DETERMINANTS OF FINANCIAL PERFORMANCE OF PRIMARY SAVING AND CREDIT COOPERATIVE SOCIETIES IN JIMMA ZONE, ETHIOPIA

A Thesis Submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Science in Accounting and Finance (MSC)

BY:
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JIMMA UNIVERSITY

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CERTIFICATE

This is to certify that the thesis entitles "Determinants of Financial performance of Primary Saving and credit cooperative Societies in Jimma Zone" Submitted to Jimma University for the award of the Degree of Master of Science degree in accounting and finance and is a record of research work carried out by Mrs. Meron Araya Haile, under our guidance and supervision.

Therefore, we hereby declare that no part of this thesis has been submitted to any other University or Institution for the award of any Degree or Diploma.

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Declaration

I hereby truthfully declare that the above-titled thesis is my original work and that it has not been presented for the award of a master's degree in any university.

Meron Araya Haile: Signature _____ Date _____

I confirm that this thesis has been submitted for examination with my approval as the University's Main advisor.

SINTAYEHU TULU (Assistant Professor)

Signature _____ Date _____

I confirm that this thesis has been submitted for examination with my approval as the University Co advisor.

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Signature _____ Date _____

Abstract

The study aimed to investigate the determinants of financial performance of primary SACCOs in Jimma Zone, Ethiopia. The objective of the study was based on six factors: leverage, liquidity, managerial efficiency, capital adequacy, SACCO size, and age of SACCOs. The total population of the study was SACCOs in Jimma Zone, and the sample frame selected primary SACCOs in Jimma Zone. The sample size of the study was 12 primary SACCOs, which were determined purposively. The study employed a descriptive and explanatory research design. Secondary data was used for the study, which was collected through document review from the financial statement and audit reports of the year's 2018 to 2022 using observation and review as data collection instruments. E-View 10 was used for secondary data analysis. Inferential statistics were applied through the use of multiple regression analysis to establish the nature of the existing relationship between the dependent variable and independent variables.Out of the six variables incorporated in the model, capital adequacy, size of SACCOs, and age of SACCOs have a positive and statistically significant influence on the financial performance of SACCOs in Jimma zone. Managerial efficiency has a negative and significant effect on the financial performance of SACCOs. On the other hand, liquidity and leverage have positive and insignificant influences on the financial performance of the SACCOs. The number of primary SACCOs in Jimma is high in number but they are not as strong, so the study recommended that to improve the financial capacity of SACCOs by amalgamating different primary SACCOs into one under the big umbrella. The government official of cooperatives should pay great attention to continuously supervising, inspecting, auditing, and developing regulatory situations to make them financially prudent and enhance the development of infrastructures in different areas where difficulties are being faced on the way to providing financial services."

Keywords*: Capital adequacy, Liquidity, SACCO's size, management efficiency, Leverage and age of SACCOs, and financial performance.*

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ACCOSCA	**Africa confederation of Cooperative Savings and Credit Association**
ADLI	**Agricultural Development led to Industrialization**
FAO	**Food and Agriculture Organization**
FCA	**Federal Cooperative Agency**
FDRE	**Ethiopian Federal Democratic Republic**
ICA	**International Cooperative Alliance**
IMF	**International Monetary Fund**
MEDAC	**Ministry of Economic Development and Cooperation**
MFIs	**Micro Finance Institutions**
NBE	**National Bank of Ethiopia**
SACCO	**Saving and Credit Cooperative**
USD	**United States of America Dollar**
WOCCU	**World Counsel of Credit Union**

CHAPTER ONE

1. INTRODUCTION

This chapter intends to investigate the Determinants of Financial Performance of Primary Saving and Credit Cooperative Societies in Jimma Zone**.** The assessment is conducted based on the data obtained from selected primary SACCOs in Jimma Zone. This chapter offers a general clue about the study by providing general background for the study, the statement problem, objectives of the study, research hypothesis, scope, limitation, the significance of the study, and organization of the paper.

1.1. Background of the Study

According to Mckernan and Chen (2005), cited in Ofei (2001), finance is the backbone of any business enterprise. For country's economic development, financial institutions play a vital role in the world. Formation of financial institutions can be formal, semiformal and informal institutions. Micro finances are one of the formal financial institutions that provide financial services to the poor and rural areas with high interest rate to compensate for the risk. World Bank's strategy seeks to improve the demand and supply conditions for expanding access of the rural poor to a suitable "diversity of products and institutions that fill the financial needs of low-income rural clients in income generation and reduction of vulnerability" (World Bank, 2002).

MFIs focus on providing credit to the poor who have no access to commercial banks, in order to reduce poverty and to help the poor with setting up their own income generating businesses which is described as outreach in many literatures generally. The objective of the MFIs is basically poverty alleviation through the provision of suitable financial services to the poor who actually don't have access to the financial support services of other formal financial institutions. To this effect, the delivery of microfinance service to the poor in Ethiopia is one of the main effective instruments of insuring food security, reducing poverty and increasing employment in both urban and rural areas. This could only be realized by developing capable and suitable 2 microfinance institutions (Wolday, 2004). SACCOS can help providing financial services to the poor and rural societies in this regard. However, society's access to financial services depends on many variables such as financial development of the country, income level of the individuals, geographic location and development of the country

accompanied by other variables. That means even though financial service is vital to the society, it is not equally available to all members of society. Hence, Savings and Credit Cooperatives (SACCOs) are established based on this premise to serve the interest of economically neglected segment of society.

SACCOs are the main providers of financial services for low income, rural and urban societies who are overlooked by formal financial institutions in many countries. According to Munyiri (2006) cited in Ofei (2001), Savings and Credit Co-operative Societies (SACCOs), which are started locally, are more attractive to customers thus deeply entrenching themselves in the financial sectors of many countries. In fact, they have solid bases of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs Branch (2005) cited Ofei (2001).

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. The core objective of SACCOs is to ensure members empowerment through mobilization of savings and disbursement of credit (Ofei, 2001).

Financial cooperatives play a critical role in improving communities by increasing financial inclusion, broadening and reinforcing a culture of saving, financial literacy, and judicious loans, as well as reducing excessive lending and credit. SACCOs differ from other cooperatives and financial institutions in that their operations are centered inside its membership, and to save, borrow, or obtain other services from the SACCO, one must be a member. Here's a quick rundown of how the concept came to be in various places around the world:

Germany was the first country in the world to implement the cooperative saving and credit principle. In the middle of the nineteenth century, the cooperative saving and credit movement began in Germany. The economic situation in Germany at the time was exceedingly poor, and peasants and artisans felt crushed under the weight of debt. Jews ruled the market, leaving poor laborers and farmers with no choice but to buy and sell their wares to them. Hence, German laborers and peasants were passing such a bad time. (Ondieki et al., n.d.). A city mayor of Heddesdorf tries to reduce the suffering of the people who are living in rural areas (Fouillet et al., 2013).

1. 1.2.Overview of SACCOS in Ethiopia

Ethiopians have a strong tradition of saving, which is evident from the widespread existence of informal rotating savings and credit organizations such as iqubs and iddirs. There is also a promising history in the country of successful savings and credit cooperatives in urban areas. In Ethiopia, the history of modern cooperatives was started in 1960 (Federal Cooperatives Agency, 2012). Saving and credit cooperatives are one of the successful cooperatives' ventures in Ethiopia.

Actually, the history of cooperative movements in Ethiopia has demonstrated the potential for growth and expanded outreach in the success of nearly 700 mainly urban based saving and credit cooperatives. There is a sound legal and policy framework conducive to the establishment of financially and politically independent rural and urban saving and credit cooperatives (Wolday, 2004). Establishment of saving and credit cooperative societies in Ethiopia started in the mid-1960s. From 1964-1973, there were 28 saving and credit cooperative societies and these societies formed their own national apex body known as Ethiopian Thrift and Cooperative Societies Limited (Muluneh,2012). SACCOs have been growing fast since 1979, however; the rate of growth is slower than other types of cooperatives in Ethiopia. In 1991 the number of SACCOs in Ethiopia was 3,491 (Dessalew, 2014). During the Derg regime (1974-1991), different types of cooperative societies (Agricultural Cooperatives, Housing Cooperatives, Saving and Credit cooperatives and Mining Cooperatives) 4 were organized, promoted, regulated and inspected by different ministries and institutions (Muluneh,2012).

During the Derg period, Proclamation No. 138/70 was issued which provided the National Bank of Ethiopia to promote and organize SACCOs. These cooperatives were not demand-driven and member managed. There were frauds, embezzlement and mismanagement. However, the saving and credit cooperatives (SACCOs), mainly in urban areas, which were insulated from government interference, continued to thrive. After the adoption of mixed economy in 1991, producers' cooperatives were completely abandoned and only limited strong service cooperatives with committed leadership survived. Little or no attention was paid to the cooperative sector until 1995 (Wolday, 2004). After the fall of the Derg regime in 1991,

adoption of Economic Reform Program helped the organization, promotion and development of cooperative societies within the framework of free market economy.

This opportunity opened to turn cooperative societies into real people's organizations and the number of saving and credit cooperative societies mushrooming up both in urban and rural areas have increased tremendously. Generally, the poor are considered credit risk to the conventional banks and hence excluded from the credit market (Muluneh, 2012).

Savings and credit cooperatives' financial performance is critical to their long-term sustainability. Economic services are provided by savings and credit cooperatives and other financial institutions. They are appropriate for low-income households who have trouble obtaining financing from banks. SACCOs' primary job is to provide financial services to their members, but their financial intermediary and investment functions are critical for many other functions (Abamagal & Abamagal, 2019). SACCO is a system that brings savers and borrowers together in a way that covers all of the costs of doing business and is beneficial to both parties. SACCO's primary motivation is not profit, but revenue is also an important source of fairness. This could happen if profits are re-invested.

The delivery of microfinance services to the poor in Ethiopia is one of the main effective instruments of ensuring food security, reducing poverty, and increasing employment in both urban and rural areas. This could only be realized by developing capable and suitable microfinance institutions (Berhanu & Eticha, 2020). Saving and credit cooperatives hereafter, SACCOs can help provide financial services to the poor and rural societies in this regard.

Cooperatives, including SACCOs, are important grassroots organizations in Ethiopia that play a key role in achieving the goals of various development programs and strategies, including rural development, poverty reduction, industrial development, agricultural marketing, food security programs, and financial intermediation (Berhanu & Eticha, 2020). SACCOs, in particular, are locally established financial institutions that serve the community's financial requirements, primarily to aid the poor who did not have access to conventional financial systems such as Commercial Banks and Microfinance Institutions, and who saw the poor as a dangerous alternative. Furthermore, when compared to financial cooperatives, the expenses of accessing the creditworthiness of disadvantaged individuals were significant.

Locally founded Savings and Credit Co-operative Societies (SACCOs) are more appealing to customers, firmly entrenching themselves in the financial sectors of many countries (Info, 2018). SACCOs can make loans at lower interest rates than other financial institutions. Commercial banks and other formal institutions, on the other hand, are unable to provide the credit demands of small businesses, owing to their lending terms and restrictions. Furthermore, SACCOs have the potential and chance to contact clients in places where banks are not interested, such as rural or impoverished communities.

Because of the deep relationships that exist in Ethiopian societies, there are several opportunities to form cooperatives throughout the country. Financial institutions are critical to a country's economic success. The failure of specialized financial institutions to accommodate these businesses' loan needs has highlighted the significance of a needs-based financial system for both urban and rural development. As a result, the necessity for non-traditional financial institutions grows. The poor, particularly women, have more access to informal credit than formal credit, according to experience in the informal finance sector. Saving and Credit Cooperatives are an example of an informal financial institution that provides services to both urban and rural residents, particularly the impoverished (Lemessa&Gemechu, 2016).

Savings and credit cooperatives (SACCOs) provide their members with savings and credit services. SACCOs are member-owned, member-controlled, and member-capitalized cooperatives. Members' savings are mobilized and returned to members in the form of loans. In Ethiopia, SACCO societies are governed by Proclamation No. 985/2009, which was revised in 2009. The government of Ethiopia has identified rural-based financial institutions, such as the Rural Financial Intermediation Program (RUFIP) under the Ethiopian Development Bank, as a key player in the provision of credit funds to their clients to become effective and sustainable in their business. Whatever types of business prospects people choose to pursue, they must have easy access to sufficient financial resources.

