures while on the other hand educated people are likely to earn more.

## **2.4 Empirical Studies**

In developing economies, only a low percentage of low income households hold savings or investments (Hogarth and O'Donnell, 1999) mainly due to lack of access to mainstream financial institutions for savings and appropriate financial instruments (Sherraden, 1999). They do not have the same incentives and financial subsidies for asset accumulation available to high income earners. Such incentives include mortgage interest deductions, pension contributory schemes and information needed to make sound investment decisions. A social support network is required to encourage them to save in the form of community development financial institutions. This can be done by improving access to financial institutions and ensuring appropriate savings instruments are available. Financial educators can join hands with the community development credit unions to enhance development and delivery of financial education on savings. In the standard models of savings, total savings decrease due to improved access to credit. This is because when a household is able to acquire credit during emergencies, for investment purposes and for purchasing household durables, the need to save for precautionary purposes, accumulating for investments and household purchases, respectively, become less important. However, Rogg (2000) noted that increased access to credit induces borrowers to shift their savings from traditional assets to deposits accounts with positive returns. When micro-entrepreneurs access credit, they develop an understanding of and confidence in various operations and services of financial sector.

Rogg (2000) looked at the effect of credit availability on the level of financial savings in two types of financial institutions, MFIs and FFIs in Ecuador, Paraguay and Salvador. The current study examined the effect of credit availability and other independent variables on the decision to save in three financial institutions, FFIs, SFFIs and IFIs in Kenya. Kiiza and Pederson (2002) conducted a study in Uganda seeking to identify factors that influenced decision to open a savings deposit account and factors affecting the net savings of a household. Cross sectional data was collected from central, eastern and western regions of the country in 1996 and 1997, covering a total of 370 households. Households were seen to make two separate decisions. The first decision was to choose to acquire or not to acquire a deposit instrument such as a savings account or a certificate of time deposit at a financial institution, which represented choice between financial and non-financial assets. This was modeled using a logistic function. The second decision was to choose how much to save once a saving instrument had been acquired given the minimum deposit requirement of the financial institution. This was modeled by specifying and testing the household net saving deposit function.

The study by Kiiza and Pederson (2002) presumed that a household choice to acquire a saving deposit instrument was affected by attributes of saving deposit that included the level of information available to the household on banking activities, proximity of the institution and number of banks in the household's locality (bank density). In addition, the choice was also affected by the characteristics of the head of the household that included the level of income of the household, type of occupation of household head, age of household head, work experience of the household head and the education level of household head. A logistic function was used to predict the probability of a household opening a saving deposit account in a financial institution.

The results of the study by Rogg (2000) indicated that the level of education of the household head was significant in improving the probability of acquiring a deposit instrument. Household heads who were well informed about the financial institutions were more likely to acquire a savings deposit instrument than those who were not. The transaction cost, measured by the place of residence, was shown to play a major factor in influencing acquisition of saving deposit instrument. Those in urban areas and cities, representing lower transaction costs due to higher bank density, were seen to have a higher probability of acquiring a deposit instrument as compared to those in rural areas and small towns. Increase in bank density increased the likelihood of acquiring a saving deposit account, whereas reduced physical accessibility of banks reduced the likelihood of households opening a savings deposit account.

According to Otero (2009) the role of SACCOs is in the 'provision of financial services to low income poor self-employed people'. These according to Otero (1999) generally include savings and credit but can also include other financial services such as insurance

and payment services. In Kenya, SACCOs have also been seen as avenues through which development can be channelled to reduce poverty and improve peoples' livelihoods. The government and development partners and practitioners have realized that the provision of financial services such as credit to the poor and the vulnerable most of whom are women, disabled and youth (young boys and girls) can go a long way in improving their livelihoods and hence welfare (Johnson and Rogaly, 1997).

Kenya like many developing countries, has given special attention to SACCOs. It has streamlined SACCO operation through enacting a Microfinance Bill, 2006 which seeks to provide a legal framework to the sector. The focus on microfinance followed the realization that opportunities for formal sector employment were squeezed while the informal sector was expanding (Republic of Kenya, 2006). Although women's contribution is substantial, their productivity is low due to constraints of culture and tradition (Ndeti, 2005). Most women do not possess any assets and cannot normally offer the necessary securities against loans. In addition, offering tangible security (usually land) implies involving male partners in the transaction, thereby, reducing the women's control over means of production and critical decision making.

Bwoma (2003) carried out a study on the effect of liberalization on the investment practice of reserve funds and payment of dividends in savings and credit co-operatives in Nairobi. He found that the reserve funds mean growth rate increased from 12.66% to 19.85% in prep and post-liberalization respectively. Dividend payment rate increased from a mean of 4.12% to 5.12% in pre and post-liberalization respectively. He concluded that liberalization of the competitive sector has a positive effect on the dividend

distribution and reserve funds with 60% of the Saccos shifting to new areas of investment after liberalization.

