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DETERMINANTS OF DISCLOSURE LEVEL BY DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA

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Determinants of Disclosure Level by Deposit Taking Savings and Credit Co-operative Societies in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

This thesis is dedicated to my ever cheerful daughters, Maria, Abigail and wife, Annastacia who are my constant source of inspiration to work smart and with dedication at all times.

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ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
CAMEL	Capital Adequacy, Asset Quality, Management, Earnings and Liquidity
CBK	Central Bank of Kenya
CEO	Chief Executive Officer
CMA	Capital Markets Authority
CSR	Corporate Social Responsibility
CUNA	Credit Union National Association
FIRE	Financial Reporting Excellence Award
FSDT	Financial Sector Deepening Trust
FSRs	Financial Sector Regulators
GAAP	Generally Accepted Accounting Principles
GRI	Global Reporting Initiative
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
ICPAK	Institute of Certified Public Accountants of Kenya
ICURN	International Credit Union Research Network
IFRSs	International Financial Reporting Standards
ISA	International Standards of Auditing
KUSCCO	Kenya Union of Savings and Credit Co-operative Societies
MIED	Ministry of Industrialization and Enterprise Development
MOCDM	Ministry of Co-operative Development and Marketing
NFPO	Not For Profit Organization
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares
PEARLS	Protection, Effective Financial Structure, Asset Quality, Rates of Return and Costs, Liquidity and Signs of Growth
SACCOs	Savings and Credit Co-operative Societies
SASRA	SACCO Societies Regulatory Authority
SME	Small and Medium Sized Enterprise
WOCCU	World Council of Credit Unions

DEFINITION OF TERMS

Deposit-taking SACCOs are registered savings and credit cooperative societies (SACCOs) in Kenya which accept deposits on a day-to-day basis (GOK, 2008). In this study, deposit-taking SACCOs also refer to those SACCOs operating front-office services activities (FOSA).

Disclosure refers to the provision of both qualitative and quantitative information in whichever form to help users make informed decisions. Disclosures encompass information provided in financial statements and notes, management analysis and discussion, future outlook and any other supplemental information (Glauiter & Underdown, 2001; Khlif & Souissi, 2010).

Financial disclosure is the provision of an organization's disclosures relating to its performance, position, changes in performance and accompanying notes to the annual report (Quayes & Hasan, 2014).

International Accounting Standards (IASs) refer to earlier versions of accounting standards issued between 1973 and 2000 by the International Accounting Standards Committee (IASC), stating how particular types of transactions and other events should be reflected in financial statements. They were first written in 1973, and stopped when the International Accounting Standards Board (IASB) took over the creation of International Financial Reporting Standards in 2001. (Botzema & Quack, 2009).

International Financial Reporting Standards (IFRSs) refer to a single set of accounting standards, developed and maintained by the IASB with the intention of those standards being capable of being applied on a globally consistent basis by developed, emerging and developing economies thus providing investors and other users of financial statements with the ability to compare the financial performance of publicly listed companies on a like-for-like basis with their international peers (International Financial Reporting Standards (IFRS) Foundation, 2016).

Mandatory disclosure refers to the provision of minimum information mandated by regulations, securities exchanges and accounting standards-setting body (Owusu-Ansah, 1998; Kribat, Burton & Crawford, 2013).

Savings and Credit Co-operative Society (SACCO) is viewed as an autonomous association of individuals who are voluntarily united with the objective of meeting common economic, social and cultural needs and aspirations through a mutually owned and democratically-controlled enterprise (Hyndman, McKillop, Ferguson & Wall, 2004; McKillop & Wilson, 2011; International Co-operative Alliance (ICA), 2015).

Social disclosure encompasses disclosures regarding the organization and it's physical and social environment, and include disclosures on human resources, community participation, products and services, customers, energy and environmental conservation (Deegan *et al.*, 2002).

Voluntary disclosure is the discretionary release of qualitative and quantitative information through annual reports over and above mandatory requirements, either with regard to Kenyan laws and regulations, professional accounting standards or any other relevant regulatory requirements (Barako, 2007).

ABSTRACT

Despite disclosure being widely regarded as a necessary condition for market discipline, the determinants of disclosure in the financial sector are relatively unknown. Concerns have been raised regarding the quality and level of disclosure by savings and credit co-operative societies (SACCOs) in Kenya. This study sought to investigate the determinants of the level of disclosure by deposit-taking SACCOs in Kenya. The study utilized a descriptive research design. Using a disclosure index comprising of 112 information items, the study employed content analysis of audited annual reports to establish the level of disclosures by 202 deposit-taking SACCOs in Kenya over the period 2008-2013. To corroborate the findings, semi-structured questionnaires were utilized. Data were analyzed using SPSS software version 24. Correlation and multivariate fixed effects panel regression approaches were used to test six hypotheses. The findings revealed an average disclosure level of 60.1%, with SACCOs providing more financial disclosures at an average of 81.9% compared to general disclosures at an average of 60.4% and social and environmental disclosures at an average of 29.5%. The findings revealed that the level of disclosure by SACCOs is significantly and positively influenced by total asset value, governance score and the ratio of non-performing to gross loans at the 0.05 level of significance. The findings revealed that SACCOs audited by the government auditor had lower disclosure levels. The findings illustrated a moderating influence of the ICPAK guidelines on the relationship between asset value, governance score, non-performing to gross loans and the level of disclosure. This showed that whereas the regulator-driven ICPAK guidelines improved disclosure levels by SACCOs significantly, the benefits appeared varied across SACCOs. To improve the level of disclosure, the study highlighted the need to create awareness for SACCOs to embrace social and environmental disclosure practices. The findings highlighted the need by SACCOs to devote resources towards improving the level of disclosure. In addition, the results revealed the need for SACCOs to adopt best practice governance practices to improve their transparency and accountability. Since the study relied extensively on disclosures provided by SACCOs in the audited annual reports, an examination of disclosures in other media and in a larger number of co-operatives is warranted. Further research can also establish whether the determinants of disclosure would differ if a weighted disclosure index was used to determine the level of disclosure.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

This chapter outlines the background of the study in terms of global, regional and local perspectives on disclosure by organizations. It also provides a statement of the problem, the objectives of the study and hypotheses. The chapter also highlights significance, scope and limitations encountered during the study. This study sought to investigate the determinants of disclosure levels by deposit-taking savings and credit co-operative societies (SACCOs) in Kenya. Disclosure is viewed as the provision of both qualitative and quantitative information in whichever form to help users make informed decisions. Disclosures encompass information provided in financial statements and notes, management analysis and discussion, future outlook and any other supplemental information such as corporate social responsibility, environmental conservation, employee information, customer information and related social information (Glauiter & Underdown, 2001; Khlif & Souissi, 2010).

Disclosure, whether mandatory or voluntary, financial or social, provides a channel for enhancing market discipline in the financial sector. Financial disclosure refers to the provision of an organization's disclosures relating to its performance, position, changes in performance and accompanying notes to the annual report (Quayes & Hasan, 2014). Social disclosure entails disclosures regarding the organization and its physical and social environment, and include disclosures on human resources, community participation, energy and environmental conservation (Deegan *et al.*, 2002). According to Njuguna (2009), financial transparency and information disclosure are important aspects of good governance in an organization. Gibbins, Richardson and Waterhouse (1992) and Haniffa and Cooke (2002) posited that corporate governance should be considered because the board of directors manage information disclosure in the annual reports.

The corporate governance challenges and weak disclosure practices by SACCOs in Kenya have led to regulatory reforms aimed at promoting public confidence by ensuring the security of members' funds and financial soundness in the SACCO

sector (Chavez, 2007; WOCCU SACCO CAP Kenya, 2009). The regulatory reforms stipulated disclosures that SACCOs should comply with (GOK, 2010). To understand what motivates disclosure by SACCOs in Kenya, this study examined the level of disclosure by SACCOs and what motivates it. Spiegel and Yamori (2004) conducted a similar study on Japanese small co-operatives (called Shinkin banks) but limited the study to the determinants of voluntary disclosures of bad loans. Another study on Irish credit unions was conducted by Hyndman, McKillop, Ferguson and Wall (2004) who examined the extent of financial reporting from both qualitative and quantitative perspectives. The present study examined a broader and more detailed spectrum of disclosures encompassing financial and social aspects by SACCOs in Kenya and the potential determinants of disclosure level. The study also sexamined the moderating influence of the regulator-driven disclosure guidelines released in November 2010 on the relationship between the determinants of disclosure and the level of disclosure.

1.1.1 Global Perspective on Disclosure

Disclosure in the financial statements has spanned from the ninenteenth century and has existed as long as the accounting profession has been in existence (Institute of Chartered Accountants in England and Wales (ICAEW), 2013). In the advent of corporate governance practices, disclosure has been emphasized more and more as depicted in prior studies (Forker, 1992; Haniffa & Cooke, 2002; Eng & Mark, 2003; Khan, Muttakin, & Siddiqui, 2013). Globally, there has been notable academic interest on the level and determinants of disclosure in corporate annual reports by companies in developed economies in the past four decades (Singhvi & Desai, 1971 in the U.S; Wallace, Naser & Mora, 1994 in Spain; Meek, Roberts & Gray, 1995 in the U.S and the U.K; Ho & Wong, 2003 in Hong Kong; Bujaki & McConomy, 2002 in Canada; Eng & Mark, 2003 in Singapore; Beeks & Brown, 2006 in Australia; Hofmann & McSwain, 2013 in the U.S).

Chipalkatti (2002) studied the determinants of disclosure in annual reports of banks in India and established that banks with lower levels of leverage provided more disclosure. Further, bank size was positively related to disclosure. Quayes and Hasan (2014) investigated the relationship between financial performance and financial disclosure of MFIs. The study found that better performing MFIs are associated with improved financial disclosure. Previous studies have established significant

determinants of disclosure such as profitability (Skinner, 1994; Xiao, Yang & Chow, 2004; Lan, Wang & Zhang, 2013), size of the organization (Spiegel & Yamori, 2004; Branco & Rodrigues, 2006; Luethge & Han, 2012), corporate governance (Gordon, Henry & Palia, 2004; Yeh, Shu, & Su, 2012), non-performing bad loans (Spiegel & Yamori, 2004) and type of auditor (Wallace, Naser & Mora, 1994; Dunn & Mayhew, 2004; Khlif & Souissi, 2010).

Globally, relatively few studies have examined disclosures in SACCOs or credit unions. Spiegel and Yamori (2004) examined the determinants of voluntary disclosures by small Japanese credit associations. The study established that small credit associations in Japan with more serious bad loan problems, higher leverage and less competitive pressure were less likely to provide voluntary disclosure. Hyndman and McKillop (2004) performed basic content analysis of the financial statements of credit unions in the U.K. and established that the annual reports of credit unions in the U.K. lacked quality. The study found that multiple accountability confusion, limited resources and expertise are possible explanations of low quality reports by credit unions in the U.K. The study also found little differences in financial accountability with respect to the size of credit unions in the U.K. Hyndman *et al.* (2004) performed an initial exploratory study on the role of financial disclosure in the discharge of accountability by credit unions in Ireland. The study revealed a low overall disclosure quality of credit unions in Ireland. The current study builds on prior studies by Spiegel and Yamori (2004), Hyndman and McKillop (2004) and Hyndman *et al.* (2004) by studying the determinants of disclosure levels in the SACCO sector.

1.1.2 Regional Perspective on Disclosure

A considerable number of disclosure studies have been carried out in Africa (Tsamenyi, Enninful-Adu & Onumah, 2007; Samaha & Dahawy, 2011; Aboagye-Otchere, Bedi & Kwakye, 2012; Momany, Al-Malkawi & Mahdy, 2014). Despite the limited studies on disclosure levels by organizations in Africa, the focus tends to be on non-financial, listed or large firms. Notably, few disclosure studies have focused solely on microfinance institutions (MFIs) and banks (Kribat *et al*., 2013; Quayes & Hasan, 2014). Regionally, there exists scanty literature on disclosure studies by SACCOs.

Tsamenyi *et al.* (2007) examined disclosure practices of companies listed on the Ghana Stock Exchange and found low disclosure level of below 60% by Ghanaian listed companies. Further, the study found that ownership structure, dispersion of shareholding, and firm size (measured by total assets and market capitalization) have significant effect on disclosure. Karim and Ahmed (2005) examined the extent of financial disclosure of firms in Bangladesh following the adoption of IASs and established an overall disclosure level of 39.75% with a range of 17% to 63%. Karim and Ahmed (2005) found that firm size, profitability, stock exchange security category, size of audit firm and the presence of an international affiliation, are significantly related to the extent of disclosure.

Kribat *et al.* (2013) investigated the degree of compliance with mandatory disclosure requirements by Libyan Banks and established an overall mean disclosure compliance of 54.45%. Kribat *et al.* (2013) found that while many items are disclosed on a regular basis, on average, barely more than half of all possible items appear in the annual reports. The study found higher compliance with regard to mandatory disclosure which was influenced by bank profitability. Hossain (2008) found an average disclosure level of 60% (with a range of 48% to 73%) for Indian banks. Other studies in Africa have established disclosure determinants such as profitability (Al-Bastaki, 1997; Owusu-Ansah, 2005; Samaha & Dahawy, 2011), size of the organization (Ahmed & Courtis, 1999; Khlif & Souissi, 2010), corporate governance (Mangena & Tauringana, 2007; Aboagye-Otchere *et al.*, 2012) and type of the auditor (Alsaeed, 2006; Khlif & Souissi, 2010). The present study examines the determinants of disclosure by SACCOs in Kenya, a country with a vibrant SACCO sector which has been ranked first in Africa. The study builds on disclosure studies in Africa by focusing on SACCOs, which have received minimal attention by researchers.

1.1.3 Local Perspective on Disclosure

Adopting higher disclosure compliance is beneficial in terms of promoting financial stability, both globally and nationally, reduces risk of failure by SACCOs, promotes economic growth and development and facilitates good governance and accountability (Osoro, 2015). Disclosure by private organizations in Kenya has been considerably lower compared to publicly listed companies (Bova & Pereira, 2012). The level of disclosure by SACCOs in Kenya, which are considered as private, has

been cited as low and cannot be benchmarked with most of the International Financial Reporting Standards (IFRS) (Irungu, 2013; Ngatia, Kyalo, & Kiragu, 2015). Despite the low level of disclosure in the private sector, especially SACCOS, few studies have examined the extent of disclosure and what motivates disclosure by organizations in the private sector. McFie (2006) studied the quality of reporting by 47 companies listed on the Nairobi Securities Exchange (NSE) and established that the level of compliance with IFRS by NSE companies is at an average of 96.74%. McFie (2006) also found that company size and shareholding are significant determinants of financial reporting. Mugucia (2005) found that the level of compliance with required disclosures by NSE companies was at 71.95%.

Barako (2007) examined the determinants of voluntary disclosures by companies listed on the NSE over 10 years. Using a disclosure index with 47 voluntary disclosure items, the study found that the level of voluntary disclosures by listed companies in Kenya is low. The study found that institutional ownership and firm size were important determinants of voluntary disclosures across four categories of information: general and strategic, financial, forward-looking and social and board. In another study, Barako and Brown (2008) examined corporate social disclosure by 40 commercial banks in Kenya and found a low level of social disclosure at 15%. The study found that board representation is useful in improving social disclosure. Bova and Pereira (2012) examined the factors that explain the heterogeneous compliance levels with International Financial Reporting Standards (IFRSs) for private and publicly listed firms in Kenya covering the years 2005-2007. Bova and Pereira (2012) found a positive association between leverage, foreign ownership, share turnover and IFRS compliance. The study established that the level of compliance to IFRS by private companies at 58.3% was lower compared to public companies at 71.1%. The study also showed that voluntary disclosure levels by private companies (31.3%) were lower than public companies (53.4%).

According to the United Nations Conference on Trade and Development (UNCTAD), the overall level of disclosure by Kenyan companies was 60% with insurance companies disclosure levels being 63%, banks 43% and other companies at 67% in 2006 (UNCTAD, 2006). The World Bank report on the observance of standards and codes found the level of compliance of companies with IFRS in Kenya to be very low

(WB, 2001). According to SASRA, only 60% of the 215 SACCOs had fully complid with the SASRA guidelines which included the preparation of financial statements and periodic reporting (SASRA, 2013). According to Osoro (2015), the challenges affecting the level of disclosure by SACCOs in Kenya include SACCOS' lack of awareness on IFRS and regulatory requirements, lack of accounting professional staff in SACCOs, financial constraints for training and purchase of IFRS materials by SACCOs, inappropriate information technology infrastructure, suspense reconciling amounts carried forward from previous years and capacity of audit firms. This study examined the influence of disclosure challenges by analyzing the significant determinants that influence the level of disclosure by SACCOs in Kenya.

1.1.4 Savings and Credit Co-operative Societies in Kenya

The terms SACCOs and credit unions have been used interchangeably in this study to refer to the same business organization. SACCOs are viewed as self-help co-operative financial organizations whose aim is to promote economic, social and cultural needs and aspirations of its membership and wider local communities through a mutually owned and democratically-controlled enterprise (Hyndman *et al.*, 2004; McKillop & Wilson, 2011). The membership in a co-operative is based on common bond, which is shared by savers and borrowers based on a community, organizational, religious or employee affiliation (World Council of Credit Unions (WOCCU), 2005). As mutual organizations, SACCO customers are both members and owners and consequently, the focus is on members and the benefits they derive from the union (McGrath, 2008). Being member-owned organizations, upholding accountability and transparency through the provision of adequate disclosures and proper governance to members and stakeholders is important for a SACCO's success (Quayes & Hasan, 2014).

In Kenya, a number of regulations have been enforced to regulate SACCO operations. These include the Co-operative Ordinance of 1931, the Co-operative Societies Ordinance of 1945, the Co-operative Societies Act, Cap 490, Laws of Kenya, the Co-operative Societies (Amendment) Act No. 2 of 2004 which amended the Co-operative Societies' Act No. 12 of 1997, The SACCO Societies Act No. 14 of 2008 (the Act) and the SACCO Societies Regulations, 2010 for deposit-taking SACCOs (the Regulations). The number of co-operatives in Kenya has grown from 1,834 in 1969 to 13,500 in 2013. Over time, registered SACCOs in Kenya had been operating front-

office services activities (FOSA) and taking deposits from the public as is the case with banks. This was in addition to their regular back-office service activities (BOSA). The Act of 2008 led to the creation of SASRA as a regulator for deposit-taking activities. Consequently, the SACCO Societies Regulations, 2010 for deposit-taking SACCOs (the Regulations) were created and commenced on 18 June 2010. Deposit-taking SACCOs were required to obtain licenses from SASRA and comply with the Regulations enacted in 2010. Those SACCOs that were already operating front-office services were granted a four-year grace period to grow their capital to the 10 million Kenya shillings threshold, among other regulatory requirements, to be licensed.