Jimma Zone has no unique evolution of cooperatives apart from the evolution of cooperatives in Ethiopia. Savings and credit cooperative societies are established to help the marginalized poor access financial services, but they have not been able to meet their demands satisfactorily because of various challenges facing them. To assist the financial performance of Cooperatives

in our country, it is necessary to give much attention to members and community-based financial performance at a grass-root level. Thus, the study was aim to investigate the determinants of financial performance of primary saving and credit cooperatives societies in Jimma zone.

1.2. Statements of the Problem

Savings and Credit Cooperative Societies (SACCOs) can devote massively to the growth and development of economies. They promote savings behavior among people that is essential for planning in terms of investment plans and planned expenditures. SACCOs play an essential role in financial accessibility thus enabling members to engage in viable businesses that generate income to improve social welfare (Simon & Ochieng, n.d.). Although saving and credit cooperative societies (SACCOs) promote a savings culture among people and mobilize funds with the economy, they contribute extremely to the growth and development of economies, investigating what are the factors that determine the financial performance of SACCOs are the questions raised.

SACCOs play a great role in financial accessibility that enables members to engage in visible business that generates income to improve their living standards and be an investor. However, regardless of the potential and contribution of SACCOs, they have not provided the expected financial service to members due to reprehensible financial performance (Simon & Ochieng, 2018). SACCOs offer similar products to banks and other financial institutions, but their financial performance is not somewhat to be proud of compared to banks (Gachora, 2017).

Various studies will be conducted on SACCOs by several researchers; For instance; Studies by Hanna(Determinants of the Financial Co-Operatives in the Banking Sector in Kenya Hannah Waithera Kiaritha Doctor of Philosophy (Business Administration), 2015) assessed the determinants of financial performance of savings and credit cooperatives in the banking sector in Kenya. (Onyango, 2018) studied factors that affect the financial performance of saving and credit cooperative societies. (NDONGA, 2016), conducted a study on factors affecting the financial performance of employees of SACCOs in Kenya. (ONYANGO, 2016), studied about determinants of financial performance of saving and credit societies in Kiambu country, Kenya. (Simon & Ochieng, 2018) discussed on determinants of financial performance of saving and credit cooperative societies in Nakuru town, Kenya.

Management of Savings and Credit Cooperatives from the Perspective of Outreach and Sustainability (Sebhatu, 2011) revealed that those masses and members' financial institutions known as saving and credit cooperatives were capable of marshaling vast financial resources and supplying credit and savings services to a large population at a standard that was comparable to formal financial institutions. He also claimed that SACCOs are viable financial entities whose growth should be aided significantly. He also identifies a lack of awareness and a poor saving culture, as well as weak organizational arrangements and governance issues, a policy and regulatory environment, weak institutional capacity, a low capital base, a lack of differentiated products, and inappropriate loan security requirements, as factors affecting SACCOS' growth and outreach. In addition, (Tesfamariam, 2015), investigated the influence of Savings and Credit Cooperatives, finding a positive significant association between seniority, savings, loan amount, and the number of times loans were taken out, as well as the respondents' post-income.

The common issues that influence the performance of SACCOs in Malawi and pointed out that the issues influencing the performance of SACCOs are inadequate capital, poor asset quality, poor governance, poor profitability, poor liquidity, and noncompliance (Oynaka, 2020). In another way,(Mmari & Thinyane, 2019), argued that several of the factors influencing the performance of SACCOs as weak regulation, limited product and services, low marketing, and poor image.(Miriti, 2014), reported that SACCOs are formed from mostly the firms of cash crops and basic commodities while there is market risk in their marketing but in this research, membership size affects the determinants of financial performance of SACCOs have not been identified.

According to(Karagu & Okibo, 2014), the decline in financial performance in SACCOS is also due to funds misused, member withdrawals, and the variety of products offered to be the key factors. These studies will be conducted by different researchers have identified the determinants of financial performance of SACCOs by considering different variables through the different methodologies and coming up with a different conclusion and the majority of them is done abroad. As the literature indicates in our county there are a various studies on determinants of financial performance of SACCOs with the emphasis on the SACCO union. Almost all the studies conducted before in our country were based on the SACCO union. These

were overlooked primary SACCOs that are not the members of the union and there is no comprehensive study on the determinants of financial performance of primary saving and credit cooperative societies.

Also, they do not use liquidity, SACCO's size, managerial efficiency, leverage, capital adequacy, and age of SACCOs as determinants of SACCO's financial performance and there is no comprehensive study conducted so far with those variables on primary SACCOs in this zone. However, there were attempts made on other regional and national levels. So, this study comes up with different outputs and finding since determinants of financial performance are dynamic through time and differ with the nature of operating and place to place. Therefore, this study may prove critical in bridging the knowledge gap and context (geographical) gap by identifying the determinants of financial performances of SACCOS in the Jimma Zone.

1.3. Objectives of the Study

1.3.1. General Objective of the Study

The overall objective of the study was to investigate determinants of financial performance of primary saving and credit cooperatives in the Jimma Zone.

1.3.2. Specific Objectives of the Study

The specific objectives of the study were :

1. To determine the effect of capital adequacy on the financial performance of SACCOs
2. To examine the effect of liquidity on the financial performance of SACCOs
3. To explore the effect of managerial efficiency on the financial performance of SACCOs
4. To examine whether Leverage determines the financial performance of SACCOs
5. To identify the effect of SACCOS size on the financial performance

1.4. The hypothesis of the Study

In light of the objectives articulated above and the literature review the following hypotheses are developed as alternative hypotheses:

H1: Capital adequacy has a statistically significant and positive effect on the financial performance of SACCOs

H2: Liquidity has a statistically significant and positive effect on the financial performance of SACCOs.

H3: Managerial efficiency has a statistically significant and positive effect on the financial performance of SACCOs.

H4: Leverage has a statistically significant and positive effect on the financial performance of SACCOs.

H5: SACCOS size has a statistically significant and positive effect on the financial performance of SACCOs

1.5. Significance of the Study

SACCOs are engaged in providing saving and credit to members who have in need of money so that they can generate income and promote self-help, reliance among members, and employment for themselves. For these institutions, to be able to render such a service permanently, they should be viable and sustainable. They should not depend on donations or subsidies in the long run.

This requires an effective and efficient financial performance as well as an impact to be observed on the target beneficiaries. Although some studies have been conducted on the credit arrangements that targeted the saving and credit cooperatives in Ethiopia, so far, this study is believed to be relevant for one, it will settle the concerned bodies to look for more best possible solutions for the problems. Second, the solid suggestions of the study will use by the concerned body at least to minimize the financial performance problems that exist in the saving and credit cooperative societies. Finally, the study will have a valuable reputation for further study and add a new idea to the existing knowledge of saving and credit cooperative societies and their financial performance.

1.6. Scope of the Study

The study investigated the determinant factors of the financial performance of primary SACCOs in the Jimma zone. The sample is taken from SACCOs located in the Jimma zone. The period of the study is covered from 2018 to 2022 years. The study only covers primary savings and credit cooperatives. The scope of the study is limited to the stated objectives of the study which spells out the variables to be studied. The study included all primary saving and

credit cooperatives that are evidenced by 12 purposively selected SACCOs from total SACCOs that fulfill the criteria stated by a researcher.

1.7. Limitation of the study

The scope of the study is limited to the Determinants of financial performance of saving and credit cooperatives outreach in Jimma Zone. The study used only five-year audited financial statement.

The determinant of financial performance of SACCOs is very broad, and it is difficult to generalize the findings of the study to others. There is no well-organized published document in Jimma Zone cooperative promotion office or online information related to Jimma SACCOs. Obtaining necessary data in a well-organized manner is the biggest challenge during this study. To obtain the required data for the study the researcher visit each selected SACCO to identify the continuously audited SACCOs and then collects necessary information from identified SACCOs by visiting each SACCO.

1.8. Organization of Study

The final report of the research paper is organized as follows. The first Chapter consists of the introduction part and focuses on the Background of the study, statement of the problem, objectives of the study, hypotheses of the study, significance of the study, scope of the study, limitations, and organization of the study. Chapter two includes a review of different literature regarding the research objective. In chapter three the methodology of the study is presented. In chapter four Data presentation and analysis are discussed. Lastly, in chapter five the conclusions and recommendations part is presented.

CHAPTER TWO

LITERATURE REVIEW

2. INTRODUCTION

Literature review constitutes of the theoretical framework, empirical literature review, research gap observed, and conceptual framework. It provides insights and more understanding of the determinants of financial performance of savings and credit cooperative society.

2.1. Theoretical Framework

The theoretical framework has to verify an understanding of the theories and concepts related to the research topic and will be relevant to the broader field of knowledge you are researching. A theory selection depends on the appropriateness, ease of application, and explanatory power and the theoretical framework connects the researcher to existing knowledge (Kennedy, 2007).

2.1.1. Organizational theory

The organizational theory describes the scale of an organization's performance. Profitability is defined as a component of firm size performance (Kimberly, 1976). It also illustrates the organization's efficiency in terms of transaction, agency, and control costs management. Firm size influences financial performance through influencing hidden costs, vertical organizational integration, and industry profitability. Large corporations have the ability to diversify their operations. They can sell a wide range of products or differentiate their services to better meet the needs of their customers (Jones, 2012). Diversification helps in risk management and, as a result, improves performance. Big organizations, according to organizational theory, have a better chance of achieving successful financial performance than small ones. As a result, businesses strive to expand as much as possible. Furthermore, the firm's size influences its potential to achieve economies of scale, which aid in cost reductions (Hosmer, 1995).

Organizational theory is applicable in a current study that assesses the determinants of financial performance of Savings and Credit Co-operative Societies. Membership size is one of the variables in the study. Membership size in SACCOs determines the size of the organization. Organization theory explains financial performance from a firm size point of view. Therefore, Membership size influences the revenue of the SACCOs that contributes to financial performance.

2.1.2. Trade-Off Theory

Trade-off theory explains the financial performance of an organization regarding the method of financing used (Kraus and Litzenberger (1973). The trade-off theory states that the ratio of debt to equity financing is determined by balancing the costs and benefits. An organization trades off the dead weight costs that arise due to bankruptcy and tax shield benefits associated with debt financing. Firms get benefits from tax shields when they apply debt financing in their operations. However, in case they utilize the debts inappropriately, they may suffer the problem of financial distress. Financial distress means that the organization is experiencing difficulties in settling its debt obligations. The trade-off theory hence calls for a suitable balance between equity and debt financing. The inclusion of equity in debt financing helps to neutralize the problems associated with the use of debt (Frank &Goyal, 2007).

The trade-off theory was applicable due to its importance in methods of financing organizations. The financial performance of SACCOs is influenced by the decisions made by management concerning debt and equity financing. The quality of decisions depends on management competence. The employment management practices of SACCOs indicate whether they can employ qualified managers and officials who can make informed decisions. The Trade-Off theory talks about the appropriate balance between debt and equity financing. SACCOs are Empirical review that outlines explanations of membership size, frequency of supervision, and employment management practices based on related previous studies(In & Town, 2019).

2.1.3. Liquidity preference Theory

Keynes (1971) projected the liquidity preference theory and the theory suggests that liquidity preference entails the degree to which people prefer cash over less liquid assets. It mainly entails people's ease of holding cash. The theory suggests that holding all other things equal, investors prefer liquid investments compared to illiquid ones. Investors prefer cash because after they use it to strengthen cash, this issue will lead to a demand for premiums. Investors prefer cash because after they use illiquid investments to strengthen cash, this issue will lead to a demand for premiums (Choudhry, 2011). Liquidity is cash, and liquidity preference is when people contact to cash. According to this theory, investors prefer short-term securities in

comparison to long-term securities. Encouragements to hold long-term bonds are due to the notion that there will be higher interests compared to short-term bonds.

2.1.4. Concepts' of SACCOs

(Risal, 2021), states that cooperative was founded from Latin word "co-operari" where "co" means together and "operari" means work, it means working together. Cooperatives are democratically established and people entered associations that are aimed at fulfilling the common needs (ICA, 2019). It is egalitarian concept to evaluate economic, social, and cultural scenarios to a new level with the purpose to understand their people's aspirations. Saving and credit cooperative societies had been identified as essential avenues for economic growth in most nations of the world.

(Peer et al., 2020), state that SACCO societies are financial institutions designed for people to have their efficient financial service-giving institutions that empowers themselves in constructing asset with the aid of teaching thrift culture and make themselves accessible to credit sustainably. SACCOs are member-owned financial institutions that offer both savings and credit services to their members. Sacco's society is a financial cooperative society established voluntarily based on the philosophy of self-help or people helping people.