Makori et al, (2013) reviewed the challenges facing deposit-taking Saccos in compliance focusing on the GUSII region of Kenya. Their study found out that the various challenges facing compliance in these institutions included non-separation of shares from deposits, high dependence on short-term external borrowing, and lack of liquidity monitoring system, high investment in non-earning assets, inadequate ICT system, inadequate managerial competencies and political interference among others. They also realized that even with the challenges, opportunities were available for compliant Saccos including capital accumulation and agency business largely arising from access to Government funds for on-ward transmission to youth and women groups.

Okundi (2011) carried out a study on the financial challenges facing Saccos in Nairobi where he concluded that Saccos suffered challenges in meeting loan requests by the members partly due to long term investments they engage in. Members therefore preferred loans from commercial banks partly due to the speed in which they were disbursed and the fact that the loan is not pegged on savings as is the case with Saccos.

Opondo (2009) looked at the responses of Saccos based in Nairobi to changes in the external environment where he found that challenges posed by competitive environment were felt by the Saccos since majority of them concentrated on operational issues at the expense of strategic ones.

Kimata (2013) studied the effects of financial innovation on the financial performance of Saccos in Nairobi where she found that Saccos were now embracing new products based on information technology such as internet banking and money transfer services but were yet to link the money transfer services to their back office systems.

Kiiza and Pederson (2002) included seven variables as affecting decision to acquire a deposit instrument, and income and age of household head; which have been shown to affect household's decision to save in financial institutions were not included. Carpenter and Jensen (2002) included six variables as affecting choice of where to save. Credit availability, bank density, level of financial information, perception of rate of interest on savings.

Institutional accessibility was affected by availability of financial information. Probability of a household in acquiring a saving deposit increased with increase in information about the banking services. Availability of financial information was a major catalyst in increasing household savings mobilization. A household's probability of acquiring a saving deposit increased dramatically when households were well informed on banking sector. They recommended that for savings mobilization to be effective, households needed awareness on financial investment opportunities available. They observed that advertising and other forms of communication on financial services were crucial in increasing mobilization of savings among households. In addition, they noted that financial institutions could influence choice to save and amount saved through appropriate incentives, instruments and improvements in accessibility to their services (Rogg, 2000)

# 2.5 Summary of the Review

Low income households have got limited financial information; hence, they are likely to make sub-optimal long term decisions on consumption and savings. The presence of imperfect credit markets and uncertainties of future incomes, constraints household borrowing, making consumption sub-optimal (Beverly, 1997). Most low income households are faced with low and irregular incomes and hence are credit constrained. Most of the households rarely have incomes that exceed their consumption needs (Wilcox, 1991). In Kenya, most of the households are in the low income group hence the need to conduct the current study.

The neo-classical growth theory argues that the rate of growth is exogenously determined using the Harrod Damar model or Solow model. Solow-Swan class growth theory which focuses on capital and labour indicates that capital is added when SACCOs invest but is lost due to depreciation, Keynes's General Theory gives a central role to the investment decision in the determination of the aggregate level of effective demand, which in turn is the primary factor generating the equilibrium level of employment and output and Growth of wealth theory relates the Savings and Credit Co-operative Society (SACCOs) system encompasses a mutual membership organization involving pooling voluntary savings together from cooperators in form of shares.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

## **3.1 Introduction**

This chapter sets to explain the research design, population of interest, sample size and sampling method, data collection and analysis method.

#### **3.2 Research Design**

This study used a descriptive survey (Describing the characteristics of existing phenomenon) in soliciting information on the effect of SACCO services on investment by households in Kiambu County, Kenya. Descriptive survey design is used since it provides insights into the research problem by describing the variables of interest. It was used for defining, estimating, predicting and examining associative relationships. This would help in providing useful and accurate information to answer the questions based on who, what, when, and how. (Kombo &Tromp, 2006). The study was conducted in Kiambu County, Kenya.

## **3.3 Target Population**

The target population was all SACCOs in Kiambu County which have been in existence from 2009 to 2013. There are 25 SACCOs in Kiambu County. They also collected primary data from SACCO members.

#### **3.4 Data Collection**

The study collected primary and secondary data. Primary data was collected using a semi structured questionnaire which contained both open and closed-ended questions. Primary data was obtained from the survey of SACCOs and the procedure was used with questionnaires. The questionnaires were dropped for the respondents to fill and were later picked after they completed filling them. Open ended questions were used in order to allow respondents personal views and closed questions will be used to captivate the respondents. The researcher personally ensured that the questionnaires were given to the right people, at the right time and place. Secondary data was obtained from the financial reports of SACCOs for the period 2009 to 2013.