As of 31 December 2014, Kenya had 6,500 registered SACCOs of which 1,995 were active and filed audited annual returns with the regulators (SASRA, 2014). There were 215 deposit-taking SACCOs, of which 135 had been licensed by SASRA to operate front-office "bank-like" activities (SASRA, 2014). The remaining 80 deposit-taking SACCOs were in the process of being licensed to formally provide front-office services. According to SASRA (2013), the 215 deposit-taking SACCOs account for 78% of the assets and deposits in the SACCO sector. They also control 82% of the membership in Kenyan SACCOs. The penetration rate of SACCOs in Kenya in 2014 was relatively higher at 20.5% compared to the overall penetration rate in Africa at 6.9% and 8.2% globally (WOCCU, 2014). Being in a sector that serves 217 million members globally and 5.1 million members in Kenya (WOCCU, 2014), the interest and concerns of this membership base and consequently, regulators cannot be overlooked. As such, SACCOs are expected to provide adequate disclosures to their stakeholders about their activities and the effects of those activities on members and social welfare (Hyndman *et al.*, 2004; McGrath, 2008).

The prescription of the format and type of information to be disclosed by SACCOs is largely determined by legislation, the IFRSs in place, guidelines issued by the regulators, WOCCU and International Credit Union Regulators' Network (ICURN). In Kenya, the SACCO Act of 2008 and Co-operative Societies Act, Cap 490, Laws of Kenya require SACCOs to prepare accounts that conform to the IFRSs (Government of Kenya (GOK), 2008 (Revised, 2012)). In addition to IFRSs, WOCCU, through the ICURN provides guidelines focusing on disclosures relating to governance, service to

members, corporate social responsibility, consumer protection and financial stability (WOCCU, 2005). Since Kenya formally adopted IFRSs in 1999, there have been efforts aimed at improving financial reporting across various organizations. In total, 80 SACCOs have participated in the financial reporting excellence (FIRE) awards program between 2010 and 2014. The FIRE awards is a joint program organized by the Institute of Certified Public Accountants of Kenya (ICPAK), NSE and the Capital Markets Authority (CMA).

In one of the FIRE events in 2013, a former chief executive officer (C.E.O) of ICPAK noted "SACCOs in Kenya are grappling with lack of qualified and experienced accountants to keep their financial records, affecting the quality of reporting in the sector" (Irungu, 2013). The Ministry of Co-operative Development and Marketing (MOCDM) and auditors of financial statements also raised concerns on the dismal quality of disclosures by SACCOs in Kenya (Chavez, 2007). The present study on the level of disclosure by SACCOs in Kenya is particularly timely as the SACCO sector has experienced a series of regulatory changes between 2008 and 2010 aimed at improving governance, efficiency and protecting the resources of SACCO members.

1.2 Statement of the Problem

Disclosure by organizations is important in providing information to stakeholders to assist in decision making. Despite the decision usefulness of disclosure in the modern financial sector, concerns have been raised on the level of disclosure by SACCOs in Kenya (Irungu, 2013; SASRA, 2013; Ngatia, Kyalo, & Kiragu, 2015). Sile (2009) noted that most SACCOs do not accurately disclose their financial position as per the accepted accounting practices. An earlier impact study in 2006 cited poor financial disclosure practices as a major weakness in the SACCO sector in Kenya. The study found that SACCOs failed to complete and submit required financial statements and reports to regulators. SASRA (2013) found that only 60% of the SACCOs in Kenya have fully complied with the disclosure requirements stipulated by SASRA. Msuya and Maleko (2015) attributed the low level of disclosure to availability of resources, governance, poor loan asset quality and the capacity of audit firms.

In Kenya, corporate governance challenges have been reported in SACCOs and have been cited as a contributor to the low level of transparency and accountability by

SACCOs in Kenya. The strength of governance mechanisms in SACCOs has been questioned in light of the information SACCOs provide to stakeholders (Mugwe, 2012; Irungu, 2013; Olando, Jagongo & Mbewa, 2013; Okewo, 2013). Bova and Pereira (2012) found that the level of disclosure by private companies in Kenya is lower (58.3%) compared to the level of disclosure by public companies (71.1%). This depicts the relatively low disclosure by private companies and financial institutions in Kenya, where SACCOs reside. Despite the low level of disclosure, few studies on disclosure levels by SACCOs have been conducted.

Due to the low level of disclosure by SACCOs, this study undertook critical analysis of a broad spectrum of disclosures to identify, firstly, the extent of disclosure and what motivates the level of disclosure by SACCOs. The present study was motivated by the failure of SACCOs in Kenya to provide sufficient disclosures and the possible disadvantages of low disclosure levels such as member apathy and withdrawal due to reduced confidence in the SACCO. The study was also motivated by concerns from the regulators and the accounting professional body in Kenya (ICPAK) on the low level of disclosure and the possible deterrents for the low level of disclosure.

1.3 Research Objectives

This section provides an outline of the general and specific objectives for this study.

1.3.1 General Objective

The overall objective of the study was to examine the determinants of disclosure level by deposit-taking SACCOs in Kenya.

1.3.2 Specific Objectives

The study sought to address the following specific objectives:

1. To establish the influence of profitability on the level of disclosure by deposit-taking SACCOs in Kenya.
2. To analyze the influence of SACCO size on the level of disclosure by deposit-taking SACCOs in Kenya.
3. To examine the contribution of governance on the level of disclosure by deposit-taking SACCOs in Kenya.

4. To analyze the contribution of asset quality on the level of disclosure by deposit-taking SACCOs in Kenya.
5. To determine the influence of auditor type on the level of disclosure by deposit-taking SACCOs in Kenya.
6. To examine the moderating effect of the ICPAK guidelines on the relationship between the determinants of disclosure and disclosure levels by deposit-taking SACCOs in Kenya.

1.4 Research Hypotheses

The following hypotheses were tested in this study:

1. $H_0$1: Profitability does not influence the level of disclosure of deposit-taking SACCOs in Kenya.
2. $H_0$2: SACCO size does not influence the level of disclosure of deposit-taking SACCOs in Kenya.
3. $H_0$3: SACCO governance does not contribute to the level of disclosure of deposit-taking SACCOs in Kenya.
4. $H_0$4: Asset quality does not influence on the level of disclosure of deposit-taking SACCOs in Kenya.
5. $H_0$5: The type of auditor does not influence the level of disclosure of deposit-taking SACCOs in Kenya.
6. $H_0$6: The ICPAK guidelines did not moderate the relationship between the determinants of disclosure and disclosure levels by deposit-taking SACCOs in Kenya.

1.5 Significance of the Study

The findings in this study are relevant in various ways:

1.5.1 Existing and Potential SACCO Members

The study examined the level of disclosures by deposit-taking SACCOs in Kenya. This information is useful in guiding the constituent members of SACCOs in gauging the level of accountability by SACCOs in Kenya. The findings of the study are expected to assist in improving communication between SACCO management,

members, regulatory authorities and other users. The study highlighted the level of disclosures in SACCOs thereby assisting financial statement users to monitor trends in accountability and transparency of their SACCOs. Further, the findings of this study are useful in informing potential SACCO members when making economic decisions with regard to commitment of their funds in a particular SACCO.

1.5.2 SACCO Regulators and Policy Makers

This study was structured to establish, firstly, the level of disclosures by Kenyan deposit-taking SACCOs. Secondly, the study attempted to establish the moderating role of regulator-driven disclosure guidelines on the determinants of disclosures. By examining the level of disclosures by deposit-taking SACCOs, regulators are in a position to understand the current disclosure status. The heterogeneity in disclosure practices among deposit-taking SACCOs is useful to regulators in monitoring trends in accountability and transparency of deposit-taking SACCOs and co-operatives in general. The findings are also relevant in terms of assisting policy makers to develop informed mechanisms aimed at improving the quality of disclosure by SACCOs.

1.5.3 Researchers and Scholars

This study provides a rich description of the current status of financial and social disclosure not just in Kenya, but by extending the limited literature on disclosure by deposit-taking SACCOs in the wider East African region and Africa as a whole. By establishing what SACCO-specific characteristics drive financial and social disclosure, this highlights areas where efforts to improve disclosure regulation should be focused. Because of the scanty research in the field of SACCO disclosures, this study adds to the sparse literature on SACCO disclosures. Using a mixed methods research approach, the study provides insights on the determinants of financial and social disclosures by SACCOs in a developing country. Further, the study contributes to extant literature by examining the moderating influence of regulator-driven disclosure guidelines on the determinants of disclosure by SACCOs in Kenya.

1.6 Scope of the Study

The study targeted a census of 215 FOSA SACCOs operating in Kenya as of 31 December 2013. These SACCOs were dispersed countrywide. The unit of analysis

was the deposit-taking SACCOs which had a six-year continuous data over the period 2008-2013. The study examined five key determinants of disclosure, profitability, size, governance, asset quality and auditor type. The study also focused on the impact of the ICPAK disclosure guidelines released in 2010 on the relationship between the determinants of disclosure and disclosure levels.

1.7 Limitations of the Study

A number of limitations were encountered in the course of this study. Due to time and resource constraints, the study was limited to 215 deposit-taking SACCOs in Kenya. The census excluded other regular SACCOs. However, this allows further studies to examine disclosure behaviour in regular SACCOs.

The study experienced a relatively low response rate from the respondents to the questionnaire. This may have led to important information being omitted in the data analysis stage. The researcher made efforts to improve the response rate by visiting the targeted SACCOs within Nairobi and its environs in person and requesting the respondents to fill in the questionnaire. The researcher also utilized research assistants to reach out to the SACCOs. Further, the researcher reminded the respondents to fill in the mailed questionnaires through telephone calls and emails.

This study focused on disclosure (measured using a self-constructed index), which is an aspect of accountability and transparency by SACCOs in Kenya. Whereas the study focused on deposit-taking SACCOs in a developing country, care should be exercised in replicating the findings of the study to other economies. This is because, there are certain regulatory, cultural, institutional and country-specific factors that SACCOs in Kenya operate in, and these may be different in other economies. However, the study provides an impetus in understanding disclosure issues in SACCOs in a developing country context.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses both the theoretical and empirical literature on financial and social disclosure practices with emphasis on SACCOs. Five theories of disclosure were considered: stewardship, legitimacy, signaling, agency and stakeholder theories. The conceptual framework illustrating the relationships among the variables is also presented. The chapter also discusses the determinants of disclosure level. The chapter presents the linkages between theoretical and empirical literature to establish the existing relationships among the variables. The chapter concludes with a critique of the literature and gaps which form the basis of the current study.

2.2 Theoretical Literature Review

The study was anchored on the stewardship theory and borrowed from legitimacy theory, signaling theory, agency theory and stakeholder theory. Drawing from the five theories, five categories of disclosure determinants were derived and the dependent variable formulated. Stewardship and legitimacy theories guided the formulation of the dependent variable, disclosure level. Legitimacy, signaling, agency, and stakeholder theories informed the selection of the independent variables – profitability, size, governance, asset quality and auditor type.

2.2.1 Stewardship Theory

Stewardship theory can be traced back to psychology and sociology. According to Davis, Schoorman and Donaldson (1997), "a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized". It is a special case of accountability concerning the provision of financial statements to shareholders on the use made of their money, and whether the stewards properly managed the organization's assets and liabilities (Gray, Owen & Adams, 2009; Kribat *et al.*, 2013). In this regard, stewards are company managers and those charged with governance who protect and maximize the wealth of the owners. The roles of stewards should therefore be integrated as part of the

organization (Abdullah & Valentine, 2009). According to Haniffa and Cooke (2002), managers act in the best interests of the organization and owners. The stewards are satisfied and motivated when the organizational success is attained.

Stewardship theory emphasizes the need for executive management to ensure that the SACCO operates sustainably and provide members with timely loan disbursements, dividends, interest on deposits and safeguard their deposits (Daly, Dalton, & Canella, 2003). Stewardship theory is linked to corporate governance where directors are viewed as an organization's stewards. Under stewardship, the board of directors plays an important function especially the relationship between the chairperson and the CEO (Tricker, 1984). Owner interests will be safeguarded properly where the board chair is not influenced by the CEO and where the CEO has the same interests as the owners through an appropriately designed incentive compensation scheme (Donaldson & Davis, 1991). According to stewardship theory, boards should function effectively in discharge of their mandate (Haniffa & Cooke, 2002). Stewardship also involves the need to provide information to users and being answerable for one's conduct and responsibilities (Abu-Nassar & Rutherford, 1996).

Disclosure can be used as a mechanism to discharge stewardship responsibilities, and it therefore implies that if one party has a right to an account, the other party has a duty to give that account (Kribat *et al.,* 2013). A SACCO discharges its stewardship by publication and dissemination of its financial statements to its saving and borrowing members and regulators. The above distinction highlights stewardship and provision of information to relevant stakeholders as important aspects in accounting and accountability. Consequently, it follows that a consideration of the information needs of users would be necessary before the determination of what to disclose (Hyndman *et al.,* 2004). Stewardship theory has been criticized because, although it addresses some of the reductionist assumptions of agency theory, it suffers from being static. This is because it considers the relationship of principal-agent at one point in time and assumes that there is no learning by the individuals in the course of their interactions (Pastoriza & Ariño, 2008). Further, the stewardship theory presumes that one party has a right to know or a right to information, while most users do not have legal rights to full disclosure but basic access to publicly available information (Gray *et al.,* 2009)

Hyndman *et al.* (2004) recognized the importance of providing both financial and non-financial social information in discharging stewardship responsibilities to members of SACCOs. This importance is emphasized by the Canadian Institute of Chartered Accountants (CICA, 1984) where it stipulates that: "one has to consider who the users of financial statements are and what information would they find useful in making economic decisions". The present study therefore is an extension of the work by Hyndman *et al.* (2004) in terms of examining issues of stewardship by transition SACCOs in a developing country. In Kenya, SACCOs have played a significant role in terms of savings mobilization as financial intermediaries. Further, 43% of the country's Gross Domestic Product (GDP) is associated with the cooperative movement (Imungi, 2016).

The contribution of SACCOs to the economy and the growth in the SACCO sector necessitated the creation of regulations, which encompassed the information SACCOs should provide. The corporate governance challenges also experienced in the sector led to the establishment of a regulator to supervise FOSA SACCOs. Given the growth, expansion and opening up of the common bond in Kenyan SACCOs, stewardship has become an important consideration to ensure that member deposits are protected and that the SACCO managers provide adequate disclosures regarding the SACCO. Stewardship theory is relevant for the current study for the following reasons. First, it guided the formulation of a disclosure index which incorporates possible disclosure aspects by SACCOs. Second, stewardship theory informed the choice of governance as an independent variable.

2.2.2 Legitimacy Theory

Legitimacy theory can be traced back to Dowling and Pfeffer (1975) who argue that the social perceptions of an organization's activities should be reported in accordance with the expectations of the society. Suchman (1995) considers legitimacy as a perception that the actions of an organization are desirable, proper or appropriate within some acceptable social norms, values, beliefs and definitions. Legitimacy theory has widely been used as an attempt to explain social and environmental reporting practices of an organization in order to fulfil the social contract that enables them achieve their objectives (Branco & Rodrigues, 2006; Deegan & Blomquist, 2006; Islam & Deegan, 2008). Legitimacy assumes that an organization is expected to

match its values with societal values in order to access resources, and gain approval of its aims and place in the society and be guaranteed of continued existence (Magness, 2006). Lindblom (1994) explained that organizational legitimacy occurs when an entity's values are congruent with those of the larger social system. The need for the congruency between organizational actions and societies' value system is to ensure the organization survives in the market (Ullmann, 1985).

According to Luethge and Han (2012), social disclosure is the provision of financial and non-financial information relating to an organization's interaction with its physical and social environment, as stated in corporate annual reports or separate social reports. Luethge and Han (2012) posited that since the society gives legitimacy and status to business, the management should take societal needs into account. Legitimacy theory examines the social responsiveness of an organization to important issues in the society and the integration of an organization's objectives with those of all stakeholders in the organization. Legitimacy presupposes a contract between the organization and the society (Magness, 2006).

Legitimacy theory is seen as a means of explaining what, why, when and how certain items are addressed by an organization's management in their communication with outside audience (Magness, 2006). Since legitimacy theory is linked to the way a society perceives the organization, Cormier, Gordon and Magnan (2004) argued that managers are mandated to disclose information that influences economic decision-making. Lightstone and Driscoll (2008) posited that legitimization can occur through both mandatory and voluntary disclosures in the annual report. The theory has been criticized by its reliance on the social contract that is not binding in law – opponents argue that this social contract only exists in theory and that there are no real and direct sanctions on an entity that does not engage in socially responsible behavior (Dowling & Pfeffer, 1975; Suchman, 1995). Other opponents or legitimacy theory argue that the engagement in social and environmental activities by organizations, unless compelled to do so, is a way of expropriating resources from the organization, contrary to the expectations of the owners. For instance, Friedman (1970) argues that corporate social responsibility activities are an irresponsible use of corporate resources.

Legitimacy theory was used in the present study because it provides a rationale for establishing social and environmental disclosures by SACCOs. Since SACCOs are

seen as serving member interests only (Hyndman *et al.*, 2004; McKillop & Wilson, 2011), the present study aimed at examining whether SACCOs extend their legitimacy status by serving the larger society and providing social and environmental disclosures. The social and environmental disclosure themes examined were employee welfare, member welfare, products and services, community engagement and environmental conservation. Legitimacy theory was also been applied in the current study as it informed the variables under investigation. Gutierrez-Nieto, Fuertes-Callen and Serrano-Cinca (2008) argued that legitimacy theory envisages that a relationship exists between a company's size and its disclosure practices. This is because a larger organization carries out more activities, receives more attention from the public and has more shareholders who are concerned with its social programs than a smaller company.

2.2.3 Signaling Theory

Signaling theory originated from Spence (1973) and was advanced by Watts and Zimmerman (1986) who stipulate that the asymmetric information surrounding an organization and investors causes adverse selection. This is mitigated by disclosure, and providing signals to calm the market. According to Connelly, Certo, Ireland and Reutzel (2011), signaling theory is useful in describing disclosure behaviour when two organizations have access to different information. Under signaling theory, the signalers are insiders (e.g., executives or managers) who have information about an organization that is not available to outsiders. This information may be both positive or negative, and the signalers must decide on whether they should communicate this information to outsiders (Connely *et al.*, 2011).

When an organization reports an increase in profits, it is communicating that its future is promising and that investors should consider investing in it. According to signaling theory, well performing organizations tend to provide more disclosure (Lan, Wang & Zhang, 2013). This is seen as a way of differentiating themselves from other organizations in the industry. However, information asymmetry exists in a financial institution because managers know more about the organization than customers or members (in the case of SACCOs). Management is likely to disclose "good news" as opposed to "bad news" due to the value benefits associated with disclosing "good news" (Penman, 1980). Campbell, Shrives and Bohmbach-Saager (2001) argued that

non-disclosure can be a signal in itself. As such, managers are compelled to provide "bad news" because non-disclosure may serve as an adverse signal (Inchausti, 1997). Signaling theory has been criticized for its reliance on adverse selection, a phenomenon that is difficult to operationalize and prove empirically (Connelly *et al.*, 2011; Lan *et al.*, 2013).