Lari (2009), mentioned SACCOs area type of cooperative whose objective is to pool savings for the members and in turn provide them with credit facilities. The financial institution and financial services sector is a very significant sector in today's modern economies. Like other financial institutions, SACCOs play a great role in the economic system by means of mobilizing financial savings and allocating credit for investment thereby helping to improve people's living standards. The financial performance of a SACCO is measured through the capacity of the institution to satisfy the financial needs of its members taking into consideration of the economic status of members. SACCOs are expected to give better and cheaper services to their members as compared to other financial institutions like banks because SACCOs are contributor owned and primarily serve the member (Simon & Ochieng, 2018).

2.1.5. Concepts, Characteristics, and Role of SACCOs

SACCOs are member-owned financial cooperatives that provide both savings and credit to their members. These financial institutions' members might be net savers as well as net

borrowers. SACCOs may be allowed to mobilize both member and non-member savings, or exclusively member savings, depending on a country's legislative structure. They are founded by volunteers to establish a self-help society or "people helping people." Members are the ones who own, administer, and control them. Members have the right to vote on topics and to get benefits from their participation.

SACCO Society is formed initially for the poorer to provide financial services such as a safe place for savings and providing easily accessible loans to members. They organize not for profit or charity" but serve members a fair profit margins. In these organizations, once overhead and other expenses are paid, reserved for a cushion against any loss, and for expansion of services set aside, the remaining income from loans is returned to members in the form of a dividend on savings, shares, or both. The basic structure of the SACCOs and credit unions is what differentiates them from banks. They are user-owned financial intermediaries. Members typically have a "common bond" based on geographic area, employer, community, industry, or other affiliation. Each member has equal voting rights regardless of their deposit amount or how many shares they own.

Savings and credit are their main offerings, but some also offer money transfers, payment services, and insurance. SACCOs sometimes band together to form second-tier associations to increase capacity, manage liquidity, and refinance; these second-tier associations can also help with monitoring(Branch, 2005). The existence of numerous informal savings methods observed around the world, as well as a few recent empirical investigations, show that poor people have a large potential to save. Many people, particularly in rural households, are forced to save during specific seasons of the year, such as harvest, to compensate for periods when their income is drastically decreased, such as the dry season.

Finally, while only a small percentage of people may require credit at any given moment, practically everyone will need to save at some point. As a result, we can conclude that impoverished individuals will deposit their money in a financial institution if the depositor's mix of savings demands is met by an acceptable institutional structure and appropriate savings products.

SACCOs reach out to those with little savings and income by providing goods tailored to their specific requirements in a safe and accessible environment. External and internal incentives

must be in place to ensure that appropriate financial intermediaries for the poor exist. Regulatory authorities' high-performance expectations and effective oversight will inevitably transfer into increased management capacities, particularly in terms of cost, liquidity, and risk management. Another important problem for all financial institutions under consideration is access to secondary structures. Secondary entities such as the Ministry of Commerce and the Ministry of Local Government must provide strong political support to SACCOs. Furthermore, the government should make it easier for SACCOs and MFIs to form alliances so that SACCOs can delegate responsibilities to their secondary structures and profit from economies of scale and scope, as well as give their consumers the chance to upgrade to larger loans (Robinson, et al., 2004).

The role and characteristics of SACCOs are:

- Allow and encourage members to pursue official business and investment opportunities, as well as offer them long-term loans.
- Encourage members to buy shares in the right amounts at the right times by leveraging their resources; with those shares, members' savings and loans are insured by providing the right level of liquidity in the SACCO Society to control the risk of withdrawal or late repayment;
- Retaining a portion of the interest collected on the loan operation to pay a dividend to members depending on the number of shares they possess; dispersing the earnings to members as a dividend based on the number of shares they own.

SACCO Societies, in general, are financial institutions established for people to have their own efficient financial service-giving institutions that empower themselves in creating assets by teaching thrift culture and making themselves credit-accessible on a long-term basis. As a result, for the SACCO Society to be successful and long-lasting, it must function similarly to banks as a market for money in a group with a shared bond. SACCO Society is a financial institution that focuses solely on mobilizing money from members in the form of savings and shares, as well as providing timely loans to members. Since SACCO Society deals with cash (the most liquid asset) that can be easily lost, it needs high-quality management and special attention to minimize the risk. Therefore, to minimize the risk the function of the SACCO Society should not be mixed with other functions.

2.1.6.1. Financial Products

Saving is the act of withholding something from today's consumption. The condition of reserving anything valuable for future use is referred to as saving. This brief sentence encapsulates two crucial aspects of any saving effort (FAO, 2001). Saving is a discipline because it teaches people how to manage their money effectively and build future assets.

Planning for Tomorrow (Future) because it educates people to forego today's expenses and save important resources for future possible outflows rather than spending right away. People learn to anticipate, forecast, and prepare for potential hazards and emergencies by saving (bad harvest, sickness, and death). People who save are more likely to consider launching a new business or expanding an existing one. People learn to anticipate and prepare for upcoming events and expenditures by saving (School fees, Marriage, Old age, retirements, etc.). As a result, saving is everything that can empower human beings to have bargaining power, allowing them to feel comfortable and confident.

In the SACCO society, saving is an asset to members, and a liability to the SACCO society. Saving is collected from members to lend to members. Saving is a source of income for the SACCO society because it lends to members with interest. This loan interest is the main source of income for the SACCO society. For a SACCO society, it is a must to have a regular savings flow from members and to promote efficient financial services to members. SACCO societies have three kinds of savings:

- Compulsory Savings
- Voluntary Savings
- Contract Savings (Time Deposits)

Compulsory Savings: Compulsory saving is a saving that a member is forced to save regularly; it is a membership saving i.e. must be saved monthly. This compulsory saving is collected to lend to members. If members fail to save on time they will get penalized based on the saving policy of the society. Unless the member quits from membership, he should save regularly. If a member wants to withdraw from the SACCO society, he has the right to take this compulsory saving with one-mouth priors notes to the Board of Directors. Society will provide interest for these savings.

Voluntary Savings: If the potential SACCO members are farmers and only receive income once or twice a year, how can they save the appropriate amount at the appropriate time? This kind of saving is very important to farmers since they do not have a regular income they can save as voluntary savings during harvest time, and transfer them monthly to their compulsory saving accounts. Voluntary savings are deposited and withdrawn as the member sees fit. Farmers, and other individuals, can save the full amount for the coming year's compulsory savings in advance with the SACCO by depositing 12 months' worth of saving in a voluntary account. Following that, each month on the appropriate day the member will come to the SACCO to withdraw the amount of one month's compulsory saving from the voluntary saving account and deposit it in the compulsory saving account. This maintains the fundamental function of the SACCO and allows individuals with seasonal incomes to be members. This ensures a regular flow of cash to the SACCO society and promotes members' participation. This kind of saving can be withdrawn at any time when the owner needs it. The SACCO society may or may not provide saving interest for this voluntary savings.

Contract Savings (Time Deposits) or Fixed Deposit

This type of saving will not be permitted unless the SACCO society has gained sufficient expertise in effectively managing its savings and loans. This type of saving will be encouraged in the future if the SACCO society has the capacity and position to appropriately manage its savings and loans, and if there is a lack of viable financial demand among members. It can be collected from both members and nonmembers, but the amount, collecting time, and interest rate for this saving should be established by the members' General Assembly. A high-interest rate on savings is available with a time deposit.

Share: The SACCO society's capital and an asset to its members is the share. It is a risk-mitigation fund that is collected from members in proportion to mandatory savings. A share should be saved in a bank because it is a risk-protecting capital. If a member wishes to leave the SACCO, they have the option to do so after 12 months or after the audit. This is to shield the SACCO from any losses and to provide members with the opportunity to receive dividends for as long as they remain members of the organization.

Loan: The loan is the use of someone's money for products, school fees, and other expenses, which will be repaid over time with added interest. Having a loan (borrowing) can be costly, hazardous, demanding, and unpleasant, according to the FAO (2001).

The loan is expensive by definition since the borrower will have to pay additional interest on the loan that is greater than or equal to the amount it generates. It is dangerous because it may be vulnerable to risks such as weather, income changes, disease, and mortality, all of which could make repayment difficult. The impoverished have a harder time getting loans than the wealthy. Local moneylenders, acquaintances, and even family, as well as banks, are hesitant to lend to persons they believe will have difficulty repaying their loans.

Because a loan entails a pledge to repay the lender, it can be stressful. Failure to repay may result in the loss of valuable assets (jewelry, a cow, a plot of land, and so on) as well as a bad reputation. As a result, in the SACCO society, loans (borrowing) must be carefully reviewed and treated.

2.1.6.2. Savings and Credit Cooperatives (SACCOs) Unions in Ethiopia

The existence of the clear and accommodating governmental policy and all-inclusive structures and the government's commitment to transforming the subsistence economy has created a conducive environment for the development of voluntary-based SACCO unions in the country. Accordingly, there are 89 SACCO unions and a capital amounting to ETB 618,654,727. As to their distribution by regions, there are 26 SACCO unions in Oromia (26%) and SNNP (26%), in Amhara (23%), in Tigrai (9%), 2 in Addis Ababa (2%), (1%) each in Benishangul Gumuz, Harare and Dire Dawa. (1%) Detailed SACCO unions found in each region, primary societies affiliated to the unions, and capital is indicated in Table 2.1 below:

Table 2.1: Distribution of SACCO Unions and Primaries by Region

Region	SACCO Unions	Capital(Birr)
Oromia	26	468,638,203.00
SNNP	26	70,022,161.00
Amhara	23	40,509,792.00
Tigrai	9	28,804,866.00
BSG	1	330,000.00
Harare	1	402,000.00
Dire Dawa	1	686,000.00
Addis Ababa	2	9,261,705.00
Total	**89**	**618,654,727.00**

Source: Federal Cooperative Agency, (2019)

2.1.6.3. The Saving Aspects of SACCO's

It is a cooperative that encourages its members to save money and allows them to borrow money from their collected savings for various purposes. This definition identifies the cooperative's two primary responsibilities. The first aim is to enable members to save money regularly or when needed. The member saves his or her money within the cooperative's framework, knowing that he or she will be rewarded for his or her efforts in the form of interest on his or her savings.

2.1.6.4. The Credit Aspects of SACCO's

The cooperative's second task is to provide loans to its members. Members' collected savings are used to provide loans. Not all members can take out loans or get them immediately or at the same time. Members are granted loans based on their cooperative seniority and the amount of money they have saved. The size of loans given from the cooperative's fund is generally determined by the liquidity regulations of the country in which it is headquartered. As a result, the amount of loans given to members does not exceed their total savings. However, in rare extreme instances, the cooperative can act as a middleman to help members receive additional credit.

On the credit he receives, the member pays the (cooperative) fund interest. Because this is part of the service the cooperative provides to its members, the interest rate will be lower than at other commercial financial institutions. The interest rate is determined by a simple formula: the total interest paid on the fund's loans must cover both the total interest paid to members on their savings and the fund's entire running costs. The smaller the difference between the interest charged on loans and the interest paid to members on their savings, the more efficient the fund is administered, which encourages members to save more (Meron, 2008).

Savings and Credit Cooperatives are user-owned financial intermediaries. They have many names around the world, including credit unions, SACCOs, COOPECs, etc. Members typically share a "common bond" based on a geographic area, employer, community, or other affiliation. Members have equal voting rights, regardless of how many shares they own. Savings and credit are their principal services, although many offer money transfers, payment, and insurance services. Sometimes savings and credit cooperatives join together to form second-tier

associations to build capacity, liquidity management, and refinancing. Second-tier associations also play useful monitoring (DONOR BRIEF No. 25, 2010).

The fundamental objective of a cooperative is not "to maximize the profits" as in a capitalist company, nor to act initially like an "actor of a social change" as in the non-profit-making associations, but "to maximize the benefit which the member users can obtain from their commercial transactions with the cooperative" (DONOR BRIEF No. 25, 2010). In fact, with their cooperation, the members try to obtain the maximum individual benefit through the particular type of commercial transactions which they carry out with it. It is thus for example, that a SACCO could promote the mutual aid, to the economic and social welfare of its members by granting loans to cover their economic needs, by supporting the spirit of initiative and agricultural or industrial local work, by the careful use of the saving produced locally.
The financial institution is a private (shareholder-owned) or public (government-owned) organization that, broadly speaking, acts as a channel between savers and borrowers of funds (suppliers and consumers of capital). Two main types of financial institutions (with increasingly blurred dividing lines) are (1) Depository banks and credit unions which pay interest on deposits from the interest earned on the loans, and (2) Non-depository insurance companies and mutual funds (unit trusts) which collect funds by selling their policies or shares (units) to the public and provide returns in the form periodic benefits and profit payouts.