#### 3.5 Data Analysis

Two types of data were collected in this study: Qualitative and quantitative, and two types of statistical analysis were used. The quantitative data was analyzed by descriptive statistics, which included frequencies, percentages and measures of central tendency like means; while the qualitative data was analyzed by content analysis. The analyzed data was presented using tables, charts and figures. The study also used multiple regressions to help determine the relationship between the variables under study. Multiple regression is a flexible method of data analysis that may be appropriate whenever a quantitative variable (the dependent or criterion variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables). Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Cohen, West & Aiken, 2003).

Multiple regression equation is as follows:  $Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \mu$ 

Y= is the dependent variable representing investment by households (personal saving rate)

 $\beta_0$  is a constant, the value of Y when all Xs are zero X<sub>1</sub> is the total savings by households in SACCOs X<sub>2</sub> is the total credit to members (loans) B<sub>1</sub>-  $\beta_2$  are the regression co-efficient or change introduced in Y by each X  $\mu$  is the random error term accounting for the of all other Sacco services not captured in the model.

# 3.6 Validity and Reliability

To obtain data free from errors introduced by those responsible for collecting them, it will be necessary for the researcher to do pilot/pretest and do constant verifier as the data is being collected. The researcher will make checkups to ensure that the data collecting assistants performs their duty honestly and without prejudice. When data is collected, it will be examined for completeness, comprehensibility, consistency and reliability. The accuracy of tabulation and accuracy of punching will be checked and ensured. Finally statistical computations are needed and as such averages, percentages will be worked out at completion of the study.

# CHAPTER FOUR: DATA ANALYSIS, INTERPRETATIONS AND PRESENTATION

# 4.1 Introduction

This chapter presents the information processed from the data collected during the study on the effect of SACCO services on investment by households in Kiambu County, Kenya. Descriptive and inferential statistics have been used to discuss the findings of the study. The study targeted a sample size of 80 respondents from which 75 filled in and returned the questionnaires making a response rate of 93.8%. This response rate was satisfactory to make conclusions for the study as it acted as a representative. According to Mugenda and Mugenda (1999), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Based on the assertion, the response rate was excellent.

# 4.2 Reliability Analysis

Table	4.1:	Relia	bility	Coeffi	cients
1 4010			~ m y	Count	

Scale	Cronbach's Alpha	Number of Items
Savings by households	0.811	5
Credit to members (loans)	0.807	5

A pilot study was carried out to determine reliability of the questionnaires. Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. Cronbach's alpha was calculated by application of SPSS for reliability analysis. The value of the alpha coefficient ranges from 0-1 and may be used to describe

the reliability of factors extracted from dichotomous and or multi-point formatted questionnaires or scales. A higher value shows a more reliable generated scale. Cooper and Schindler (2008) has indicated 0.7 to be an acceptable reliability coefficient. Table 4.1 shows that savings by households had the highest reliability ( $\alpha$ =0.811) followed by credit to members (loans) ( $\alpha$ =0.807). This illustrates that the two scales were reliable as their reliability values exceeded the prescribed threshold of 0.7.



#### **4.3 Background information**

#### Figure 4.1: Gender distribution

The study sought to determine the gender of the respondent, from research findings, the study established that majority of the respondents as shown by 55.3% were females whereas 44.7% of o the respondents were males, this is an indication that both genders were fairly involved in this research and thus the findings of this study did not suffer from gender biasness

#### **Marital status**



#### **Figure 4.2: Marital status**

The study requested the respondents to indicate their the marital status, from the research findings, majority of the respondents as shown by 56.9% indicated that they were married men and women, 30.1% of the respondents were single whereas 13% of the respondents indicated that they were widow(er). No respondent indicated marital status as divorced. This implies that majority of the respondents engaged in this research were married men and women.



## Age distribution

#### **Figure 4.3: Age distribution**

The study sought to determine the age category of the respondents and therefore requested the respondents to indicate their age groups. From the findings the study established that most of the respondents as shown by 40.5% were aged between 31-40 years, 30.6% of the respondents were aged between above 41 years, and 18.4% of the respondents were aged between 21-30 years, whereas 10.5% of the respondents were aged between 11-20 years. This implies that respondents were well distributed in terms of their age



#### Highest level of education attained

#### Figure 4.4: Highest level of education attained

The study requested the respondents to indicate their highest level of education attained, from the research findings, 40.4% of the respondents indicated their highest level of education as college diploma certificate, 25.3% of the respondents indicated highest their level of education as secondary school certificate, 20.2% of the respondents indicated highest their level of education as university graduates whereas 14.1% of the respondents indicated their level of education as primary school certificate. This is implies that majority of the respondents were well educated and thus they were in a position to read understand and respond to the research questions accordingly.



#### The time when the respondent joined the SACCO



The study requested the respondent to indicate the period which they had been investing with the Sacco, from the research findings, the study revealed that most of the respondents as shown by 38.4% indicated to have joined the Sacco in more than 3 years back, 31.9% of the respondents indicated to have joined the Sacco in the last 3 years, 21.6% of the respondents indicated to have joined the Sacco in the last 2 years whereas 8.1% of the respondents indicated to have joined the Sacco in the last one year. This implies that most of the respondents had been saving with the Sacco for a considerable period of time and thus they were in a position to give credible information relating to this study.

