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THE EFFECTS OF GOVERNANCE ON SAVING AND CREDIT COOPERATIVES' OUTREACH:

The Case of Addis Ababa Saving and Credit Cooperatives Union

BY:

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A THESIS UNDERTAKEN IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE / MSC. / IN INTERNATIONAL BUSINESS MANAGEMENT.

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ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT
GRADUATE PROGRAM

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Declaration

I, YONA GIRMA hereby declare that the thesis entitled, "THE EFFECTS OF GOVERNANCE ON SAVING AND CREDIT COOPERATIVES' OUTREACH: *The Case of Addis Ababa Saving and Credit Cooperatives"* is my own original work resulted from my genuine and purposeful study on the subject with indispensable guidance and suggestions of my research advisor Dr. Asres Abite. All the resources and materials that I used in the study have been properly acknowledged. I have submitted this thesis to Addis Ababa University the department of management, Graduate program in partial fulfilment of the requirements for the award of the degree of Masters of Science in International Business Management, confirming to the best of my knowledge that it hasn't been presented for the award of any other Degree, Diploma, Fellowship or any other purposes in any university or institution.

YONAS GIRMA Signature:_______________________ Date: ___________________

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This is to certify that the thesis undertaken by YONAS GIRMA entitled "THE EFFECTS OF GOVERNANCE ON SAVING AND CREDIT COOPERATIVES' OUTREACH: *The Case of Addis Ababa Saving and Credit Cooperatives Union"* and submitted in partial fulfilment of the requirements for the award of the degree of Master of Science in International Business Management complies with the regulations of the university and meets the accepted standard with respect to originality and quality.

Approved by Board of Examiners:

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I thank God using an old statement, so called *serenity prayer*, "God grant me the serenity to accept the thing I cannot change, courage to change the things I can and wisdom to know the difference". The statement highlights finding faith in God through adversity and urge to work actively to improve what can be improved. Providence together with the love, encouragement, and trust of my whole family has been an essential source of perseverance for change and achievement.

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ABSTRACT

Saving and credit cooperatives has been growingly playing essential role enhancing the welfare of the society during the last few decades. Despite their great contribution, they are facing several challenges that typically emanates from their organizational and governance problems. Consequently, many studies have been undertaken on saving and credit cooperatives that targeted to examine the nature and consequences of their governance. However, many of them have approached the subject focused on the relationship between an aspect of governance and a chosen measure of performance. This partly has led to quite huge lack of consistency in the research outcomes pertaining to the essential nature of the relationship between governance and performance of saving and credit cooperatives.

The purpose of this research is to underline the true nature of the relationship between governance and outreach of saving and credit cooperatives in Addis Ababa. Explanatory research approach is employed, and mainly secondary data are used with supplementary primary information. The study used a panel data framework that pools observations on cross-section of units over the last three years periods (2017/18 to 1019/20). The unit of analysis are 232 currently operational primary saving and credit cooperatives that are enrolled under Addis Ababa saving and credit union. Samples of 60 units are randomly taken and primary data are collected using self-administered semi structured questioner and secondary data are collected using documents review.

The research statistically examined whether the data met the underlying assumptions of ordinary least square method. Then Pearson correlation analysis has been carried out to examine the net effects of each explanatory variable over the response variables. Finally, the nature and magnitude of the relationship between governance and outreach is underlined through the analysis of the joint effects of the explanatory variables on the response variables using multiple regression technique. The study has found that the independent variables board competency, board meeting frequency, and internal control mechanism have strong positive effects on outreach of SCCO both in terms of the number of clients served and the average loan size. It has also found that weak positive association exists between the explanatory variables board size, board diversity, and incentive mechanism with the response variables number of borrowers and the average loan size.

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ACRONYMS

AASCCO	Addis Ababa Saving and credit cooperatives
AACA	Addis Ababa cooperatives Agency
BG	The Breusch–Godfrey test for autocorrelation
CEO	Chief executive officer
CFA	Confirmatory factor Analysis
DW	Durbin–Watson test for autocorrelation
EFA	Exploratory factor analysis
FCA	Feral Cooperatives agency
FEM	Fixed effects model
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary least squares
REM	Random effects model
SEM	Structural Equation Modelling
SRF	Sample regression function
UK	United Kingdom
WOCCU	World Council of Credit Unions

CHAPTER ONE

1 INTRODUCTION

1.1 THE RESEARCH BACKGROUND

Saving and credit cooperatives [SCCO] are financial institutions that essentially accept savings and deposits, provide credit, offer money transfer, and facilitate insurance to members' assets. SCCO are autonomous association of persons united voluntarily to meet their common economic needs and aspirations through a jointly owned and democratically controlled enterprise. SCCO has been established in both rural and urban areas by individuals of common interest working in the same organization, labour unions, other private organizations, and government cooperative development agency. SCCO provide huge contribution to society adding many values like creating access to finance, realizing economies of scale, managing risk, increasing market efficiency, reducing transaction costs, coping better with economic crises, reinvesting surpluses, empowering members, enhancing social inclusion and promoting the overall economic development typically in low income countries [Kifle, 2015].

SCCO are established mainly with the objective to provide financial services for low income rural and urban population who are not accommodated by the banks and other formal financial institutions. They have been the guardian of financial inclusion for more than a century. They are the oldest and most common form of cooperatives in Africa. According to federal cooperative Agency report, [2019] there are 82,089 cooperatives in Ethiopia with an accumulated capital of ETB 5,126,912,681.00 out of these 19,988 (25%) are saving and credit cooperatives and 1705 financial cooperatives with an accumulated capital of 4,555,102,303.00 are found in Addis Ababa. Besides, 126 saving and credit unions are operating in the country providing financial service to members of the primary cooperatives organized under them.

Though the importance of SCCO for the welfare of the society has grown substantially during the last few decades, they are growingly facing several challenges that typically emanates from their organizational and governance problems. Governance of SCCO underlines relationships among cooperatives' bords, management, shareholders, and other stakeholders. It provides the structure through which the objectives of the organization are set, determines the means of attaining those objectives and monitoring performance. Governance is a determining factor of performance and quite crucial aspect of competitiveness to achieve organizational goal. Several studies indicated that good governance is the main cause of many aspect of organizational excellence and successful performance. The absence of good governance on the other hand is considered as the main cause of failure of many well performing firms. OECD [2009].

Consequently, the issues of governance and the managements of SCCO has taken the attention of many scholars. Governance has become a paramount issue in the management of financial cooperatives. Good governance is associated with practicing accuracy, maintaining accountability, establishing effective internal control, and managing organizations towards their ultimate goals. Good governance is believed to be the foundation that defined the framework for directing, controlling, monitoring, and evaluating organizations leveraging their internal competence and external opportunities for achieving the ultimate organizational goals [Ronald and Willi, 2015].

Several publications written on the current state of saving and credit cooperatives have criticised SCCO for not reaching the poor and for inability to meet the needs of their members. Currently about 2.5 billion working adults are excluded from formal financial services. This is even more serious in developing economies where about 80% of adult population is financially marginalized [FCA, 2019]. Access to formal financial service is crucial to households and individuals to manage their life and develop their wellbeing. Specially, the poor are excluded from formal financial opportunities and they are left to live and work in the informal sector out of necessity. people with low income rely on family, friends, rotating saving schemes like "Ekub in Ethiopia" and money lenders, that are often insufficient, unreliable, and expensive. Therefore, financial exclusion imposes higher cost mainly to the poor as both producers and consumers in their need for finance to sustain livelihood and build assets [Kifle, 2015; Meseret, 2017].

Most SCCO do not have employees to run their day to day activities. They are run by a committee whose members are elected by the general assembly to lead and manage the daily operations for a given period. The management committee members of many SCCO lack essential skills and training in organizational and financial management. Therefore, it is difficult for the elected volunteer committee members of many SCCO to make business decisions on risky and complicated operations [Kifle, 2015; Meseret, 2017]. Above all, SCCO mainly in developing countries are often viewed as instruments for the delivery of the goals set by external agencies including the government [Ronald & Willi, 2015]. They often considered as deficient in maintaining the respect for their institutional integrity, governance, enterprise, values, and principles. Consequently, the capacity of financial cooperatives in terms of governance, and provision of efficient and affordable service to their members is for from the ideal. [FCA, 2019]

1.2 PROBLEM STATEMENT

The role of SCCO in Ethiopia referring to the financial inclusiveness of the people shares the embodied values and positive functions as well as the prevailing challenges, shortcomings, and negative outcomes. Various studies have shown that about 56% of adults in Ethiopia have no bank account, out of 48% of the adult who saved only 14% have been saving in formal financial institutions. Out of 44% adults who borrowed only 7% have borrowed from the formal financial institutions [FCA, 2019].

Various Literatures have identified that SCCO in Ethiopia are held by the number of challenges. Among others week governance has been one of the determining problems that held them back from creating wealth sufficiently and meet their goal in terms of outreach. SCCO in Ethiopia have problems of governance such as inconsistent accounting standards, weak regulatory systems and weak accounting practices, inefficiency in boards of directors, weak management of human resources, poor management of capital markets, weak regulatory mechanisms and so on [Kifle, 2015]. Zerfeshewa, [2010], studied determinants of saving and credit cooperatives operational performance in Gondar town and found week governance as the main challenge. Kifle, [2011] studied the "Management of Savings and Credit Cooperatives from the Perspective of Outreach and Sustainability" and underlined that the elected committee members lack the necessary expertise to manage SCCO. The committees' ability to manage these financial cooperatives depends on the members' willingness, commitment, level of education and voluntarism. Muluneh [2012] mentioned that SCCO lack regulatory and supervisory framework, usually do not have employed management staffs and they are managed by elected volunteer committee members who might have quite little education in managing business and financial organization.

However, a comprehensive empirical search that underlines the effects of governance on outreach of SCCO has not yet been made. Most studies have approached the subject with descriptive and qualitative approach focused on the description of the state the affairs without investigating the fundamental relationship between the variables. Those that are done in a quantitative and explanatory approach are not exhaustive enough to include governance among the independent variables. Moreover, many of them have approached the subject focused on the relationship between an aspect of governance and a chosen measure of performance. This partly has led to quite huge lack of consistency in the research outcomes pertaining to the essential nature of the relationship between governance and performance of SCCO.

1.3 HYPOTHESIS OF THE STUDY

Therefore, the main purpose of the study is to underline the causal relationship between governance and outreach of SCCO and explain the effects of governance on outreach of SCCO in Addis Ababa. It has focused on the examination of the effects of governance on outreach through empirical analysis of all the relevant dimensions of both the explanatory and response variables. Previous researches on governance and performance of organizations in different studies have indicated that board size, board competency, board meeting frequency, board diversity, internal control system and incentive mechanism are the most important dimensions of governance and outreach is widely considered as the relevant performance indicator in relation to the basic objective of SCCO to ensure the financial inclusiveness of the marginalized section of the society. Thus, the study is based on the fundamental hypothesis that governance has a direct causal association with outreach of SCCO, and formulated the following six null hypothesis:

1) No causal association exists between board size and outreach of SCCO.
2) No causal association exists between board competency and outreach of SCCO.
3) No causal association exists between board meeting frequency and outreach of SCCO.
4) No causal association exists between board diversity and outreach of SCCO.
5) No causal association exists between board internal control system and outreach of SCCO.
6) No causal association exists between incentive mechanism and outreach of SCCO.

1.4 OBJECTIVES OF THE STUDY

General Objective

To verify the statements, underscore in the above-mentioned hypothesises, the study carried out the following general objective:

- Examine the existence of causal relationship between governance and outreach of SCCO.

Specific Objectives

To achieve the general objective the following specific objectives are formulated:

1) Analyse the effect of board size on outreach of SCCO.
2) Analyse the effects Board competency on outreach of SCCO.
3) Analyse the effects board meeting frequency on outreach of SCCO.
4) Analyse the effect of board diversity on outreach of SCCO.
5) Analyse the effect of internal control system on outreach of SCCO.
6) Analyse the effect of incentive mechanism on outreach of SCCO.

1.5 SIGNIFICANCE OF THE STUDY

This study is expected to provide an in-depth insight on the effects of governance on outreach of saving and credit cooperatives in Addis Ababa. Therefore, it has an empirical significance to government bodies providing helpful inputs in the formulation of policies and implementation of decisions pertaining to SCCO. As an academic literature, It may contribute to the existing theoretical knowledge of the factors that affect outreach of SCCO by underlining the true relationships between the various dimensions of governance and outreach of SCCO and there by shedding light on the significance of governance in the determination of SCCO outreach. It can also be quite useful material for individuals working in the sector, board of directors and management of SCCO.