Financial performance is a firm's performance measured against standard or prescribed indicators of effectiveness, efficiency, and environmental responsibility such as cycle time, productivity, waste reduction, and regulatory compliance. Operational performance is viewed in both the Industrial Organization and Strategic Management literature as the product of firm-specific factors such as management skill, innovation, cost control, and market share, which determine current firm performance, and critically, the sustainability of this level of performance (McWilliams and Smart, 1993).

Performance, in general, is considered a "survival condition" for firms that function in competitive environments (Fare, 1985). Afriat (1988) loosely defines "performance" as the relationship between ends and means and its measure as "the extent to which they are

matched". Standards are written definitions, limits, or rules, approved and monitored for compliance by an authoritative agency or professional or recognized body as a minimum acceptable benchmark. Standards may be classified as (1) government or statutory agency standards and specifications enforced by law, (2) proprietary standards developed by a firm or organization and placed in the public domain to encourage their widespread use, and (3) voluntary standards established by consultation and consensus and available for use by any person, organization, or industry. Once established, standards (like bureaucracies) are very difficult to change or dislodge. For example, the world standard for a broad gauge railway line is 4 feet and 8½ inches between the parallel tracks. This odd figure has its origin in the axle-width of Roman army chariots designed to accommodate the rear ends of two horses yoked side-by-side

2.2. Empirical Literature Review

This section reviews studies conducted previously on determinate of financial performance. It is a comprehensive review of previous inquiries related to the current research questions. According to Miller and Yang (2008) through the use of a systematic approach to previous scholarly work, a Literature review allows the researcher to place the research into an intellectual and historic context. Therefore, the previous study is presented in line with its relevancy to which variable is under investigation accordingly.

2.2.1. Financial Performance

The importance of financial performance in today's industry as it affects corporate sustainability cannot be overstated. The degree to which an organization's financial objectives are met is referred to as financial performance. A company's financial performance will be measured in monetary terms. To gain a competitive advantage over their competitors, institutions will put in place the greatest financial and nonfinancial structures. An institution's financial performance will improve as a result of this competitive advantage, allowing it to meet its short- and long-term obligations, such as wealth generation for its shareholders. Poor financial performance will reduce an institution's appeal to potential investors, potentially leading to insolvency and eventual collapse (Amalendu and Sri, 2011).

Different stakeholders in a business will assess the company's performance from various angles. Shareholders, management, creditors, tax officials, and other users are all interested in a

company's performance. Shareholders will invest in a company in order to get a return on their investment. An institution's management must make efficient use of its resources in order to achieve strong financial results. To evaluate the financial performance of an institution, financial statements are used where different ratios are performed as per the requirement of the user. Some of the commonly used financial performance measures are profit after tax, Return on Assets (ROA), Return on Equity (ROE), and earnings per share.

SACCOs operate in a complex and competitive business environment where conventional banks and other financial institutions are players. For SACCOs to survive in the market, performance is paramount to attracting members who are core financiers. It's by having efficient management that SACCOs will meet their operational obligations translating to satisfied stakeholders and consequently good performance (Adebayo et al., 2011). Good performance is therefore the lifeblood of a successful organization since it can pay the operational costs and have residue which is distributed to its shareholders from its profit. The analyst will measure the financial performance and other indicators that show the financial soundness of the business by use of financial records and reports(Harrison, 2015).

2.2.2. Capital Adequacy and financial performance

Capital adequacy is one of the specific elements that impact the level of profitability of a saving and credit cooperative society, according to Mokua (2015). Orkaido (2021) defines capital as the amount of own cash available to support SACCO's operations and act as a safety net in the event of a crisis. Because deposits are the most vulnerable and prone to runs, a financial institution's capital produces liquidity. According to Ongore (2013), the capital adequacy ratio is used to determine capital adequacy. Furthermore, more cash lowers the risk of financial distress (Dybvig, 2017).

The capital adequacy ratio measures a SACCO's ability to sustain losses during a crisis. The capital adequacy ratio is directly linked to the SACCO's crisis resilience. It also has a direct impact on financial performance by deciding the company's development into high-risk, high-reward enterprises or regions (Mokua, 2015). Almazari (2017) investigated the impact of capital adequacy on profitability in two Saudi Arabian banks, Samba and Sabb. In order to evaluate the hypothesis, they used secondary data and descriptive analysis. They come to the conclusion that ROA and capital adequacy have a strong positive association.

The study was conducted by (Onyango, 2018), to establish the effect of capital adequacy on the financial performance of savings and credit societies in Kenya. The study result showed capital adequacy positively influenced the financial performance of saving and credit societies in Kenya.

2.2.3. Liquidity and Financial Performance

The study by (Mutua, 2018) on the effects of liquidity risk management practices on the financial performance of SACCOs in Kiss country, Kenya found that the return on assets of SACCOs was highly influenced by capital adequacy. But, asset quality and capital leverage did not affect savings mobilization. The current researcher sought to determine the financial performance of SACCOs by assessing Asset quality (Mazanec, 2022) states that asset and working capital management is a very important component of corporate finance because it directly affects the liquidity, profitability, and growth of a business and is important to the financial health of the business.

To guarantee portfolio stability and improvement on the balance sheet, liquidity risk must be addressed as part of an integrated institution-wide risk management approach that includes accounting market and credit risk. Reducing the time cash is tied up in the operational cycle, according to Moussa, Aymen, and Systems (2022), boosts a company's prosperity and market worth even more. The importance of effective cash management practices in boosting overall business performance. There was a positive relationship between efficient working capital management and financial performance, according to Advisor & Siyum (2014).

According to Gachora (2017), liquidity is a business entity's ability to honor all-cash payment commitments as they become due, and empirical studies define liquidity as the means by which an institution ensures that it has enough cash and liquid assets to meet client demand for loans and savings withdrawals as well as pay its expenses.

(Gachora, 2017), focused on the effect of financial strategies on the liquidity of SACCOs licensed by SASRA in Nairobi country. The study concludes that financial strategies positively and significantly influence the liquidity in SACCOs licensed by SASRA operating in Nairobi Country.

2.2.4. Management efficiency and financial performance

One of the most important internal aspects that determine a SACCO's profitability is management efficiency. Different financial measures, such as total asset growth, loan growth rate, and earnings growth rate, are used to depict it. It is, nevertheless, one of the complexity that may be captured via financial ratios. Another facet of management quality is operational efficiency in managing operating expenses. Management performance is frequently measured qualitatively through subjective assessments of management systems, organizational discipline, control systems, staff quality, and other factors. However, some financial statistics in financial statements might be used as a proxy for management effectiveness. Financial ratios can be used to assess management's capacity to efficiently deploy resources, maximize revenue, and reduce operating expenses. The operational profit to income ratio is one of the ratios used to assess managerial quality (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits as a percentage of total revenue (revenue), the more efficient management is in terms of operational efficiency and revenue production.

2.2.5. SACCOS Size and financial performance

In most studies, the total asset is used to illustrate the effect of size on SACCO financial performance. Size is utilized to reflect the fact that larger SACCOS are better placed than smaller SACCOS in leveraging economies of scale in transactions and enjoy a higher level of profitability, according to Indranarain (2009). One of the most critical concerns underlying SACCO strategy is which size best improves the financial performance of the organization. According to Ignore (2013), the impact of a SACCOS's expanding size on profitability has been shown to be favorable to a degree.

Consequently, a positive relationship is expected between SACCO’s size and financial performance by many SACCO’s area researchers. However, for SACCOs that become extremely large, the effect of size could be negative due to bureaucratic and other reasons. Hence, the size-profitability relationship may be expected to be non-linear. Therefore most studies use the SACCOS’ real assets in logarithm and their square to capture the possible non-linear relationship (Ongore, 2013), (Indranarain, 2009),(Rajesh et al.2009), and (Devinga, 2010) find a positive relationship between SACCOS size and financial performance.

2.2.6. Leverage and financial performance

The term "equity" in this ratio refers to stockholders' equity. Creditor finance and owner financing are compared using the debt to equity ratio. The debt-to-equity ratio is a standard metric for determining a company's leverage, or how much it relies on debt for funding. Lislevand is a town in Lislevand, Norway (2012). Microfinance institutions that use a higher level of debt in their capital structure, as well as highly leveraged MFIs, are more lucrative, according to studies. Besides, a higher debt ratio can enhance the rate of return on equity capital during a good economic time. Muriu(2011) concluded that the significant correlation between performance and gearing ratio is an indication that perhaps more debt relative to equity is used to finance microfinance activities and that long-term borrowings impact positively on profitability by accelerating MFIs growth than it would have been without debt financing. Dissanayake, (2012) And Milkmaid, (2012); found that debt to equity is a statistically insignificant predictor variable. Besides, the direction of the coefficient of the variable was not as per the predicted direction of the researchers.

2.2.7. SACCO age and financial performance

Companies that have been established for a long time certainly can prepare financial statements better compared to a company that was recently founded. The age of the company shows how long the company has existed, able to compete and take advantage of business opportunities in an economy (Hastuti et al., 2017). A company that has long been established probably has a lot of experience gained. In addition, long-established companies certainly have better strategies for staying survive in the future. From the description above, it can be concluded that the age of the company is a period for the operation of a company starting from the date of establishment and stated in years. The age of the company can be determined from the date of establishment of the company(Hastuti et al., 2017).

According to James (2013) factors that influence the financial performance of SACCOs in Kenya were studied by considering the target population of the Capital SACCO Meru branch. The SACCO showed good operational and financial performance, but there was a weakness in its product diversity. The data analysis that the SACCO should also review their interest rates to ensure that their rates are competitive. The default rate in the SACCO also showed a threat to the future financial performance of the SACCO hence the need to put in place policy measures

to reduce default rates. There was a positive correlation between the duration of loan repayment and the retention of customers (members).

According to ((Wangui, 2016), studies about factors that influence the financial performance of SACCOs membership size, dividend policy, and loan defaults that affect the financial performance of SACCOs.

(NDONGA, 2016), discussed the factors affecting the financial performance of employees in saving and credit cooperative societies of PESA K-rep welfare association. This study examines the factor that affects the financial performance of employee SACCOs with a specific variable like interest rates charged, attitude towards risk, amount of loan desired and the savings mobilized. The outcome of the research is a positive and significant relationship between the financial performance of SACCOs and all independent variables except interest rates.

A study by Sum R. and Membo F. (2017) discussed the effects of financial innovation on the financial performance of deposit-taking SACCO in Kenya, a case of Kiambu country. The analyzed variables were found to have a statistically significant effect on the financial performance of SACCOs in the study area.

A study by(Simon & Ochieng, 2018), undertaking determinants of financial performance of saving and credit cooperative societies in Nakuru Town, Kenya. The findings indicate that membership size affected the financial performance of SACCOs and the correlation between the membership size and financial performance was positive and also the correlation between the membership size and financial performance was positive and statistically significant. The employment management practices were found to affect financial performance as expenditure within the budget estimates.

Ina study by (Juma et al., 2018), on the effect of credit management on the financial performance of deposit-taking saving and credit cooperative societies in Nakuru town, Kenya. Sound credit management is a prerequisite for financial institution stability and profitability. The results showed that credit standard and debt recovery had a positive and significant effect on the financial performance of the SACCOs

As the researcher's knowledge In Ethiopia, there is not enough empirical literature directly adders issue of the current topic for instance Zerfeshewa (2010) discussed the determinants of saving and credit cooperatives (SACCOs) operation performance in Gonder town. Abayneh (2011) studied factors influencing saving and credit cooperatives of the North shewa zone. Nugusie (2015) assessed on determinants of savings and credit cooperatives societies' outreach in Addis Ababa. He had seen the relationship between income per capita of the country and dividends are positive and there is a negative relationship between interests on borrowing and loan size.

The study by Tadael (2017) on determinants of financial performance of employees saving and credit association was conducted with the general object of on determinants of performance of employees SACCOs and the study would also offer knowledge about ESCAs. The study aimed to investigate to what degree the loan management, saving capacity, technology, and literacy level of management and members had affected the overall performance of ESCAs. Descriptive research design and inferential statistics were employed for the study and multiple regression analysis was applied to data to examine the effect of the explanatory variable on the performance of ESCAs. The data collected was primary and secondary data from Ethiopia Telecommunications Corporation ESCAs. The finding of the study state that loan management, saving capacity of members, technology adoption, and literacy status of workers and members has a positive significant effect on the performance of ESCAs.