Opinion	Frequency	Percentage
Yes	52	69.3
No	23	30.7
Total	75	100

Table 4.2: Whether the respondents were investing before joining the SACCO

The study sought to establish whether the respondents were investing before they joined the SACCO. From the research findings, the study established that majority of the respondents as shown by 69.3% were still investing through other means whereas 30.7% of the respondents indicated that they were not at all. This implies that significant number of the respondents used to save with other organizations before joining the Sacco.

Means of investment	Percentage
With friends, relatives	78%
Secret place	64%
Save with an institution that is regulated by Central of Bank Kenya	41%
In asset form	68%
Total	100

Table 4.3: Means of investment used by the Respondent before joining the SACCO

The study requested the respondent to indicate the means of investment they used before joining the SACCO, from the research findings the study revealed that some of the respondents saved through with friends and relatives as shown by 78%, others invest their money in asset as shown by 68%, others used to save their money in secret places as shown by 64% whereas others used to save with institutions that is regulated by Central of Bank Kenya as shown by 41%, the study also established that some of the respondents never used to save due to low levels of income as well low levels of financial levels literacy.

#### **Table 4.4: Reasons for investing**

Means of investment	Percentage
Precautionary measures	75%
Accumulation of wealth	85%
Save for future investment and consumption	71%
Meet social and religious obligations	55%
Education	60%
Total	100

The study requested the respondent to indicate their main reasons for investing, from the research findings, the study revealed that a considerable number of the respondents invested in order to accumulate wealth as shown by 85 percent others invested in view of precautionary measures as shown by 75 percent while some save for future investment and consumption as indicated by 71% others invested to meet of education needs as shown by 60 percent, and that other members invested in order to meet social and religious obligations as shown by 55%. This implies that majority of the respondents saved in view of accumulating wealth.

# 4.4 Factors that affect the investment culture

Statement					e		
	Strongly agree	Agree	Not sure	Disagree	Strongly Disagree	Mean	Std deviation
People with lower incomes always save							
less than those with relatively higher	23	45	5	2	0	4.19	0.25
incomes. Socio-economic factors like political stability affect an individual's willingness and propensity to save The number of savings products offered can greatly impact on a person's willingness to save	21 16	44 51	7	2 3	1	4.09 4.04	0.24 0.28
Access to the savings and security will always be considered when choosing a mode of saving	14	54	3	2	2	4.01	0.30
Inflation rates greatly affect an individual's level of savings	22	46	3	3	1	4.13	0.26
Social responsibility and the cost of living affect the amount an individual can save	26	44	2	1	2	4.21	0.26

#### Table 4.5: Statements relating on factors affecting the investment culture

The study sought to establish the extent to which respondents agreed with the above statements, relating to factors affecting the investment culture. From the research findings, majority of the respondents agreed that, social responsibility and the cost of living affect the amount an individual can save as shown by mean of 4.21, people with lower incomes always save less than those with relatively higher incomes as shown by a mean of 4.19, inflation rates greatly affect an individual's level of savings as shown by a mean of 4.13, socio-economic factors like political stability affect an individual's

willingness and propensity to save as shown by a mean of 4.09, the number of savings products offered can greatly impact on a person's willingness to save as shown by a mean of 4.04, access to the savings and security will always be considered when choosing a mode of saving as by a mean of 4.01

# 4.5 The Impact of SACCOs

Table 4.6:	Statements	relating	to	impacts	of	Sacco's	on	respondent's	investment
culture.									

Statement					əə.		
	Strongly agree	Agree	Not sure	Disagree	Strongly Disagr	Mean	Std deviation
SACCO helped to change your savings culture	16	51	4	2	2	4.03	0.28
SACCO has provided access low cost credit from the SACCO	22	48	2	2	1	4.17	0.27
SACCO has provided free sensitization, education and training to the SACCO members	26	42	3	3	1	4.19	0.24
Through the provision of credit SACCO has helped the members start up small businesses	25	46	1	2	1	4.23	0.27
Many members of the community have become members of the SACCO, employees and hence improved their standards of living	21	51	2	0	1	4.21	0.29

The study sought to establish the extent to which respondents agreed with the above statements, from the research findings, majority of the respondents agreed that, through the provision of credit SACCOs have helped the members start up small as shown by a mean of 4.23, many members of the community have become members of the SACCOs, as shown by a mean of 4.21, SACCOs have provided free sensitization, education and training to the SACCOs as shown by a mean of 4.19, SACCOs have provided access to low cost credit as shown by a mean of 4.17., SACCOs have helped to change people's savings culture as shown by a mean of 4.03, the study also established that that family size, age, income level education level have strong significant effect on SACCOs members' saving culture which findings are in agreement with a study by Ddumba and Obwona (1998)