According to Urquiza, Navarro, Trombetta and Lara (2010), size, profitability and growth are factors that influence an organization's decision to disclose information to avoid adverse selection. The level of information asymmetry is larger for big organizations who engage in more disclosure to mitigate adverse selection. Organizations with higher profitability also disclose more information to the stakeholders as a confidence building exercise and mitigate undervaluation of their shares (Sighvi & Desai, 1971). Under signaling theory, organizations with strong profitability have greater incentives to disclose more information compared to under-performing organizations. Providing more disclosure is also viewed as a signal of credibility of the reported earnings (Inchausti, 1997). Signaling theory has been found to explain mainly voluntary disclosure behavior by organizations (Urquiza *et al.*, 2010). Organizations tend to disclose more voluntary information than mandatory information to signal that they are performing better than their counterparts (Campbell, Shrives & Bohmbach-Saager, 2001).

Bini, Dainelli and Giunta (2011) established the presence of signalling mechanisms in voluntary disclosure in annual reports. Bini *et al.* (2011) found that more profitable organizations disclose a higher number of profitability indicators in the narrative section of the annual report. In this thesis, signaling theory informed the selection of variables such as profitability, size, asset quality and auditor type which are expected to influence the level of disclosure.

2.2.4 Agency Theory

According to Jensen and Meckling (1976), agency theory defines an agency relationship as a contract that arises when one or more persons (principals) engage another person (agent) to perform certain service on their behalf, which may involve delegating some decision-making authority to the agent. Aboagye-Otchere *et al.* (2014) argued that the basic agency conflict in modern firms arises due to separation

of ownership and management. The theory maintains that managers (agents) do not always act in the best interests of owners (principals). Instead, managers further their own self interests. This is further aggravated by the incomplete and asymmetric information between the principal and agent (Urquiza *et al.*, 2010). This leads to agency costs such as costs of monitoring managers, costs of preventing managers from harming owners' interests and residual loss - the difference in wealth due to actions not being carried out by the principals themselves.

According to agency theory, the main purpose of financial reporting is to monitor the quality of management. Aboagye-Otchere *et al.* (2014) noted that good corporate governance, transparency and disclosure practices are viewed as mechanisms of checks and balances to mitigate agency problems. Managers use disclosure to convince shareholders that they are acting optimally (Watson, Shrives & Marston, 2002). McFie (2006) argued that regulation and the forces of demand and supply determine the amount of information transmitted in the reporting process. Disclosure information is provided by the management who determine the quality and quantity of disclosure. The demand for the information disclosed lies with the users (McFie, 2006).

Agency theory presumes that information asymmetry may exist between managers and owners (Jensen & Meckling, 1976). To bridge the gap between managers and owners in relation to information asymmetry, managers are inclined towards providing more disclosure to convince the owners that they are acting optimally. This behaviour by managers is hastened if the owners exercise more control and monitoring (Watson *et al.,* 2002). In a SACCO setting, members are interested in knowing whether the SACCO has sufficient liquidity, asset base and profitable enough to guarantee them availability of loans and sustainable return on their investment. To reduce agency costs brought by information asymmetry, Aboagye-Otchere *et al.* (2014) argued that managers engage in improved transparency and disclosure practices.

Healy and Palepu (2001) documented that disclosure bridges the information gap between managers and owners. This involves the effective and periodic disclosure of firm-specific information, which is both quantitative and qualitative, on either a mandatory or voluntary basis. Agency theory has often been found to be inconsistent

with other theories such as the stakeholder theory. For instance, whereas agency theory argues that stakeholder interests require protection by ensuring independence in the board, stewardship theory advocates for shared incumbency in the roles of board chair and CEO (Donaldson & Davis, 1991). Further, while agency theory outlines a clear separation of interests between managers and owners at the objective level (Jensen & Meckling, 1976), the separation is debatable, since what motivates individual calculative action by managers is their personal perception (Donaldson & Davis, 1991).

Hyndman and McKillop (2004) argued that lack of pressure on managers to discharge accountability could lead to them pursuing their own interests at the expense of other stakeholders. In relation to credit unions, these "other" stakeholders are member-savers and member borrowers. Hyndman *et al.* (2004) posited that credit unions must provide accounting information to various stakeholders as part of accountability. The accounting information provided must be in accordance with prevailing IFRSs and pronouncements by the regulator. However, McGrath (2008) observed that credit unions have other stakeholders – the community, just like any other financial institution or corporation.

In this study, agency theory was useful in informing the determinants of disclosure by deposit-taking SACCOs such as size and profitability. Aboagye-Otchere *et al.* (2014) noted that due to relatively lower direct costs of disclosure and higher agency costs, larger firms are likely to disclose more information than small-sized firms. Jegers (2002), while utilizing agency based economic theory, identified an empirically testable hypothesis that larger not-for profit organizations will produce more accounting and auditing information. Watson *et al.* (2002) pointed out that agency theory can be used to explain the positive association between size and disclosure. According to Watson *et al.* (2002), larger organizations try to minimize agency costs which arise because of the conflicting interests of owners, managers and debt holders by providing more disclosure. Organizations with higher margins and profitability provide a higher level of disclosure in order to obtain and justify better contractual conditions. The managers of the organization will provide comprehensive disclosures to improve their compensation arrangements (Urquiza *et al.*, 2010).

2.2.5 Stakeholder Theory

Stakeholder theory was advanced by Freeman (1984) and posited that in line with the stakeholder approach, organizations are accountable to the owners as well as other stakeholders. Therefore, the contrasting interest of the various stakeholders has to be considered when providing disclosures. This is because, depending on the varying stakeholder interests, this can affect an organizations ability to achieve its goals (Freeman, 1984). Stakeholder theory is used to examine those groups to who an organization is responsible (Omran & Ramdhony, 2015). According to Boatright (2003), organizations operate for the benefit of the various interested parties in it. This includes owners, employees, customers, regulators, creditors and other stakeholders relevant to the organization. For instance, the owners have committed their capital to the business, employees have invested their time and intellectual capital, and customers have invested their trust and repeated business. Communities expect the organization to provide infrastructure, conserve environment and provide education to employees and the needy in the society (Graves, Waddock, & Kelly, 2001).

Stakeholder theory holds that business organizations should play an active role in the communities and societies in which they operate (Omran & Ramdhony, 2015). Stakeholder theory highlights the importance of all parties affected directly or indirectly by the organization's activities (Wearing, 2005). According to the managerial facet of the stakeholder theory, organizations can respond to stakeholders who have a direct economic impact upon the organization (O'Dwyer, 2003). The ethical facet of stakeholder theory provides that all stakeholders have a right to know about an organization's affairs at all times, and this can be achieved through providing the necessary disclosures (Deegan, 2013). Stakeholder theory has been criticized in that there are instances where it is difficult to identify all possible stakeholders in an organization (O'Dwyer, 2003; Wearing, 2005). In this study, the stakeholder theory was utilized to highlight the moderating influence of the regulatory-driven (ICPAK) guidelines on the level of disclosure.

As a summary of the theoretical literature, the study's main objective was to examine the determinants of disclosure level by SACCOs in Kenya. A number of theories on disclosure and why organizations provide disclosure have been advanced. This study adopted five disclosure theories namely: stewardship, legitimacy, agency, signaling

and stakeholder theories which were discussed in detail. For various reasons, the stewardship and legitimacy theories provided the rationale for identifying the types of disclosures SACCOs would be expected to provide which could be general, financial or social. The other three theories (agency, signaling and stakeholder) were useful in identifying the specific determinants of disclosure levels in a SACCO setting. The agency theory was useful in informing the use of corporate governance as a disclosure determinant. Signaling theory was instrumental in informing the selection of size, profitability and asset quality as potential disclosure determinants. Finally, the stakeholder theory was useful in informing the consideration of regulatory-driven disclosure guidelines and their influence on disclosure levels in SACCOs.

2.3 Conceptual Framework

Sekaran and Bougie (2013) viewed a conceptual framework as the foundation on which the entire research project is based. It is a logically developed, described, and elaborated network of associations among the variables deemed relevant to the problem situation and identified through such processes as interviews, observations, and literature survey (Kothari, 2009). According to Sekaran and Bougie (2013), the dependent variable is the variable of primary interest to the researcher. Kothari (2009) explained that an independent variable is one that influences the dependent variable in either a positive or negative way.

The moderating variable is one that has a strong contingent effect on the independent-dependent variable relationship (Dawson, 2013). A moderating variable can either be qualitative or quantitative. It has an interaction effect with the independent variable on the variance of the dependent variable and can change the strength and/or direction of a direct relationship. An intervening variable is one that surfaces between the time the independent variables start operating to influence the dependent variable and the time their impact is felt on it (Sekaran & Bougie, 2013).

The dependent variable in the present study was the level of disclosure by SACCOs, which is the variable of primary interest. The level of disclosure was measured using an unweighted disclosure index that comprised 112 items. The use of an unweighted disclosure index was consistent with prior studies such as Rouf (2011) and Bova and Pereira (2012). Using the disclosure index, a disclosure score was calculated using the

ratio of actual items disclosed to the maximum possible items in the disclosure index. The heterogeneity in the level of disclosure by SACCOs was explained by five independent variables namely: profitability, SACCO size, governance, asset quality and auditor type. The release of the regulator-driven ICPAK guidelines in 2010 was treated as a moderating variable. The associations among the independent, moderating and dependent variables are illustrated in Figure 2.1.

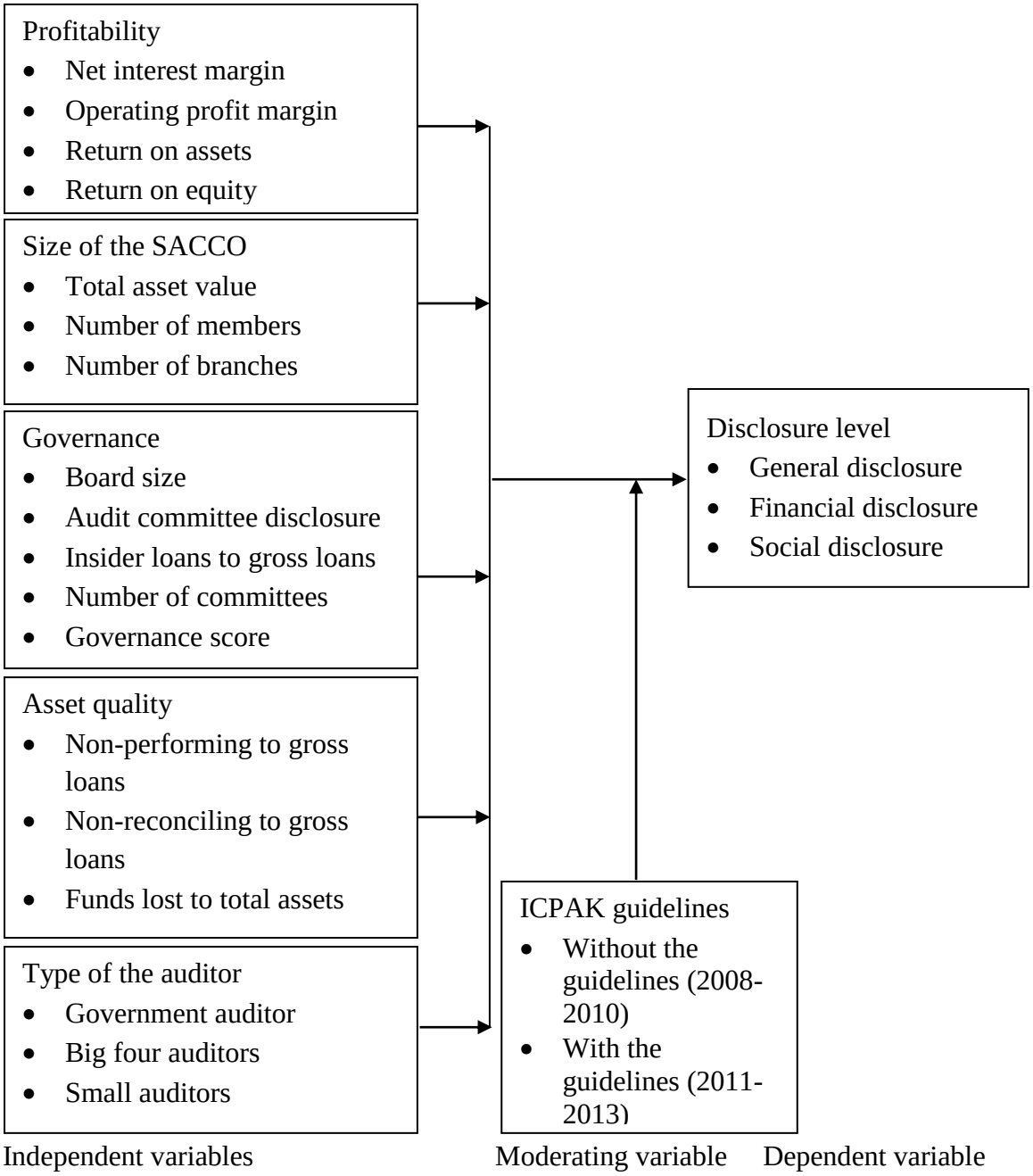

Figure 2.1: Conceptual Framework

The study's variables were operationalized as shown in Table 2.1. Operationalization of the variables is important as it helps to measure the variables quantitatively thus allowing the hypotheses to be tested. Sekaran (2003) posited that operationalization is useful in giving meaning to a concept that specifies the activities or operations necessary to measure it. Sekaran and Bourgie (2013) argued that a study's constructs must be operationalized to allow for the relationships among them to be tested. The research variables included measure of profitability, size, governance, asset quality, auditor type and ICPAK guidelines. The dependent variable was disclosure.

Table 2.1: Operationalization of Key Variables in the Study

Variable	Type	Measurement	Source	Supporting theory
Independent variables				
Profitability measures				
Net interest margin	Continuous	Ratio of (interest income less interest expense) divided by the value of gross loans.	Evans and Branch (2008)	Signaling
Operating profit margin	Continuous	Ratio of (total revenue less operating expenses) divided by total revenue.	Quayes and Hasan (2014)	Signaling
Return on assets	Continuous	Ratio of net income (after tax) divided by total assets.	Evans and Branch (2008), Quayes and Hasan (2014)	Signaling
Return on equity	Continuous	Ratio of net income (after tax) divided by total equity.	Evans and Branch (2008)	Signaling
Size of the SACCO				
Total assets	Continuous	Natural logarithm of the year end asset value.	Evans and Branch (2008), Spiegel and Yamori (2004), Karim and Ahmed (2005), Barako (2007), Quayes and Hasan (2014)	Legitimacy, agency.
Membership	Continuous	Natural logarithm of SACCO members at the	Evans and Branch (2008)	Legitimacy, agency, stakeholder

Variable	Type	Measurement	Source	Supporting theory
		year end.		
Number of branches	Continuous	Number of SACCO branches.	Menassa (2010)	Agency
Corporate governance				
Board size	Continuous	Number of board members in the SACCO.	John and Senbet (1998), Mangena and Tauringana (2007), Karamanou and Vafeas (2005)	Stewardship, agency
Insider lending	Continuous	Ratio of insider to gross loans.	GOK (2010)	Stewardship, agency
Number of committees	Continuous	Number of board committees disclosed by the SACCO.	Saxton *et al.* (2012).	Stewardship, agency
Governance score	Continuous	Ratio of actual items disclosed to the total possible disclosure items in the governance index in Appendix IX.	Kent and Zunker (2013), WOCCU (2005), WOCCU (2007).	Stewardship, agency
Disclosure of audit committee	Dichotomous	1 if the audit committee is disclosed and 0 if not.	Mangena and Tauringana (2007), Aboagye-Otchere *et al.* (2012).	Stewardship, agency
Asset quality				
Non-performing loans	Continuous	Ratio of non-performing to gross loans.	Peria and Schmukler (2001), Muasya (2008) and Spiegel and Yamori (2004).	
Non-reconciling loans	Continuous	Ratio of non-reconciling to gross loans.	Spiegel and Yamori (2004)	
Funds lost	Continuous	Ratio of funds disclosed as lost to total assets.	Spiegel and Yamori (2004)	
Auditor type				
Government auditor	Dichotomous	1 if the auditor is from the commissioner of co-operatives and 0 if otherwise.	Barako (2007), Khlif and Souissi (2010), Aboagye-Otchere *et al.*	Agency

Variable	Type	Measurement	Source	Supporting theory
Big four auditor	Dichotomous	1 if the auditor is among the list of big four auditors and 0 if otherwise.	(2012), Zainon *et al.* (2014).	
Small auditor	Dichotomous	1 if the auditor is not government or big four auditor and 0 if otherwise.		
Release of the ICPAK guidelines	Dichotomous	1 when the ICPAK guidelines are considered and 0 when the ICPAK guidelines are not considered.	ICPAK (2010)	Stakeholder
Dependent variable				
Level of disclosure	Continuous	Ratio of actual items to total possible items in the disclosure index.	Cerf (1971), Barako (2007), Kribat *et al.* (2013), GOK (2010) and ICPAK (2010).	Stewardship, legitimacy.

2.3.1 Profitability

Quayes and Hasan (2014) established that improved profitability in a microfinance (which included SACCOs) resulted in better financial disclosure. Kamwenji (2013) argued that improved compliance with IFRS disclosure requirements was positively associated with the profitability of the SACCO. Although profitability is viewed as a secondary objective in SACCOs, improved profitability may contribute to higher disclosure since it is a signal of financial strength. SACCOs reporting an increase in profitability communicate to the market about their stability, and if this is accompanied by a higher demonstration of transparency and accountability through enhanced disclosure, the SACCO attracts more members. However, there are other studies that have established a negative influence of profitability on compliance with mandatory disclosure (Bova & Pereira, 2012). Poorly performing organizations may engage in increased disclosure due to fear of sanctions from the regulator, especially if the disclosures are mandatory in nature. SACCOs have reported improved performance in terms of profitability over time, and this motivated an examination of

whether the trends in profitability have had an influence on the level of disclosure. This study therefore tested the following hypothesis.

$H_0$1: Profitability does not influence the level of disclosure of deposit-taking SACCOs in Kenya.