The study conducted by Ergetew (2015) on the determinants of financial performance of SACCO union in the south wollo zone addressed different issues regards to the current research topic. The research is descriptive and analytical and the secondary data collected were analyzed by using simple statistical analysis like percentages, tables, and financial ratio analysis tools such as liquidity ratios, leverage ratios, profitability ratios, and trend analysis of balance sheets. The liquidity level of the SACCO unions is fairly high but at a decreasing rate. The leverage ratio of SACCO unions is highly leveraged. Their profitability rate is below the minimum required rate. This study focused on the internal determinant factor of the financial performance of the SACCO union. It doesn’t concede the external factors.

The study conducted by Yitayaw (2017) on determinates of financial performance of saving and credit cooperative unions; in three zones of Amhara regional state, Ethiopia. The study

investigates the effect of operational efficiency, Management efficiency, Capital adequacy, Gearing ratio, Long term debt, and Size and growth of domestic product on the financial performance of SACCO unions.

The finding of the study concludes that SACCO unions were averagely generating positive ROA and ROE during the study period. The regression result shows that operational efficiency, management efficiency, capital adequacy, greening ratio, and loan to total debt ratio have a positive and statistically significant impact on ROA, OPE, LTD ratio, and GDP have a positive and statistically significant impact on ROE and CA and Size have a negative and statistically significant impact on ROE.

Negalign, (2020) identify factor influencing the financial performance of saving and credit cooperative societies of Derash and Alleworeda in SNNPRG, Ethiopia. To achieve the objective the study lookedat the factor influencing SACCOs' financial performance like; interest rate charged, membership enrollment, duration of loan processing, and management of loan defaulters. The finding of the study indicated loan repayment, interest rates, membership enrolment, duration of loan processing, and management of loan defaulters were identified as major factors.

2.3. Research gap

As mentioned above there is the various study conducted on determinates of the financial performance of SACCOs and the SACCO union. These studies are conducted by using different methodology and different study areas and come up with different findings. The limitations of this previous literature are; that some of the studies conducted abroad on SACCOs are focused in Kenya country, they employed descriptive research design, they use few variables for their investigation and they did not clearly show the determinants of financial performance of primary SACCOs by considering their membership of SACCO union. On the other hand, few studies conducted on the current topic in our country Ethiopia and the majority of studies done before are focused on the SACCO union and this overlooked the primary SACCOs who are not members of the SACCO union. Therefore, there is no comprehensive study on primary SACCOs in Jimma Zone with those variables at the same time, and the variablesthat were used for this study are not considered at once in the previous literature.

Therefore, the researcher identifies the gap in previous studies and initiated conducting the research by taking the identified variable to attain the ultimate objective of the study. The current study is to fill the gap by initiating financial performance toward the determinates of financial performance of saving and credit cooperatives like SACCO's size, managerial efficiency, capital adequacy, leverage(Debt or Equity) financing, liquidity, and age of SACCOs on the determinants of financial performance of SACCOs in Jimma zone.

2.4. Conclusion and conceptual framework

2.4.1. Conclusion

The view from the literature review indicates different outcomes concerning the financial performance of saving and credit cooperative societies. The different researchers have conducted the study based on the financial performance of SACCO with different study areas, methodology, and sample sizes and they come up with different outcomes (finding). These studies are conducted by different researchers like; James (2013) discussed factors influencing the financial performance of saving and credit cooperative societies in Kenya.Osoro and Muturi(2015), on effects of liquidity-risk management practices on the financial performance of SACCOs in Kisii country, Kenya.

Hannah (2015) assessed the determinants of financial performance of savings and credit cooperatives in the banking sector in Kenya. Njihia and Muturi (2016) studied factors that affect the financial performance of saving and credit cooperative societies. (NDONGA, 2016) undertook a study on factors affecting the financial performance of employees of SACCOs. Kepha&Linet (2016) studied about determinants of financial performance of saving and credit societies in Kiambu country, Kenya. Odhaimbo (2018) discussed on determinants of financial performance of saving and credit cooperative societies in Nakuru town, Kenya.

Jema, Otuya, and Kibati (2018) discussed the effect of credit management on the financial performance of deposit-taking saving and credit cooperative societies in Nakuru town, Kenya. Ndonga (2018) discussed factors affecting the financial performance of employee saving and credit cooperative societies (a case study of PESA K-rep welfare association SACCOs). Sambasivam (2013) studied the financial performance analysis of GOHE cooperative savings and credit Unions by using the common financial ratio, Ergetew (2015) studied the determinants of the financial performance of saving and credit cooperative unions in the south

Wollo zone, Ethiopia. Tadael (2017) studied determinants of performance of Employee saving and credit associations in Ethiopia Telecom Corporation, Ethiopia. Negalign (2020) discussed factors influencing the financial performance of saving and credit cooperative societies in Derash&Alleworeda, SNNPRG region, Ethiopia.

2.4.2. Conceptual framework

The conceptual framework involves forming an idea about the relationship between variables in the study and showing the relationship graphically or diagrammatically (Mugenda, (2003))Figure 2.1 show the effect of SACCO's size, capital adequacy, management efficiency, leverage, liquidity, and duration(age) of SACCOs on their financial performance.

Figure 2.1: Conceptual Framework of the Study

Independent Variables **Dependent Variable**

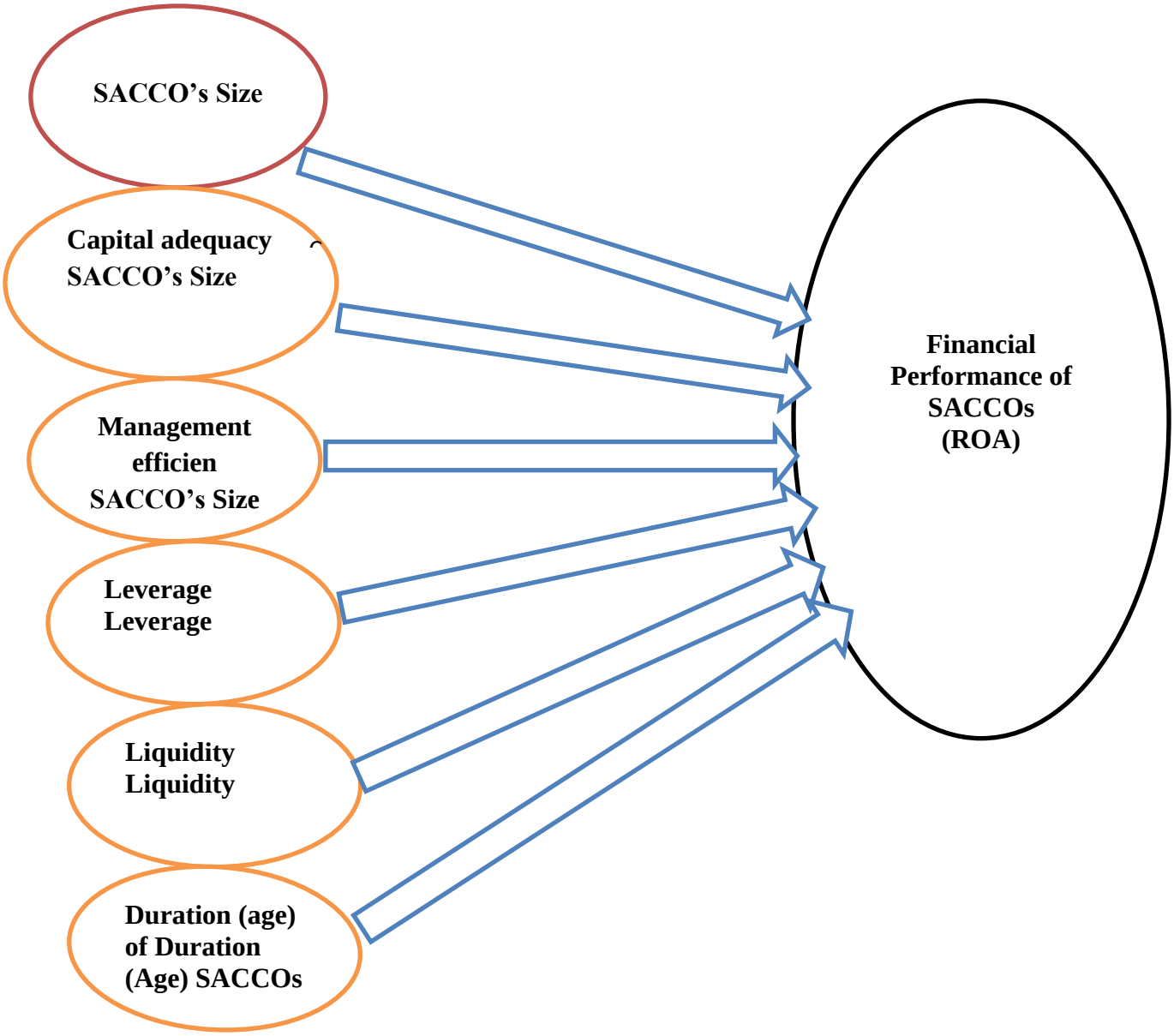

Figure 2.1 **Conceptual Framework**

Source: - own sketch based on literature review.

CHAPTER THREE
RESEARCH METHODOLOGY

3. Introduction

This chapter focuses on the methodologies adopted by the researcher to attain its general and specific objectives. The chapter includes description of the study area, research design, data source and types, sampling technique and sample size, method of data collection, method of data analysis, model specification, and operational measurement of variables.

3.1. Description of the Study Area

Jimma is a zone in the Oromia Region of Ethiopia. Jimma is named after the former Kingdom of Jimma, which was absorbed into the former province of Kaffa in 1932. Jimma is bordered on the south by the Southern western Ethiopia Nations, Nationalities, and Peoples Region, the northwest by Illubabor Zone and Buno Bedele zone, on the north by East Welega Zone, and on the northeast by West Shewa Zone; part of the boundary with Gurage Zone is defined by the Gibe River. The highest point in this zone is Mount Maigudo. The Central Statistical Agency (CSA) reported that 26,743 tons of coffee were produced in this zone in the year ending in 2005, based on inspection records from the Ethiopian Coffee and Tea authority. This represents 23.2% of the Region's output and 11.8% of Ethiopia's total output, and makes Jimma one of the three top producers of these goods, along with the Sidama and Gedeo Zones.

3.2. Research Design

A research design provides a framework and organization to the way for gathering and analysis of data following the research objective and it is a road map to the gathering, evolution, and analysis of data and choices to be made about what, where, when, how much and by what means to address research forms a research design (Kothari, 2004). The researcher employed descriptive and explanatory research design. Descriptive research design includes surveys and fact-finding inquiries of different kinds and it is an exhaustive sort of research design to answer what and how Kothari, (2005). The major purpose of descriptive research is a description of other states of affairs as they exist at present. The designs in such studies focus attention on formulating the objective of the study, designing the methods of data collection, selecting the

sample, collecting the data, and processing and analyzing the data. Explanatory research design explains the subject of the research and thereby answers what, why, and how questions.

3.3. Data Types and Source

The researcher used secondary data. Secondary data is the main source of information for this research and was collected in the area of the determinants of financial performance of primary SACCOs.The Secondary data sources are collected from financial statements or annual audit reports of SACCOs. Secondary data were collected by using document review and observation. To Kothari, (2004) observation method implies the collection of information by way of the investigator's observation. The data for the years 20018 to 2022 will be collected from audited financial statements of sample SACCOs.

3.4. Target Population

According to Jared Makori (April 2013 pp 35), the target population refers to a group of individuals, objects, or items from which samples are taken for measurement. The target populations of study were the saving and credit Cooperatives societies (SACCOS) in Jimma zone which is registered under cooperative promotion office. According to Jimma zone cooperative promotion office, there are 312 SACCOS, which are registered as of 2016.

3.5. Sampling Method and Sample Size

To determine the sample size of SACCOs purposive sampling method is used for this study, the reasons for using this method of sampling is; unavailability of five-year successive audited data, some SACCOs don't have full consecutive data for five years, and some others are organized less than five years. Therefore, in order to avoid those problems purposive sampling method is used.

According to Jimma zone cooperative promotion office (2022), primary SACCOs in Jimma zone are large in number there were 312 registered SACCOs but a majority of them are not active. Among those SACCOs, only 12 SACCOs are active (Jimma zone cooperative promotion office 2022). Even though they were active they have only five years of consecutive financial statements audit reports. So, the target number of primary SACCOs which is registered and consecutively audited for the past 5 years between the years 2018-2022 in the study consists of 12 in number.