# 4.6 Ways to improve the savings culture

Statement							
	Strongly agree	Agree	Not sure	Disagree	Strongly Disagree	Mean	Std deviation
Increasing the savings rate in SACCOs will greatly improve the saving culture	12	56	3	2	2	3.99	0.31
Saving culture will always improve if the SACCOs can ensure security, convenience and market returns	11	55	4	3	2	3.93	0.30
The older generation is biased and rigid about saving and therefore the youth should be targeted by SACCOs	26	41	4	3	1	4.17	0.24
Increase in the number of savings products and their quality will improve the savings culture	24	47	1	2	1	4.21	0.27
Reaching out to the community through holding regular seminars will improve the saving culture saving savings culture,	18	46	8	1	2	4.03	0.25

### Table 4.7: Statements relating to Ways of improve the savings culture

The study sought to determine the level at which respondents agreed with the above statements relating to mean of improving the savings culture, from the research findings majority of the respondents agreed that; Increase in the number of savings products and their quality will improve the savings as shown by a mean of 4.21, The older generation is biased and rigid about saving and therefore the youth should be positive about it, as shown by a mean of 4.17, Reaching out to the community through holding regular seminars will improve saving culture the as shown by a mean of 4.03, Increasing the savings rate in SACCOs will greatly improve the saving culture as shown by a mean of 3.99, and that Saving culture will always improve if the SACCOs can ensure security, convenience and market returns as shown by a mean of 3.93.

FORMULATION	2009	2010	2011	2012	2013	Totals
Kshs	<b>'</b> 00'	<b>'</b> 00'	<b>'00'</b>	<b>'</b> 00'	<b>'</b> 00'	<b>'</b> 00'
Total income						
	589,258	789,446	956,349	1,234,467	1,478,580	5,048,103
Total expenditure	376,465	432,578	585,695	586,224	778,233	2,759,195
Total Savings	212,793	356,868	370,654	648,243	700,350	2,288,908

## 4.7 Personal Saving Rate

Table 4. 8: Average saving trends from the respondents

The study sought to determine the saving trend of the respondents, from the research findings, the study revealed that there was concurrent increase in saving trend in each year which implies that a positive performance in saving culture among the Sacco members.

#### 4.8 Regression Analysis

The study conducted a linear regression model to establish the effect of SACCO services on investment by households in Kiambu County, Kenya. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (investment by households) that is explained by all the two independent variables (total savings by households in SACCOs and total credit to members).

Table	4.9:	Model	Summary
			-/

			Adjusted	R	Std.	Error	of	the
Model	R	R Square	Square		Estin	nate		
1	881(a)	.776	. 723		.1246	)		

Adjusted R squared is coefficient of determination which tells the variation in the dependent variable due to changes in the independent variable: From the findings in the above table the value of adjusted R squared was 0.723 an indication that there was variation of 72.3% on Personal Saving Rate due to savings by households and total credit to members (loans) at 95% confidence interval. This shows that 72.3% changes in Personal Saving Rate could be accounted to changes in savings by households and total credit to members (loans). R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table below there was a strong positive relationship between the study variables as shown by 0.881.

Table 4	. <b>10:</b> A	ANO	VA
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Mod	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.497	2	.572	4.434	.001 <sup>b</sup>
	Residual	9.288	72	.129		
	Total	12.785	74			

#### Analysis of variance

From the ANOVA statistics in table below, the processed data, which is the population parameters, had a significance level of 0.1% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 5%. The F critical at 5% level of significance was 4.434 since F calculated is greater than the F critical (value = 3.13), this shows that the overall model was significant.

M	odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1	Constant	В	Std. Error	Beta		
	Personal Saving Rate	1.298	.223		5.821	.003
	savings by households	.271	.126	.235	2.151	.003
	Total credit to			.108		.001
	members (loans)	.229	.112		2.045	

#### Table 4.11: Coefficients

From the data in the above the table, the established regression equation was

#### $\mathbf{Y} = \mathbf{1.298} + \mathbf{0.271X_1} + \mathbf{0.229} \ \mathbf{X_2}$

According to the model, all the variables were significant as their significance value was less than 0.05. The two variables (savings by households and total credit to members)

were positively correlated with investment by households. From the above regression equation it was revealed that holding savings by households and total credit to members (loans) to a constant zero, Personal Saving Rate would stand at 1.298, a unit increase in savings by households would lead to increase in Personal Saving Rate by a factors of 0.271, and a unit increase in credit issuance to members (loans) would result to increase in Personal Saving Rate by factors of 0.229. At 5% level of significance and 95% level of confidence, savings by households had a 0.003 level of significance while credit issuance to members (loans) had a 0.001, this implies that credit issuance to members was the most significant factor followed by savings by households.