1.6 THE SCOPE AND LIMITATION OF THE STUDY

The scope of the study is limited to the crucial effects of governance in the management of saving and credit cooperatives in Addis Ababa. The unit of analysis of this study are primary SCCO that are members of Addis Ababa saving and credit cooperatives union. Thus, conclusions and recommendations can only be reasonably made only to saving and credit institutions in Addis Ababa. Besides, the findings of the study are limited to the established relationship between governance and outreach. The researcher's limitations in financial and other resources together with institutional factors of the research units' like the availability of relevant information, the accuracy of secondary data provided and so on may limit the precision of this research.

CHAPTER TWO

2 LITERATURES REVIEW

This review of literatures provides a conceptual framework based on the existing theoretical knowledge of the concepts of governance and outreach. The empirical review is concerned with a critical evaluation of several literatures pertaining to their perspective, approach, methods, and levels substantiation of the issues of SCCO governance and outreach. The arguments are made in such a way that the current knowledge gaps on the subject have become vivid.

2.1 THEORETICAL LITERATURES REVIEW

2.1.1 THE CONCEPT OF GOVERNANCE

The word Governance in this study and any part of this document refers to the term "Corporate Governance" in business literatures. Governance can simply be defined as the whole set of mechanisms by which an organization is properly managed towards its goals and organizational decisions complement the mission of the organization. Governance comprises a set of relationships among an organization's management, its board, its shareholders, and other stakeholders. It is the mechanism that establishes the structure for the objectives of the organization, set the means of attaining those objectives and determine the process of monitoring performance. It specifies the distribution of rights and responsibilities among different stakeholders and embodies both enterprise performance and accountability [OECD, 2004].

The issue of Governance generally lacks a comprehensive framework that underlines the institutional structure and the legal, regulatory, and supervisory formwork of SCCO in many countries of the world. There are some countries and international bodies, however that have formulated a functional framework of corporate governance. In the UK the framework of governance is a code of best practice formulated as principles and listed companies are required to apply the code. The code of best practices is a framework which include corporate governance, remuneration of board of directors, internal control, audit committee and non-executive directors. The other major corporate governance framework is the one followed by the US code of governance which is issued by Organization for Economic Cooperation and Development [OECD].

The OECD Principles of Corporate Governance [1999], revised in 2004, exhaustively identified the underling aspects of governance. These are : promote transparent and efficient markets;

protect and facilitate the exercise of shareholders' rights; ensure the equitable treatment of all shareholders; recognize the rights of stakeholders established by law or through mutual agreements; encourage active co-operation between organizations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises; ensure that timely and accurate disclosure is made in all material matters including the financial situation, performance, ownership, and governance of the company and ensure strategic guidance of the organization, effective monitoring of management by the board and accountability of the board to the organization and the shareholders. In Ethiopia, SCCO and their unions and federations are governed by the cooperative societies legislation of 985/2016 which provides only the legal framework and left the structural, regulatory, and supervisory framework blank.

2.1.2 THEORIES OF GOVERNANCE

The concept of corporate governance and the underlying theories have evolved from a variety of disciplines including finance, economics, accounting, law, management, and organizational behavior. The concept emerged within various theories attempting to formulate a set of measures that must be taken within an enterprise to favour economic agents to take part in the productive process, generate organizational surplus, and to set up a fair distribution between the partners considering what they have brought to the organization. It takes shape in the literatures considering the legal, cultural, ownership, and other structural differences among countries [Christian, 2013].

Agency Theory: One of the significant theoretical principles underlining the issue of corporate governance is the agency theory developed by Jensen and Meckling [1976]. Agency theory identifies the agency relationship where one party (the principal) delegates work to another party (the agent). The agency relationship however can have several disadvantages to the principal because the actions of the agent (manager) do not always comply with the interest of the principal. According to Jensen and Meckling, [1976] managers can expropriate shareholders by transfer pricing, asset stripping, and investor dilution. Managerial expropriation could also take the form of diversion of corporate opportunities from the firm through corruption, dishonesty, nepotism and other forms of theft. The agency theory referring to corporate governance underlines constraining managements' unacceptable behaviour through monitoring, providing incentives or imposing sanction as a solution that can complement the interest of the management with the interest of shareholders [Robert, 2011].

Stewardship Theory: rejected the underlying assumptions of agency theory and transaction cost theory and introduced an alternative approach to corporate governance. The theory argues that when managers work towards the achievement of the interest of the shareholders, their interest would simultaneously be satisfied [Davis, David & Donaldson 1997]. The theory assumes that the interest of shareholders and that of the management are complementary. Therefore, the management is motivated to take decisions that would maximize performance and the total value of an organization. According stewardship theory, shareholders must provide appropriate governance structures and mechanisms in such a way that the management would exercise full autonomy in making decisions with enough authority of execution. Steward managers act in favour of the organization and work best where the business philosophy of the organization is trust, open communication, empowerment, long-term orientation and performance enhancement and when the corporate governance structures give them high authority and discretion [Davis, David & Donaldson 1997].

Resource Dependency Theory: The basic assumption of the theory is that bord of directors have a decisive role in providing access to resources that organizations require such as finance, human expertise, technical skill, information and technology [Pfeffer, Jeffrey, and Gerald 1978)]. The resource dependency theory focuses on the crucial role that the directors play in securing essential resources to the organization through their communication and relationships with the business environment. The theory argue that directors enhance performance and achieve organizational objectives through social and professional networking. A well-functioning board provide advice, counsel and know-how, legitimacy and reputation, channel for communicating information with external organizations, preferential access to recourses and support from important actors outside the firm [Pfeffer, Jeffrey, and Gerald 1978)].

Stakeholder Theory: Stakeholders are “entities that can affect or be affected by the purpose and actions of an organization. The theory emphasis on the need for managers to have corporate accountability to the whole stakeholders instead of just shareholders. In contrast, the Agency theory holds a contractual view of the relationship between managers and shareholders where the managers have the sole objective of maximizing the wealth of shareholders. A consequence of focusing on shareholders is that the maintenance or enhancement of shareholder value is paramount, whereas when a wider stakeholder group such as employees, providers of credit, customers, suppliers, government, and the local community is taken into account, the overriding focus on shareholder value becomes less self-evident [Christian, 2013]. Stakeholder theory like the resource dependency theory proposed for the representation of the various interest groups on the organization's board to ensure consensus building and to avoid conflicts. The board serves as arbitration over the conflicting interests of the stakeholders and brings about cohesion needed for the achievement of organizational objectives [Donaldson and Preston, 1995]. The theory has been criticized for putting too much burden on managers by making them accountable to many stakeholders and lacking guidelines to solve conflicting interest problems. This situation has given managers the discretionary powers to decide on whose interest to serve [Jensen, 2001].

Shareholders and stakeholders may favour different corporate governance structures and monitoring mechanisms. For example, the corporate governance structures and monitoring mechanisms of the 'Anglo American model' stress on shareholder value and a board comprised totally of executive and non-executive directors elected by shareholders. In contrast, the German model provides a right enshrined in law to certain stakeholder groups such as employees to have their representatives sit on the supervisory board alongside the directors [Christine, 2013].

2.2 EMPIRICAL LITERATURES REVIEW

2.2.1 INDICATORS OF GOVERNANCE

Empirical literatures that are concerned with the study of governance lacks consistency in their approach, methods and focus on the aspects of governances. This is partly because the issue of governance generally lacks a comprehensive framework that underlines the institutional structure and the legal, regulatory, and supervisory formwork of SCCO in many countries of the world. SCCO lacks a definite structure and they are different in their nature. Studies have indicated that there are different types of SCCO, depending on members' occupation and the type of services provided [Meseret, 2017].

The first type of SCCO are those that are established by a community mostly by the initiative of a local government body. Members here are typically engaged in small and micro business. These SCCO can be found in urban areas and regional towns but are most frequently encountered at village level. The second type of SCCO are employee based SCCO which are established by employees of a given organization. These SCCO are generally located in urban areas and reginal towns. Members savings and loan are based on salaries and loans are provided often guaranteed with the involvement of the employer. The third ones are agricultural SCCO that represent primary cooperatives found in rural areas. Both individual farmers and farmers' associations can be members for the main purposes of agricultural production loans.

The heterogeneous structure of SCCO is considered as one reason for the lack of clear result from the many studies undertaken about governance. There is quite little agreement over the important aspects of governance. Some argue that analysis of the governance and performance of savings and credit cooperatives must consider their special nature [Meseret, 2017]. The other element that hold the concern of many studies is that the nature of the board of SCCO is quite different from other financial institutions. SCCO are user owned financial institutions that offer both savings and credit services to their members. They provide loans and other financial service using the volunteer efforts of their members. Unlike other financial institution, SCCO are owned and operated by members. The day to day activities of SCCO are run by elected board members. In Ethiopia for example the day to day operation of most primary SCCO are run by elected board members without having any employees or management [Dessalew, 2014; Kifle 2012].

In the case of formal financial institution, a CEO or a management is given the role of running the day to day operation of the organization and the board of directors is an important component of internal governance that enables the solving of agency problems inherent in managing any organizations. The board has the power to hire, fire and compensate the top-level decision managers and to ratify and monitor vital decisions. Board of directors are widely recognized as an important mechanism for monitoring the performance of managers and protecting shareholders' interests. It is argued by both agency theory and resource dependence theory that the larger the number of non-executive directors on the board, the better they can fulfil their role in monitoring and controlling the actions of the executive directors or the management. However, in the case of primary SCCO, there is no difference between the board and the CEO. The board is involved in the management of the day to day operation. This essentially different nature of the board of SCCO automatically makes irrelevant analysing some of the main variables like board independence and composition which are the concern of many studies undertaken on formal financial institution pertaining to governance and firms' performance.

Despite several empirical studies, the subject of governance and performance of SCCO enormously lacks a comprehensive theoretical structure that links aspects of governance with the overall performance. The most common principles of governance are founded mainly on normative pronouncements made based on logical reasoning rather than empirical evidence. Therefore, most studies have focused on the relationship between an aspect of governance and a chosen measure of performance. Governance holds both quantitative and qualitative dimensions that are complicated and difficult to measure [Kinyuira, 2017]. Among the quantitative attributes of governance bord size, bord competency and board meeting frequency are the focus of many literatures and the qualitative dimensions board diversity, internal control mechanisms and incentive mechanisms are also the concern of many studies [Meseret, 2017].

A. BOARD SIZE

One of the most frequently discussed aspect of corporate governance is the board size. The board is responsible for directing all the affairs and managing the activities towards the achievement of the goals of SCCO. Board size is defined as the total number of board members of a SCCO. The functions and performance of a board are influenced by the number of people involved. But there is little agreement over whether a large or small board is suitable for good performance of the board. Many studies have argued in favor of small board size and many others suggested large board size and still others indicate the existence of quite little association between board size and firm's performance [Valentina, 2005]. The widely accepted statement is that good corporate governance results higher performance. Most of the studies indicated that a large board size affects organizational performance when the board is bureaucratic and not conclusive.

According to Jensen, [1993] massive board size has the possibility to create a reduced sense of the responsibility of an individual. It is argued that that the smaller the board of directors the better the firm's performance and larger boards are found to be slow in decision making. The monitoring expenses and poor communication in a larger board has also been a reason for the support of small board size [Jensen, 1993].

Arguments in favor of large board size mentioned that large board size has higher opportunity to have large number of individuals with better skills and knowledge which increase performance. There are studies that argued large boards with superior monitoring ability pursue higher leverage to raise the value of the firm. On the other hand, there are studies that have found no association between board size and firm performance [Valentina, 2005].

B. BOARD COMPETENCY

The level of expertise of board member's or board competency is the other aspect of governance that needs to be examined in the analysis of the relationship between governance and performance of SCCO. The board competency and expertise of SCCO is determined by the number of qualified directors and their level of expertise. Many studies have indicated that the elected board members of most SCCO do not possess the required financial expertise to effectively plan, organize, direct, execute, monitor, evaluate, report and communicate the objectives and activities of SCCO [Kinyuira, 2017].

The argument here is that a board with qualified members increase performance of the firm by reducing costs overseeing operation and management. Researches have concluded that higher board expertise provide a better governance mechanism because qualified directors are more effective in monitoring operation, networking, reporting and communication [Kinyuira, 2017]. However, there is no clear and common criteria in defining the elements of expertise that underline the level of an expert. Some studies suggest that a qualified expert must have relevant employment experience or professional certification in accounting and finance [Mohd, et.al., 2008]. Directors who have worked for several boards are also considered to have the capacity to be experts.