2.3.2 Size of the SACCO

The size of Kenyan SACCOs as measured by asset base has been growing over time (SASRA, 2014). This implies that the financial strength of SACCOs has been improving with SACCOs controlling over 78% of the sector's assets (SASRA, 2014). Alukwe, Ngugi, Ogollah and Orwa (2015) established a moderating influence of SACCO size on the relationship between SACCO governance and regulation compliance. This means that the level of compliance with regulatory requirements is dependent on the size of the SACCO. The positive influence of size on the level of disclosure has been established in prior studies such as Bova and Pereira (2012), Quayes and Hasan (2014) and Zainon, Atan, Wah and Ahmad (2014). Larger organizations engage in more disclosure because they have more membership, resources and experience a lower competitive disadvantage for disclosing more information. Bova and Pereira (2012) argued that large companies are likely to exhibit higher compliance with regulatory disclosures to avoid close regulatory scrutiny. Hyndman *et al.* (2004) did not find differences in disclosure levels by SACCOs of different sizes as measured by asset size. This finding is supported by prior studies that established insignificant influence of size on the level of disclosure (Samaha & Dahawy, 2011; Kribat *et al.,* 2013). This discussion led to the following hypothesis.

$H_0$2: SACCO size does not influence the level of disclosure of deposit-taking SACCOs in Kenya.

2.3.3 Governance

Weak governance mechanisms in SACCOs have raised concerns about the stewardship and transparency of SACCO managers and the board (Olando *et al.,* 2013). According to Sile (2009), most SACCOs do not comply with the requirement of having their financial statements audited, and they are not always available on a periodic basis. The failure to provide audited annual reports by SACCOs on a timely basis curtails transparency and weakens the governance mechanisms of SACCOs.

Alukwe *et al.* (2015) found a significant relationship between governance and regulation compliance. The study by Srairi and Douissa (2014) found that governance variables had a significant and negative effect on bank transparency. Yeh *et al.* (2012) posited that good corporate governance as manifested in the structure of the boardroom and ownership, is effective in improving the quality of reporting. Rouf (2011) established that governance characteristics such as board size, leadership and audit committees had a significant and positive influence on voluntary disclosure. Board transparency has also been found to have a significant influence on disclosure levels, with more transparent boards providing relatively more disclosure.

Kent and Zunker (2013) found that the adoption of a set of voluntary corporate governance mechanisms by companies has a positive influence on the extent of disclosure of employee-related information in the annual report. John and Senbet (1998) argued that the effectiveness of the board may be affected not only by its composition and size but also by its internal administrative structure. With regard to the SACCO board, the setup of appropriate committee structures, directors' qualifications, directors' remuneration, and rights and responsibilities of committee members lies with the management committee. The type of decisions taken by the management committee may determine the extent to which the SACCO's governance supports and facilitates the effective and efficient operation of credit unions (Hyndman *et al.,* 2004). Klein (1998) examined firm performance and its linkage with board composition. To achieve this objective, Klein (1998) investigated committee structure of boards and the directors' roles within these committees. Klein (1998) found that a committee structure with specialized roles enhanced board's productivity and monitoring capabilities. Organizations with weaker governance structure have also been found to have greater agency problems and poor performance (Saxton, Kuo & Ho, 2012).

In a SACCO-setting, the board of directors is elected from among the membership. The board is charged with the responsibility of ensuring sound and prudent management of SACCOs' affairs and the provision of adequate disclosures to enable members and regulators make well-informed decisions (Alukwe *et al.,* 2015). Since the SACCO board is elected from the SACCO members, board members are motivated to ensure that the co-operative is run properly and is accountable and

transparent to its members. SASRA (2014) laid out a set of corporate governance practices that must be upheld by SACCOs in Kenya, and it is on this framework that the current study borrows governance practices relevant for SACCOs. Due to the concerns raised on the level of transparency and accountability by SACCOs, the present study tested the following hypothesis.

$H_0$3: SACCO governance does not contribute to the level of disclosure of deposit-taking SACCOs in Kenya.

2.3.4 Asset Quality

The quality of loan portfolio in a SACCO has been found to have a significant influence on the level of disclosure (Spiegel & Yamori, 2008). In financial institutions, asset quality has been measured using the level of non-performing loans, which are classified into four categories depending on the number of days they are past due – watch (1-30 days), substandard (31-180 days), doubtful (181-360 days) and loss (over 360 days) (ICPAK, 2010; SASRA, 2014). Loans comprise about 60% of SACCO's assets, and if most of the loans are bad or non-performing, the SACCO may fail. In Kenya, all deposit-taking SACCOs are required to disclose the level of non-performing loans in the annual report.

Magali (2013) used non-performing loans to measure the asset quality of rural SACCOs in Kenya and their influence on default risk. Spiegel and Yamori (2004) found that SACCOs with poor asset quality as evidenced by bad loan problems are less likely to engage in higher disclosure levels. Lajili (2004) found that organizations disclosed more information on the quality of their assets as opposed to other categories of information. According to the SASRA report of 2014, the level of non-performing loans deteriorated from 4.72% to 5.73% in 2014, implying an increase in credit risk. This study examined whether asset quality (measured by non-performing loans, non-reconciling loans and funds lost) had any influence on the level of disclosure. The following hypothesis was therefore tested.

$H_0$4: Asset quality does not influence on the level of disclosure of deposit-taking SACCOs in Kenya.

2.3.5 Auditor Type

The International Standards on Auditing (ISA) and auditing regulation in many jurisdictions assert that it is the management's responsibility to prepare annual reports, as noted by Barako (2007). However, Khlif and Souissi posited that external auditors play an important role as intermediaries between firms, its owners and investors. Khlif and Souissi (2010) argued that the presence of an external auditor as a third party influences the amount of information disclosed especially when one of the "Big 4" auditing firms exerts such influence. Previous literature includes a number of studies that examined the relationship between disclosure and audit firms, but the findings are inconclusive.

Dunn and Mayhew (2004) provided evidence that an organization selects its auditors as part of its overall disclosure strategy, signaling the organization's decision to provide high quality disclosures. Wallace *et al.* (1994) found that larger audit firms may improve the quality of annual reports thereby getting their clients provide more disclosures. Given their larger client portfolio, it is easier for the big audit firms to ascertain their stronger independence, and exert more pressure on company managers to improve the level of transparency (Owusu-Ansah, 1998). Small audit firms (majority of who are usually local) may not have the power to influence the quantity of disclosures of their clients. Wallace and Naser (1995) argued that small audit firms would rather try to satisfy the needs of their clients to keep their job.

Wallace *et al.* (1994) further argued that larger international audit firms are subject to global standards in auditing and exhibit influence over their local counterparts because of their size and expertise in auditing. Zainon, Atan and Wah (2014) found that the presence of external auditors promotes better reporting practice. Khlif and Souissi (2010) established a positive association between audit firm and level of disclosure implying that large audit firms require more transparency from their clients. Karim and Ahmed (2005) found a positive relationship between disclosure level and size of the audit firm. The study by Alsaeed (2006) on Saudi firms suggested a significant relationship between the type of audit firm and level of disclosure. However, Samaha and Dahawy (2010) found that the type of auditor does not affect the level of voluntary disclosure by large companies listed on the Egyptian stock exchange. Likewise, Xiao *et al.* (2004) and Eng and Mak (2003) did not find a

significant association between audit firm size and the level of disclosure. The study therefore tested the following hypothesis.

$H_0$5: The type of auditor does not influence the level of disclosure of deposit-taking SACCOs in Kenya.

2.3.6 ICPAK Guidelines

Hyndman *et al.* (2004) observed that regulators are key stakeholders in the financial performance disclosure regulation and support framework. Further, regulators have significant influence and possibly power in terms of fostering and monitoring accountability. Taplin, Tower and Hancock (2002) argued that when non-compliance with financial performance disclosure regulations is observed, the bulk of the pressure and responsibility lies with the regulatory enforcement. Aljifri (2008) argued that the level of disclosures in the United Arab Emirates is more regulator-driven as opposed to market-driven. Depending on the strictness or laxity of the regulator, this can affect the extent to which firms comply with disclosure requirements. Spiegel and Yamori (2004) opined that since disclosure enhances market discipline, regulatory authorities attempt to design regulations and accounting standards to enhance the level of disclosure. Further, prior research has found that regulators and managers do not think that a specific guidance on the preparation of financial statements by credit unions is necessary (Hyndman *et al.*, 2004).

To assist SACCOs improve disclosure and enhance comparability, the ICPAK in collaboration with SACCO regulators issued guidelines with illustrative financial statements and disclosures for a model SACCO in November 2010 (ICPAK, 2010). The guidelines can be applied by any SACCO, whether deposit-taking or regular. These guidelines were developed by a team of auditors, representatives of SACCO regulatory bodies and academicians. The issuance of the ICPAK guidelines can be construed as an initiative by the regulators to improve the quality of disclosure by SACCOs. However, as decried in previous studies such as Hyndman *et al.* (2004), credit union managers did not express the need for guidance on the preparation of final accounts.

Notably, SASRA adopted the format of the ICPAK guidelines in the periodic mandatory disclosure reports for licensed deposit-taking SACCOs (SASRA, 2014).

However, unlicensed deposit-taking and regular SACCOs are not obligated to adhere to the format and the guidelines in the ICPAK guidelines. Likewise, no sanctions are placed against licensed deposit-taking SACCOs for not preparing their annual reports in line with the ICPAK guidelines. Currently, the adoption of the ICPAK guidelines in preparing the annual reports of SACCOs is left at the discretion of the management and those charged with governance.

This raises a debate as to whether the issuance of financial reporting guidelines to SACCOs by the ICPAK moderated relationship between disclosure level and the determinants of disclosures in SACCOs. Prior to the issuance of the ICPAK guidelines, concerns were raised on financial disclosure practices in a SACCO impact study by MOCDM, FSDT and WOCCU in 2006 (Chavez, 2007). The present study sought to examine whether the release of the ICPAK guidelines in November 2010 had a moderating influence on the relationship between disclosure level and the drivers of disclosure by deposit-taking SACCOs in Kenya. To achieve this, the following hypothesis was tested.

$H_0$6: The ICPAK guidelines did not moderate the relationship between the determinants of disclosure and disclosure level by deposit-taking SACCOs in Kenya.

2.4 Empirical Literature Review

2.4.1 Profitability

Quayes and Hasan (2014) analyzed the relationship between financial disclosure and the profitability of microfinance institutions over the period 1997 – 2006. The study utilized an ordered probit model to investigate the possible effect of financial performance on disclosure level of microfinance institutions in 75 countries. The study found that improved profitability resulted in better financial disclosure. As a departure from the study by Quayes and Hasan (2014), the present study examined the influence of profitability on SACCOs, which have different characteristics and objectives from microfinance institutions. Whereas SACCOs are member-owned financial institutions with charter limitations and regulated by SASRA in the case of Kenya, microfinance institutions are often limited liability companies, and in some

cases, regulated by the Central Bank. Kamwenji (2013) examined the effect of adoption of IFRS on the quality of accounting information of 34 deposit-taking SACCOs in Nairobi county. Using inferential statistics, the study argued that improved compliance with the IFRS can improve the performance of a SACCO. As an extension of the study by Kamwenji (2013), the present study examined the level of disclosure for all SACCOs distributed in 46 counties in Kenya. In addition, the current study examined a broad range of disclosure aspects, which included compliance with IFRS requirements among other disclosures.

Zainon, Atan, Wah and Ahmad (2014) examined the determinants of the extent of disclosure by 65 charity organizations in Malaysia for the year 2009. The study found profitability to be a significant determinant of disclosure. In contrast to the study by Zainon *et al.* (2014) on charity organizations, this study focused on SACCOs in Kenya. Using a random effects regression, Srairi and Douissa (2014) examined the internal and external factors influencing the transparency of 69 commercial banks in seven emerging countries (Egypt, Lebanon, Malaysia, Morocco, Thailand, Tunisia and Turkey) over the period 2006-2009. The study found a significant association between bank transparency and profitability as measured by the return on equity and return on assets. Since the study by Srairi and Douissa (2014) focused on commercial banks, the present study shifted focus on SACCOs whose activities and organizations are slightly different from commercial banks. For instance, the members of a SACCO are its customers while the customers of a commercial bank are diversified.

Bova and Pereira (2012) examined the determinants of compliance with IFRS by 46 private and 29 public companies over the period 2005-2006. The study found that the return on assets is negatively associated with compliance with Companies Act disclosure requirements. Since the study focused on private and publicly listed companies, the present study analyzed the influence of profitability on disclosure levels by SACCOs in Kenya. Kribat *et al.* (2013) examined the determinants of disclosure practices in the annual reports of 11 Libyan banks over the period 2002 to 2006. Using panel regression analysis and a disclosure score with 40 items, the study found that profitability is significant and positively associated with the level of disclosure. In a study on the linkages between corporate characteristics and voluntary

disclosure by 120 companies listed on Dhaka Stock Exchange, Rouf (2011) found that net profitability was negatively related with voluntary disclosure level.

Lan *et al.* (2013) examined the determinants of voluntary disclosure by 1066 Chinese firms listed on the Shanghai and Shenzhen Stock Exchanges. Using multiple regression analysis, the study found that more profitable organizations disclose more information than those with lower returns. The present study focuses on the determinants of disclosure levels by SACCOs in Kenya, which are not listed. Karim and Ahmed (2005) examined the determinants of disclosure by listed companies and found a significant positive relationship between bank profitability of bank and the overall financial disclosure. Samaha and Dahawy (2011) found that profitability significantly impacts the level of voluntary disclosure by large companies listed on the Egyptian stock exchange. Spiegel and Yamori (2004) established that financially weak credit associations are less likely to disclose voluntary information. Barako, Hancock and Izan (2006) examined the determinants of voluntary disclosure by listed companies in Kenya. Using multiple OLS analyses, the study found a negative association between the level of disclosure and profitability of an organization.

2.4.2 Size of the Organization

A number of studies in both developed and developing economies have found that the size of a firm has a positive relationship with the level of disclosure, with large firms disclosing more compared to the smaller firms (McFie, 2006; Barako, 2007; Bova & Pereira, 2012; Zainon *et al.*, 2014; Quayes & Hasan, 2014). Collectively, these studies argued that larger firms provided more disclosures because they have more ownership, resources and are likely to experience lower competitive disadvantage for disclosing more information. Msuya and Maleko (2015) examined the extent of IFRS compliance and challenges faced by 80 Tanzanian SACCOs in complying with the IFRS. Using a case study design, the study found that one of the financial reporting challenges SACCOs face included financial constraints. This meant that the extent of reporting is influenced by the financial resources of the SACCO. Quayes and Hasan (2014) examined the relationship between financial disclosure and profitability by 806 microfinance institutions operating in 75 countries. The study found that size of the MFI, measured by the logarithm of gross loans, was negatively associated with the level of disclosure. Compared to the study by Quayes and Hasan (2014), the current

study examined disclosure by SACCOs in Kenya and measured size using three proxies – assets, number of members and the number of SACCO branches.

McFie (2006) examined the determinants of disclosure by 35 companies listed on the NSE in Kenya during 2003. The study found that firm size was positively associated with disclosure level. As a departure from studies on listed companies in Kenya, the present study examined the determinants of disclosure levels by SACCOs, which are not listed on the NSE. Zainon *et al.* (2014) examined the determinants of the extent of disclosure by 65 charity organizations in Malaysia for the year 2009. The study found that charity size as measured by total assets was a significant determinant of disclosure. In the study by Bova and Pereira (2012) on the determinants of compliance with IFRS by 46 private and 29 public companies in Kenya over the period 2005-2006, firm size measured by total assets was positively associated with compliance with the IFRS and voluntary disclosures by public companies. Barako (2007) examined the determinants of voluntary disclosure by listed companies in Kenya and found that the size of a firm is positively associated with voluntary disclosure level.

Hossain and Hammami (2009) examined the determinants of voluntary disclosure in the annual reports of 25 companies listed in Doha Securities Market in Qatar. Using multiple regression analysis and a disclosure checklist with 44 voluntary items of information, the study found that company size was significant and positively associated with disclosure level. Using a disclosure index with 184 items, Hossain (2008) analyzed the extent of disclosure by 38 listed banks in India and found that size as measured by total assets was a significant determinant of disclosure by Indian banks. In the same context, Chipalkatti (2002) found a positive relationship between bank size and level of disclosure by banks in India. The present study examined the influence of size (measured by total assets, membership and number of branches) on the level of disclosure by SACCOs. Karim, Pinsker and Robin (2013) examined the influence of firm size on voluntary disclosure decisions concerning quantitatively immaterial non-financial information. The study examined the views of 136 managers and found that disclosure was positively linked to firm size.

Khlif and Souissi (2010) argued that large organizations have stronger incentives to disclose more such as economies of scale (Field, Lowry & Shu, 2005). Branco and

Rodrigues (2006) found that banks with higher visibility among consumers in terms of number of branches seemed to exhibit greater concern to improve the corporate image through higher social responsibility information disclosure. However, prior studies have excluded banks and other financial institutions on social performance disclosure (Domench, 2003; Branco and Rodrigues, 2006). This is because, Branco and Rodrigues (2006) argued that financial service sector organizations have lower direct environmental impact compared to other sectors such as chemicals, paper and pulp. However, financial institutions are seen as key facilitators of industrial activity which contributes to social wellbeing as has environmental impacts, whose impact must be assessed.

A study by Spiegel and Yamori (2004) on small credit associations in Japan found that size was positively associated with the level of disclosure. Spiegel and Yamori (2004) argued that larger credit unions have economies of scale in the calculation of financial information. The present study shifted focus to a broad range of disclosure aspects by SACCOs. Contrary to Spiegel and Yamori (2004), the size of the SACCO in this study was measured using total assets, membership and number of branches. Barako (2007) found that firm size is an important variable which positively influenced the level of voluntary disclosures across four categories of information, that is, general and strategic, financial, forward-looking or social and board information. Ahmed and Courtis (1999), Karim and Ahmed (2005) and Khlif and Souissi (2010) found a positive relationship between disclosure level and firm size. Luethge and Han (2012) found a positive relationship between firm size and social disclosure.

Interestingly, Hyndman *et al.* (2004) did not find striking differences in terms of credit union size (measured by asset size) and the quality of information disclosed in the financial statements. The study found little differences between three categories of credit unions (by size) and the level of financial disclosure. Aljifri (2008) and Kribat *et al.* (2013) did not find significant association between bank size and the extent of overall financial disclosure. Similarly, Samaha and Dahawy (2011) found that the size of an organization did not affect the level of voluntary disclosure among large companies listed on the Egyptian stock exchange. In another study, Stanwick and

Stanwick (1998) found an inverse relationship between the firm's size and its social responsiveness.

2.4.3 Governance

Alukwe *et al.* (2015) examined the constraints to regulation compliance by deposit-taking SACCOs in Kenya. Using a sample of 108 deposit-taking SACCOs, the study used logistic regression analysis and found a significant relationship between governance and regulation compliance. The present study shifted focus to the level of disclosure by deposit-taking SACCOs, with emphasis on both compliance to both mandatory and voluntary disclosure requirements. Srairi and Douissa (2014) utilized a random effects regression to examine the internal and external factors influencing the transparency of 69 commercial banks in seven emerging countries (Egypt, Lebanon, Malaysia, Morocco, Thailand, Tunisia and Turkey) over the period 2006-2009. According to the findings, governance variables showed that ownership concentration had a significant and negative effect on bank transparency. In contrast to the study by Srairi and Douissa (2014), the present study examined the contribution of a composite governance score in SACCOs on the level of disclosure.