# 4.9 Summary and Interpretation of Findings

From the above regression model, the study found out that there were factors influencing investment by households are total savings by households in SACCOs and total credit to members (loans). They influenced investment by households positively. The study found out that the intercept was 1.298 for all years.

The two independent variables that were studied (savings by households and total credit to members (loans)) explain a substantial 72.3% of investment by households as represented by adjusted  $R^2$  (0.723). This therefore means that the two independent variables contributes 72.3% of investment by households while other factors and random variations not studied in this research contributes a measly 27.7% of investment by households.

The study established that the coefficient for savings by households was 0.271, meaning that savings by households positively and significantly influenced investment by households. This is in line with Zia (1981) who indicated that large and rapid increases in

household income have a positive impact on the rate of investment. The rate of growth of income is a major determinant of investment. There is a strong positive correlation between the real rate of interest and a household investment. Income has been considered as the chief determinant of investment. The exact nature of relationship between the investment and income is controversial (Zia, 1981). In developing economies, only a low percentage of low income households hold savings or investments (Hogarth and O'Donnell, 1999) mainly due to lack of access to mainstream financial institutions for savings and appropriate financial instruments (Sherraden, 1999). They do not have the same incentives and financial subsidies for asset accumulation available to high income earners. Such incentives include mortgage interest deductions, pension contributory schemes and information needed to make sound investment decisions. A social support network is required to encourage them to save in the form of community development financial institutions. This can be done by improving access to financial institutions and ensuring appropriate savings instruments are available. Financial educators can join hands with the community development credit unions to enhance development and delivery of financial education on savings.

The study also deduced that total credit to members (loans) had a positive and significant influence on investment by households since it had a coefficient of 0.229. This is in line with Pitt and Khandker (1998) that for participants of the Grameen Bank, the Bangladesh Rural Advancement Committee (BRAC), annual household consumption expenditure increases 18 taka for every 100 additional taka borrowed by women, compared with 11 taka when the borrowers are men. They control for participation endogeneity by using the specific design of the credit programs to identify the effect of program credit, by gender

of participant, in a limited information-maximum-likelihood framework, and by controlling for nonrandom program placement by using village-level fixed effects. Khandker (2005), using a household-level fixed-effects model with panel data, which resolves both household- and village-level endogeneity, finds that Pitt and Khandker (1998) actually underestimated program impacts. He finds each additional 100 taka of credit to women increased total annual household expenditure by more than 20 taka, but finds no returns to male borrowing at all. A few studies, however, have failed to find positive impacts on income from microfinance participation. Masanjala and Tsoka (1997) find little impact of FINCA Malawi on living standards and expenditure patterns. Ssendi and Anderson (2009) also find little long-term effect, as measured by increases in household assets. However, both studies use a much less robust methodology and make little attempt to control for selection bias.

According to most respondents the major factor that affects the individual's savings culture socio-economic factors like economic stability represented by a mean of 4.19. However, the findings indicate that it's not only the socio-economic factors that sorely determine individual's savings culture. There are other factors like the interest rates offered. It was also found that SACCOs can affect the savings culture of individuals by ensuring security, convenience and market returns and by offering a wide range of products that are customer based. There were also other factors that affect savings but were not under the control of the SACCO. These included the level of income, the ability and willingness to save, and the level of inflation. These findings concurs with (Adam, Collier & Ndungu, 2011) indicates that there are three factors that mostly determine savings behavior of a household in Kenya which they mentioned as the ability to save,

which in turn depends on a household's disposable income; the willingness and propensity to save as influenced by the socio- economic factors; and the opportunity to save and earn a return on the savings

The study found out that Savings and credit cooperatives do have a great impact on the savings culture whereby majority of respondents as shown by a mean of 4.23 answered positively to the statement asking them whether the SACCO has helped them to improve their savings culture. However, it should be noted that though the impact of SACCOs to members is great, SACCOs do not provide education, sensitization and training. Probably this is the reason for the general slow rate of increase in the savings in SACCOs. These findings call the action by (Munyiri, 2006) that SACCOs ensure members are empowered through mobilization of savings and disbursement of credit

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

The chapter presents the discussions drawn from the data findings analyzed and presented in chapter four. The chapter also gives the conclusions and recommendations of the study based on the objectives of the study. The objective of the study was to assess the effect of SACCO services on investment by households in Kiambu County, Kenya

# **5.2 Summary**

This study adopted a descriptive survey design (Describing the characteristics of existing phenomenon) in soliciting information on the effect of SACCO services on investment by households in Kiambu County, Kenya. Descriptive survey design is used since it provides insights into the research problem by describing the variables of interest. It was used for defining, estimating, predicting and examining associative relationships. (Kombo & Tromp, 2006). The study was conducted in Kiambu County, Kenya. Secondary data was collected using desk review of published company annual financial statements and academic sources. The study conducted a linear regression model to establish the effect of SACCO services on investment by households in Kiambu County, Kenya.