C. BOARD MEETING FREQUENCY

Board Meeting frequency is the third dimension of governance that takes the attention of several studies. It can be defined as the number of times that the board meets in a given financial year. Studies have indicated that the board meeting frequency is positively associated with the performance of the firm. A study has indicated that the annual number of board meeting increases following share price declines and operating performance of firms improves following years of increased board meetings. It suggests meeting frequency is an important dimension of an effective board. This frequency of board meeting should however trade-off between costs and meaningful communications between board members during the meeting [Jensen, 1993].

D. BOARD DIVERSITY

Board Diversity is the fourth aspect of governance attracting increasing interest in business environment and literatures and it is defined broadly as the composition of the board members in terms of gender or national and cultural identity. The rationale for the need to have a diverse composition in the boardroom may hold that board diversity enables different perspectives to be taken on various issues given that men and women may approach issues from different viewpoints and may have different behavioural patterns as well; similarly individuals from different socio cultural backgrounds may bring additional insights and a variety of perspectives to the boardroom [Christian, 2013].

Carter *et al*. [2007] examine the relationship between board diversity and firm value for Fortune 1000 firms. Board diversity is defined as the percentage of women, African Americans, Asians, and Hispanics on the board of directors. After controlling for size, industry, and other corporate governance measures, they find significant positive relationships between the fraction of women or minorities on the board and firm value. In another study, Carter *et al*. [2007] analysed both the diversity of the board and of important board committees, in all firms listed on the Fortune 500 over the period 1998–2002, to gain greater insight into the way diversity affects board functions and, ultimately, shareholder value. Their findings support the view that board diversity has a positive effect on financial performance.

The evidence on board committees indicates that gender diversity has a positive effect on financial performance primarily through the audit function of the board whilst ethnic diversity impacts financial performance through all three functions of the board: audit, executive compensation, and director nomination. Erkut [cited in Christian, 2013] show that, based on interviews with 50 women directors, twelve CEOs, and seven corporate secretaries from Fortune 1000 companies, a critical mass of three or more women directors can cause a fundamental change in the boardroom and enhance corporate governance. The content of boardroom discussion is more likely to include the perspectives of multiple stakeholders; difficult issues and problems are less likely to be ignored or brushed aside and boardroom dynamics are more open and collaborative.

In another development, Ferreira [cited in Christian, 2013] discusses the potential costs and benefits of board diversity arising from the academic literature. The costs include conflict, lack of co-operation, and insufficient communication; choosing directors with little experience, inadequate qualifications, or who are overused; and conflicts of interests and agenda pushing. The benefits include creativity and different perspectives; access to resources and connections; career incentives through signalling and mentoring; and public relations, investor relations, and legitimacy.

In Ethiopia, there is a law that encourages business to include women in their management and currently women and minorities participation have considerably increased in the management of organizations and highest government offices including the councils of ministers. In the UK the government invited “Lord Davies” to review the situation and identify the barriers that were preventing more women from reaching the boardroom, and to make recommendations as to how this situation might be redressed. Lord Davies’ report, *Women on Boards*, was published in February 2011 and reviewed the situation on UK boards (FTSE 350) and considered the business case for having gender-diverse boards. A number of recommendations were made, including that the chairmen of FTSE 350 companies should state the percentage of women that they aim to have on their boards in 2013 and 2015, and that FTSE 100 companies should aim for a minimum 25 per cent women in the boardroom by 2015.

E. INTERNAL CONTROL SYSTEM

Internal Control System is the fifth aspect of governance that holds the attentions of scholars. According to Whittington and Pany [2001], internal control system has a critical effect on firms' performance. It has a control environment component that sets the tone of the organization by influencing the control consciousness of people and control activities component that comprise performance reviews, forecasts, information processing that are necessary to check accuracy, completeness and authorization of transactions; physical controls that are necessary to provide security over both records and other assets; and segregation of duties where no one person should handle all aspects of a transaction from the beginning to the end.

The control activities also include the establishment of various sub committees such as audit nomination, and remuneration committees. Sub committees like audit committee are expected to have a positive influence on the motivation of the directors and provide confidence in the financial reports of the firm [Meseret, 2017]. The agency theory support establishing independent monitoring committees to alleviate agency problems and recommended establishing oversight committees for remuneration of executive directors, the auditing of financial statements and appointment of directors. The theory considered sub committees as an additional control mechanism that increased accountability and ensured the interests of the shareholders were safeguarded. Studies have indicated that firms that introduced sub committees to the board structure performed better than those without them. Firms which have introduced nomination, audit and remuneration committees showed a significant improvement in their performance. The study recommends firms to work using various subcommittees so that they can improve their performance.

F. INCENTIVE MECHANISM

The last aspect of cooperative governance is incentive mechanism. It can be defined as a system by which a firm can attract, motivate, and retain its work force. It is the structure of rewards and incentive to motivate directors to maximize shareholders' profit and greater good to other stakeholders. Studies have indicated that institutions performance revolves around employer-employee relation and the job incentives to the employees. Thompson [Cited in Christian, 2013] observes that company managers typically use an assortment of motivational techniques and rewards to enlist organization-wide commitment to executing the strategic plan. Financial incentives are found generally the list of motivating tools to gain full employee commitment. It is noted that successful companies and managers widely use nonmonetary incentives such as frequent words of praise, special recognition at company gatherings or in the company newsletter, more job security, simulative assignments, and opportunities to transfer to attractive locations, increased autonomy, and rapid promotion. Other widely used methods are providing attractive perks and fringe benefits, relying on promotion from within whenever possible, making sure that the ideas and suggestions of employees are valued and respected, creating a work atmosphere where there is genuine sincerity, caring and mutual respect among workers and between management and employees, sharing information with employees about financial performance strategy, operational measures, market conditions and competitors' actions.

Studies have indicated that in a comparison of common reward and incentive plans, it was found that merit pay and pay for knowledge are individual based and have the advantages of allowing management to target specific behaviour and to easily evoke criteria over time, and allows management to target specific types of skills and personal growth respectively. Profit sharing, gain sharing, lump sum bonuses and piece rates are applicable to groups and when applied have the advantages of tying business performance to employee rewards and allows management to target specific output goals. What is not clear is the effect of this motivational effort on performance of co-operatives [Meseret, 2017].

2.2.2 INDICATORE OF PERFORMANCE: OUTREACH

Among several indicators, outreach has been one of the main indicators used to assess the performance of saving and credit institutions. The term *outreach* in most cases is used to refer to the effort by MFI (microfinance institutions) to extend loans and financial services to an ever wider clients which is the breadth of outreach and especially toward serving the lowest income section of the population which is the depth of outreach [Yaron et.al., 1997; Cunning, 1999].

Though, several methods are often used, there is no general agreement on the specification of evaluating and measuring financial institutions performance. The traditional methods in micro finance institutions performance appraisals include traditional financial ratios, performance evaluation framework, and production frontier-based techniques [Yaron et al., 1997; Conning, 1999; Schreiner, 2002]. The traditional methods are effective in some circumstances but the use of these ratio measures to evaluate the performance of financial institutions has been seriously criticized. Yaron, [1992a] argue that traditional financial ratios are not suitable for considering the effects of economies of scale and estimation of overall performance measures due to their univariate nature. Yaron [1992a] propose an alternative performance evaluation framework that uses self–sustainability and outreach of MFI as two primary assessments criteria, measured by subsidy dependent index (SDI) and outreach index (OI). Subsidy granted to MFI and measured by the SDI is an input of social cost of subsidized MFI and one of the most heavily weighted factors upon which further access to donor capital is conditioned [Conning, 1999].

Outreach is the social output that is different from econometric measurement of the impact of SCCO operations. It is a hybrid, arbitrary, flexible index that measures the achievement of financial institutions with respect to its predetermined social objectives [Yaron, 2015]. Moreover, outreach unlike econometric measurement doesn't claim to capture the full impact of the MFI operations on client welfare but it is user friendly and inexpensive to apply. Econometric measurements are uncommon because they are comparatively much more expensive to carry out and require high skills.

Like the concept of governance, the concept of outreach involves both qualitative and quantitative dimensions. Therefore, it is not an easy task to construct and measure these concepts. There are ongoing disagreements among the scholars with regards to the measurements of outreach, some argue that outreach should be measured by the number of beneficiaries of the financial services in general and others favor the idea that it should be measured by the number of the low income group people who are served. The further debate on this issue is that if outreach has to be measured by the number of poor people served, how can the poor be identified or what would be the criteria to define a given client is poor. Aspects of outreach like the number and gender of clients served are easy to measure and are regularly reported by SCCO. But whether the services of SCCO reach to the low-income group people or not is among the frequently questioned issues and developing simple tools to measure it is the area where progress is still needed.

Despite the conceptualization and dimensions of outreach is still being refined, the concept has been widely used by scholars. According to Yaron et.al., [1997] The two most important dimensions of outreach are the breadth and depth of outreach and it can be measured by the number of loans extended, the number of savings accounts, the types of financial services offered, the number of branches and village units, the percentage of total population served, the real annual growth of the assets of SCCO and the number of women served. The breadth of outreach simply involves the number of people reached by the saving and credit institutions and is measured as the total number of active borrowers [Yaron et.al. 2015].

Depth of outreach is all about how the service of SCCO reaches the poorest sections of the society [Schreiner, 2002]. It is the value that society attaches to the net gain of a given client. If poverty alleviation is among the main objectives of the nation, then clients' poverty level is a good indicator for depth of outreach. The loan size is often used as a measure for the poverty level of clients, but it is suspected of being a poor approximation. It is usually taken as a proxy for the depth of outreach with the assumption that the poorer the client the smaller the loan amounts or the shorter the loan period. The size of loan has proxy measures like disbursed amount, maturity period, the mount of instalment or the time between instalment. However, several studies preferred to consider only the disbursed loan amount as a proxy measure for the depth of outreach. Given increasing number of borrowers, a declining average loan size indicate more and more poor are being served, whereas increasing the average loan size indicate less and less poor are being served. The number of women clients served is also associated with the low-income group and it is also used as an alternative proxy to the depth of outreach of SCCO [Yaron, 1992].

2.3 SUMMARY OF LITERATURES REVIEW

Governance can simply be defined as the whole set of mechanisms by which an organization is properly managed towards its goals and organizational decisions complement the mission of the organization. It comprises a set of relationships among an organization's management, its board, its shareholders, and other stakeholders. The concept of corporate governance and the underlying theories have evolved from a variety of disciplines including finance, economics, accounting, law, management, and organizational behaviour.

The concept emerged within various theories attempting to formulate a set of measures that must be taken within an enterprise to favour economic agents to take part in the production process, generate organizational surplus, and to set up a fair distribution between the partners considering what they have brought to the organization. It takes shape in the literatures considering the legal, cultural, ownership, and other structural differences among countries [Christian, 2013].

One of the significant theoretical bases that underline the issue of governance is the agency theory developed by Jensen and Meckling [1976]. Agency theory identifies the agency relationship where one party "the principal" delegates work to another party "the agent". The agency relationship however can have several disadvantages to the principal because the actions of the agent (manager) do not always comply with the interest of the principal. On the other hand, stewardship theory rejected the underlying assumptions of agency theory and introduced an alternative approach to corporate governance. The theory argues that when managers work towards the achievement of the interest of the shareholders, their interest would simultaneously be satisfied. The theory assumes that the interest of shareholders and that of the management are complementary. The third main theoretical background of governance is resource dependency theory and the basic assumption of the theory is that bord of directors have a decisive role in providing access to resources that organizations require such as finance, human expertise, technical skill, information and technology [Pfeffer and Salancik, 1978)]. The resource dependency theory focuses on the crucial role that the directors play in securing essential resources to the organization through their communication and relationships with the business environment. The fourth one is stakeholder theory that was developed by Freeman, [1984]. Its emphasis is on the need for managers to have corporate accountability to the whole stakeholders instead of just shareholders.

Governance issues in SCCO have become increasingly important in recent years and have received more attention from both academics and practitioners of cooperatives. Several reasons have accounted for the growing interest in governance, such as SCCO grow in their outreach, increase their assets, and growingly become regulated entities that can capture savings deposits. On the contrary, the sector also has experienced some major failures where many argued that among other reasons, the inadequacy of governance practices was the main factor responsible for the failure. Therefore, it becomes important to have a clear understanding of the characteristics and quality of the governing bodies that lead these institutions.

SCCO lacks a definite structure and they are different in their nature. The heterogeneous structure of SCCO is considered as one reason for the lack of clear result from many studies undertaken about governance. Besides, the most common principles of governance are founded mainly on normative pronouncements made based on logical reasoning rather than empirical evidence. However, studies have indicated that SCCO governance have a visible impact on their performance. In examining this relationship, many studies are concerned with governance attributes like bord size, bord competency and board meeting frequency are the focus of literatures and the qualitative dimensions board diversity, internal control system and incentive mechanisms are also the concern of many studies.