Therefore, the researcher undertakes the study by selecting purposively 12 audited SACCOs because in Judgment (purposive) sampling the researcher uses his judgment to select people that he feels are representative of the population to have particular expertise or knowledge which makes them suitable. The major reason why the researcher chooses the 12audited primary SACCOs was that they have consecutively audited and the nature of the research topic needs consecutively Audit reports. Besides, all primary SACCOs are homogeneous, have a similar objective, and are organized under the same proclamation of Ethiopian government cooperative society's proclamation number 985/2016, so the researcher believed to be representative of the entire cooperatives in Jimma Zone.

2Table 3.1: The proportion of sample SACCOs for the study

No	**Jimma Zone Woredas**	**Numbers of sample SACCOs**	**Proportion (100%)**
1	Limukossa	3	25
2	SakaChokorsa	1	8.3
3	LimuSeka	3	25
4	Agaro City	1	8.3
5	Mana	1	8.3
6	Nedi Gibe	2	16.7
7	Oma Nada	1	8.3
	Total	12	100

Source; from Jimma zone Cooperative organization and promotion office. October 2022

3.6. Method of data analysis

The researcher was used document reviews to collect secondary data. The collected data was used to analyses the determinants of financial performance of primary saving and credit cooperative society in Jimma zone. The collected data will be regressed and analyzed using descriptive statistics, correlation matrix and multiple linear regression analysis. The E-View 10 will be used for secondary data and inferential statistics were employed through the use of multiple regression analysis to establish the nature of the existing relationship between the research dependent variable (ROA) and six explanatory variables.

3.7. Model Specification

The diagnostic tests is carried out to ensure that the model suit the basic assumption of a classical linear model. The panel data are specified and estimated to examine the determinants of financial performance of primary SACCOs Financial performance (ROA) and with six explanatory variables such as SACCO size, Capital Adequacy, Liquidity, Management efficiency, leverage, and duration (age) of SACCOs. Multiple regressions are a statistical tool that allows the researcher to examine how multiple explanatory variables are related to a dependent variable (Brooks, 2008). The models are specified as follows;

$$\mathbf{ROA = \alpha + \beta 1(LEV) + \beta 2(CAP) + \beta 3(LIQ) + \beta 4(ME) + \beta 5(SS) + \beta 6(AG) + \mu}$$

Where;

ROA- Represents Return on Asset

Financial performance= ROA

α-is constant, βi are co-efficient where i= 1, 2, 3, 4, 5, 6, 7… which represent the proportionate change in dependent variable due to independent variables.

CAP- represents capital adequacy.

LIQ- represents Liquidity management.

MAN- represents management efficiency.

SS- represents SACCO size.

LEV- Leverage.

AG-Age (duration of SACCOs)

μ- represents unobserved factors of SACCOs.

Table 3.2. Operational measurement of variables

Variables		Notation in the model	Measurement	Variable description in the regression model
Dependent Variable	Return on Asset	ROA	Net Income/Total Assets	Net income to total Asset
Independent variable	Capital adequacy	CAP	Total Capital/Total Assets	Total capital to total Assets
	Liquidity	LIQ	Current Assets/Current Liabilities	Current Assets to Current Liabilities
	Management efficiency	MAN	Operating Expense/Net operating Income	Operating Expense to Net operating Income
	Leverage	LEV	Total debt / Equity	Total debt to Equity
	SACCOs Size	SS	Natural logarithm of total assets of the SACCOs.	Natural logarithm of total assets of the SACCOs.
	Age (duration of SACCOs	AG	Natural logarithm of Total asset/years of SACCO	Natural logarithm of total assetstothe years of the SACCOs.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the data analysis and presents the outcome of the results from data of SACCOs in Jimma zone. The study used the annual panel data, where all the variables are observed for each cross-section and each time. The study has a panel segment spanning from the period 2018 up to 2022, and a cross-section segment that considered 12 saving and credit Cooperative societies in Jimma zone. The chapter is organized as: descriptive statistics of variables, Diagnostic Testing, the model selection criteria and, Results of Regression analysis and Summary of Findings

4.2 Descriptive Statistics of the Variables

The major purpose of this study was to investigate determinants of financial performance of saving and credit cooperatives in the Jimma Zone. In this section, the study examined the descriptive statistics for dependent variables; Return on Asset (ROA), and the explanatory variables; size (SIZE.), liquidity (LIQ.), managerial efficiency (MAN), capital adequacy (CAP), leverage (LEV), and age of SACCOs (AGE) involved in the regression model are presented. Mean, maximum, minimum, and standard deviation values are included in Table 4.1 below. These figures give the overall description of the data used in the regression models. The summary of descriptive statistics that was intended to give general descriptions of the data (both dependent and independent variables) is presented in Table 4.1. Totally 60 observations from 12 SACCOs were included in the study, which were collected from 2018 to 2022. Accordingly, the mean, median, standard deviation, minimum and maximum values of each variable were used to show the overall trend of the data over the period under consideration.

Table 4.1: Summary of descriptive statistics for dependent and independent variables

	ROA	MAN	LIQ	LEV	CAP	AGE	SIZE
Mean	0.090600	0.906500	0.885599	3.390283	0.115103	2.959000	4.087967
Median	0.094500	0.900000	0.995750	2.856000	0.126200	2.695000	4.095800
Maximum	0.104000	1.040000	1.664500	20.08300	0.279300	4.000000	6.999800
Minimum	0.061000	0.610000	0.013700	-4.654000	0.009500	2.000000	3.005100
Std. Dev.	0.013821	0.132548	0.421621	3.497958	0.062378	0.713736	0.591557
Skewness	-0.825473	-0.780013	-0.743190	2.424842	-0.077109	0.608689	1.650274
Kurtosis	2.605901	2.657709	2.885622	11.96495	2.372390	1.799826	11.14718
Observations	60	60	60	60	60	60	60

Source: Descriptive results from E-Views 10

As indicated in the above table, the profitability of SACCOs in Jimma zone as measured by ROA (net income to total asset) for 60 observations (panel data of 12 SACCOs in Jimma zone for 5 years) has a mean value of 0.0906 percent. The result indicates that the sampled CACCOs on average earned a profit of 0.0906 cents from one birr invested in the asset of the saving and credit cooperatives. The maximum value of the ROA was 10.4 percent and the minimum value of 6.1 percent with a standard deviation of 0.013821. This shows that profitable SACCO earned 0.10400 cents of profit for one birr invested in its assets. On the other hand, the least profitable SACCO earned 0.0610cents of profit for each birr invested in their assets during the study period (2018 up to 2022). The standard deviations of 0.013821 show the per-unit profitability variations of SACCOs.

In relation to explanatory variables arranged in table 4.1 above, the mean value of managerial efficiency (MAN) was 90.6500 percent indicating that on average sampled SACCOs were incurred 0.906500 cents operating expense to generate one birr operating income. The maximum

value of management efficiency was 104 percent and the minimum value of 61 percent. This shows that managerially efficient SACCOs incurred an operating cost of 1.040 cents to generate one birr operating income. On the other hand, managerially least efficient SACCO incurred an operating cost of 0.610 birrs to generate one birr operating income with a standard deviation of 0.132548 it shows the profitability variations of SACCOs.

The result of descriptive statistics indicates that the capital adequacy ratio (CAP) also has a mean value of 11.5103 percent. The mean value result suggested that 0.115103 cents of one birr asset were financed by shareholder's equity while the remaining 88.5 cents were financed through debt. The maximum value of capital adequacy was 27.9300 percent and the minimum value of 0.9500 percent with a standard deviation of 0.062378. This shows that sampled SACCOs financed their one birr asset using shareholders' equity range from 0.009500 cents to 0.279300 cents in their capital structure.

The outputs of descriptive statistics indicate that the mean value of the liquidity management was 88.55% and maximum and the minimum value of 166% and 1.37% respectively. This result shows that most saving and credit cooperatives kept 88.55% of their current asset from the current liability and the liquidity management standard deviation was 42.1%, this implies that there is a low variation from the mean.

The average value of age is 2.959 years along with a standard deviation of 0.7117 years. The maximum and minimum rate is 4.00 and 2.00 years, respectively. The relative similarity of age may be viewed in terms of the absence of monopoly power in the organization, at least due to the accumulated experiences and associated reduction in the cost of service delivery in the organization.

Concerning total asset (size) as shown in Table 4.1 above, the average size is 4.08 and there exists variation across the sample SACCOs for the reason that the mean value of size is 4.08 and the value of the standard deviation is 0.592. The maximum and minimum values of size were 6.99 and 3.00, respectively. Hence, the variety of sizes among SACCO might have a significant impact on financial performance.

The leverage in this study is defined as total debts divided by total assets. This study used leverage as one of the determinant variables of the financial performance of SACCOs in Jimma

Zone. From the descriptive statistics Table 4.1, cooperative societies in Jimma Zone total debts as a proportion of their total assets range from a maximum and minimum of 20.08 to -4.65. The mean value and standard deviation of leverage are 3.39 and 3.49, respectively. This implies that there were differences among leveraged levels as measured by debt to equity ratio across the sample SACCOs under this study, and it also indicates those SACCOs are leveraged because they used debt than equity for financing purposes.

4.3 Diagnostic Testing

The following diagnostic tests were carried out to ensure that the model suit the basic assumption of a classical linear model. Among the assumption, the researcher conducted four basic diagnostic tests to check if the data meet the requirement. Normality, multicollinearity, autocorrelation, and heteroscedasticity tests were undertaken.

4.3.1 Test for normality

The Classical Linear Regression Model assumes that the error term is normally distributed with the mean of error being zero as a positive error will offset the negative error. According to (Brooks, 2008), to conduct single or joint hypothesis tests about the model parameter, the normality assumption ($ut \sim N(0, \sigma 2)$ (i.e. the errors are normally distributed) must be fulfilled. In this study, the normality of the data was checked with the Jarque-Bera test statistic. If the residuals are normally distributed, the Jarque-Bera statistic would not be significant at 5 percent significant level meaning disturbance to be normally distributed around the mean. This means that the p-value given at the bottom of the normality test should be bigger than 0.05 to not reject the null hypothesis of normality at a 5 percent significant level. The hypotheses for the normality test were formulated as follows:

H0: Error term is normally distributed.

H1: Error term is not normally distributed.

Decision Rule: Reject H0, if the P-value is less than significant level 0.05. Otherwise, do not reject.

The normality test result of ROA model in figure 4.1 above shows, that the histogram was bell-shaped and the Jarque -Bera statistic has a P-value of (3.670335) which implies that the p-value for the Jarque-Bera test for this model is greater than 0.05. So, the result indicates that the errors

were normally distributed and there was no problem with normality in the ROA model. Based on the statistical result, the study failed to reject the null hypothesis of normality at the 5 percent significance level.

4.3.2 Test for Heteroscedasticity

According to (Brooks, 2008), Heteroscedasticity means that error terms do not have a constant variance. If heteroscedasticity occurs, the estimators of the ordinary least square method are inefficient and hypothesis testing is no longer reliable or valid as it will underestimate the variances and standard errors. There are several tests to detect the Heteroscedasticity problem, which are Harvey Test, Glesjer Test, Breusch-Pagan-Godfrey Test, White's Test, and Autoregressive Conditional Heteroscedasticity (ARCH) test. This study used the Breusch-Pagan-Godfrey test to detect the presence of Heteroscedasticity.

H_0: Error has constant variance (homoscedasticity).

H_1: Error has no constant variance (heteroscedasticity).

5Table 4.2: Heteroscedasticity Test

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.562923	Prob. F(6,53)	0.1763
Obs*R-squared	9.020112	Prob. Chi-Square(6)	0.1725
Scaled explained SS	9.580003	Prob. Chi-Square(6)	0.1435

Source: Heteroscedasticity results from E-Views 10

Table 4.2 showed that the p-value is greater than the significant level of 0.05 Thus, the null hypothesis, which is the Error has constant variance (Homoscedasticity) was accepted. Therefore, the model was perfect, and it has no Heteroscedasticity problem.

4.3.3 Test for serial correlation

Serial correlation is usually a result of model misspecification or genuine autocorrelation of the model error term. In the presence of such a phenomenon, ordinary least squares are no longer BLUE (Best Linear Unbiased estimators). In such cases, R-squared may be overestimated. There was thus every need to test for serial correlation in the residuals.

According to Brooks (2008) when the error term for any observation is related to the error term of another observation, it indicates that an autocorrelation problem exists in this model. In the case of the autocorrelation problem, the estimated parameters can remain unbiased and consistent, but it is inefficient. The result of the T-test, F-test, or the confidence interval will become invalid due to the variances of estimators tend to be underestimated or overestimated. Due to the invalid hypothesis testing, it may lead to misleading results on the significance of parameters in the model. Breusch-Godfrey Serial Correlation LM Test was used to detect autocorrelation problems.