From the regression model, the study found out the two variables savings by households and total credit to members were positively correlated with investment by households hence they influenced it positively. The two independent variables that were studied, explain only 72.3% of the investment by households as represented by the adjusted  $R^2$ . This therefore means the two variables contribute to 72.3% of investment by households, while other factors

not studied in this research contributes 27.7% of investment by households. Therefore, further research should be conducted to investigate the other (27.7%) factors investment by households in Kenya. The study concludes that savings by households and total credit to members influences of investment by households

#### **5.3 Conclusions**

The study by Zia (1981) indicates that large and rapid increases in household income have a positive impact on the rate of investment. The rate of growth of income is a major determinant of investment. The study concludes that the SACCOs have a significant positive effect on members' saving culture as shown in savings trend in (from table 4.8) which indicate positive savings culture in from 2009 to 2013

From the model, holding savings by households and total credit to members (loans) to a constant zero, Personal Saving Rate would stand at 1.298, a unit increase in savings by households would lead to increase in Personal Saving Rate by a factors of 0.271, and a unit increase in credit issuance to members (loans) would result to increase in Personal Saving Rate by factors of 0.229. At 5% level of significance and 95% level of confidence, savings by households had a 0.003 level of significance while credit issuance to members (loans) had a 0.001, this implies that credit issuance to members was the most significant factor followed by savings by households

The study by Kiiza and Pederson (2002) established that Investment is also increases with the age but decline when age cross a certain limit. Social responsibility and the cost of living affect the amount an individual can save, people with lower incomes always save less than those with relatively higher incomes, inflation rates greatly affect an individual's level of savings, socio-economic factors like political stability affect an individual's willingness and propensity to save, the number of savings products offered can greatly impact on a person's willingness to save, access to the savings and that customers always considered security when choosing a mode of saving

Reaching out to the community through holding regular seminars will improve the saving culture, Increasing the savings rate in SACCOs will greatly improve the saving culture, and that Saving culture will always improve if the SACCOs can ensure security, convenience and market returns It is found that a strong negative correlation exists between inflation and house hold Investment

### **5.4 Recommendations**

Since financial literacy and experience affect the Personal Saving Rate among the Sacco members; it's important that the management of Sacco's in collaboration other financial institutions initiates' financial management training programs amongst the residents of Kiambu. The Sacco's should come up with more lenient means of establishing the creditworthiness of the without necessarily looking at their asset base but on their financial records, this will encourage the members obtain credits for self-developments which will encourage saving as well.

The management of Sacco's should come up with products that best suit the economic class of its members,( loan repayment period and interest rate charged) this will help to alleviate some the factors restricting members from accessing credit from Sacco's. There is need to ensure access to business information to the all Sacco members, this will help to equip members with business ideas and therefore encourage personal growth.

The researcher recommends that trainings on saving in totality are a vital strategy to improve saving culture in SACCOs. Equally important is development of new savings products, compulsory savings and rising of saving rate. Others are targeting of small scale business proprietors with business loans

Further still, the government and those involved in SACCOs should educate people to learn to borrow only when it is extremely necessary. This is because borrowing for the sake of it, may lead to misuse of funds leading to draining of the -would -have been saved resource. The government should educate people in communities generally, about the basic principles of controlling expenditure namely: Be quick to receive money but pay as late as possible. This principle will help one to control the way he/she spends. People should set priority of what to spend on. Match expenditure with what they income. SACCOs should adopt a dynamic and aggressive policy to encourage savings by enhancing public confidence in the micro-finance industry, providing cost-effective schemes for small depositors and more importantly, they must be seen by the public to be concerned not only with balancing their books but also, with promoting members' welfare and prosperity.

### 5.5 Limitations of the Study

The study findings may not be replicated to other SACCO members in Kenya. Some members were illiterate and these posed a challenge when filling questionnaire and disclosing the information of SACCOs and this impact on the misleading outcomes of the results.

Another limitation was in developing a model which would enable a researcher to study the relationship between the various variables. When developing this model, there was a great need to define the dependent variables and independent variables. If the model was not correct, the process of analysis would not give the right results. In this case, multiple linear regressions was used since there were multiple variables which required to be studied

Time allocated for the study was insufficient while holding a full time job and studying part time. This was encountered during the collection of material as well as the data to see the study success. However the researcher tried to conduct the study within the time frame as specified.

The other limitation is that this study used only savings by households and total credit to members this does not seem to have overall effect on the Personal Saving Rate and hence there is need to carry out the study with other different factors in order to be able establish which are the major factors that affect the Personal Saving Rate amongst individuals.