One of the most frequently discussed aspect of corporate governance is the board size. Many studies have argued in favour of small board size and many others suggested large board size and still others indicate the existence of quite little association between board size and firm's performance. The level of expertise of board member's or board competency is the other aspect of governance that needs to be examined in the analysis of the relationship between governance and performance of SCCO. The board competency and expertise of SCCO is determined by the number of qualified directors and their level of expertise. Many studies have indicated that the elected board members of most SCCO do not possess the required financial expertise to effectively plan, organize, direct, execute, monitor, evaluate, report, and communicate the objectives and activities of SCCO. Board Meeting frequency is the third dimension of governance that takes the attention of several studies. It can be defined as the number of times that the board meets in a given financial year. Studies have indicated that the board meeting frequency is positively associated with the performance of the firm.

Board diversity is the other indicator of governance which is broadly defined as the composition of the board members in terms of gender or national and cultural identity. The argument for the need to have a diverse composition in the board may hold that board diversity enables different perspectives to be considered in various issues given that men and women may approach issues from different viewpoints; similarly individuals from different socio cultural backgrounds may bring additional insights and a variety of perspectives to the boardroom [Christian, 2013].

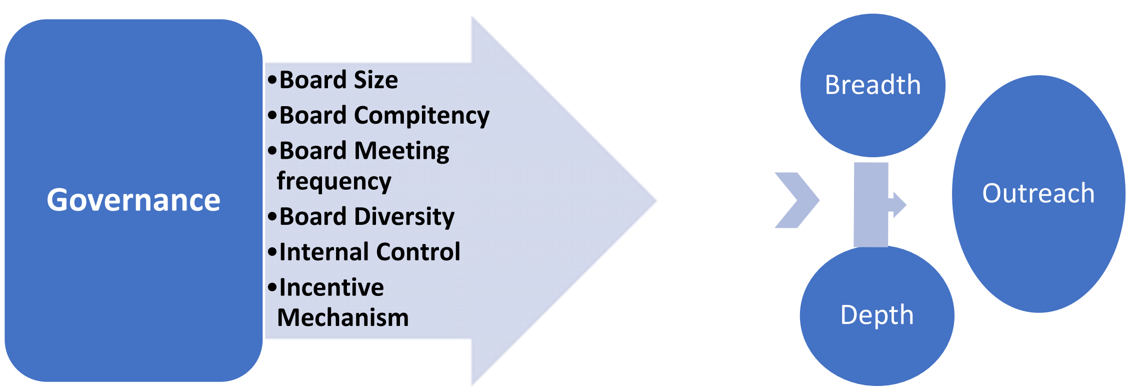
Internal Control System is the other dimension of governance that holds the attentions of scholars. According to Whittington and Pany [2001], internal control system has a critical effect on firms' performance. It has a control environment component that sets the tone of the organization by influencing the control consciousness of people and control activities component that comprise performance reviews, forecasts, information processing that are necessary to check accuracy, completeness and authorization of transactions; physical controls that are necessary to provide security over both records and other assets; and segregation of duties where no one person should handle all aspects of a transaction from the beginning to the end.

The last element of governance is incentive mechanism. It can be defined as a system by which a firm can attract, motivate, and retain its work force. It is the structure of rewards and incentive to motivate directors to maximize shareholders' profit and greater good to other stakeholders. Studies have indicated that institutions performance revolves around employer-employee relation and the job incentives to the employees. The traditional methods used to measure financial institutions performance: traditional financial ratios, performance evaluation framework, and production frontier-based techniques [Yaron et al., 1997; Conning, 1999] has been seriously criticized. Yaron, [1992a] argue that traditional financial ratios are not suitable for estimation of overall performance measures due to their univariate nature. Among several indicators, outreach has been one of the main indicators used to assess the performance of saving and credit institutions. The term *outreach* in most cases is used to refer to the effort by financial institutions to extend loans and financial services to an ever wider clients which is the breadth of outreach and especially toward serving the lowest income section of the population which is the depth of outreach [Yaron et.al., 1997; Conning, 1999].

2.4 THE RESEARCH GAP

Several studies that have been undertaken referring to the issues of governance and performance of SCCO approached the subject focused on the relationship between an aspect of governance and a chosen measure of performance. This partly has led to quite huge lack of consistency in the research outcomes pertaining to the essential nature of the relationship between governance and performance of saving and credit cooperatives. Besides, most of the researches are based on logical reasoning about the relationship between the variables rather than empirical investigation. Moreover, many of the studies undertaken in Ethiopia are focused on only the financial performance of SCCO or approached the subject descriptively and qualitatively focused on the description of the existing status of SCCO in terms of their performance. Therefore, empirically investigating whether there exists a causal relationship between governance and outreach is a gap that is addressed in this research.

2.5 ANALYTICAL FRAMEWORK: GOVERNANCE Vs OUTREACH



Independent variables **Dependant Variables**

Figure 2.1 Analytical Framework

The analytical framework is the reflection of the fundamental construct that governance has a determinantal effect on performance of SCCO. It assumes that governance affects all aspects of an organization and determines their success in terms of outreach. In other words, the study fundamentally assumed that there exists a direct causal relationship between SCCO governance and outreach.

CHAPTER THREE

3 METHODS AND MATERIALS OF THE STUDY

3.1 METHODS OF THE STUDY

3.1.1 THE RESEARCH APPROACH

The study has employed explanatory research approach using both primary and secondary source of information. It is because the main objective of the research is gaining deeper insight on the effects of governance which is the independent variable on outreach which is the dependant variable. Statistical tests are carried out to underline the inherent relationship between the response and explanatory variables. The approach is based on the fundamental assumptions of the research and quantitative study is considered to be quite strong to yield largely unbiased answers to the research questions when analysing using quantitative dataset derived from a quantitative variable as well as numeric values representing qualitative variables.

3.1.2 THE STUDY AREA

The target population of the study are saving and credit Cooperatives in Addis Ababa which are registered under Addis Ababa saving and credit cooperatives union [AASCCU]. The union was established in 2003, comprising primary cooperatives and it is one of the two secondary unions in the city. "There are 118,758 individual members that are enrolled in 270 primary saving and credit cooperatives out of which 38 are currently non-operational" [Daniel legesse, AASCCU Annual report, 2019/20 unpublished data].

3.1.3 METHOD OF SAMPLING

Sampling essentially involves sampling design and sample size considerations. It is very important in all quantitative research and a carefully designed sampling method and sample size determination is vital to produce valid and credible findings. Therefore, a research must adopt scientifically proven sample size estimation at the method development phase. [Kyriazos T. A. 2018]. Interestingly, this is not often the case. Researchers are often faced with challenges of estimating valid sample sizes. In other words, sample sizes are often selected in a seemingly arbitrary manner in many research studies and little or no rationale is provided for the sampling design used. Many researchers frequently use inadequate sample size, and there by invariably introduces errors into their final findings [Julius Omona, 2013].

Taking 'too much' or 'too small' of a population sample is not only a waste of resources, but it is also to work with wrong research assumptions which could possibly have ethical concerns as well [Kyriazos T. A. 2018]. Here, the bottom-line question is “How large is large enough?” [Kline, 2016 cited in Kyriazos T. A. 2018]. Unfortunately, the existing literature provides limited sometimes conflicting guidance on this issue and there is no easy answer. What is adequate sample size depend on several issues and what is important here is not the proportion of the research population that gets sampled, but the absolute size of the sample selected relative to the complexity of the population, the aims of the researcher and the kinds of statistical manipulation that will be used in data analysis [Taherdoost, 2016].

As a rule, for Exploratory factor analysis (EFA), Explanatory (Confirmatory) factor Analysis (CFA) and Structural Equation Modelling (SEM), the stronger the data the smaller the sample can be for accurate analysis [Brown, 2015; Kline, 2016]. But the question here is that how the strength of the data can be measured. There are numerous approaches, methods suggesting several different formulas are available for calculating the sample size. However, even suggestions based on statistical power analysis are only rough approximations which are not equally applicable to all kinds of studies [Nicolaou & Masoner, 2013]. Thus, the answer to the question “is the sample size adequate?” is commonly approached by many EFA, CFA, and SEM researchers using rules of thumb method. One category of the rule of thumb that is mainly used in social studies researches is the ratio of participants (N) to variables (p) where N:p is commonly used for minimum recommendations and 5:1, 10:1 to 20:1 is a commonly suggested ratio [Brown, 2015; Kline, 2016 cited in Kyriazos T. A. 2018].

This study employed the traditional rule of thumb method where the medium ratio 10:1 is commonly recommended. Thus, 60 samples are drawn using random sampling technique. That is partly because the study is undertaken with limited time and resource. Besides, the main objective of the research is based on the fundamental assumptions of the existence of liner relationship between the response and explanatory variables that can be verified using non-complex statistical analysis.

AASCCU is the sampling frame and the 232 currently operational SCCO enrolled under the union are the units of analysis. The population is divided into mutually exclusive and exhaustive strata based on the socioeconomic conditions of the units. Three different socioeconomic structures have been identified where, some SCCO are formed by government employees, others are formed by NGO’s employees and still others are formed by small and micro business owners and street venders with the initiative of the city administration cooperative development agency. Using stratified random sampling technique, simple random samples are drawn from each socioeconomic stratum. The samples are randomly taken using stratified random sampling technique in such a way that the units selected adequately represent the population and true inferences about the population can be made from the results obtained.

3.1.4 METHOD OF DATA COLLECTION

The study has used longitudinal information based on panel data framework which involves the pooling of cross-sectional observations of units over three-year time periods. Longitudinal observation of the variables under study is preferred on the understanding that longitudinal studies can show the nature of growth, trace patterns of change, and possibly give a true picture of cause and effect over time. Panel data allows a researcher to control for variables that cannot be observed or measured like difference in business practices across organizations and variables that change over time but not across organizations like government policies. longitudinal data allows for establishing temporal order, measuring change, and making stronger causal interpretations [Fernando R., 2001].

Both primary and secondary data are collected from all the sample units for the period of the last three years from 2017/18 to 2019/20. The sample units selected are required to provide well documented, audited, and reliable information. Secondary data is the main source of information for the study. It is gathered from each units' annual report, financial statements, magazines, association memorandums, articles of rules and regulations, letters, correspondences, and other relevant written documents. A semi- structured questionnaire is used for the collection of primary data mainly to supplement the information required on qualitative variables. The respondents are board members and managers of the sample units. Many of the questionnaire are administered by the researcher as an interviewer to clarify any ambiguity and minimize possible miss understanding.

The questioner involves questions designed to measure and value the qualitative variables. The qualitative variable is broken down into five desirable attributes of equal weight where the number positive response determines the value of the variable. The variables are measured as a weighted average of numerical values observed in each desirable attribute. The weighted averages provide ratio scale of measurements with true zero value, order, and calculable difference between the variables.

3.1.5 METHOD OF ANALYSIS

The main objective of the research is to underline the existence of causal relationships between the response variables and the explanatory variables. The study verifies its fundamental assumptions and addresses the underlined objectives using two step statistical analysis.

First, statistical examinations are undertaken to verify whether the data met the underlying assumptions of statistical analysis. According to most widely used ordinary least square method (OLS), there are underlining assumptions, commonly known as Gaussian assumptions by which the data set is tested for validity. In other words, using multiple regression analysis is possible only if the data set is found to be valid after having tested based on these fundamental assumptions. The study used SPSS statistical software to test heteroscedasticity, autocorrelation, multicollinearity, and normality assumptions.

Secondly, using panel data Pearson correlation analysis has been carried out to examine the relationship among the predicators and response variables. Pearson correlation coefficients show the extent and direction of the linear relationship between independent variables and SCCO outreach. Pearson Product Moment correlation coefficient, ranges between -1 and +1 and quantifies the direction and strength of the linear association between the two variables. Then the causal relation between the variables is examined using multiple regression technique to underline the nature and magnitude of the relationship between the response and explanatory variables. Multiple regression analysis is a powerful tool and when it is based on panel data, it involves the pooling of observations on cross-section of units over several time periods and provides results that are not detectable in pure cross-sections or pure time-series studies.

3.2 MATERIALS OF THE STUDY

3.2.1 VARIABLES AND MEASUREMENTS

RESPONSE VARIABLE: *OUTREACH*

Outreach refers to the type of clients served, and the variety of financial services offered. It is a hybrid index that assesses the extent to which an MFI has succeeded in reaching its target clients and the degree to which the MFI has met the demand of clients for financial services [Yaron, 1992]. The main objectives of SCCO is the provision of financial services to the maximum number of people and reaching the poor that are denied access to finance by the formal financial institutions. Outreach is commonly used to assess the performance of SCCO towards the achievement of their gals. It measures the extent of social benefit provided by saving and credit institutions in terms of the number and type of beneficiaries.