Kent and Zunker (2013) examined the influence of corporate governance on the level of disclosure of employee-related information by 970 listed companies in Australia for the period 2004. Using a disclosure index and ordinary least squares regressions, the study found that the voluntary adoption of corporate governance mechanisms by Australian companies was associated with improved disclosure of employee-related information in the annual reports. As a departure from the study by Kent and Zunker (2013), the present study examined the contribution of individual corporate governance variables as well as a composite governance score in SACCOs on the level of disclosure. Further, whereas Kent and Zunker (2013) examined one period, the present study examined disclosure level over a six-year period. Rouf (2011) examined the linkages between governance attributes and the extent of voluntary disclosure for 120 companies listed on the Dhaka Stock Exchange in 2007. Using ordinary least squares regression and an unweighted disclosure index, the study found that governance characteristics (board size, leadership and audit committees) positively influenced the level of voluntary disclosure. Compared to the study by Rouf (2011), the present study analyzed the joint contribution of a number of

governance characteristics on the level of disclosure by SACCOs in Kenya over a six-year period.

Hossain (2008) found board composition to be a significant and positive determinant of disclosure levels by listed banks in India. Hossain (2008) utilized a disclosure index with 184 items. Instead of focusing on the individual aspects of governance, the present study examined the influence of a composite governance score, which included 16 disclosure items, on the level of disclosure by SACCOs in Kenya. Yeh *et al.* (2012) posited that good corporate governance as manifested in the structure of the boardroom and ownership, was effective in improving the quality of reporting. Gordon, Henry and Palia (2004) showed the relevance of board transparency through related party transactions and insider lending disclosures. The size of the board has an impact on the level of disclosure due to the following reasons. According to John and Senbet (1998), large boards are characterized with problems of communication, coordination and decision-making. These problems lead to less efficient and effective managerial monitoring (Saxton *et al.,* 2011). Larger boards have been found to have more contact with public, thereby attracting more funds (Olson, 2000). Further, large boards have greater capacity for monitoring (John & Senbet, 1998).

The presence of an audit committee in a SACCO's board or management committee has an impact on disclosure practices (Mangena & Tauringana, 2007). Where an organization's management and owners are dispersed, an audit committee serves as a monitoring mechanism to improve the quality of information flow from managers to owners (Barako *et al.,* 2006). Audit committees exist to monitor the financial reporting practices and reduce agency costs (Karamanou & Vafeas, 2005). An audit committee helps maintain the quality of financial information disclosure and control systems (Barako *et al.,* 2006). According to Karamanou and Vafeas (2005), a positive association between the presence of an audit committee and the level of disclosure exists since audit committees monitor and supervise the quality of reporting. Aboagye-Otchere *et al.* (2012) found a significant positive relationship between the presence of accounting and/or finance expert(s) on the audit committees and corporate disclosure practices of listed firms in Ghana.

In a SACCO setting, corporate governance is primarily driven by the membership who during the annual general meeting (AGM) delegate responsibilities to the

management committee (the board). Further, governance is particularly important in SACCOs since there is no marketplace for co-operative "shares". As such, the board or the AGM of the co-operative has the ultimate decision on accountability and transparency matters (Borgström, 2013). Since the SACCO board is elected from its membership, as board members, they are motivated to ensure that the co-operative is run properly and is accountable and transparent to its members. In furtherance of accountability and transparency, the SACCO Act of 2008 required SACCOs to disclose any insider lending which should not be in excess of 10% of the core capital (GOK, 2008).

2.4.4 Asset Quality

In the financial services sector, a number of indicators are used as measures of asset quality. One of the commonly used measures is the ratio of non-performing to gross loans (Evans & Branch, 2008; Muasya, 2008). The ratio measures the proportion of loans that a financial institution might have to write-off as losses (Peria & Schmukler, 2001; Muasya, 2008). Higher levels of non-performing loans negatively impact performance, and this may affect the level of disclosure depending on what the management intends to signal to the market. The disclosure of a growing level of non-performing loans may be perceived as negative news and inability of the management to reduce credit risk. For an organization to disclose information such as a growing level of non-performing or bad loans, the management should be prepared to deal with stakeholder reaction to such information (Deegan & Blomquist, 2006; McCombs & Stroud, 2014).

The disclosure of information regarding asset quality of an organization may impact an organization's disclosure intensity. Rational firms may wish to disclose this information due to pressure to disclose so as to avoid investor unrest or lawsuits (Spiegel & Yamori, 2004). In a study on the experience of banks in Argentina, Chile, and Mexico during the 1980s and 1990s, Peria and Schmukler (2001) found that depositors discipline financial institutions by withdrawing deposits and requiring higher interest rates when they perceive negative behavior by the managers. Lajili (2004) found that disclosing firms provided more proprietary information (for example, asset quality) compared to non-disclosing firms. As an extension of Lajili (2004)'s proposition, present study examined whether the proprietary information

provided by SACCOs (in terms of non-performing assets, non-reconciling loans and funds lost) had any influence on the level of disclosure.

Spiegel and Yamori (2004) examined the impact of bad loans as a determinant of the level of voluntary disclosure by 416 small credit associations in Japan in 1996 and 1997. Using OLS and probit regressions, the study found that small credit associations in Japan with more serious bad loan problems were less likely to provide voluntary disclosures. The present study extended Spiegel and Yamori (2008)'s study by examining the contribution of asset quality on the level of disclosure by SACCOs in a developing country, Kenya.

Spiegel and Yamori (2004) acknowledged the difficulty in establishing the impact of news quality on the decision to disclose. However, all SACCOs in Kenya were mandated to provide disclosures regarding non-performing loans in accordance with the SACCO Act of 2008 and the SACCO Regulations of 2010. Therefore, the disclosure of bad loans was anticipated in annual reports of SACCOs. The Act required SACCOs to make adequate provisions for known and probable losses likely to occur as required by regulations and ensure that the SACCO society maintains a positive image. The present study examined the influence of asset quality as measured by the ratio of non-performing loans to gross loans on a broader spectrum of disclosures by SACCOs in Kenya. The study also introduced other measures of asset quality such as the ratio of non-reconciling to gross loans and the ratio of funds lost to total assets, and their influence on the level of disclosure.

2.4.5 Auditor Type

The International Standards on Auditing (ISA) and auditing regulation in many jurisdictions assert that it is the management's responsibility to prepare annual reports (Barako, 2007). However, Khlif and Souissi (2010) posited that external auditors play an important role as intermediaries between organizations, their owners and investors. Khlif and Souissi (2010) argued that the presence of an external auditor as a third party influenced the amount of information disclosed especially when one of the "big four" auditing firms (KPMG, PwC, Deloitte and Ernst and Young) exert such influence. Prior literature on the influence of auditors on the level of disclosure has produced inconclusive results. Zainon, Atan, Wah and Ahmad (2014) examined the

determinants of the extent of disclosure by 65 charity organizations in Malaysia for the year 2009. The study found that the existence of an independent auditor was a significant determinant of disclosure level. Contrary to the study by Zainon *et al.* (2014) on charities, the present study examined the influence of auditor type on the level of disclosure by SACCOs.

Dunn and Mayhew (2004) provided evidence that an organization selected its auditors as part of its overall disclosure strategy, signaling the organization's commitment to provide high quality disclosures. Wallace *et al.* (1994) examined the influence of auditor type on level of disclosure by companies in Spain. Using multivariate regression analysis, the study found that larger audit firms improved the quality of disclosure in annual reports of their clients. Wallace *et al.* (1994) further argued that larger international audit firms are subjected to global standards in auditing and exhibited influence over their local counterparts because of their size and expertise in auditing. Given their larger client portfolio, it is easier for the big audit firms to ascertain their stronger independence, and exert more pressure on company managers to improve the level of transparency (Owusu-Ansah, 1998). Small audit firms (majority of who are usually local) may not have the power to influence the quantity of disclosures of their clients. The present study extended the study by Wallace *et al.* (1994) by examining the influence of three auditor types (government, small and big four) on the level of disclosure.

Zainon, Atan and Wah (2014) examined the determinants of disclosure level by 101 non-profit organizations (NPOs) in Malaysia. Using a disclosure index and multivariate analyses, the study found that the presence of external auditors promoted better reporting practice. The present study shifted focus on the influence of auditors on the level of disclosure by SACCOs, which are profit-oriented. Khlif and Souissi (2010) analyzed the association between disclosure and seven corporate characteristics which included audit firm size as one of the characteristics. Using a meta-analysis technique, Khlif and Souissi (2010) analyzed a sample of 16 articles published between 1997 and 2006 and established a positive association between the type of audit firm and level of disclosure implying that large audit firms require more transparency from their clients. The present study performed an empirical analysis to

establish the contribution of auditor type on the level of disclosure by SACCOs in Kenya.

Karim and Ahmed (2005) utilized multiple linear regression analysis and an unweighted disclosure index comprising of 411 items on 188 annual reports for Bangladeshi companies in the period 2003. The study examined the association between disclosure level and a number of corporate characteristics, which included auditor type. Karim and Ahmed (2005) found a positive relationship between disclosure level and size of the audit firm. The study by Alsaeed (2006) on Saudi firms suggested a significant relationship between the type of audit firm and level of disclosure. However, Samaha and Dahawy (2011) found that the type of auditor did not affect the level of voluntary disclosure by large companies listed on the Egyptian stock exchange. Likewise, Xiao *et al.* (2004) and Eng and Mak (2003) did not find a significant association between audit firm size and the level of disclosure. Whereas prior studies have studied the influence of two auditor types on disclosure (big four and non-big four), the present study analyzed the influence of three types of auditors on disclosure, that is, big four, small and government auditors.

2.4.6 The ICPAK Guidelines of 2010

Ngatia *et al.* (2015) examined the influence of management training on compliance with IFRS by 47 SACCOs in Nyeri County. Using regression analysis, the study found that the SACCO regulator, SASRA had a significant influence on the level of disclosure by SACCOs. The study recommended that SASRA should make it mandatory for SACCO managers to attend meetings organized by the ICPAK to improve their level of understanding on disclosure requirements. The present study examined the moderating effect of the regulator-driven ICPAK disclosure guidelines on the association between the determinants of disclosure and disclosure levels of SACCOs.

Hyndman *et al.* (2004) analyzed the level of compliance with 16 mandatory financial disclosure items by credit unions in Ireland. The study found that the level of disclosure by credit unions in Ireland was weak, and this could partially be attributed to inadequate regulatory efforts aimed at improving disclosure by credit unions. Hyndman *et al.* (2004) argued that regulators are key stakeholders in the financial

performance disclosure regulation and support framework. Further, regulators have significant influence and possibly power in terms of fostering and monitoring accountability. Interestingly, the study by Hyndman *et al.* (2004) found that regulators and managers did not think that a specific guidance on the preparation of financial statements by credit unions was necessary. The present study sought to examine whether the regulator-driven ICPAK guidelines on disclosure had any influence on the level of disclosure by SACCOs in Kenya.

Taplin, Tower and Hancock (2002) analyzed the level of compliance with International Accounting Standards (IAS) by companies in six Asia-Pacific countries. The study found higher compliance levels with disclosure issues (95.5%) compared to measurement issues (77.7%). This implied that regulatory forces lead to significant improvements in disclosure levels. Taplin *et al.* (2002) argued that when non-compliance with financial performance disclosure regulations was observed, the bulk of the pressure and responsibility lied with the regulatory enforcement. Aljifri (2008) examined the determinants of the level of disclosure in the annual reports of 31 companies listed in the United Arab Emirates for the year 2003. Using denominator-adjusted disclosure-indices, weighted least squares and a weighted one-way analysis of variance (ANOVA), the study found that the level of disclosures by companies in the United Arab Emirates was regulator-driven as opposed to market-driven. Depending on the strictness or laxity of the regulator, this affected the extent to which firms complied with disclosure requirements. Spiegel and Yamori (2004) argued that since disclosure enhances market discipline, regulatory authorities attempted to design regulations and accounting standards to enhance the level of disclosure.

To assist SACCOs improve disclosure and enhance comparability, the ICPAK, in collaboration with SACCO regulators issued guidelines with illustrative financial statements and disclosures for a model SACCO in November 2010 (ICPAK, 2010). The guidelines can be applied by any SACCO, whether deposit-taking or regular. These guidelines were developed by a team of auditors, representatives of SACCO regulatory bodies and academicians. The issuance of the ICPAK guidelines is construed as an initiative by the regulators to improve the quality of disclosure by SACCOs. However, as decried in previous studies such as Hyndman *et al.* (2004), credit union managers did not express the need for guidance on the preparation of

final accounts. Notably, SASRA adopted the format of the ICPAK guidelines in the periodic mandatory disclosure reports for licensed deposit-taking SACCOs (SASRA, 2014). However, unlicensed deposit-taking and regular SACCOs are not obligated to adhere to the format and the guidelines in the ICPAK guidelines. Likewise, no sanctions are placed against licensed deposit-taking SACCOs for not preparing their annual reports in line with the ICPAK guidelines. Currently, the adoption of the ICPAK guidelines in preparing the annual reports is left at the discretion of the management and those charged with governance.

This raises a debate as to whether the issuance of financial reporting guidelines to SACCOs by the ICPAK moderated the determinants of disclosure by SACCOs. Prior to the issuance of the ICPAK guidelines, concerns were raised on financial disclosure practices by SACCOs (Chavez, 2007). The present study sought to examine whether the release of the ICPAK guidelines in November 2010 moderated the relationship between disclosure determinants and the level of disclosure by deposit-taking SACCOs in Kenya.

2.5 Critique of Literature Reviewed

Msuya and Maleko (2015) examined the extent of IFRS compliance and challenges faced by Tanzanian SACCOs while the present study examined the level of disclosure with regard to both IFRS and other voluntary disclosures. Further, the present study examined what motivated the level of disclosure by SACCOs in Kenya. Ngatia *et al.* (2013) focused on the contribution of training on the level of compliance with IFRS by SACCOs in Nyeri County. The present study examined other possible determinants of the level of disclosure by a larger sample of 202 deposit-taking SACCOs in Kenya. Olando *et al.* (2013) examined the contribution of SACCO's stewardship on the growth of SACCOs in Kenya, with specific focus on SACCOs in Meru County. The sample examined included both active and dormant SACCOs. The present study examined a census of deposit-taking SACCOs operating in Kenya as of 2013. The study by Kamwenji (2013) only focused on compliance with IFRS by SACCOs operating within Nairobi County. The present study examined a census of all deposit-taking SACCOs operating in Kenya with a focus on compliance with IFRS requirements among other disclosure aspects. Further, whereas Kamwenji (2013) did not focus on the determinants of the level of disclosure, the present study examined

five categories of determinants of disclosure, profitability, size, governance, asset quality and auditor type.

Quayes and Hasan (2014) studied the influence of profitability as a determinant of disclosure in microfinance institutions over the period 1997 – 2006. The sample utilized included 112 cooperatives and SACCOs selected globally, with only 13 from Kenya. Further, the study focused on both cooperatives and SACCOs, which have different characteristics. The study by Quayes and Hasan (2014) examined one aspect of disclosure, financial disclosure but failed to study the specific and detailed items under financial disclosure. In addition, the study did not examine the influence of auditor type and asset quality and determinants of disclosure level. Using a disclosure index with 112 items, the present study examined detailed disclosure aspects under general, social and financial categories. Zainon *et al.* (2014) examined the extent of disclosure by charity organizations for a single period, 2009. The current study examined disclosure level and determinants over a six-year period. Studying disclosure levels for an extended period is useful in determining the heterogeneity in disclosure and the factors that explain the heterogeneity in disclosure over time.

Magali (2013) studied default risk by rural SACCOs in Tanzania while the present study focused on the determinants of disclosure level by SACCOs in Kenya. Bova and Pereira (2012) studied the levels of compliance with the Companies Act, IFRS and voluntary disclosures by companies listed on the NSE. The study by Bova and Pereira (2012) relied extensively on the disclosure scores provided during the annual FiRe awards organized by the ICPAK. The present study shifted focus to SACCOs which contribute significantly to the economy's GDP and the social welfare of the citizens. Kribat *et al.* (2013) examined the determinants of disclosure levels by Banks in Libya with a focus on size, profitability and age. The present study extended the determinants to include broader categories of profitability, size, governance, asset quality and auditor type.

Hyndman *et al.* (2004) studied the level of financial accountability of SACCOs in Ireland. A mixed-methods approach was taken, where quantitative analysis of disclosure data was performed and qualitative analysis of interview responses was performed. The study utilized a brief disclosure index with 16 items, which were mainly drawn from financial aspects. The study failed to examine the determinants of

the level of disclosure level using multivariate analysis over an extended period. Spiegel and Yamori (2004) focused on voluntary disclosures of bad loans by Japanese small credit associations. Further, Spiegel and Yamori (2004) studied the disclosure of bad loans over a two-year period only, while the present study examined detailed disclosure aspects over a six-year period.

2.6 Summary of the Literature

A growing body of literature examined the determinants of disclosures in large, listed and commercial banks. Disclosure theories have been developed to explain what determines the level of disclosure by organizations. This study discussed five theories that have been advanced to explain disclosure behaviour in organizations and the determinants of disclosure. The five theories helped in providing a framework within which disclosure level and associated determinants in SACCOs can be examined. The study then generated constructs which formed the conceptual framework for the study on which the study was anchored. The variables in the study were operationalized through detailed review of relevant empirical literature aligned to the problem statement and the objectives of the study. Based on the theoretical and empirical literature review, it was evident that disclosure by organizations is still a potential aspect for further research, in terms of sectoral, cultural or country-specific basis. Disclosure theories were replicable in different settings ranging from large, private or public to small organizations in various jurisdictions. Further empirical studies are necessary to test the theories and models and provide more rationale for disclosure by organizations. This will be useful in developing sector-specific disclosure guidelines that consider cultural and country-specific needs.

2.7 Research Gaps

A review of literature established that whereas majority of disclosure studies have focused on large or publicly listed companies, less research has been carried out in organizations in the private sector, especially in SACCOs. The literature review showed that SACCO disclosure research has been low despite the contribution of SACCOs towards the economy and the well-being of individuals and the society in general. As a result, the current study aimed at providing knowledge relating to the level of disclosure by deposit-taking SACCOs in a developing country characterized

by SACCOs in the transitional stage. Both general, financial and social dimensions of disclosure were examined to understand the current status of disclosures provided by deposit-taking SACCOs. As an extension of disclosure studies in credit unions by Hyndman *et al.* (2004) on credit unions in Ireland, Spiegel and Yamori (2004) on small credit associations in Japan, Ngatia *et al.* (2013) on SACCOs in Kenya and Msuya and Maleko (2015) on SACCOs in Tanzania, the present study sought to fill gaps in literature in the following ways.