The hypothesis for the model specification test was formulated as follows;

H_0: There is no autocorrelation problem.

H_1: There is an autocorrelation problem.

6Table 4.3: Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	3.640703	Prob. F(1,52)	0.0619
Obs*R-squared	3.925942	Prob. Chi-Square(1)	0.0575

Source: Autocorrelation results from E-Views 10

Table 4.3 showed that if the p-value is greater than the significant level of 0.05 then H_0 is not rejected. Therefore, the data is no autocorrelation problem. Durbin-Watson stat = 2.1200 in table 4.6 also shows there is no autocorrelation problem since its value is around 2.

4.3.4 Test for Multicollinearity

Multicollinearity is the linear relationship between explanatory variables that creates a biased regression model. This problem occurs when the explanatory variables are very highly correlated with each other (Brook, 2008). According to (Pallant, 2010; Hair et al., 2010) multicollinearity problem exists when the correlation coefficient among the variables is greater than 0.90. On the other hand, according to Guajarati (2004), if the correlation coefficient is higher than 0.8, it is considered as the model consists of a serious multicollinearity problem. If the multicollinearity problem is too serious in a model, either an additional important variable should be added or an unimportant independent variable should be dropped. This study uses the

pair-wise correlation coefficients method to detect the existence of multicollinearity. As is shown in the correlation matrix in table 4.4, all the values are less than 0.7. Therefore, there is no relationship between the explanatory variables and hence, that is an indication of no multicollinearity problem in the data.

7Table 4.4: Correlation matrix among independent variables

	MAN	LIQ	LEV	CAP	AGE	SIZE
MAN	1					
LIQ	-0.07163	1				
LEV	0.10520	0.0693529	1			
CAP	-0.371224	-0.094417	-0.29010	1		
AGE	0.285524	-0.132380	-0.00700	-0.193296	1	
SIZE	0.032335	-0.089938	0.0183944	0.1279719	0.16435	1

Source: Correlation results from E-Views 10

4.4 Model selection criteria (Random vs. Fixed effect model)

In this study, the method used in each model is selected based on the Correlated Random Effects-Hausman Test. The Hausman test examines whether the unobservable heterogeneity term is correlated with explanatory variables while continuing to assume that repressors are uncorrelated with the disturbance term in each period. The null hypothesis for this test is that the unobservable heterogeneity term is not correlated or random-effect model is appropriate, with the independent variables. If the null hypothesis is rejected then we employ the Fixed Effects method (Padachi, 2006).

H_0: Random-effects model is appropriate

H_1: Fixed effects model is appropriate

Decision Rule: Reject H0 if P-value is less than significant level 0.05. Otherwise, do not reject H0

8Table 4.5: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.

Cross-section random	8.514231	6	0.157

Source: Hausman test from E-Views 10

The Hausman model selection test for this study has a p-value of 0.157. Thus, the null hypothesis which is the random effect model appropriate was accepted and the study used the random effect model. Since the results presented in table 4.5 showed that the p-value is greater than 0.05 then H_0 is not rejected. Therefore, this study implemented a random-effects model.

4.5 Results of Regression analysis

E-Views regression output is divided into three panels. The top panel summarizes the input to the regression, the middle panel gives information about each regression coefficient, and the bottom panel provides summary statistics about the whole regression equation. The two most important numbers, "R-squared" (the one who answered how much percent of the variance in the dependent variable in the regression accounted for) and "S.E. of regression." and the one that shows how far is the estimated standard deviation of the error term. Five other elements, "Sum squared residuals," "Log-likelihood," "Akaike info criterion," "Schwarz criterion," and "Hannan-Quinn criteria." is used for making statistical comparisons between two different regressions. The next two numbers, "Mean dependent var" and "S.D. dependent var," report the sample mean and standard deviation of the left-hand side variable Brooks, (2008).

"Adjusted R-squared" adjusts the plain-old to take account of the number of right-hand side variables in the regression. Measures what fraction of the variation in the left-hand-side variable is explained by the regression. The adjusted, sometimes written, subtract a small penalty for each additional variable added.

"F-statistic" and "Prob (F-statistic)" come as a pair and are used to test the hypothesis that none of the explanatory variables explain anything. Put more formally, the "F-statistic" computes the standard F-test of the joint hypothesis that all the coefficients, except the intercept, equal zero. "Prob (F-statistic)" displays the p-value corresponding to the reported F-statistic.

The final summary statistic is the "Durbin-Watson," the classic test statistic for serial correlation. A Durbin-Watson close to 2.0 is consistent with no serial correlation, while a number closer to 0 means there probably is serial correlation Brooks, (2008). Hence, as

concluded in the Hausmantest above the random-effects model is an appropriate regression analysis for this study.

4.6 Discussion of Regression results

This section discusses in detail the analysis of the results for each explanatory variable and their importance in determining ROA in Jimma Zone SACCOs. The model developed for this study was:

ROA= α+β1(LEV) + β2(CAP)+ β3(LIQ)+ β4(ME)+ β5(SS)+ β6(AG) +μ.

The descriptions of all the variables included in the equation are discussed in the methodology part of the study. The regression result for this model is as follows:

Table 94.6: Panel Regression Results

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 08/13/23 Time: 22:46
Sample: 2018- 2022
Periods included: 5
Cross-sections included: 12
Total panel (balanced) observations: 60
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MAN	-0.035872	0.008791	-4.080691	0.0002*
LIQ	0.002452	0.002539	0.965979	0.3384
LEV	0.000541	0.000315	1.719839	0.0913
CAP	0.071574	0.019369	3.695224	0.0005*
AGE	0.007488	0.001580	4.739464	0.0000*
SIZE	0.012980	0.001828	7.098672	0.0000*
C	0.141776	0.011771	12.04420	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.008044	1.0000

Weighted Statistics			
R-squared	0.520517	Mean dependent var	0.090600
Adjusted R-squared	0.466236	S.D. dependent var	0.013821

S.E. of regression	0.010098	Sum squared resid	0.005404
F-statistic	9.589306	Durbin-Watson stat	2.220028
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.520517	Mean dependent var	0.090600
Sum squared resid	0.005404	Durbin-Watson stat	2.120028

Note: *denotes significant at 5%

Source: Regression results from E-Views 10

The estimated results reported in Table 4.6 showed that The R-squared and an adjusted R-squared value are 0.520 and 0.466, respectively. This means about 52.2% of the variations in ROAs of SACCOs were explained by independent variables included in the model. The remaining 47.8% of changes were explained by other factors, which are not included in the model thus unobserved variables may explain chapter three empirical analyses. Table 4.6 also showed that the F-statistic was 9.656 and the probability is significant and rejecting the null hypothesis that there is no statistically a significant relationship existing between the dependent variable (ROA) and the independent variables, it also tells that the overall model is highly significant and all the independent variables are jointly significant causes on the variation of financial performance in the saving and credit cooperatives.

Furthermore, the above table showed that the panel regression model of the study. Which were used to analyze the effect of each factor on return on assets (ROA), while the other independent variables in the model were kept as it is. Accordingly among six predictor variables included in this study Managerial efficiency (MAN), capital (CAP), age (AGE), and SACCOs size (SIZE) were found to be significant predictors for the determinant of return on assets (ROA) at 5% level of significance. But liquidity and Leverage were found to be insignificant predictors for the determinant of return on assets (ROA) at a 5% level of significance. Thus based on the result presented in Table 4.6, the estimated model for this study is given by:

ROA= 0.1417+0.0005(LEV) + 0.0757(CAP) + 0.00245(LIQ) -0.03587(MAN)+ 0.01298(SS)+ 0.0075(AG) +μ.

H1: Capital adequacy has a statistically significant and positive effect on the financial performance of SACCOs.

The regression output above showed that capital adequacy(CAP) has statistically significant because its p-values equal 0.0005, which is less than the usual significance level of 5%, and also according to the regression result capital adequacy has a positive relationship with primary SACCO's financial performance i.e., it has a coefficient estimate of 0.07157. This means that holding other independent variables constant and when one unit increases in capital adequacy, consequently it increases the return on asset (ROA) of primary SACCOs by 0.0715 units.

The finding of the study is capital adequacy had a positive and significant effect on the financial performance of primary SACCOs of Jimma Zone. Similarly, the capital adequacy ratio measures the extent to which SACCO member patrons own all the assets of their SACCOs. USAID (2015) tells that SACCOs can be regarded as having a good capital adequacy ratio if it is greater than 50%. In this study, the researcher concludes that many primary SACCOs' capital adequacy ratio is less than standard. This implies that the members' patron is inadequate. This proxy used is consistent with this finding (Ergetew, 2015) study on the cooperative union. The liquidity level of the SACCO union is fairly high but at a decreasing rate and their profitability rate is below the minimum required rate.

H2: Liquidity has a statistically significant and positive effect on the financial performance of SACCOs.

Based on the table above 4.6, revealed that the coefficient beta value of liquidity is 0.002452 which has confirmed that, liquidity has a positive effect on the effectiveness of the financial performance of SACCOS. And its p-value is greater than 0.05 tells that, liquidity has no significant effect on the financial performance of SACCOs. Therefore the null hypothesis that liquidity has no significant effect on the financial performance of SACCOs is accepted and the alternative hypothesis is rejected.

H3: Managerial efficiency has a statistically significant and positive effect on the financial performance of primary SACCOs.

According to the regression, output depicted that managerial efficiency (ME) has statistically significant because its p-values equal 0.000, which is less than the usual significance level of 5%, and also according to the regression result managerial efficiency has a weak negative relationship with primary SACCOs financial performance i.e. it has a coefficient estimate of -0.0060984. This means that holding other explanatory variables constant and when one unit increases in managerial efficiency, consequently it decreases the return on asset (ROA) of primary SACCOs by 0.0061 units. Accordingly, the result didn't support the working hypothesis that managerial efficiency has a negative and statistically insignificant effect on the financial performance (ROA) of primary saving and credit cooperative societies in Jimma Zone for the period 2018 to 2022.

Consistence to this study Mulualem (2015), mentioned that the management efficiency ratio is the highest negatively correlated variable with return on asset (ROA). Moreover, this study finding the management efficiency of the SACCOs has a statistically significant and positive relationship with financial performance as depicted in the study of Yiregalem (2015).

H4:**leverage has a statistically significant and positive effect on the financial performance of SACCOs.**

Based on the table above 4.6, revealed that the coefficient beta value of leverage is 0.000541 which has confirmed that, leverage has a positive effect on the effectiveness of the financial performance of SACCOS. And its p-value is greater than 0.05 tells that, leverage has no significant effect on the financial performance of SACCOs. Therefore the null hypothesis that leverage has no significant effect on the financial performance of SACCOs is accepted and the alternative hypothesis is rejected.

Muriu (2011) concluded that the significant correlation between performance and gearing ratio is an indication that perhaps more debt relative to equity is used to finance microfinance activities and that long-term borrowings impact positively on profitability by accelerating MFIs growth than it would have been without debt financing. Dissanayake, (2012) And Melkamu, (2012);

found that debt to equity is a statistically insignificant predictor variable. Besides, the direction of the coefficient of the variable was not as per the predicted direction of the researchers.

H5: The size of the SACCOs has a statistically significant and positive effect on the financial performance of SACCOs.

As per this study size of SACCOs has a positive and significant effect on SACCO's financial performance (ROA). This reveals that as the size of SACCOs increases the financial performance of the SACCOs will increase. This direct relationship between SACCO's size and financial performance reveals that large SACCOS perform better than smaller SACCOs.

According to (Ongore, 2013), the effect of the growing size of a SACCOS on profitability has been proved to be positive to a certain extent. Consequently, a positive relationship is expected between SACCO's size and financial performance by many SACCO's area researchers. However, for SACCOs that become extremely large, the effect of size could be negative due to bureaucratic and other reasons. Hence, the size-profitability relationship may be expected to be non-linear. Therefore most studies use the SACCO's real assets in logarithm and their square to capture the possible non-linear relationship (Ongore, 2013), (Indranarain, 2009),(Rajesh et al.2009), and (Devinga, 2010) find a positive relationship between SACCOS size and financial performance.

Literature also provides conclusive evidence concerning the financial performance-age relationship in the organization as some researchers such as Ali Al-Shami (2008) reported the absence of any significant relationship between the two variables whereas Swiss Re (2008) confirms this finding by concluding old firms are relatively more financial performance as compared to the younger one based on his research finding.