OUTREACH INDICATORS

Several literatures have indicated that the breadth and depth of outreach are the two main dimensions of outreach. The breadth of outreach indicates the scale of operations of SCCO and it can be measured by the number of active borrowers. The depth of outreach indicates the poverty level of clients served and it can be measured by the average loan size per borrower. [Yaron, 1992; Canning, 1999; Yaron, et.al. 2015]

EXPLANATORY VARIABLE: *GOVERNANCE*

Governance is the whole set of actions taken by the management of an institution towards the achievement of its objectives.

GOVERNANCE INDICATORS

Board size: the study measures board size using the number of board members of a given SCCO. There are contrary arguments in the literature referring to board size. On the one hand, larger boards are considered less effective than smaller boards on the ground that too big boards have a chance of poor communication among board members and without a proper allocation and coordination of activities, some members may hide in the crowed not to take responsibility so that the tasks of the board would risk failure. On the other hand, others argue in favor of larger board size for its advantage of additional manpower resources [Valentina, 2005].

But, neither views those in favor of large nor small board size are not supported by empirical evidence. The widely accepted view however is that firms with ideally between 5 to 9 board size have the ability to be efficiently organized and pursue to increase performance [WOCCU report, 2005]. The argument here is that a relatively large boards with superior monitoring ability better leverage the firm's competency to achieve its objectives and to raise the value of the firm. Therefore, the assumptions of this study with regards to board size are that the larger the board size with in the limit of nine members is the better in its governance and board size is assumed to have a direct positive relationship with the performance of SCCO in terms of outreach.

Board Competency: the study measures the variable board competency in terms of the number graduate financial professionals in the board. It is a widely accepted fact that given other factors the higher the level of expertise of board members the better would be the board's efficiency and effectiveness. Many researches on the issue concludes that qualified SCCO directors are far better in their execution ability towards goals. However, the elected board members of SCCO in many cases do not possess the required financial expertise to understand and effectively utilize the cooperative's financial and other resources. This study assumes that the financial expertise of each board member has a significant direct effect on outreach performance of SCCO.

Board meeting frequency: It is measured by the total annual number of meetings undertaken by a board. Several studies have indicated that meeting frequency increases integration of the board and it is an important indication of an effective board performance. One of the common problems of directors is lack of sufficient time to carry out their duties. Therefore, the frequency of board meeting must consider the tradeoff between time costs and meaningful communications between board members during the meeting. Despite these, frequent board meeting is an important resource in improving the coordination and teamwork that enhance the effectiveness of a board. Therefore, the other main assumption of this study is that the frequency of board meeting has a direct positive effect on the performance of SCCO in terms of their outreach.

Board diversity is defined broadly as the composition of the board members in terms of gender or national and cultural identity. The argument for the need to have a diverse composition in the board may hold that board diversity enables different perspectives to be taken on various issues given that men and women may approach issues from different viewpoints and may have different behavioural patterns as well. Similarly, individuals from different socio-cultural backgrounds may bring additional insights and a variety of perspectives to the boardroom [Christian, 2013]

Several studies Carter *et al*. [2003, 2007]; Erkut et.al. [2008] examine the relationship between board diversity and firm's performance and find significant positive relationships between them. They argue that a critical mass of three or more women directors can cause a fundamental change in the boardroom and enhance corporate governance. The content of boardroom discussion is more likely to include the perspectives of multiple stakeholders; difficult issues and problems are less likely to be ignored or brushed aside and boardroom dynamics are more open and collaborative.

The study assumes board diversity is directly associated with performance of SCCO in terms of their outreach through enhancing creativity and different perspectives, access to resources, business connections and so on. Board diversity of a SCCO is measured by the relative proportion of women in the bord.

Internal Control system: is composed of the internal control measures, activities, and the audit committee. The internal control environment includes integrity and ethical values of personnel responsible for administering and monitoring, commitment of persons performing assigned duties, board of directors and audit committee's management philosophy and operating style. It is the tone of the organization on which all the other components of internal control mechanisms are founded.

The study has used five attributes of equal weight to measure the extent of internal control system in the sampled SCCO. The use of professional accounting system in managing all financial transactions; The use of written terms of reference and decisions are made with diligence having relevant information; The bord meet and evaluate performance regularly with relevant reports and communications; The audit committee meet and inspect the activities and performance of SCCO regularly; Audited accounts are presented and considered during Annual General Meetings. The study assumed that internal control system has a positive relationship with the performance of SCCO in terms of their outreach and it is measured by a value derived from the above mentioned five desirable attributes of equal weight where the number positive response determines the value of the variable. Thus, internal control mechanism is measured as a weighted average of numerical values observed in each desirable attribute.

Incentive mechanism: Organizational rewards and incentive mechanism to motivate directors, maximize shareholders' profit and provide greater value to other stakeholders is among the main subjects in corporate governance. Appropriate incentive mechanism plays a significant role to motivate directors and employees toward the implementation and successful achievement of organizational goal by allowing management to target and promote specific behavior, types of skills, capacity. and performance. Several literatures have indicated that company managers typically use various motivational techniques and rewards to enhance employee's commitment in executing organizational objectives.

The study has used five attributes of equal weight to measure the level of incentive mechanism in the sampled SCCO. Provide financial incentives like attractive salary, monthly allowance, or gain sharing, lump sum bonuses; Provide non-financial benefits like training or any other privileges; The work atmosphere favours the prevalence of genuine sincerity, caring and mutual respect is among members, the board and workers; There is frequent words of praise and recognition at the SCCO gatherings and public meetings; There is job security, opportunities, increased autonomy, promotion to workers and bord members. The study assumed that incentive mechanism has a positive relationship with the performance of SCCO in terms of their outreach and it is measured by a value derived from the above mentioned five desirable attributes of equal weight where the number positive response determines the value of the variable. Thus, incentive mechanism is measured as a weighted average of numerical values observed in each desirable attribute.

Variables	Dimensions	Measurement
Dependent variables		
Outreach	Breadth of outreach	the number of active borrowers.
	Depth of outreach	the average loan size per borrowers.
Independent Variables		
Governance	Board Size	the number of bord members
	Board competency	the number of financial professionals
	Board meeting frequency	the number of meetings in a year
	Board Diversity	the proportion of women in the board
	Internal control system	weighted average derived using 5 attributes
	Reward mechanism	weighted average derived using 5 attributes.

Table 3.1. Variables, dimensions, and measurements

3.2.2 THE RESEARCH MODEL

The objective of this study is to underline the relationship between governance and outreach of SCCO in the study area. It examines the performance of SCCO as a response variable [Y] using two proxies that are: the breadth of outreach measured by the number of active borrowers denoted by [Y_1] and the depth of outreach measured by the average loan size per borrowers denoted by [Y_2]; the explanatory variable governance is indicated by six dimensions: Board Size [X_1], Board competency[X_2], Board meeting frequency[X_3], Board diversity[X_4], Internal Control system[X_5] and Incentive mechanisms[X_6].

The study employed panel data regression model to address the dimensions of both time series and cross-sectional analysis. Variables in the model are depicted with double subscripts where [i] represent individual SCCO and [t] represent time period and these differentiate the model from strict time-series or cross sectional analysis. The error term [$\mathcal{E}$] depicts exogenous variables that are not included in the model.

$$\mathbf{Y_{1it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \mathcal{E}_{it}} \text{ ------------ } \mathbf{[1]}$$

$$\mathbf{Y_{2it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \mathcal{E}_{it}} \text{ ------------- } \mathbf{[2]}$$

Where:

Y_{1it} = The number of active borrowers at a given time period t

Y_{2it} = The average loan size per borrowers at a given time period t

β_i = The coefficient of variation

X_1 = Board Size

X_2 = Board competency

X_3 = Board meeting frequency

X_4 = Board diversity

X_5 = Internal Control system

X_6 = Incentive mechanisms

$\mathcal{E}_{it}$ = The Exogeneous variables

CHAPTER FOUR

4 DATA ANALYSIS, RESULTS AND DISCUSSION

This chapter of the study deals with data presentation, analysis, and discussion. It examines the data collected from both primary and secondary sources in such a way that the research objective can be adequately addressed. The main purpose of the study is to underline the existence of causal relationship and explain the determining effects of governance on outreach of SCCO in Addis Ababa. Multiple regression analysis is used to determine the effects of board size, board competency, board meeting frequency, board diversity, internal control system and incentive mechanism on outreach of SCCO. The study has used longitudinal data where all the variables are observed in time series segment of three periods between 2017/18 up to 2019/20 and a cross section segment that observes sixty SCCO.

4.1 THE RATIONALE TO USE FIXED EFFECT MODEL (FEM)

The study employed longitudinal data analysis where the determination of appropriate estimator is the first crucial task. To decide using whether fixed effects model (FEM) or random effects model (REM), it is important to understand the basic assumptions behind these models. Each unit (entity) in a study has its own individual characteristics that may or may not influence the predictor variables for example, being a male or female could influence the opinion toward certain issue; the business practices of an organization may influence its income [Brooks, 2008].

FEM fundamentally assume the existence of time invariant characteristic or characteristics within the organization (entity) that may impact or bias the predictor or response variables that must be controlled. FEM further assumes that those time-invariant characteristics that are unique to the individual unit must not be correlated with other individual characteristics [Brooks, 2008; J.H. Stock & M. Watson, 2008]. FEM remove the effect of those time invariant characteristics so that only the net effect of the predictors on the response variable can be assessed. Therefore, it is appropriate to use FEM whenever the objective of the study is analysing only the impact of variables that vary over time.

The rationale behind random effects model is that, unlike the fixed effects model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. Random effects assume that the entity's error term is not correlated with the predictors which allows for time-invariant variables to play a role as explanatory variables. The study assumed heterogeneity among units in terms of socio-economic formation, scope and business practice and believed that those differences across units have some influence on the dependent variable. The study aspires to remove the effect of those time invariant characteristics so that only the net effect of the predictors on the response variable can be assessed. Thus, the researcher concluded that fixed effects estimator is most efficient to use in this study.

4.2 MULTIPLE LINEAR REGRESSION MODEL TESTS

Analysing data using multiple regression has an essential precondition to make sure whether the data set can be analysed using multiple regression. According to most widely used ordinary least square method (OLS), there are underlining assumptions, commonly known as Gaussian assumptions by which the data set is tested for validity. In other words, using multiple regression analysis is possible only if the data set is found to be valid after having tested based on these fundamental assumptions. In this study SPSS statistics has been used to test for heteroscedasticity, autocorrelation, multicollinearity, and normality assumptions.

4.2.1 ZERO MEAN AND EQUAL VARIANCE ASSUMPTION

The first assumption that is required for valid multiple regression analysis is that the average value of the errors term must be equal to zero [$E(\mathcal{E}) = \mathbf{0}$]. Green, [2008] indicated that the assumption of constant variable cannot be violated so long as a constant term is included in the regression equation. The model of this study has included a constant term that makes it valid to the test.

4.2.2 TEST FOR HETEROSCEDASTICITY

The assumption of homoscedasticity state that the variance of the errors is constant [$\mathbf{Var}\ (\mathcal{E}_{it}) = \sigma^2 < \infty$]. That means the variance of the ε' s is constant for all values of the X’s. If the variances are not homogeneous, representation of the residuals against the explanatory variables may reveal heteroscedasticity, it is therefore necessary to perform a test for heteroscedasticity. To check heteroscedasticity “White test” is carried out with the null and alternative hypothesis:

H0: The residuals are homoscedastic

Ha: The residuals are heteroscedastic

Heteroscedasticity Test: White

F-statistic	0.993	Prob. F (33,126)	0.213*
Obs* R-squared	63.321	Prob. Chi-Square (33)	0.281*
Scaled explained SS	54.015	Prob. Chi-Square (33)	0.523*

EViews Result Summary
Table 4.1 Heteroscedasticity Test for Y_1

Table 4.1 indicated that, both chi- Square and F-test failed to reject the null hypothesis at 10% significant level. Therefore, the variance of the ε' s is constant for all values of the X's which validated the model for the test.

Heteroscedasticity Test: White

F-statistic	5.916	Prob. F (42,117)	0.218*
Obs*R-squared	87.194	Prob. Chi-Square (42)	0.292*
Scaled explained SS	58.322	Prob. Chi-Square (42)	0.541*

EViews Result Summary
Table 4.2 Heteroscedasticity Test for Y_2

Similarly, Table 4.2 indicated that, both chi- Square and F-test failed to reject the null hypothesis at 10% significant level. Therefore, the variance of the ε' s is constant for all values of the X's which validated the model for the test.