### **5.6 Recommendation for further studies**

The study mainly dealt with SACCOs in Kiambu County which is a rural area. There is need to compare SACCOs in the urban areas and SACCOs in rural areas. Since SACCOs are of many categories a study is needed to establish whether there is competition within the SACCOs and the reasons behind such competitions. The two variables accounted for 72.3% changes on of investment by households, while other factors not studied in this research contributes 27.7% of investment by households. Therefore, further research

should be conducted to investigate the other (27.7%) factors investment by households in Kenya.

There is need for academician to research on credit risk management and performance of SACCOs. There is also need to research on the influence of governance on SACCOs' performance and development. There's also need to determine the correlation between the savings culture and the rate of emergence of SACCOs.

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#### **APPENDIX I: QUESTIONNAIRE**

#### Dear respondent,

I am investigating the EFFECTS OF SACCO SERVICES ON INVESTMENT BY HOUSEHOLDS IN KIAMBU COUNTY, KENYA. Therefore, I wish to request you kindly to spare some time and answer the questions below as honestly as possible by ticking or filling in the spaces provided. The information given will be purely for academic purposes and will be treated confidentially. Thank you for your cooperation. Tick or write answers in full where applicable.

# **SECTION A: Background information**

1. Gender

a) Male b) Female	
2. Marital status:	
a) Single b) Married c) Widow(er) d) Divorced	]
3. Age bracket (yrs)	
a) 11-20 b) 21-30 c) 31-40	
d) 41 and above	
4. Highest level of education attained	
a) Primary education b) Secondary	
c) College certificate d) graduate	
5. When did you join the SACCO?	
a) 1yr back b) 2yrs back c) 3yrs back	
d) Above 3yrs back	
6. Were you investing before you joined the SACCO?	
a) Yes b) No	
If yes, how were you investing?	
a) With friends, relatives	
b) Secret place	
c) Save with an institution that is regulated by Central of Bank Kenya.	
d) In asset form	
Others (specify)	

If not, why? ...... 7. Why were you investing? a) Precautionary measures b) Accumulation of wealth c) Save for future investment and consumption d) Meet social and religious obligations e) Education Others (specify)....

# SECTION B: Factors that affect the investment culture

On a scale of 1-5, tick in the appropriate box on how you strongly agree or disagree with the statements given.

Scale	5	4	3	2	1
	Strongly	Agree	Not sure	Disagree	Strongly
	agree				Disagree

Statement	5	4	3	2	1
People with lower incomes always save less than those with					
relatively higher incomes.					
Socio-economic factors like political stability affect an					
individual's willingness and propensity to save					
The number of savings products offered can greatly impact on					
a person's willingness to save					
Access to the savings and security will always be considered					
when choosing a mode of saving					
Inflation rates greatly affect an individual's level of savings					
Social responsibility and the cost of living affect the amount					
an individual can save					

# **SECTION C: the Impact of SACCOs.**

Statement		4	3	2	1
SACCO helped to change your savings culture					
SACCO has provided access low cost credit from the SACCO					
SACCO has provided free sensitization, education and					
training to the SACCO members					
Through the provision of credit SACCO has helped the					
members start up small businesses					
Many members of the community have become members of					
the SACCO,					

# **SECTION D:** Ways to improve the savings culture

Statement	5	4	3	2	1
Increasing the savings rate in SACCOs will greatly improve					
the saving culture					
Saving culture will always improve if the SACCOs can ensure					
security, convenience and market returns					
The older generation is biased and rigid about saving and					
therefore the youth should be targeted by SACCOs					
Increase in the number of savings products and their quality					
will improve the savings culture					
Reaching out to the community through holding regular					
seminars will improve the savings culture,					

# **SECTION E: Personal Saving Rate**

Please provide us with the following data to enable us compute the personal saving rate. Fill where appropriate.

FORMULATION	2009	2010	2011	2012	2013	Totals
Kshs						
Total income						
Total expenditure						
Total Savings						

Thank you for the co-operation...

# APPENDIX II: LIST OF SACCOS IN KIAMBU COUNTY

- 1. Karirana Sacco
- 2. Nyara Sacco
- 3. Mefa Sacco
- 4. Limuru D. Sacco
- 5. Conduit Sacco
- 6. Brackehust Sacco
- 7. Terrazan Sacco
- 8. Marijoe Sacco
- 9. Redhill Sacco
- 10. Pamoja T. Sacco
- 11. Flow Glow Sacco
- 12. Stragollen Kentmere Sacco
- 13. Kiatu Ombi Sacco
- 14. Limuru Traders Sacco
- 15. A.C.K Limuru Sacco
- 16. Bibirioni Water Sacco
- 17. Ndeiya Sacco
- 18. Ndeyusa Sacco
- 19. Likana Sacco
- 20. Everbest Sacco
- 21. Likambu Sacco
- 22. Lingana Sacco
- 23. Lira Line Sacco
- 24. Lina Sacco
- 25. Mamuli Sacco

Source: Ministry of Cooperative Development and Marketing, (2013)