The present study developed a disclosure index with 112 disclosure items compared to Hyndman *et al.* (2004)'s disclosure index which had 16 items. The 16 disclosure items focused on financial aspects. As an extension of Hyndman *et al.* (2004)'s study, an examination of general, social and environmental disclosures was performed. The items of disclosure studied in the present study were drawn from prior studies on disclosures in other contexts, the disclosure guidelines issued by the ICPAK, WOCCU and those contained in the SACCO regulations. Finally, the study by Hyndman *et al.* (2004) failed to examine the determinants of disclosures which were a focal point in this study. The present study examined five categories of disclosure determinants which included profitability, size, governance, asset quality and auditor type.

Spiegel and Yamori (2004) focused on credit associations classified under the nascent stage while the current study focused on disclosure practices by transition-stage SACCOs in a developing economy. Hyndman *et al.* (2004) argued that the developmental stage of a credit union impacts the type and quality of disclosures. In addition, the present study explored additional and determinants of disclosure practices which included profitability, governance, asset quality, auditor type and the moderating influence of the regulator-driven ICPAK guidelines on the relationship between disclosure level and the determinants of disclosure.

Third, the period examined by Spiegel and Yamori (2004) comprised of two years (1996 and 1997) while the present study considered an extended period covering six years. Fourth, whereas Spiegel and Yamori (2004) focused on the level of bad loans as an indicator of asset quality, the current study extended the scope of asset quality to encompass non-performing loans, non-reconciling loan balances and funds lost due to misappropriation or fraud. Finally, whereas Spiegel and Yamori (2004) focused on

voluntary disclosures, the present study focused on a broad spectrum of disclosure aspects which encompassed both mandatory and as well as voluntary disclosures by SACCOs in Kenya. The present study examined five categories of determinants of disclosure level by SACCOs in Kenya, which is an extension of the study by Ngatia *et al.* (2015), who focused on management training only as a determinant of compliance with IFRS by SACCOs in Nyeri County. The present study extended the study conducted by Msuya and Maleko (2015) by examining a detailed level of compliance with 112 disclosure items, which included IFRS and other disclosures.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research design, research philosophy, population, census, data collection and analysis are discussed. According to Kothari (2009), an appropriate research methodology should be adopted which explains the technical aspects of the research procedures in an understandable format. The chapter discusses the applicability of the chosen research design in addressing the objectives of the study. The chapter also discusses primary and secondary data collection methods and how data obtained from both sources were analyzed. Finally, the chapter specifies the regression model used in analyzing secondary data. In this study, the moderating effect of the ICPAK guidelines on the determinants of disclosure was examined. In line with Kim, Kaye and Wright (2001), the moderating effect of the ICPAK guidelines was examined using regression analyses.

3.2 Research Design

The present study adopted a descriptive research design. Descriptive research design was adopted because the study entailed an investigation of the determinants which explain disclosure behaviour by deposit-taking SACCOs in Kenya. Descriptive research design also enabled the researcher to obtain information about the current status of the phenomena (that is, disclosure) and explain its association with the variables in the study. McFie (2006) and Barako (2007) utilized the descriptive research design in their studies on disclosure by companies listed on the NSE. In this study, an analysis was performed on the relationships that existed between the level of disclosure of financial and social information and five categories of possible determinants: profitability, size, governance, asset quality and auditor type.

3.3 Research Philosophy

The study employed an ontological research philosophy paradigm with positivist epistemological assumption. According to Baikie (1993), ontology is viewed as "the science or study of being". It deals with studying the nature of reality, which can be

measured. There are two important aspects of ontology: objectivism (or positivism) and subjectivism. Positivism advocates for the application of methods of the natural science to study social reality and beyond (Bryman & Bell, 2011). Saunders, Lewis and Thornhill (2009) viewed positivism as a research paradigm that is likened to an objective analyst who interprets data without adding value to its outcome. According to Bryman and Bell (2011), objectivism asserts that social phenomena and their meanings have an existence that is independent of social actors.

In this study, positivism was adopted to guide the study. According to the positivist approach, a deterministic view of nature was adopted and a nomothetic methodology applied. A nomothetic methodology enables the researcher to apply statistical techniques to test hypotheses and analyze research data collated using quantitative research techniques, such as questionnaire surveys. A positivist - inductive reasoning was applied to make conclusions from the analysis performed.

3.4 Population of the Study

Saunders *et al.* (2009) defined a population as the entire group of individuals, events or objects having a common observable characteristic. For the purposes of this study, the target population was all Kenyan SACCOs. These SACCOs comprised both BOSA and FOSA SACCOs that accept deposits and provide loans throughout the country and are under the SACCO Act of 2008. The reason for selecting this population is because SACCOs are classified under the financial services sector which is comprised of private entities whose disclosure levels have been found to be low (Bova & Pereira, 2012). In addition, the impact assessment report by Chavez (2007) found that SACCOs are grappling with financial reporting challenges, with some SACCOs failing to disclosure their financial position appropriately. In total, there were 6,841 SACCOs in Kenya as of 31 December 2013 as per the Commissioner of Cooperatives (2013). These SACCOs are dispersed countrywide.

3.5 Sample and Sampling Process

In this study, a census of all deposit-taking SACCOs in Kenya was used. A census, also referred to as complete enumeration, is a study of every unit, in a population (Kothari, 2009). Out of the 6,841 SACCOs in Kenya, 215 are FOSA SACCOs and

regulated by SASRA. The remaining 6,621 SACCOs are BOSA and are under the supervision of the Commissioner of Cooperatives. For the purposes of this study, all registered 215 FOSA SACCOs as of 31 December 2013 were targeted as shown in Table 3.1. Therefore, no sampling technique was used to select the number of deposit-taking SACCOs.

Table 3.1: Distribution of Deposit-taking SACCOs

Category of SACCOs	Census	Percentage
Licensed deposit-taking SACCOs	135	63%
Un-licensed deposit-taking SACCOs	80	37%
Total	215	100%

Source: SASRA and Commissioner of Co-operative lists of Kenyan deposit-taking SACCOs as of 31 December 2013

3.6 Data Collection Instruments

The study used both primary and secondary data. Secondary data from the audited annual reports were hand collected and keyed into a spreadsheet with the main variables under examination. To corroborate the findings of data obtained from audited annual reports of SACCOs in the census, a semi-structured questionnaire was also utilized to collect primary data. The questionnaire was addressed to the senior managers in each of the 215 deposit-taking SACCOs. The researcher indicated that senior SACCO staff members involved in disclosure decisions such as the C.E.O, finance manager, senior accountant and internal auditor could fill in the questionnaire. The questionnaire contained both "open-ended" and "closed" simple and short questions as recommended by Sekaran and Bougie (2013) and was divided into two parts. Part 1 captured general information while part 2 captured questions addressing each of the six research objectives in the present study.

3.7 Data Collection Procedure

Secondary quantitative data, which was the main source of data for the present study, were hand-collected from the audited annual reports of the 215 deposit-taking

SACCOs in Kenya. The data were obtained from the two regulators that is, SASRA and the Commissioner of Co-operatives. The period covered was three years before 2010 and three years after 2010. The split in the period was to allow a comparison of disclosure levels before and after the release of the ICPAK guidelines in 2010. The length of period chosen is consistent with studies such as McFie (2006); Aboagye-Otchere *et al.* (2012) and Kribat *et al.* (2013) who examined disclosures for periods covering more than five years.

A disclosure index played a key role in establishing the level of disclosure by SACCOs in the census which formed the dependent variable in this study. Hassan (2012) defined a disclosure index as a detailed and comprehensive list of selected items that might be expected to be disclosed in an organization's annual report. The use of a disclosure index was pioneered by Cerf (1963) and has since been employed in various studies over the last four decades. Kribat *et al.* (2013) observed that a disclosure index can contain mandatory and/or voluntary items of information. Kribat *et al.* (2013) further noted that the index can incorporate information items reported in one or more disclosure instruments such as annual reports, interim reports, social and environmental (or sustainability) reports. Given the central role of the disclosure index in the study, a careful consideration of the disclosure items was taken. While disclosure indices can be weighted or un-weighted, the current study employed the un-weighted disclosure index for the following two reasons.

First, assigning weights to a disclosure index introduces a degree of bias (Firth, 1979). This is because the level of usefulness of each disclosure item is not absolute but varies with the user, industry, country and time of the study (Hassan & Marston, 2010). Second, Chow and Wong-Boren (1987) observed that weights may not represent real economic consequences to the subjects whose opinions are aggregated. Thus, they may not reflect consistent disclosure items across subjects over time. However, Maali, Casson and Napier (2006) noted that the unweighted index may not reflect the decision usefulness of the items in the index. In applying the un-weighted disclosure index approach, dichotomous scores were used with a 1 awarded if a disclosure item was provided and a 0 awarded in the case of non-disclosure of a particular item. A disclosure score was then calculated based on the actual items

disclosed as a proportion of the possible disclosure items in each category for each SACCO over the period 2008-2013.

For the purposes of this study, a disclosure index capturing both general, financial and social disclosures by deposit-taking SACCOs was utilized. The disclosure items were derived from the relevant legislation on SACCO disclosure, ICPAK and WOCCU guidelines, previous studies and those items which are regularly reported by SACCOs. The overall disclosure index consisted of 112 disclosure items as presented in Appendix III.

Primary data were used to support the results of secondary data analyses. The primary data were collected using a semi-structured questionnaire. The questionnaire was posted to each of the deposit-taking SACCOs in the census. A self-addressed envelope with pre-paid postage was also sent to the respondents to facilitate the return of the filled in questionnaire. Where respondents were located within Nairobi and its environs, questionnaires were hand-delivered by the researcher and the assistants. Reminders were sent out at specific periods after questionnaires were dispatched to the respondents. Sekaran and Bougie (2013) observed that the main advantage of mail questionnaires is that a wider geographical area can be covered in the survey and a better response rate.

3.8 Pilot Study

Oppenheim (1998) posited that when questionnaires have been constructed, they should initially be issued to a selected group of respondents, improved and then issued again to the intended respondents. This is to ensure that they serve their intended purpose (Kothari, 2009). Sekaran and Bougie (2013) explained that a pilot study helps in ensuring that the questions are understood by respondents and correctly filled in. A pilot study also reveals issues such as wording problems, ambiguity or problems with measurement (Oppenheim, 1998). Hertzog (2008) indicated that samples as small as 10 to15 per group are sufficient for pilot studies. Isaac and Michael (1995) suggested 10 to 30 participants while considering the time, costs and practicality of the exercise. In this study, the questionnaire was issued to ten randomly selected SACCOs for piloting purposes.

Thomas, Nelson and Silver (2011) recommend two-staged pilot study. The first stage involves asking colleagues or acquaintances to provide feedback on the questionnaire. The second stage involves requesting respondents who are part of the intended population to fill in the questionnaire as well as provide feedback. To ensure that the questionnaire developed met its objective, it was tried through two pre-testing stages. First, the document was issued to a selected group of five MBA students within JKUAT's Nairobi Campus and two colleagues and their feedback was obtained on the format, content, understandability, importance of items, and feasibility of adding or deleting questions. The next phase involved issuing the questionnaire to senior managers of 10 randomly selected deposit-taking SACCOs from the list of 215 SACCOs. The feedback obtained was reflected in the revised questionnaire. The responses provided were also subjected to item analysis to test whether the items were measuring what they intended to measure.

3.8.1 Reliability Test

According to Sekaran and Bougie (2013), the reliability of a measure is established by testing for both consistency and stability. To address the reliability of the data collection instrument for the study, questions were adopted from previous studies such as Hyndman and McKillop (2004), Hyndman *et al.* (2004) and McFie (2006) and tailored to reflect the present study's objectives. Further, the questions in the questionnaire were structured to address the objectives of the study, thereby maintaining content validity. Before collecting data using the questionnaire, research assistants were trained on how to administer the questionnaire. Consistency indicates how well the items measuring a concept hang together as a set. The Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. To test the reliability of the questionnaire and the disclosure index used in this study, Cronbach's alpha was computed.

3.8.2 Validity Test

To address the validity of the disclosure index, the items in the disclosure index were adopted from prior studies on disclosures such as Hyndman *et al.* (2004), Spiegel and Yamori (2004), McFie (2006), Maali *et al.* (2006), McGrath (2008), Barako and Brown (2008) and Menassa (2010), Aboagye-Otchere *et al.* (2012) and Kribat *et al.* (2013), which have been tested and have been utilized in other studies in the area. The

comprehensiveness of the index during the test-retest stage was discussed with a staff member at SASRA who is actively involved in supervision of deposit-taking SACCOs. Further, the index was also shared with an accounting advisory professional working with a big four audit firm who is actively involved in financial and sustainability reporting and auditing. In addition, two independent coders, who were both CPAs (one in level II (intermediate) and the other in level III (final)), were trained by the researcher on how to collect and code data from the audited annual reports.

The coders were provided with the disclosure index and were taken through on how to practically capture the relevant disclosure items from the annual reports into the index. The entire annual report was read first before coding took place. This was to ensure that no item of disclosure was omitted during coding. Two rounds of coding were performed. The first round, which involved data collection from SASRA offices, took place between November and December 2014. The second round, which took place at the co-operatives registry within the Commissioner for Co-operatives offices, took place from late December 2014 to the end of January 2015.

The coding exercise was closely coordinated by the researcher who reviewed the accuracy and completeness of the coding exercise on a weekly basis. The researcher was also involved in confirming (on a sample basis) the coding performed on a census of annual reports at the end of the coding exercise. Overall, the coding exercise took three months and was concluded in January 2014. Any discrepancies found were resolved. At the time of coding the disclosure index, financial data were also hand-collected from the annual reports. After collecting data from the annual reports of the SACCOs, the researcher checked the completeness of the data and made visits to the co-operatives registry to fill in any missing data during early February 2015.

3.9 Data Processing and Analysis

Sekaran and Bougie (2013) suggested that after data are obtained through questionnaires, interviews, observation, or through secondary sources, they need to be edited, coded and blank responses dealt with. Data collected from both primary and secondary sources were cleaned, coded, classified and sorted before further analyses were performed. Descriptive statistics were used to perform univariate analysis on the

determinants of financial and social disclosure practices by deposit-taking SACCOs in Kenya based on data obtained from the annual reports and questionnaires. In this regard, quantitative data collected were analyzed using descriptive statistics such as the mode, median, mean, range, skewness, kurtosis and standard deviation. The descriptive statistics were used to show the level of disclosure and the characteristics of deposit-taking SACCOs being studied.

Multivariate analyses on quantitative data collected from audited annual reports were also performed. According to Kothari (2009), multivariate analysis is adopted when the researcher has one dependent variable which is presumed to be a function of two or more independent variables. The objective of this analysis is to make a prediction about the dependent variable based on its covariance with all the concerned independent variables. The calculated disclosure scores were panel regressed against the identified independent variables obtained from deposit-taking SACCOs' annual reports over the 2008-2013 period using SPSS version 24 statistical software. Inferential tests of hypotheses like p-value and ANOVA were used to establish the significant determinants of disclosure practices by deposit-taking SACCOs. Panel data were used in the present study because according to Hsiao (1985), examining both cross-sectional and time series properties in panel data helps improve the efficiency of the econometric estimates and excludes bias arising from the existence of individual effects. The dependent variable, disclosure level, was sub-divided into general, financial and social disclosures as demonstrated in Appendix III. To test the five hypotheses developed in this study (hypotheses 1 to 5), the following regression model was utilized:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu_i \qquad \text{(Equation 1)}$$

Where Y = Disclosure, and the disclosure determinants are: governance (X_1), asset quality (X_2), size (X_3), auditor type (X_4) and profitability (X_5).

To test the sixth hypothesis on the moderating effect of the ICPAK guidelines on the relationship between disclosure level and its determinants, moderation analysis was performed. In line with Kim *et al.* (2001), moderation was examined using regression equations which incorporated the independent variables (X_i) and the interaction variable (X_i*Z). The regression equations utilized took the form:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu_i$ (without the interaction variable, without consideration of the ICPAK guidelines) (Equation 2)

$Y = \beta_0 + \beta_1 X_1 * ICPAK + \beta_2 X_2 * ICPAK + \beta_3 X_3 * ICPAK + \beta_4 X_4 * ICPAK + \beta_5 X_5 * ICPAK + \mu_i$ (with the interaction variable, when the ICPAK guidelines are considered)

(Equation 3)

Where Y = Disclosure, and each independent variable is reflected by the variable X_i (i = 1, 2… 5). The moderating variable, ICPAK represents the ICPAK guidelines and is a dichotomous variable which takes the value of 1 when the ICPAK guidelines are considered (i.e., in the period 2011-2013) and 0 when the ICPAK guidelines are not considered (i.e., in the period 2008-2010). The interaction variable X_i*ICPAK reflects the moderating influence of the ICPAK guidelines. The change in the adjusted coefficient of determination (R^2) was used to confirm or reject the moderation hypothesis.

In all regressions, β_0 was the constant (intercept), β_1, β_2, β_3, β_4, β_5 were the corresponding coefficients for each respective independent variable and μ_i is the error term which reflects those variables or factors which were not considered in the regression equation. The level of disclosure by a deposit-taking SACCO (Y) was obtained by computing a disclosure score as follows:

$$\text{Level of disclosure} = \frac{\text{Actual items disclosed}}{\text{Total possible items in the index}}$$

The regression models were tested to establish how well they fit the data. The significance of each independent variable was also tested using p-values and t-values. In this study, the benchmark for the p-value was 0.05. If the p-value is less than or equal to 0.05, the null hypothesis is rejected in favour of the alternative hypothesis. If the p-value if greater than 0.05, the null hypothesis is not rejected. Since linear regression model was used in this study, the model was tested for the violation of the assumptions of linear regression. The tests performed included linearity, normality, homoscedasticity, autocorrelation and multicollinearity of the variables.

The measures of central tendency used on the descriptive analysis of the variables were mean and the median. The normality of the dependent variable was also tested

using skewness and kurtosis as measures of dispersion. Data obtained from the questionnaires were analyzed using descriptive such as frequencies and percentages. Content analysis was performed on qualitative responses provided by the respondents. According to Sekaran and Bougie (2013), content analysis entails quantification of the qualitative information obtained through a systematic analysis of the relevant information, thereby providing a means for submitting it to statistical analysis.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The study sought to examine the determinants of disclosure levels by deposit-taking SACCOs in Kenya. This chapter presents the results of the analyses of data collected from the audited annual reports of SACCOs and questionnaires. Data from the audited annual reports were provided by SASRA and the Commissioner of Cooperatives. Questionnaires were issued to senior managers of SACCOs who are charged with reporting. The findings have been presented under the following sections response rate, pilot study results, demographic characteristics, descriptive statistics, regression analysis, hypothesis testing and moderation. The study focused on deposit-taking SACCOs before and after the release of the ICPAK guidelines in 2010. Since the study involved an analysis of panel data over a six-year period, fixed effects panel regressions were carried out to establish the significant determinants of disclosure by deposit-taking SACCOs in Kenya.