4.2.3 TEST FOR AUTOCORRELATION

The third underlining assumption according to the OLS method is that the covariance between the error terms over time or cross-sectionally is zero. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are correlated with one another, it would be stated that they are 'autocorrelated' or that they are 'serially correlated'.

The Breusch–Godfrey test is used to check autocorrelation among the errors in the regression model. The test is based on the idea of is sometimes referred to as an LM test for serial correlation. A similar assessment can be also carried out with the Durbin–Watson test. However, LM test is more general than that using the Durbin–Watson statistic which is only valid for non-stochastic regressors and for testing the possibility of a first order autocorrelation between an error and its immediately previous value. The Breusch-Godfrey test has none of these restrictions and statistically more powerful than DW [Asteriou, Dimitrios, Hall & Stephen G. 2011; Brooks, 2008]. Breusch – Godfrey test makes use of the residuals from the model being considered in a regression analysis and a test statistic is derived. The null hypotheses, no serial correlation cannot be rejected for any order up to *p*-value higher than 0.05 at 95% confidence interval.

Table 4.3 and Table 4.4 below depict the Breusch–Godfrey LM test statistic “Obs*R-squared” for Y_1 & Y_2 respectively. The p-value = 0.435 and he p-value = 0.532 are far greater than 0.05 that indicate the absence of autocorrelation in the regression model.

LM Test statistic

F-statistic	0.627	Probability,	0.341
Obs*R-squared	1.564	probability,	0.435

EViews result summary
Table 4.3: Breusch-Godfrey Serial Correlation LM Test: Y_1

LM Test statistic

F-statistic	0.721	Probability,	0.417
Obs*R-squared	1.998	probability,	0.532

EViews result summary
Table 4.4: Breusch-Godfrey Serial Correlation LM Test: Y_2

4.2.4 TEST FOR MULTICOLLINEARITY

The fourth underlining assumption in OLS estimation method is the assumption of no perfect relationship among the explanatory variables. Multicollinearity is the violation of this assumption. In other words, multicollinearity occurs when there exists a perfect relationship among the independent variables which invalidate the regression analysis. Multicollinearity is a statistical problem that can widen the variance, covariance, and the confidence interval; increase the standard error and R- square which affects the goodness of fit of the model [Brooks, 2008].

Multicollinearity describes the relationship among explanatory variables. A problem occurs when the explanatory variables are very highly correlated with each other. However, literatures have indicated different measurement on the extent of correlation that can causes multicollinearity. Many authors have suggested different level of correlation to judge the presence of multicollinearity. Some argued that correlation coefficient below 0.9 may not cause serious multicollinearity problem and some stated that multicollinearity problem exists when the correlation coefficient among variables is greater than 0.75 [Brooks, 2008].

Table 4.5 below depicts the correlation matrix for the explanatory variables. The explanatory variables of the model are: X_1[Bord Size], X_2 [Board competency], X_3 [Board meeting frequency], X_4 [Board diversity], X_5[Internal Control system] and X_6[Incentive mechanisms].

The table statistic shows that there is a correlation among the variable, but none has exhibited very high correlation. A relatively high 0.61 correlation is shown between board competency and internal control mechanism. There is a moderate relationship among most of the explanatory variables having below 0.56 test statistic. The matrix has shown that the bulk of the explanatory variables have either low or moderate correlation. Therefore, the data set is free of multicollinearity problem and valid for the regression analysis.

Correlation Matrix Table (N= 180)

	X1	X2	X3	X4	X5	X6
Board Size [X1]	1.00	0.53	0.54	0.27	0.56	0.52
Board competency [X2]		1.00	0.58	0.26	0.61**	0.55
Board meeting frequency[X_3]			1.00	0.00	0.51	0.46
Board diversity [X4]				1.00	0.24	0.23
Internal control system [X5]					1.00	0.54
Reward Mechanism [X6]						1.00

*Note **Correlation is statistically significant at .01 level*

Table 4.5 Multicollinearity test statistic

4.2.5 TEST FOR NORMALLITY

The data set is tested for normality using the Shapiro Wilk (SW) in SPSS. The null hypothesis in SW normality test states that the data is normally distributed. The null hypothesis is rejected if

Shapiro Wilk normality Test

Variable	Statistic	df	Sig.
X_1	2.216	180	0.435
X_2	2.301	180	0.546
X_3	1.305	180	0.308
X_4	0.415	180	0.304
X_5	1.309	180	0.791
X_6	0.227	180	0.101

EViews Result Summary

Table 4.6 Test Normality Test for Y_1

the p-Value is below 0.05 [Asteriou, Dimitrios, Hall & Stephen G. 2011].

Table 4.6 and table 4.7 below, shows the normality test statistic for Y_1 and Y_2 respectively. All p-values of the predictor variables in both models are greater than 0.05 which indicate that the data of the study is normally distributed.

Shapiro Wilk normality Test

Variable	Statistic	df	Sig.
X_1	2.425	180	0.494
X_2	1.539	180	0.611
X_3	1.595	180	0.492
X_4	0.653	180	0.473
X_5	1.731	180	0.691
X_6	0.339	180	0.278

EViews Result Summary

Table 4.7 Normality test for Y_2

4.3 DESCRPTIVE STATISTICS

Table 4.6 below presents descriptive statistics of the research variables where the response variables are: Y_1 [number of borrowers] ,Y_2[loan size]; and The explanatory variables are : X_1[Board Size], X_2 [Board competency], X_3 [Board meeting frequency], X_4[Board diversity], X_5[Internal Control system] and X_6[Incentive mechanisms].

MEASURES	DEPENDANT		INDIPENDANT					
	Y_1	**Y_2**	**X_1**	**X_2**	**X_3**	**X_4**	**X_5**	**X_6**
MEAN	7.525	26.580	5.000	0.425	24.000	0.258	0.625	0.457
MEDIAN	6.393	25.393	7.000	0.496	30.000	0.450	0.500	0.275
MAXIMUM	10.916	36.891	9.000	0.712	50.000	0.951	1.000	0.670
MINIMUM	2.584	14.400	3.000	0.283	12.000	0.148	0.203	0.183
ST. DEV.	1.465	1.946	2.409	5.235	3.253	2.568	4.323	1.5642
TOT. OBSER.	180	180	180	180	180	180	180	180

EViews result Summary

Table 4.6: Descriptive statistics of the research variables

The first dependant variable of the study is the number of borrowers [$\mathbf{Y_1}$] which is measured in terms the total number of active borrowers. Table 4.6 above, depicts that the number of active borrowers has a mean value of 7.5 for the study period, with a maximum of 10.9 and minimum of 2.4 and the standard deviation is 1.5. The trend shows that on the average 8 more peoples have been benefited in each SCCO every year that indicates an increasing trend of SCCO outreach throughout the study period.

The second dependent variable of the study is loan size [$\mathbf{Y_2}$] which is taken in natural logarithm. Table 4.6 above, shows the sampled SCCO have an average positive loan size over the study period of three years. From the total of 180 observations, the mean of loan size equals to 26.58 ETB with a minimum of 14.4 ETB and a maximum of 36.89 ETB respectively and the standard deviation is 1.9 ETB. The result shows that SCCO outreach in terms of the provision of loan to members exhibited good performance during the study period.

The first independent variable of the study is X_1[Bord Size] which is measured in terms of the number of actively involving persons in the board. Table 4.6 above, shows the mean value of sampled SCCO board size is 5 persons with a maximum of 9 persons and a minimum of 3 persons and the standard deviation is 2.41 persons. The main assumption of this study with regards to board size is that an active and fully engaged board enhance performance when the larger the board size within the limit of five to nine members. The result of the descriptive statistics of SCCO board size is consistent with the fundamental assumption where board size is within the specified limit.

The second independent variable of the study X_2 [Board competency] which is measured as a ratio that depict the proportion of competent board members counted based on their educational background and experience in the areas of business and finance. Table 4.6 above, shows the mean value of sampled SCCO board competency is 0.425 with a maximum of 0.714 and a minimum of 0.283. and the standard deviation is 5.235 which means the data set shows a wide devotion in terms of bord competency.

The third independent variable of the study X_3 [Board meeting frequency] which is measured by the number of meeting held in a given period. From the total of 180 observations that account the study period, Table 4.6 above, shows the mean value of sampled SCCO board meeting frequency 24.000 meetings with a maximum of 50.000 and a minimum of 12.000 meetings where the standard deviation is 3.235 which means the data set shows a wide devotion in terms of board meeting frequency.

The fourth independent variable of the study X_4 [Board diversity] which is measured as a ratio depicting the proportion of female persons in the board. Table 4.6 above, shows the mean value of sampled SCCO board diversity is 0.258 with a maximum of 0.951 and a minimum of 0.148.

and the standard deviation is 2.563 which means the data set shows that the proportion of female in the boards is generally quite small.

The fifth independent variable of the study is X_5 [Internal control mechanism] which is measured as the weighted average of the number of confirmed responses for the following five questions: The SCCO has employed professional accounting system in managing all financial transactions; The board has written terms of reference and decisions are made with diligence having relevant information; The board meet and evaluate performance regularly with relevant reports and communications; The audit committee meet and inspect the activities and performance of SCCO regularly; Audited accounts are presented and considered during Annual General Meetings. Table 4.6 above, shows that the mean value of sampled SCCO stablished Internal control mechanism is 0.625 with a maximum of 1.000 and a minimum of 0.203. and the standard deviation is 4.321.

The last independent variable of the study is X_6 [Incentive mechanism] which is measured as the weighted average of the number of confirmed responses for the following five questions: Provide financial incentives like attractive salary, monthly allowance, or gain sharing, lump sum bonuses; Provide non-financial benefits like training or any other privileges; The work atmosphere is where genuine sincerity, caring and mutual respect is prevalent among members the bord and workers; There is frequent words of praise and recognition at the SCCO gatherings and public meetings; There is job security, opportunities, increased autonomy, promotion to workers and bord members. Table 4.6 above, shows the mean value of sampled SCCO board competency is 0.457 with a maximum of 0.670 and a minimum of 0.183 and the standard deviation is 1.235 which means the data set shows SCCO are generally poor in terms reward mechanism during the study period.

4.4 CORRELATION ANALYSIS

Pearson correlation analysis is used to examine the relationship among the predicators and response variables. Pearson correlation coefficients show the extent and direction of the linear relationship between independent variables and SCCO outreach measures. Pearson Product Moment correlation coefficient, ranges between -1 and +1 and quantifies the direction and strength of the linear association between the two variables. The correlation between two variables can be positive (i.e., higher levels of one variable are associated with higher levels of the other) or negative (i.e., higher levels of one variable are associated with lower levels of the other. The sign of the correlation coefficient indicates the direction of the association. The magnitude of the correlation coefficient indicates the strength of the association.

4.4.1 CORRELATION ANALYSIS FOR [Y_1]

The correlation matrix table below shows the relationship between the response variable number of borrowers [Y_1] with the predictors: Board Size [X_1], [Board competency [X_2], Board meeting frequency[X_3], Board diversity[X_4], Internal Control system [X_5], & Incentive mechanisms [X_6].

The Correlation Table (N= 180)

	[Yi]	X_1	X_2	X_3	X_4	X_5	X_6
Number of borrowers [Y_1]	1.00	0.23	0.63**	0.42	0.21	0.71**	0.53
Board Size [X_1]		1.00	0.53	0.51	0.27	0.56	0.42
Board competency [X_2]			1.00	0.58	0.26	0.61**	0.55
Board meeting frequency[X_3]				1.00	0.00	0.54	0.46
Board diversity [X_4]					1.00	0.24	0.23
Internal control system [X_5]						1.00	0.54
Reward Mechanism [X_6]							1.00

*Note **Correlation is statistically significant at 0.01 level*

Table 4.7 Correlations for Number of borrowers [Yi]

The above Table 4.7 shows that all predictor variables have positive relationship with the response variable Number of borrowers [Y_1]. Bord size and board diversity have week positive correlation with the number of borrows with r (180) = 0.23 and 0.21, respectively at $p < 0.01$ significant level. Number of borrowers has strong positive relationship with board competency with r (180) = 0.63 and internal control mechanism with r (180) = 0.71, $p < 0.01$ significant level.

4.4.2 CORRELATION ANALYSIS FOR [Y_2]

Table 4.8 below shows that all predictor variables have positive relationship with the response variable the average Loan Size [Y_2]. Bord size and board diversity have week positive correlation with the number of borrows with r (180) = 0.34 and 0.27, respectively at $p < 0.01$ significant level. Loan size has strong positive relationship with board competency with r (180) = 0.80 and internal control mechanism with r (180) = 0.65, $p < 0.01$ significant level.