Summary of hypothesis testing

Here the six alternative hypotheses formulated on the financial performance were tested at a 5 percent significance level. Therefore, the alternative hypothesis; H1, H3, H5, and H6 were accepted which indicates that there is a relationship between return on assets and capital adequacy, managerial efficiency, size of SACCO, and age of SACCO in saving and credit cooperative for the period 2018 to 2022. However, the null hypothesis which indicates that there is no statistically significant relationship between liquidity and ROA; and between leverage and

ROA were accepted respectively in saving and credit cooperatives for the period 2018 to 2022 as observed in Table 4.7

Table 104.7: Summary of hypothesis testing

Summary of hypothesis testing	
Hypothesis	**Result**
H1: Capital adequacy has a statistically significant effect on the financial performance of SACCOs	Accepted
H2: Liquidity has a statistically significant effect on the financial performance of SACCOs.	Rejected
H3: Managerial efficiency has a statistically significant effect on the financial performance of SACCO.	Accepted
H4: leverage has a statistically significant effect on the financial performance of SACCOs.	Rejected
H5: The size of SACCOs has a statistically significant effect on their financial performance.	Accepted
H6: The age of SACCOS has a statistically significant effect on their financial performance.	Accepted

Source: - own sketch based on tested hypothesis.

4.7. Summary of Findings

The objective of the study was to examine the determinants of financial performance of primary saving and credit cooperative societies and to what scope SACCO's size, capital adequacy, leverage, liquidity, managerial efficiency, and age of SACCOs affects the financial performance of primary SACCOs in Jimma zone.

Descriptive analysis results revealed that almost all of the sample SACCOs earn birr 0.1 on a single birr of return on their asset on average. However, the descriptive result of explanatory variables indicated that; capital adequacy, SACCOs size, managerial efficiencies, liquidity, age of SACCOs, and leverage management of SACCOs has a mean value of 0.115, 4.088, 0.897, 0.886, 2.959 and 3.390 respectively.

The descriptive result of SACCO's size has scored the highest mean value of 4.088. This implies the degree or extent to which SACCO's size earned an additional birr of return on asset of money from the expansion of the SACCO's size. Whereas the descriptive result of capital adequacy revealed that it has a mean value of 0.115. This implies that on average 11.5 percent of the total assets of SACCOS taken for this study were financed by equity capital contributed by owners while the remaining 88.5% of their total assets were financed by deposit liabilities collected by the SACCOS from their members.

The descriptive result of managerial efficiency shows that it has the mean value of 0.907 this implies that holding other independent variable constant and when managerial efficiency increase it result increase 90% return on asset (ROA) of primary SACCOs under the study period.

The correlation result indicates that there was a positive and significant relationship between four explanatory Variables and the financial performance of SACCOs. The finding also indicated that there was a positive relationship between the size of SACCOs, liquidity, capital adequacy, leverage, and age of SACCOs on financial performance. On the other hand, the correlation result indicated that there was a negative and significant relationship between managerial efficiency and financial performance in the study area.

The finding of the regression result of the study indicated that there was a positive and significant relationship between three determinants of financial performance (i.e. capital adequacy, SACCOs Size, and Age of SACCOs) and financial performance (ROA).

The regression result indicated that there was a negative and significant relationship between managerial efficiency and financial performance (ROA). Furthermore, the result of the regression analysis indicated that in the study area capital adequacy has scored the highest positive and significant value of 0.072 and has the most influential effect on financial performance (ROA) followed by SACCO's size (0.013). The regression result also revealed that managerial efficiency has a high negative impact on the financial performance (ROA) and has scored a high negative and significant value of (-0.036).

The value of R^2 is 0.52 demonstrating that 52 percent of the variation of the determinant of financial performance (ROA) of SACCOs was explained by the six explanatory variables.

Whereas the remaining 48 percent of the variation was explained by other factors which are beyond the scope of this study. Thus, it can be concluded that the determinant of financial performance of SACCOs is largely driven by capital adequacy, SACCO size, age of SACCO's, and factors in this study.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATION

5.1. Introduction

From the data collected and analysis made in the previous chapter, the following conclusions and recommendations were made. The result is based on secondary data analyzed related to the objectives of the study. The researcher had intended to investigate the effects of the explanatory variables on the performance of primary saving and credit cooperative societies.

5.2. Conclusion

This study has tried to analyze the determinant of financial performance (in terms of ROA) in saving and credit cooperatives for the period 2018-2022. To conduct the study, secondary data particularly audited financial statements were collected from twelve sampled SACCOs in the Jimma zone. Besides, both descriptive and inferential analyses were used to analyze the data.

The researchers found that SACCOs generated positive profitability on average based on the findings of the descriptive study. The researchers found that the explanatory variables included in the model described the financial performance of SACCO based on the results of the model's regression analysis. According to the findings, capital adequacy has a positive and statistically significant impact on SACCO's financial performance, indicating that an increase in the value of capital adequacy leads to an increase in SACCO's financial performance. According to the findings, liquidity management has a statistically insignificant and modest positive link with primary SACCO financial performance. This shows that performance isn't only about having a lot of cash on hand; it's also about capital sufficiency, efficiency, and other factors. However, this does not rule out the possibility that SACCO liquidity has an impact. Rather, it indicates that liquidity has a less significant impact on the performance of principal SACCOs in the studied area. The study concludes that management efficiency has a statistically significant and weak negative relationship with SACCOs. This means that holding other independent variable constant and when management efficiency increase result decrease return on asset (ROA) of primary SACCOs.

The findings also conclude that leverage has no statistically significant impact on ROA, implying that an increase in the value of this variable does not increase SACCO's financial performance as evaluated by ROA. According to the findings, SACCO size has a positive and statistically

significant impact on SACCO's financial performance, implying that an increase in the value of this variable leads to an increased financial performance of SACCOs.

Finally, the financial performance of the selected SACCOs in Jimma Zone is favorably connected to their age. The random effect model's estimation result demonstrates a positive and substantial association between financial performance and SACCO age, with an estimated coefficient of 0.007488. When all other variables are held equal, a one-year increase in the SACCO's year results in a 0.75 percent rise in the financial performance of SACCOs.

5.3. Recommendation

According to this study, capital sufficiency has a favorable and significant impact on a savings and credit cooperative's return on asset (ROA). So the study recommended that SACCOs in the Jimma zone should build enough assets by selling shares and raising revenue to conduct their businesses healthily, as better assets minimize the risk of suffering and improve profits. The study recommended that SACCO's management and experts should take good care of assets because they play a significant role in generating funds for the SACCOs and contributing to good financial performance.

The extension of savings and credit cooperatives has a good and significant effect on the financial performance of SACCOs in the research area. Therefore the SACCO's concerned management bodies are recommended to expand SACCOs in Jimma zone where present and potential members are located. The study also suggested that SACCO leaders and experts should concentrate their efforts on creating a powerful SACCO union.

The study recommended that the financial capacity of SACCOs be increased by merging different primary SACCOs into one broad umbrella because the number of primary SACCOs in Jimma is huge yet weak. Finally, government officials in charge of cooperatives should pay close attention to constantly supervising, inspecting, auditing, and developing regulatory situations to ensure that they are financially sound and that infrastructure development is improved in areas where financial services are low.

5.4. Suggested area for further research

This study has not been exhaustive so it is recommended to other researchers conduct studies on the following area. To investigate, examine and analyze the determinants of financial

performance of SACCOs by including other SACCOs and variables that the researcher didn't include in this study that may affect the financial performance of SACCOs.

Other researchers should conduct additional research on cooperative financial performance in other Zones and woredas, as well as the application of accounting and auditing in cooperatives, to find solutions to financial performance problems, because cooperatives play an important role in advancing the economic development process in developing countries like Ethiopia.

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APPENDIX-1

1. Descriptive statistics

	ROA	*MAN*	*LIQ*	*LEV*	*CAP*	*AGE*	*SIZE*
Mean	*0.090600*	*0.906500*	*0.885599*	*3.390283*	*0.115103*	*2.959000*	*4.087967*
Median	*0.094500*	*0.900000*	*0.995750*	*2.856000*	*0.126200*	*2.695000*	*4.095800*
Maximum	*0.104000*	*1.040000*	*1.664500*	*20.08300*	*0.279300*	*4.000000*	*6.999800*
Minimum	*0.061000*	*0.610000*	*0.013700*	*-4.654000*	*0.009500*	*2.000000*	*3.005100*
Std. Dev.	*0.013821*	*0.132548*	*0.421621*	*3.497958*	*0.062378*	*0.713736*	*0.591557*
Skewness	*-0.825473*	*-0.780013*	*-0.743190*	*2.424842*	*-0.077109*	*0.608689*	*1.650274*
Kurtosis	*2.605901*	*2.657709*	*2.885622*	*11.96495*	*2.372390*	*1.799826*	*11.14718*
Jarque-Bera	*7.202346*	*6.377106*	*5.556022*	*259.7245*	*1.044194*	*7.306064*	*193.1755*
Probability	*0.027292*	*0.041231*	*0.062162*	*0.000000*	*0.593275*	*0.025912*	*0.000000*
Sum	*5.436000*	*54.39000*	*53.13594*	*203.4170*	*6.906200*	*177.5400*	*245.2780*
Sum Sq. Dev.	*0.011270*	*1.036565*	*10.48810*	*721.9069*	*0.229569*	*30.05574*	*20.64646*
Observations	*60*	*60*	*60*	*60*	*60*	*60*	*60*

2. Random effect

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 08/13/23 Time: 09:03
Sample: 2018- 2022
Periods included: 5
Cross-sections included: 12
Total panel (balanced) observations: 60
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MAN	-0.035872	0.008791	-4.080691	0.0002
LIQ	0.002452	0.002539	0.965979	0.3384
LEV	0.000541	0.000315	1.719839	0.0913
CAP	0.07157	0.019369	3.695224	0.0005

	4			
AGE	0.007488	0.001580	4.739464	0.0000
SIZE	-0.012980	0.001828	-7.098672	0.0000
C	0.141776	0.011771	12.04420	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.008044	1.0000

Weighted Statistics			
R-squared	0.520517	Mean dependent var	0.090600
Adjusted R-squared	0.466236	S.D. dependent var	0.013821
S.E. of regression	0.010098	Sum squared resid	0.005404
F-statistic	9.589306	Durbin-Watson stat	2.220028
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.520517	Mean dependent var	0.090600
Sum squared resid	0.005404	Durbin-Watson stat	2.220028

3. Normality Test

MAN	-0.000438	0.010772	-0.040654	0.9677
LIQ	0.001297	0.003183	0.407307	0.6855
LEV	0.000104	0.000389	0.267602	0.7901

CAP	-0.006446	0.023969	-0.268916	0.7891
AGE	-0.000369	0.001945	-0.189881	0.8501
SIZE	-0.000159	0.002242	0.071009	0.9437
C	0.000112	0.014422	-0.007796	0.9938
RESID(-1)	-0.273528	0.143354	-1.908063	0.0619

Log likelihood	196.3429	Hannan-Quinn criter.	-6.168867
F-statistic	0.520100	Durbin-Watson stat	1.799994
Prob(F-statistic)	0.815282		

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.514231	6	0.1570

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
MAN	-0.014368	-0.035872	0.000015	0.0000
LIQ	0.001161	0.002452	0.000004	0.4995

	4			
	-0.000458			
LEV		0.000541	0.000000	0.0035
	0.024528			
CAP		0.071574	0.000391	0.0174
	0.012600			
AGE		0.007488	0.000001	0.0000
	-0.003953			
SIZE		0.012980	0.000004	0.0000

Cross-section random effects test equation:
Dependent Variable: ROA
Method: Panel Least Squares
Date: 08/13/23 Time: 09:05
Sample: 2018- 2022
Periods included: 5
Cross-sections included: 12
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	0.080197			
C		0.015858	5.057192	0.0000
	-0.014368		-1.494827	0.1424
MAN		0.009612		
	0.001164			
LIQ		0.003175	0.366659	0.7157
	-0.000458		-0.985443	0.3300
LEV		0.000465		
	0.024528			
CAP		0.027686	0.885957	0.3807
	0.012600			
AGE		0.001787	7.050446	0.0000
	-0.003953		-1.466972	0.1498
SIZE		0.002694		

HeteroscedasticityTest

heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	*1.562923*	*Prob. F(6,53)*	*0.1763*
*Obs*R-squared*	*9.020112*	*Prob. Chi-Square(6)*	*0.1725*
Scaled explained SS	*9.580003*	*Prob. Chi-Square(6)*	*0.1435*