4.2 Response Rate

After excluding 13 SACCOs due to missing data for some of the years (3 SACCOs) and pilot testing (10 SACCOs), secondary data, which was the main data source, were collected from 202 SACCOs for each of the six-years, resulting into a balanced panel dataset comprising 1,212 observations over the period 2008-2013. In addition to the data collected from audited annual reports, primary data were collected using questionnaires administered between January 2015 and April 2015. Out of the 202 questionnaires issued, 108 were returned. However, two questionnaires had incomplete information and were not considered for analysis. This resulted in 106 questionnaires with useable responses and this yielded a response rate of 52.5%. Saunders, Lewis and Thornhill (2007) suggested that a response rate of between 30% and 40% was adequate for analysis. Sekaran (2003) posited that a response rate of 30% was sufficient. Hager, Wilson, Pollack and Rooney (2003) and Babbie (2004) posited that a response rate of 50% was acceptable to analyze and publish the findings. Therefore, the response rate of 52.5% in this study was considered adequate

for analysis. Table 4.1 illustrates the response rate for both secondary (annual reports) and primary data (questionnaire) sources.

Table 4.1: Response Rate

	Annual Reports		Questionnaires	
	Number	Percent	Number	Percent
Licensed SACCOs	133	66%	88	83%
Unlicensed SACCOs	69	34%	18	17%
Total	202	100%	106	100%

4.3 Results of Pilot Study

A pilot study was conducted to pretest the data collection tool. The questionnaire was administered to 10 senior managers in charge of reporting drawn from 10 deposit-taking SACCOs which were part of the census. The 10 SACCOs were selected randomly to ensure an equal chance of being selected. Analysis of the data collected during the pilot test revealed that one of the variables initially included in the conceptual framework (that is, value of SACCO deposits) exhibited some multicollinearity since its variance inflation factor was greater than 5, the threshold suggested by Hair *et al.* (2013). Therefore, the value of SACCO deposits was dropped from the model. Other amendments made to the questionnaire included the wording of some of the questions to improve their understandability.

Cronbach's alpha was used to test the reliability of the questionnaire. Cronbach's alpha estimates the internal consistency by determining how well the items hang together coherently. Sekaran and Bougie (2013) observed that the closer the Cronbach's alpha is to 1, the higher the internal consistency reliability of the data collection instrument. According to the results in Table 4.2, the Cronbach's alpha for the questionnaire was 0.866 which depicted a high level of reliability. Therefore, none of the variables in the questionnaire were dropped. Consistent with Waleed (2014), the Cronbach's alpha was also used to test the internal consistency of the disclosure index to confirm whether the different items in the index complemented each other. According to the results in Table 4.2, the Cronbach's alpha for the overall disclosure index is 0.942 which depicted a high level of reliability for the index. The Cronbach's

alpha for general, financial and social disclosures was 0.953, 0.747 and 0.552 respectively, which depicted a sufficient level of reliability for the indices.

Table 4.2: Reliability Analysis for Pilot Data

Aspect	Number of items	Average inter-item covariance	Scale reliability coefficient
Items in the questionnaire			
Profitability	6	0.005	0.864
Size	7	0.022	0.853
Governance	7	0.005	0.904
Asset quality	6	0.012	0.786
Auditor type	4	0.004	0.897
ICPAK guidelines	6	0.003	0.883
Overall reliability	36	0.013	0.866
Items in the disclosure index			
General information	44	0.056	0.953
Financial disclosure	40	0.006	0.747
Social disclosure	28	0.005	0.552
Overall disclosure	112	0.017	0.942

4.4 Demographic Characteristics

This section described the general characteristics of the respondents in terms of their gender, job title, experience and qualifications.

4.4.1 Gender of the Respondents

The findings in Figure 4.1 show the distribution of the respondents to the questionnaire in terms of gender. The findings showed that majority of the respondents were male (79%, N = 84) while female respondents comprised 21% (N = 22). This illustrated that women were under-represented in the management of SACCOs, especially with regard to the accountancy profession. The finding was consistent with McKillop, Briscoe, McCarthy, Ward and Ferguson (2003) who found evidence of gender imbalance in the composition of credit union boards and the management.

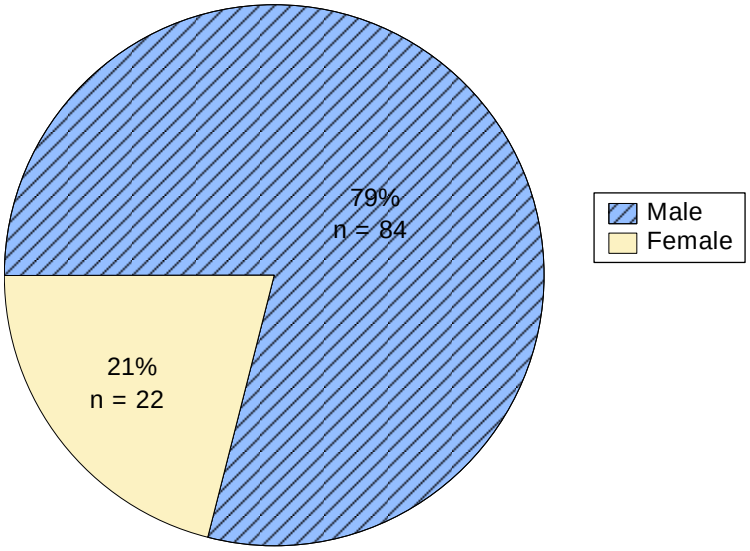

Figure 4.1: Gender of the SACCO Officers

4.4.2 Main Occupation of the Respondents

The findings in Figure 4.2 show the occupation of the respondents to the questionnaire. According to the findings, accountants comprised majority of the respondents (38%) followed by SACCOs' Chief Executive Officers (29%) and internal auditors (13%). According to the findings, 9% of the respondents were finance managers, 6% comprised of other respondents (including credit, marketing and statutory managers), 3% of the respondents were board members while 2% were chairpersons of SACCO boards. The respondent profile resonated with Kamwenji (2013) whose respondents were mainly drawn from accounting and finance departments (72.4%) of SACCOs surveyed. The findings demonstrated that the respondents to the questionnaire were senior officials who had considerable knowledge of disclosure matters in the SACCO. This helped in improving the reliability of the information provided by the respondents.

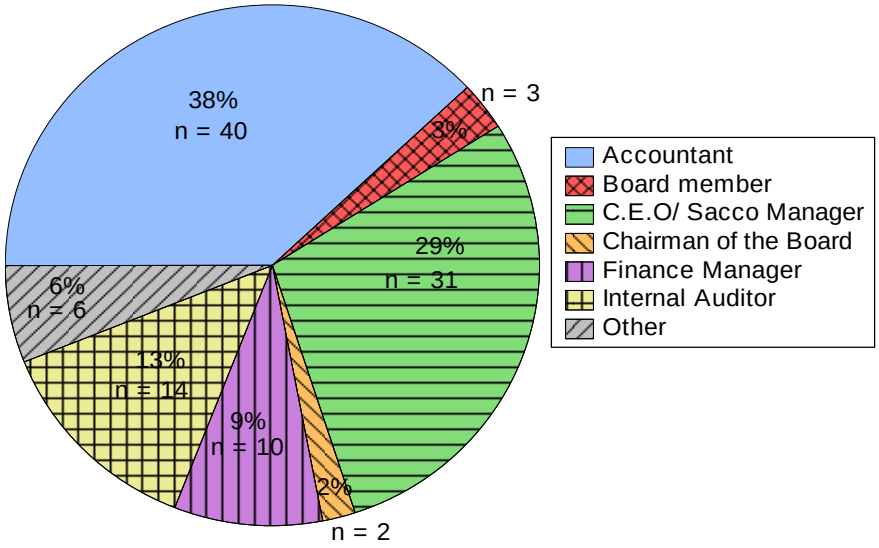

Figure 4.2: Occupation of the Respondents

4.4.3 Length of Experience of the Respondents

The findings in Figure 4.3 show the length of experience of the respondents. The findings revealed that majority of the respondents (39%) had worked in the SACCO for 1 to 5 years followed by 30% of the SACCO officials who had worked for 5 to 10 years. The findings showed that 12% of the respondents had worked in the SACCO for 10 to 15 years while 14% had worked in the SACCO for over 15 years. This illustrated that most of the respondents had considerable experience with only 5% having less than 1 year of experience in the SACCO. This showed that SACCOs had employees who possessed relevant experience needed to cope with the complexity of deposit-taking SACCO operations and products. The complexity in SACCO operations and products is as a result by the diversification of SACCOs into "bank-like" products and the growth in member base. The findings concurred with Msuya and Maleko (2015) and Ngatia *et al.* (2015) and illustrated that SACCOs are keen on ensuring that they have more experienced staff who can contribute towards improvement in the level and quality of disclosure in the sector.

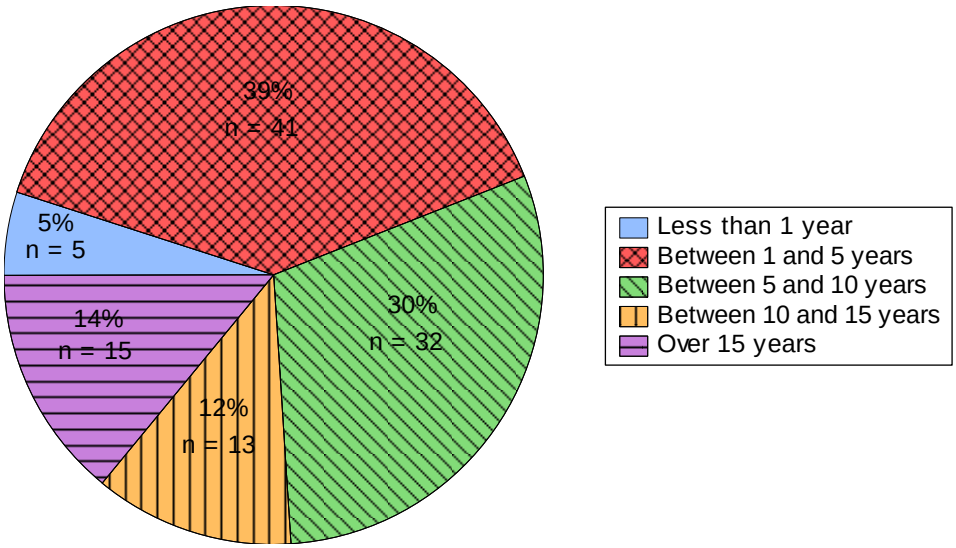

Figure 4.3: Length of Experience of the Respondents

4.4.4 Professional and Academic Qualification of Respondents

The findings in Figure 4.4 show the level of professional qualification of the respondents. The findings demonstrated that most of the respondents (86%) had professional qualification in accountancy. According to the findings, 83% of the respondents were Certified Public Accountants (CPAs), 2% were CPAs and Association of Chartered Certified Accountants (ACCA) while 1% possessed Kenya Accountants and Technicians Certificate (KATC). According to the findings, 14% of the respondents had no professional qualification in accountancy. This showed that a considerable number of accounting staff in SACCOs were professionally qualified and had sufficient experience in relation to reporting.

The findings were in tandem with Msuya and Maleko (2015) who found that SACCOs have professionally qualified accountants. Contrary to the view that SACCOs are grappling with lack of qualified and experienced accountants (Irungu, 2013), the findings illustrated that the respondents to the questionnaire were qualified and had considerable and relevant knowledge with regard to reporting. Ngatia *et al.* (2015) found that SACCO managers often attended trainings relating to IFRS and some managers has attained international professional accounting credentials. This meant that the managers were able to engage in higher level of compliance with disclosure requirements.

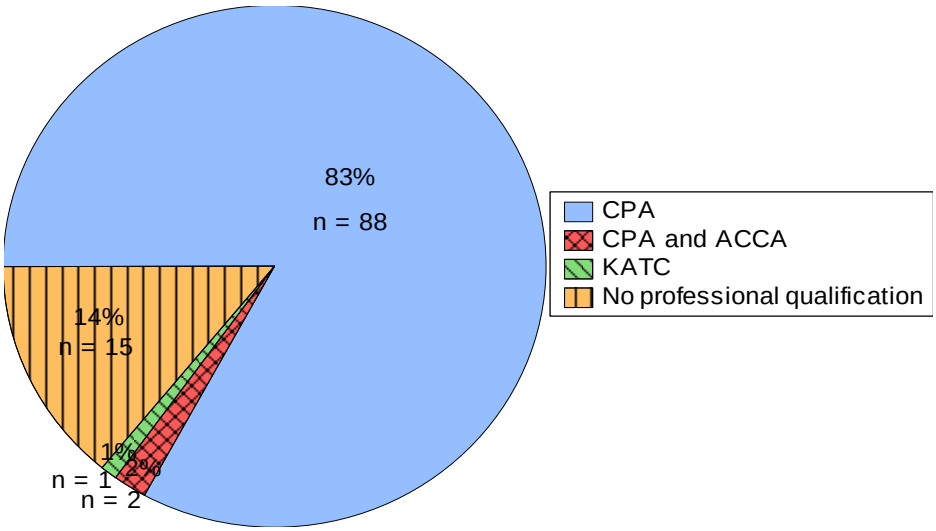

Figure 4.4: Professional Qualification in Accountancy of the Respondents

The findings in Figure 4.5 show the level of academic qualification of respondents. The findings revealed that over half of the respondents (59%) had an academic degree followed by 32% who possessed a masters' qualification. The findings illustrated that 6% of the respondents had a diploma while 2% held a doctorate degree. According to the findings, only 1% of the respondents possessed other (form four) qualifications. The findings concurred with Msuya and Maleko (2015) who found that SACCO managers had various academic qualifications, ranging from primary to University education. This provided further proof that SACCO's are dedicated towards attracting suitably qualified staff members who had at least an academic degree.

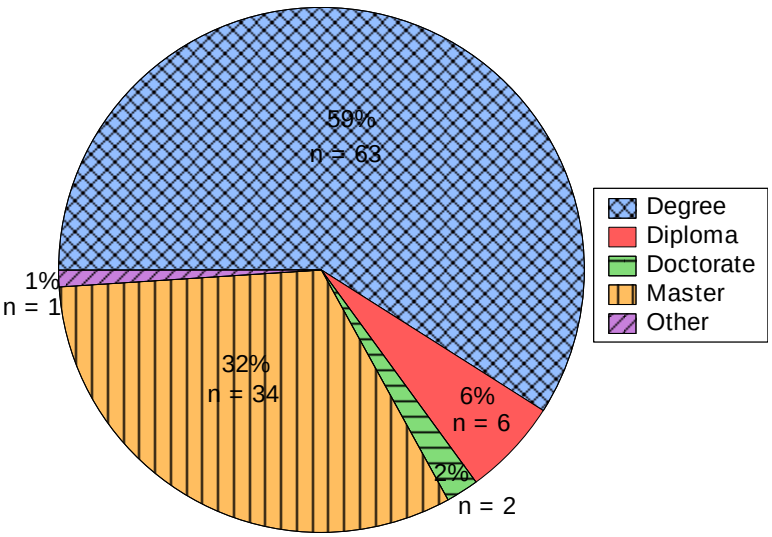

Figure 4.5: Academic Qualification of the Respondents

4.5 Descriptive Results

In this section, a discussion of the descriptive statistics for both dependent and independent variables was presented.

4.5.1 Descriptive Results on Disclosure Levels

The findings in Table 4.3 show the level of disclosure under each category (financial, social and overall) across seven disclosure bands over the period 2008 - 2013. The findings illustrated that disclosures by deposit-taking SACCOs are mainly centred on financial aspects. According to findings, financial disclosures by SACCOs were above the 50% threshold, with 82% of the SACCOs (N = 1,203) providing financial disclosures above the 60% threshold. However, the findings portrayed a dismal level of social disclosures with SACCOs barely attaining the upper threshold of 50% and above. The findings showed that most social disclosures (80%) by SACCOs lied between 30% and 50%, with some SACCOs (N = 8) providing as low as 10% in social disclosures.

The findings are consistent with Msuya and Maleko (2015) who found that financial disclosures are usually higher than other forms of disclosure since they are mandatory in nature. The combined effect of the relatively higher financial and relatively lower social disclosure was medium overall disclosure which lied between 20% and above. The results are in tandem with Msuya and Maleko (2015) who found that the overall level of compliance with IFRS by SACCOs was low at an average of 40%. Kamwenji (2013) found that the level of compliance with IFRS by SACCOs in Nairobi County was at an average of 58.6%. Appendix IV showed some variability in disclosure level across the 202 SACCOs over the period 2008-2013. The variability in disclosure level over time implied that SACCOs in Kenya complied with disclosure requirements at varying levels. This presented an opportunity to examine the factors that explain the variability in disclosure, noting the challenges faced by SACCOs in providing higher levels of disclosure as highlighted by Msuya and Maleko (2015).

Table 4.3: Disclosure Levels Across the 202 SACCOs Over the Period 2008-2013

	Financial disclosure		Social disclosure		Overall disclosure	
Disclosure band	N	Average	N	Average	N	Average
Greater than 60%	1,203	82%	0	0%	583	71%
Between 50% and 60%	9	59%	0	0%	328	56%
Between 40% and 50%	0	0%	54	45%	244	46%
Between 30% and 40%	0	0%	533	35%	56	37%
Between 20% and 30%	0	0%	492	26%	1	29%
Between 10% and 20%	0	0%	125	16%	0	0%
Less than 10%	0	0%	8	6%	0	0%
Total	1,212		1,212		1,212	

Note: N represents the number of SACCOs that lie within a specific disclosure band.

The findings in Table 4.4 show descriptive statistics for disclosure levels in 2008 and 2013. The results in Table 4.4 also show disclosure levels with the consideration of ICPAK guidelines and without the consideration of ICPAK guidelines. The findings in Table 4.4 revealed an overall improvement in disclosure levels from 2008 to 2013. The findings also showed that disclosure levels generally improved from when the ICPAK guidelines were not considered (2008 – 2010) to when the ICPAK guidelines were considered (2011 – 2013). The improvement in disclosure depicted the response by deposit-taking SACCOs in improving their level of accountability as a result of the new regulations and in preparation for licensing by SASRA.

This finding concurred with Kamwenji (2013) who argued that SACCOs exhibit higher compliance with disclosure due to regulatory pressures. According to the findings, the average level of financial disclosures was higher when the ICPAK guidelines were considered (87.2%) than when the ICPAK guidelines were not considered (76.7%). Similarly, the findings in Table 4.4 revealed that the level of social disclosure was higher when the ICPAK guidelines were considered (31.4%) than when the ICPAK guidelines were not considered (27.6%). This finding is in tandem with Msuya and Maleko (2015) who found that SACCOs exhibited higher compliance with financial disclosures compared to voluntary social disclosures because financial disclosures are regulated.