Correlation Table (N= 180)

	[Y_2]	X1	X2	X3	X4	X5	X6
Loan Size [Y_2]	1.00	0.34	0.80**	0.52	0.27	0.65**	0.52
Board Size [X_1]		1.00	0.53	0.51	0.27	0.56	0.42
Board competency [X_2]			1.00	0.8	0.26	0.61**	0.55
Board meeting frequency[X_3]				1.00	0.00	0.47	0.46
Board diversity [X_4]					1.00	0.24	0.23
Internal control system [X_5]						1.00	0.54
Reward Mechanism [X_6]							1.00

*Note **Correlation is statistically significant at .01 level*

Table 4.8 Correlations for loan size [Y_2]

4.5 MULTIPLE REGRESSION ANALYSIS

In this section, the research hypothesis is statistically tested and analysed, essentially targeted to the investigation of the causal relationship between the regressors and the response variables using multiple regression analysis.

REGRESSION RESULT OF NUMBER OF BORROWERS

Dependent Variable: Number of active Borrowers [Y_1]

Method: Fixed effects model (REM)

Sample: 2017/18 to 2019/20

Periods included: 3

Cross-sections included: 60

Total observations: 180

Variable	*Coefficient*	*Std. Error*	*t- Statistic*	*Prob*
C	2.599	3.273	0.944	0.041
X_1	0.121	2.126	0.837	0.034
X_2	0.630	0.031	0.742	0.026
X_3	0.533	0.035	1.267	0.031
X_4	0.315	0.145	2.601	0.003
X_5	0.515	0.039	0.138	0.019
X_6	0.059	0.127	0.494	0.001
Weighted Statistics				
R-squared		0.592		
Adjusted R-squared		0.575		
S.E. of regression		0.236		
F-statistic		43.818		
Prob(F-statistic)		0.001		

EViews Result Summary

Table 4.9: Regression Result Summary for Number of Borrowers [Y_1]

Tables 4.9 & 4.10 display the summary of regression analysis result for the dependent variables Number of borrowers and Loan size respectively. Goodness of fit statistics like R-square, adjusted R- square, Std. Error and F-Statistic are computed to test how well the sample regression function (SRF) fits the data. If the correlation is high, the model fits the data well. On the contrary, if the correlation is low, the model is not providing a good fit to the data [Brooks, 2008; J.H. Stock & M. Watson, 2008].

R^2 is the square of the correlation between the values of the dependent variable and the corresponding fitted values in the model. Tables 4.9 and 4.10, indicate that the explanatory power of the models is quite significant in terms of R^2 for both the response variables number of borrowers (0.592, 0.786 respectively). The probabilities of all the predictors depicts a P-value of less than 0.05 in both models indicating strong statistical significance of all the variables in their predictive ability of the response variables.

REGRESSION RESULT OF LOAN SIZE

Dependent Variable: Loan Size [Y_2]
Method: Fixed effects model (REM)
Sample: 2017/18 to 2019/20
Periods included: 3
Cross-sections included: 60
Total observations: 180

Variable	***Coefficient***	***Std. Error***	***t- Statistic***	***Prob***
C	1.912	2.193	0.862	0.038
X_1	0.152	0.026	1.351	0.025
X_2	0.723	0.024	2.523	0.001
X_3	0.563	0.076	0.783	0.053
X_4	0.167	0.061	2.744	0.016
X_5	0.642	0.045	2.397	0.018
X_6	0.095	0.044	2.701	0.001
Weighted Statistics				
R-squared		0.774		
Adjusted R-squared		0.731		
S.E. of regression		0.213		
F-statistic		129.379		
Prob(F-statistic)		0.001		

EViews Result Summary

Table 4.10: Regression Result Summary for Loan Size [Y_2]

Adjusted R^2 is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. Tables 4.9 above, shows that the value of adjusted R squared for the response variable Number of borrowers [Y_1] is 0.575. This indicate that 57.5% of the variation on the value of the variable (Number of borrowers) is due to changes in dimensions of governance: board size, Boars competency, Board meeting frequency, Board diversity, Internal control system and reward mechanism. Similarly, adjusted R square for the response variable Loan size is 0.752 (see Table 4.10), which indicate that 73.21% of the change in loan size is due to the change in the regressor variables.

4.5.1. BOARD SIZE [X_1]

The first null hypothesis is that there is no causal association between board size and outreach of SCCO. The result of the regression (see Table 4.9 & 4.10) shows that Board size has weak positive causal relationship with the Number of borrowers and loan size having coefficients 0.12 and 0.15 respectively at 0.01 level of significance. Thus, the null hypothesis is rejected. The arguments on the effect of Board size are widely contrary where some studies indicate the existence of quite little association between board size and firm's performance [Valentina, 2005]; Some others have argued in favor of large board size; and still others believe that smaller boards exhibit better performance [Burress, et al., 2012]. However, the outcome of the regression analysis confirms that there is a direct positive but weak relationship between Board size and outreach of SCCO.

4.5.2. BOARD COMPETENCY [X_2]

The second research hypothesis is that no causal association exists between board competency and outreach of SCCO. The regression analysis indicates that there is quite strong positive causal relationship between board competency and outreach of SCCO (See Table 4.9 & 4.10). Thus, the null hypothesis is rejected. The coefficients of board competence for the number of borrowers and loan size are 0.63 and 0.72 at 0.01 level of significance. This means board competency has very strong positive effect on SCCO outreach in terms of both loan size and number of borrowers. The board competency and expertise of SCCO is determined by the number of qualified directors and their level of expertise. Some studies have indicated that the elected board members of most SCCO in Addis Ababa do not possess the required financial expertise to effectively plan, organize, direct, execute, monitor, evaluate, report, and communicate the objectives and activities of SCCO. However, regression outcome indicates that the effect of board competency on outreach of SCCO is very strong.

4.5.3. BOARD MEETING FREQUENCY [X_3]

The third hypothesis state that no causal association exists between board meeting frequency and outreach of SCCO. However, the coefficients of Board meeting frequency with number of borrowers and loan size are 0.53 and 0.56 at 1% significance (see Table 4.9 & 4.10). It indicates that there exists positive causal association between them. Thus, the null hypothesis is rejected. Board meeting frequency is assumed to measure the number of times that the board meets in a given financial year. Lipton & Lorsch (1992) cited in Meseret 2017, finds that the operating performance of firms improves following years of increased board meetings and suggested that meeting frequency is an important dimension of an effective board. The finding of the regression analysis on board meeting frequency in this study confirms the position of many studies that concluded a significant positive association between board meeting frequency with the performance SCCO.

4.5.4. BOARD DIVERSITY [X_4]

The fourth hypothesis is that no causal association exists between board diversity and outreach of SCCO. The summery statistic of the regression analysis 0.31 and 0.16 (see Table 4.9 & 4.10) coefficients indicate that Board diversity has a weak positive causal relationship with the response variables number of borrowers and loan size respectively. Thus, the null hypothesis is rejected. The rationale for the need to have a diverse gender composition in the board may hold that board diversity enables the board to entertain different perspectives on various issues given that men and women may approach issues from different viewpoints [Christian, 2013]. Similarly, Carter et al. (2003), in a study of Fortune1000 firms, find significant evidence of a positive relationship between board diversity and firms performance using percentage of women in the boards of directors as a proxy measure.

However, empirical studies to date, on the relationship between board diversity and firm performance remain in short supply. Likewise, the outcome of the regression analysis in this study does not show a strong association between board diversity and firm performance. This is partly because women participation in the board is still insufficient in many SCCO; the study period is not sufficient enough to see the effect of the predictor variable on the response variable. Moreover, the current theoretical framework including agency theory does not provide a clear-cut method concerning the link between board diversity and firms' performance.

4.5.5. INTERNAL CONTROL SYSTEM [X_5]

The fifth hypothesis is that there is no causal association between board internal control system and outreach of SCCO. However, according to the regression statistic (see Table 4.9 & 4.10) Internal control mechanism has 0.51 and 0.64 coefficient for number of borrowers and loan size respectively which indicate a strong positive causal association between the variables at 0.01 level of significance. Thus, the null hypothesis is rejected. Some research findings like Whittington and Pany [2001], has indicated that internal control system has a critical effect on firms' performance. Similarly, the result of the regression analysis in this study confirms the position that internal control mechanism has a strong positive effect on the outreach of SCCO.

4.5.6. INCENTIVE MECHANISM

The sixth hypothesis is that no causal association exists between incentive mechanism and outreach of SCCO. According to the regression statistic incentive mechanism has 0.05 and 0.09 coefficient for number of borrowers and loan size respectively which indicate a weak positive causal association at 1% level of significance (see Table 4.9& 4.10). Thus, the null hypothesis is rejected. Reward mechanism define a system by which SCCO can attract, motivate, and retain their work force and board members. It is the structure of rewards and incentive to motivate board directors to maximize shareholders' profit and greater good to other stakeholders. Studies have indicated that institutions performance revolves around employer-employee relation and the job incentives to the employees. Few researches have been done on the issue of governance in Addis Ababa and studies. These studies have concluded that the incentive scheme for board members and employees of savings and credit cooperatives is very weak in Addis Ababa. The weak positive effect of relationship between the reward mechanism and outreach of SCCO identified by this study can be explained by the fact that incentive mechanisms are rarely practiced in the sector.

CHAPTER FIVE

5 FINDINGS, CONCLUSION AND RECOMMENDATION

The importance of SCCO for the welfare of the society has grown substantially during the last few decades. However, they are growingly facing several challenges that weaken their performance emanating typically from their management and governance problems. As a result, governance of SCCO that underlines the relationships among cooperatives' bords, management, shareholders, and other stakeholders has become the main issues in the global business environment and literatures.

This research rests on the fundamental hypothesis that SCCO governance has a positive causal association with their outreach. It is constructed based on prior theoretical and empirical literatures on the issues of governance. Studies have indicated that SCCO governance has relationship with their outreach and identified the dimensions of governance: Board size, Board competency, Board meeting frequency, Board diversity, Internal control system and incentive mechanisms. Besides, many literatures have indicated the dimensions of outreach to be the breadth of outreach which can be measured in terms of the number of active borrowers and the depth of outreach which can be measured in terms of the average loan size. This study statistically verifies the existence of causal relationship between governance and outreach of SCCO in Addis Ababa and provides an empirical evidence underlining the effects of governance on outreach of saving & credit cooperatives.

5.1 SUMMARY OF FINDINGS

Based on the above fundamental hypothesis six null hypotheses are formulated and the causal relationship between the dimensions of governance as regressors and the dimensions of outreach as response variable is examined using fixed effect multiple regression analysis. The following are the main findings of the study:

Goodness of fit statistics like R-square, adjusted R- square, Std. Error and F-Statistic are computed to test how well the sample regression function (SRF) fits the data. The summary of regression analysis 0.592, 0.786 (see Tables 4.9 and 4.10) indicate that the explanatory power of the models is quite significant in terms of R^2 for both the response variables number of borrowers and loan size respectively. Aadjusted R squared for the response variable Number of borrowers [Y_1] is 0.575. This indicate that 57.5% of the variation on the value of the variable Number of borrowers is due to changes in dimensions of governance: board size, Boars competency, Board meeting frequency, Board diversity, Internal control system and incentive mechanism. Similarly, adjusted R square for the response variable Loan size is 0.752 (see Table 4.10), which indicate that 73.1 % of the change in average loan size is due to the change in the predictor variables.

The study has found that Board competency, Board meeting frequency, and Internal control mechanism have strong positive effect on the outreach of SCCO. According to the regression analysis statistic, the coefficients of board competence regressed with the number of borrowers and loan size are 0.63 and 0.72 respectively at 5% level of significance; the coefficients of Board meeting frequency regressed with number of borrowers and loan size are 0.53 and 0.56 respectively at 5% level of significance and Internal control mechanism has 0.51 and 0.64 regression coefficient for number of borrowers and loan size respectively at 5% level of significance.

The study has also found weak positive effect of the predictor variables: board size, board diversity, and reward mechanism on the response variables number of borrowers and loan size (see Tables 4.9 & 4.10). According to the regression statistic, board size regressed with the number of borrowers and loan size has coefficients 0.12 and 0.15 respectively at 5% level of significance; Board diversity has a weak positive relationship with the response variables number of borrowers and loan size with 0.31 and 0.16 values respectively; Incentive mechanism has coefficients 0.05 and 0.09 for number of borrowers and loan size respectively at 5% level of significance which indicate a weak positive association with the response variables.

5.2 CONCLUSION

The fundamental conclusion of the study is that there exists a causal relationship between the predictor variables and the response variables. Further, the study has concluded that Board competency, Board meeting frequency, and Internal control mechanism have strong positive effects on the outreach of SCCO both in terms of the number of clients served and the average loan size. The study has also concluded that the predictor variables: board size, board diversity, and incentive mechanism have weak positive effects on the response variables number of borrowers and the average loan size.

Empirical work in the field of corporate governance is extensive, though quite few works have been done in Addis Ababa and Ethiopia in general. The conclusions of this explanatory study confirm with most of the conclusions of prior works. Board competency and expertise of SCCO is determined by the number of qualified directors and their level of expertise. However, most SCCO in Ethiopia including Addis Ababa do not possess the required financial expertise to effectively plan, organize, direct, execute, monitor, evaluate, report, and communicate the objectives and activities of SCCO [Zerfeshewa, 2010; Kifle, 2015 Meseret, 2017]. This fact coupled with the conclusion of this study that board competency has very strong positive effect on SCCO outreach in terms of both loan size and number of borrowers leads to a further conclusion that the incompetency of the board is one of the main challenges that draws back SCCO in Addis Ababa from meeting their objectives in terms of outreach.

The finding of the regression analysis on board meeting frequency and internal control mechanism in this study confirms the position of many studies that concluded a causal association between board meeting frequency and internal control mechanism with outreach of SCCO. The result of the regression analysis confirms the position that competent board meet frequently and employ professional accounting system in managing all financial transactions, makes decisions with diligence having relevant information and written terms of reference which together positively affects outreach.

Many researches that enquires into the nature of association between the predictor variables: board size, board diversity, and reward mechanism and outreach came up with inconsistent results [Burress, et al., 2011]. The arguments on the effect of Board size are widely contrary where some studies indicate the existence of quite little association between board size and firm's performance [Valentina, 2005]. Some others have argued in favor of large board size; and still others believe that smaller boards exhibit better performance [Burress, et al., 2012]. The outcome of the regression analysis in this study confirms that there is positive but weak association between Board size and outreach of SCCO. Similarly, empirical studies to date, on the relationship between board diversity and firm performance are inconsistent. The study indicates week association between board diversity and firm performance which can be explained by the smaller women participation in the board in many SCCO. The weak positive association identified by this study between incentive mechanism and outreach of SCCO can be explained by the prevalence of poor incentive schemes ether in cash or in kind in for board members and employees of SCCO in Addis Ababa.

4.5 RECOMMENDATION

Saving and credit cooperatives in Addis Ababa are playing a crucial role in mobilizing savings and providing credit facilities to their members and thereby strengthening the overall economy.

However, they are growingly facing several challenges which weaken their performance typically emanating from their organizational and governance problems. SCCO need the support of the government and the public at large to improve their management and governance practice to achieve their objectives and effectively perform in promoting the nation effort towards prosperity. In particular, SCCO in Addis Ababa needs to adopt good governance practices mainly focusing on their board competency, internal control mechanisms and diligent regular meetings.

The conclusions of many cooperative governance research indicated that better performing SCCO have competent board members, in terms of profession and experience with size ranges from five to nine members with adequate female members representation. Board with higher expertise provide a better governance mechanism because qualified directors are more effective in monitoring operation, networking, reporting and communication. In addition, adequate internal control measures, activities, and diligent audit committee are indispensable component of effective board. The internal control environment includes integrity and ethical values of personnel responsible for administering and monitoring, commitment of persons performing assigned duties, board of directors and audit committee's management philosophy and operating style. It is the tone of the organization on which all the other components of internal control mechanisms are founded.

Moreover, SCCO needs to have an incentive mechanism for board members and employees. Motivational approaches conducive to their specific situation must be applied. It can be financial or in kind focused on stimulating stronger employee commitment. SCCO can provide benefits, relying on promotion from within whenever possible, making sure that the ideas and suggestions of employees are valued and respected, creating a work atmosphere where there is genuine sincerity, caring and mutual respect among workers and between management and employees, sharing information with employees about financial performance strategy, operational measures, market conditions and so on.

Policy Implications & theoretical Contribution

As an academic literature, the study has provided an empirical evidence that governance has a causal association with outreach of SCCO. Board competency, Board meeting frequency, and Internal control mechanism have strong positive effects on the outreach of SCCO. It underlined that these dimensions of governance are the most important factors in the determination of

SCCO outreach and firmly reflects on the significance of governance on the performance of SCCO, thereby considerably contributes to the existing theoretical knowledge of the factors that affect the performance of SCCO.

The empirically verified fact that Board competency, Board meeting frequency, and Internal control mechanism have strong positive effects on the outreach of SCCO, has a strong implication to government bodies providing helpful inputs in the formulation of policies and implementation of decisions pertaining to SCCO. In Ethiopia SCCO and their unions are governed by the cooperative societies legislation of 985/2016 that lacks the derivative ministerial rules and regulations for successful practical legal, regulatory, and supervisory outcome. SCCO are often supervised by the same government agency that is responsible for all kinds of non-financial cooperatives. Such government agencies usually lack the relevant technical skill and institutional commitment to lead and supervise financial cooperatives. The absence of a regulatory body with prudential regulation and financial supervision framework and the lack of rules that specify qualification of board members result in several weakness of the system.

The study implies the need for the enactment of financial cooperatives Act that specifically regulate and supervise their operations focused on Board competency, Board meeting frequency, and Internal control mechanism. The Act may require the establishment of a special regulatory body to govern financial cooperatives; specific focus on the board of directors determining the number of board members, requiring them to be well versed in the management of cooperative, finance, law and leadership talent; prudent guidelines for internal control mechanisms such rules as risk exposure limits, specify disclosure norms and requirement for liquidity reserves and standards for Audit reports.

Future research direction

Finally, further research needs to be undertaken with detailed examination on the dimensions of governance and their effects on the performance of SCCO. The financial cooperatives industry requires more research and more importantly, empirical studies with better panel data of large sample size and longer period. Data set with higher sample power needs to be collected and analyzed to have an in-depth knowledge on the effects of governance on outreach of SCCO to ensure the effectiveness and efficiency of the sector.

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APPENDICES

APPENDIX I: SURVEY QUESTIONNAIRE

Addis Ababa University
College of Business & Economics
Department of Management
Graduate Program

Dear respondents,

This questionnaire is designed to collect essential and accurate information to examine the effects of saving & credit cooperatives' (SCCO) governance on their outreach in Addis Ababa. The research is an undertaking in partial fulfilment of the requirements for the degree of Master of Science / MSc. / in International Business Management, under the title "**Determining effects of Governance on Saving and Credit Cooperatives' outreach: *The case of Addis Ababa saving and credit cooperatives union*".**

Your response to this questionnaire is enormously valuable to accomplish the research objectives providing an input in the analysis, recommendations, and conclusions of the study. I request your support with genuine gratitude, to take few minutes from your time to provide the required information in the survey.

I confirm that the purpose of this study is purely academic, and the information collected in this questioner will be strictly confidential.

General Instruction

This questionnaire has 24 questions categorized into the following six clusters:

I. The profile of the saving & Credit cooperative (SCCO)
II. Respondent's particulars
III. Saving and credit Administration
IV. Board / Management Committee
V. Internal control system
VI. Reward Mechanism

- Please answer questions in clusters I & II by writing what is required or indicating your choice(s) using (✓) sign among the list specified.
- Please answer questions in cluster III, IV, V and VI, by indicating (✓) sign on one or more of your choices among the list of options given. If the question demands a quantitative answer, specify the amount (number).
- In questions 23 and 24 write a brief statement on the subject.

I. The Profile of the saving & credit cooperative

1. Name ____
2. Address: Sub city _________________________ Woreda ___________ H/No._______
3. Year of Establishment _____________________________
4. What is the Number of founding Members? Male ___________ Female ____________
5. What was the source of your cooperative initial capital? Please use (✓) sign.
   a. Members Saving ______
   b. Members Share ______
   c. Donation by NGO ______
   d. Donation by Government ______
   e. Others, please specify ____

II. Respondent's Particulars

6. Age: 20 – 30 ______ 30- 45 _______ 45- 60 _______ above 60 _____
7. Sex: Male ________ Female ______
8. Occupation ____
9. Years of experience __________________
10. Education: Primary (1-6) _______

    Junior Secondary (7-8) _____

    High School (9-12) ________

    Diploma /University Degree, Specify ________________________________
11. Position in the Board ____________________________________

III. Saving and credit administration

12. What are the financial services provided by your SCCO? please indicate using (✓) sign.
    a. Saving: Regular______ Compulsory_________Other specify ____________________
    b. Loan: Individual __________Group _______Other specify ____________________
13. Provide the following general information about your SCCO. Please specify the number (Amount).

No	Description	2017/18	2018/19	2019/20
1	Total Number of Members			
2	Total share Value			
3	Total Capital			
4	Net Income			
5	Dividend Distributed			

14. How long does it take to take loan from application to disbursement? Please indicate (✓)
    a. 1 week _________
    b. 2 weeks _________

c. 3 weeks ________
d. More than 3 weeks ________

15. Are members allowed to withdraw from their savings anytime during their membership? (✓)
    a. Only voluntary saving is allowed to withdraw anytime. ______
    b. Both Regular and Voluntary savings can be withdrawn. ______
    c. Any saving can only be taken upon termination. ______
    d. Other specify ____________________________
16. What are the possible loan repayment periods? (✓)
    a. Less than 1 year________
    b. 1 – 3 years ______
    c. 3 – 5 years ______
    d. More than 5 Years _____
17. What are the possible collaterals that can be presented by borrowers for a loan? (✓)
    a. Borrowers /Guarantors savings ________
    b. Asset collateral ________
    c. Personal guarantors______
    d. Group guarantors _______
    e. Others, specify __________________________________
18. Provide the following information referring to loan provision in your SCCO. Please specify the amount (number).

No	Description	2017/18	2018/19	209/20
1	Total size of loan granted			
2	Total number of borrowers			
3	Loan interest rate			
4	Amount of default loan			

IV. Board / Management Committee

15. Describe the number of board members and the proportion of females in the board. Specify the number.

No	Description	2017/18	2018/19	2019/20
1	Number of Board members			
2	Number of Female board members			

Qualification	2017/18	2018/19	2019/20
Primary Education (1-6)			
Junior Secondary (7-8)			
High School (9-12)			
Diploma			

University 1st Degree			
Post Graduate Degree			

16. What is your board composition in terms of academic qualifications? Specify the number.
17. What is the composition of the board in terms profession? Specify the number.

Profession	2017/18	2018/19	2019/20
Accountants			
Business & Finance			
Legal officers			
Others			

18. How frequent dose the board meet? Please indicate using (✓) sign.
    a. Weekly _________
    b. Monthly ________
    c. Quarterly _______
    d. Semiannually/annually _________
19. What are actively operating sub committees in your SCCO? Please indicate using (✓) sign.

No	Sub committee	2017/18	2018/19	2019/20
1	Loan Committee			
2	Internal Audit committee			
3	Education & awareness creation committee			
4	Ethical behavior & conflict resolution committee			
5	Other			

IV. Internal control system

21. What are the main attributes of internal control system in your SCCO? Please indicate the attribute that define the internal control system of your SCCO using (✓) sign.

No	Attributes	2017/18	2018/19	2019/20
1	The SCCO has employed professional accounting system in managing all financial transactions.			
2	The bord has written terms of reference and decisions are made with diligence having relevant information			
3	The bord meet and evaluate performance regularly with relevant reports and communications.			
4	The audit committee meet and inspect the activities and performance of SCCO regularly.			
5	Audited accounts are presented and considered during Annual General Meetings.			

	TOTAL COUNT			

22. Other internal control system (if any): ____
____
____

V. Reward Mechanism

24. What are the main reward mechanisms in your SCCO? Please indicate the main reward mechanisms in your Saving & credit cooperative using (✓) sign.

No	Attributes	2017/18	2018/19	2019/20
1	Provide financial incentives like attractive salary, monthly allowance, or gain sharing, lump sum bonuses			
2	Provide non-financial benefits like training or any other privileges.			
3	The work atmosphere is where genuine sincerity, caring and mutual respect is prevalent among members, the bord and workers.			
4	There is frequent words of praise and recognition at the SCCO gatherings and public meetings.			
5	There is job security, opportunities, increased autonomy, promotion to workers and bord members.			
	TOTAL COUNT			

23. Specify your SCCO reward mechanisms: ____
____
____
____

24. General opinion on the main problems of Cooperative governance ______________________
____
____
____
____
____

Thank you very much!

Yonas Girma
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