According to the results, the overall disclosure was higher when the ICPAK guidelines were considered (68.8%) than when the ICPAK guidelines were not considered (51.4%). The higher level of financial disclosure was due to the mandatory nature of most financial disclosures (Msuya & Maleko, 2015). Generally, the findings illustrated that the level of social disclosure was lower than financial disclosure. Studies have established that the provision of social disclosure in annual reports over and above the mandatory levels has associated costs (Barako & Brown, 2008). Therefore, SACCOs have the discretion of disclosing or not disclosing social information in the annual reports. The discretionary nature of social information may have contributed to the low level of social disclosure by deposit-taking SACCOs in Kenya. The findings imply that as SACCOs strive to achieve improved and fuller disclosure levels, they should focus on both general, financial and social disclosure aspects.

Table 4.4: Summary Descriptive Statistics on the Level of Disclosure

			Without consideration of ICPAK guidelines	With consideration of ICPAK guidelines		
Disclosure category	Variable	2008	2008-2010	2011 – 2013	2013	All years (2008-2013)
Financial	Mean	0.745	0.767	0.872	0.893	0.819
	Median	0.750	0.775	0.875	0.900	0.825
	St. dev.	0.053	0.057	0.054	0.057	0.076
	Min.	0.550	0.550	0.700	0.725	0.550
	Max.	0.875	0.975	1.000	1.000	1.000
Social	Mean	0.242	0.276	0.314	0.301	0.295
	Median	0.214	0.286	0.321	0.321	0.286
	St. dev.	0.074	0.078	0.071	0.070	0.077
	Min.	0.071	0.071	0.036	0.036	0.036
	Max.	0.429	0.500	0.500	0.500	0.500
Overall	Mean	0.463	0.514	0.688	0.708	0.601
	Median	0.455	0.518	0.714	0.723	0.589
	St. dev.	0.069	0.090	0.081	0.072	0.122
	Min.	0.330	0.295	0.420	0.464	0.295
	Max.	0.768	0.804	0.839	0.839	0.839

St. Dev. – Standard deviation

Table 4.5 presents a detailed breakdown of the level of disclosure for each line item categorized under general, financial and social disclosures. According to the findings, most of the general disclosure information provided by SACCOs referred to the SACCOs' background information (84.9%). According to the findings, general information regarding summary ratios was the lowest at 40.9%, followed by governance information at 49.9%. This implied that while most SACCOs provide adequate information regarding their background, disclosure of their performance and governance practices appeared lower. Overall, the findings in Table 4.5 revealed that financial and related disclosures were higher than social disclosures. According to the findings, the key financial disclosures included the accompanying reports of the management committee and auditors and the inclusion of the income statement and statement of financial position in the annual report. The average compliance with financial disclosures relating to the income statement items was higher at 88.9% compared to disclosures relating to the statement of financial position items, which is at 72.9%.

This finding concurred with Kribat *et al.* (2013) who found that financial disclosures relating to the profit and loss (income statement) were higher (98.7%) compared to balance sheet (statement of financial position) disclosures (90.1%). The finding was also in tandem with Msuya and Maleko (2015) who found that the level of compliance with IFRS by SACCOs in Tanzania with regard to statement of profit or loss was higher (100%) compared to the statement of financial position (60%). The findings revealed that the least disclosed financial items included retirement benefits liability (9.1%), deferred income tax (14.1%), other financial assets held by the SACCO (23.9%) and intangible assets (24.6%). All these items related to the statement of financial position, which had the lowest level of disclosure among the six categories of financial disclosure.

In contrast to the findings by Msuya and Maleko (2015), the findings showed that the level of disclosure with regard to the statement of cash flows by Kenyan SACCOs was higher (99.5%) compared to that of SACCOs in Tanzania (30%). Further, the findings revealed that the level of disclosure by Kenyan SACCOs with regard to the statement of changes in equity was higher (98.8%) compared to that of SACCOs in Tanzania (20%). Finally, whereas SACCOs in Tanzania did not provide explanatory

notes to the financial statements (0%), the results in this study revealed that Kenyan SACCOs included explanatory notes to accompany the financial statements (92.9%). These findings implied that SACCOs in Kenya engaged in higher disclosure levels compared to SACCOs in Tanzania. However, SACCOs in Kenya are yet to attain the 100% level of compliance with the expected disclosures regarding financial and social aspects. This means that SACCOs should devote their attention and resources towards improving the level of disclosure to promote market transparency and discipline as posited by Spiegel and Yamori (2004).

Table 4.5: Descriptive Statistics for Items in the Disclosure Index

Category	N	Mean	Median	St. Dev.	Min.	Max.
General disclosure						
Background information	6	0.849	1.000	0.312	0.167	1.000
General governance information	10	0.494	0.500	0.285	0.100	1.000
General performance	19	0.662	0.684	0.420	0.000	1.000
Summary ratios of the SACCO	9	0.409	0.000	0.490	0.000	1.000
Total	*44*	*0.604*	*0.546*	*0.377*	*0.067*	*1.000*
Financial disclosure						
Statement of cash flows	2	0.995	1.000	0.062	0.000	1.000
Statement of changes in equity	2	0.988	1.000	0.108	0.000	1.000
Statement of financial position	18	0.729	0.722	0.240	0.056	1.000
Statement of profit or loss	11	0.889	1.000	0.204	0.091	1.000
Notes to the financial statements	2	0.929	1.000	0.245	0.000	1.000
Financial statement signed	5	0.811	0.800	0.070	0.400	1.000
Total	*40*	*0.819*	*0.825*	*0.076*	*0.550*	*1.000*
Social disclosure						
Community involvement and other social activities	4	0.216	0.000	0.333	0.000	0.750
Environmental conservation	5	0.004	0.000	0.038	0.000	0.400
Human resources welfare	9	0.421	0.333	0.188	0.111	1.000
Member welfare	5	0.391	0.400	0.300	0.000	1.000
Products and services	5	0.324	0.400	0.231	0.000	1.000
Total	*28*	*0.295*	*0.286*	*0.077*	*0.036*	*0.500*
Overall disclosure	*112*	*0.601*	*0.589*	*0.122*	*0.295*	*0.839*

St. Dev. – Standard deviation

Despite the application of computer-based systems in SACCOs' reporting processes (Alukwe *et al.,* 2015), only 40.9% of the SACCOs disclosed the amount invested to acquire the financial reporting systems under intangible assets. As anticipated, the disclosure of retirement benefit liabilities and deferred taxes were also low. In Kenya, SACCOs do not pay tax on any returns from funds contributed by members (Kenya Revenue Authority (KRA), 2004). SACCOs pay tax on other income sources not related to members' contributions. As such, the tax liability for SACCOs is lower, and this partly explains the low disclosure in relation to deferred taxes. Although SACCOs have grown in terms of employee base, this study established a lower level of disclosure with regard to provisions for retirement benefits (9.1%).

Assuming the level of social disclosure indicated the importance of the relevant indicator in aggregate terms, the findings in Table 4.5 showed that SACCOs placed greater importance on human resources welfare (42.1%), followed by member welfare (39.1%), products and services (32.4%), community involvement and other social activities (21.6%) and environmental conservation (0.4%) in that order. The importance placed by SACCOs on human resource welfare, member welfare and products and services was consistent with Menassa (2010) who found that banks attribute greater importance to human resource and product and customer disclosures. Moreover, the finding supported Mook's *et al.* (2007)'s proposition that SACCOs provided social disclosures to promote organizational learning and support mission, vision and goals of the SACCO.

The findings in Table 4.5 illustrated that SACCOs invested more in human resources owing to diversification and growth in complexity of business operations and sophistication of products. The findings revealed that as SACCO operations grow, the focus on members, who are SACCO owners as well as customers, becomes more important. As such, SACCOs are compelled to devote considerable resources towards developing their members as well as marketing the SACCO to attract more members. The findings implied that as SACCOs diversify into "bank-like" front-office services, they tended to provide more information regarding their product and service offering to current and potential members. This was to attract more clientele and grow their business (Olando *et al.,* 2013). Disclosure of information on products and services

also served as a marketing tool and as a means of conveying information on the various products and services offered by the SACCOs (Menassa, 2010).

4.5.2 Descriptive Results on Profitability

Table 4.6 presents the findings on the descriptive statistics relating to measures of SACCOs' profitability. The findings in Table 4.6 revealed that deposit-taking SACCOs in Kenya reported an average net interest margin of 20.4% over the period 2008-2013. This illustrated that deposit-taking SACCOs in Kenya generated a relatively lower interest income relative to the amount of loans they disbursed compared to commercial banks and MFIs (SASRA, 2013). The average operating profit margin over the period 2008-2013 was 11.8%, which was higher than the operating profit margin of 4.92% established by Quayes and Hasan (2014) for MFIs globally.

According to the findings, the average return on assets over the period 2008-2013 was 1.5% which was low compared to other studies in developing countries such as Mangena *et al.* (2012), Ntim *et al.* (2012) and Waleed (2014) who reported return on assets of 4.8%, 11% and 6.71% in Zimbabwe, South Africa and Saudi Arabia respectively. The reported return on assets was also lower than the return on assets of 2.23% reported by Quayes and Hasan (2014) for MFIs globally. However, the reported return on assets by SACCOs in Kenya was higher than the return on assets of 0.47% for credit unions in the U.S. according to Goddard, McKillop and Wilson (2008). The findings revealed that the average return on equity between 2008 and 2013 was 25.3% which was higher than that of 3.96% for U.S. credit unions according to Goddard *et al.* (2008). The findings showed that the profitability of SACCOs in Kenya was higher than similar organizations in other economies, depicting the vibrancy of the SACCO sector in Kenya.

Table 4.6: Descriptive Statistics for Profitability

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
Net interest margin	1212	0.204	0.099	2.997	-0.640	10.366
Operating profit margin	1212	0.118	0.087	0.193	-0.742	1.297
Return on assets	1212	0.015	0.010	0.029	-0.219	0.192
Return on equity	1212	0.253	0.087	0.784	-1.908	6.154

St. Dev. – Standard deviation

4.5.3 Descriptive Results on SACCO Size

Table 4.7 presents the results on the descriptive statistics for the measures of SACCO size. The findings in Table 4.7 revealed that average total asset value of deposit-taking SACCOs over the period 2008-2013 was Kshs. 943 million. This represented 0.12% of the total assets for SACCOs in Africa according to the WOCCU report of 2014 (WOCCU, 2014). The findings showed that the SACCO with the highest total asset value had Kshs. 24.540 billion in assets, which was comparable to some commercial banks in Kenya. Further, the findings showed that the average number of SACCO members was 10,836.

According to the findings, the minimum number of SACCO members was 98 while the maximum number of members was 158,035. This indicated that there was wide variability in terms of membership in Kenyan deposit-taking SACCOs. The findings show that on average, deposit-taking SACCOs had two branches while there were SACCOs with up to 16 branches. The findings illustrated that SACCOs in Kenya have grown and control a considerable amount of assets and membership in the SACCO sector. Further, the results showed that SACCOs in Kenya have been expanding their branch network by opening branches countrywide to tap into more membership.

Table 4.7: Descriptive Statistics for SACCO Size

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
Log of total assets	1212	19.468	19.487	1.598	13.908	23.924
Log of total members	1212	8.256	8.160	1.415	4.585	11.971
Branches	1212	2.101	1.000	2.295	1.000	16.000
Number of members	1212	10,836	3,498	20,250	98	158,035
Total asset value (KShs. ‘million)	1212	943	297	2,090	1	24,500

St. Dev. – Standard deviation

4.5.4 Descriptive Results on SACCO Governance

Table 4.8 presents the descriptive statistics for measures of SACCO governance. According to the findings, 10.5% of the deposit-taking SACCOs disclosed the existence of an audit committee in the audited annual report. The findings in Table 4.8 showed that board size ranged between 3 and 14 members with an average of 9

members. The average number of board members was consistent with the regulatory requirement of 9. According to the findings, the average number of committees in a SACCO's board varied from one to 12. The findings showed that a typical SACCO in the sample had at least one committee. As a minimum, SACCOs are required to have a supervisory committee (McKillop *et al.,* 2003).

The findings showed that the governance score, as calculated using the index in Appendix X, averaged 42%, which implied that deposit-taking SACCOs in the sample provided a relatively higher level of governance information to their members and other stakeholders. The average ratio of insider loans to gross loans for deposit-taking SACCOs in the sample was 0.8%. Insider loans to either the members of the board of directors and/or employees are treated as related party transactions and should be disclosed as such in the annual report as per the 2010 Regulations (GOK, 2010). The findings showed that SACCOs in Kenya had adopted governance mechanisms but were yet to fully comply with best practices in governance. Alukwe *et al.* (2015) argued that governance was one of the constraints to regulation compliance by SACCOs in Kenya. This meant that for SACCOs to achieve a higher level of disclosure compliance, they should adopt best practice governance practices. This helps in improving their level of transparency and accountability.

Table 4.8: Descriptive Statistics for SACCO Governance

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
Audit committee disclosure	1212	0.105	0.000	0.306	0.000	1.000
Board size	1212	9.036	9.000	1.402	3.000	14.000
Number of committees	1212	1.456	1.000	1.249	1.000	12.000
Governance score	1212	0.420	0.438	0.098	0.188	0.875
Insider loans to gross loans	1212	0.008	0.000	0.037	0.000	0.920

St. Dev. – Standard deviation

4.5.5 Descriptive Results on Asset Quality

Table 4.9 presents the descriptive statistics for the measures of asset quality. In this study, asset quality was measured using the value of non-performing loans, non-reconciling loans and funds lost. The findings in Table 4.9 revealed that the average level of non-performing loans to gross loans was 3.3% which was lower than the

industry standard of 5% as per the SASRA supervision report of 2014 (SASRA, 2014). The ratio of non-performing to gross loans is a measure of asset quality according to the PEARLS framework. Generally, non-performing loans are classified as non-earning assets.

Non-reconciling loans are as a result of differences between the member statements and the ledger in the SACCOs' accounting information systems as highlighted in the audited annual reports. The findings revealed that the average non-reconciling loans to gross loans were 1.4%. The findings showed that the average ratio of the funds disclosed as lost (due to either fraud or mismanagement) to total assets was 0.3%. According to the findings, the highest ratio of the funds lost to total assets was 43.5%, which demonstrated the extent of losses SACCOs face due to fraud or mismanagement. Overall, the findings depicted a relatively low level of asset quality as highlighted by SASRA (2014). This means that SACCOs should strive towards improving the quality of their assets to reduce the default risk and loss of member funds as posited by Magali (2013).

Table 4.9: Descriptive Statistics for Asset Quality

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
Non-performing to gross loans	1212	0.033	0.000	0.094	0.000	0.752
Non-reconciling to gross loans	1212	0.014	0.000	0.091	-0.356	0.987
Funds lost to total assets	1212	0.003	0.000	0.024	0.000	0.435

St. Dev. – Standard deviation

4.5.6 Descriptive Results on Auditor Type

Table 4.10 presents the descriptive results on the three auditor categories. The findings revealed that small auditors audited majority of the deposit-taking SACCOs over the period 2008 to 2013 (58.3%). This was followed by the government auditor who audited 40.2% of the SACCOs between 2008 and 2013. Finally, the findings showed that big four auditors audited the lowest number of SACCOs over the period 2008 to 2013 (1.6%). When SASRA was instituted in 2010, it provided an approved list of auditors who included the big four and the small auditors. The findings

illustrated that most deposit-taking SACCOs opt for smaller auditors due to the resource constraints they face as indicated by Msuya and Maleko (2015).

Table 4.10: Descriptive Statistics for Auditor Type

Variable	N	Mean	Median	Std. Dev.	Min.	Max.
Big four auditor	1212	0.016	0.000	0.124	0.000	1.000
Government auditor	1212	0.402	0.000	0.490	0.000	1.000
Small auditor	1212	0.583	1.000	0.493	0.000	1.000

St. Dev. – Standard deviation

4.6 Inferential Statistics

In this section, the diagnostic tests performed prior to multiple regression analyses are presented.

4.6.1 Test for Linearity

Linearity test aims at determining the relationship between independent variables and the dependent variable is linear or not. According to Gujarati and Porter (2009), multiple linear regressions can only be used to estimate the relationship between the dependent and the independent variable if the relationship is linear in nature. The absence of linear relationship leads to the regression results under estimating the coefficients of the relationship. Linearity of data implies that the values of the dependent variable for each increment of a predictor lie along a straight line.

In this study, linearity was tested using scatter plots between the dependent and independent variables. The scatterplot in Appendix VIII showed that the predicted value of the multiple regression had a linear relationship with the actual disclosure level. Linearity was also checked for each independent variable using deviation from linearity tests as shown in Appendix IX. The deviation from linearity for the independent variables was greater than the significance level of 0.05. This showed no violation of linearity which was a requirement for multiple regression.

4.6.2 Test for Homoscedasticity

Homoscedasticity is useful in examining whether there is a difference in the residual variance of an observation period to another period (Gujarati & Porter, 2009). A good

regression model should exhibit homoscedasticity in its residuals with constant variance. Homoscedasticity in this study was tested using Test Glejser (Gujarati & Porter, 2009). Using the Test Glejser, the null hypothesis of no homoscedasticity was rejected if the p-value is greater than 0.05. Table 4.11 presents the results of the Test Glejser performed on the regression model used in this study.

Table 4.11: Homoscedasticity Test using Test Glejser in SPSS

Coefficients[a]							
		Unstandardized Coefficients	Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.101	0.022		4.551	0.000		
	ROA	-0.013	0.053	-0.007	-0.246	0.806	0.996	1.004
	ASSETS	-0.001	0.001	-0.031	-0.975	0.330	0.800	1.250
	GSCORE	0.003	0.016	0.005	0.152	0.879	0.915	1.093
	NPLS	-0.027	0.017	-0.047	-1.601	0.110	0.965	1.036
	GOVAUD	-0.003	0.004	-0.028	-0.879	0.380	0.787	1.271

a. Dependent Variable: AbsUt (residuals)

Based on the output coefficients, the value of the significance for the independent variables was greater than 0.05. The conclusion was that there was no heteroscedasticity problem and that the residuals from the regression model exhibited homoscedasticity. The Breusch-Pagan-Godfrey (Chi) test showed a coefficient of 17.847 whose p-value was 0.103 which was not significant at the 0.05 level. This supported the null hypothesis that the error variances were all equal and therefore the residuals from the regression model exhibited homoscedasticity. This provided proof that heteroscedasticity was not a problem in the model. In addition, the residuals plot presented in Figure 4.6 showed that the residuals from the regression were randomly distributed (no pattern) and the distribution line was approximately straight. Therefore, according to the distribution of residuals, the assumption of homoscedasticity was held as there was no relationship between the residuals and the independent variables.

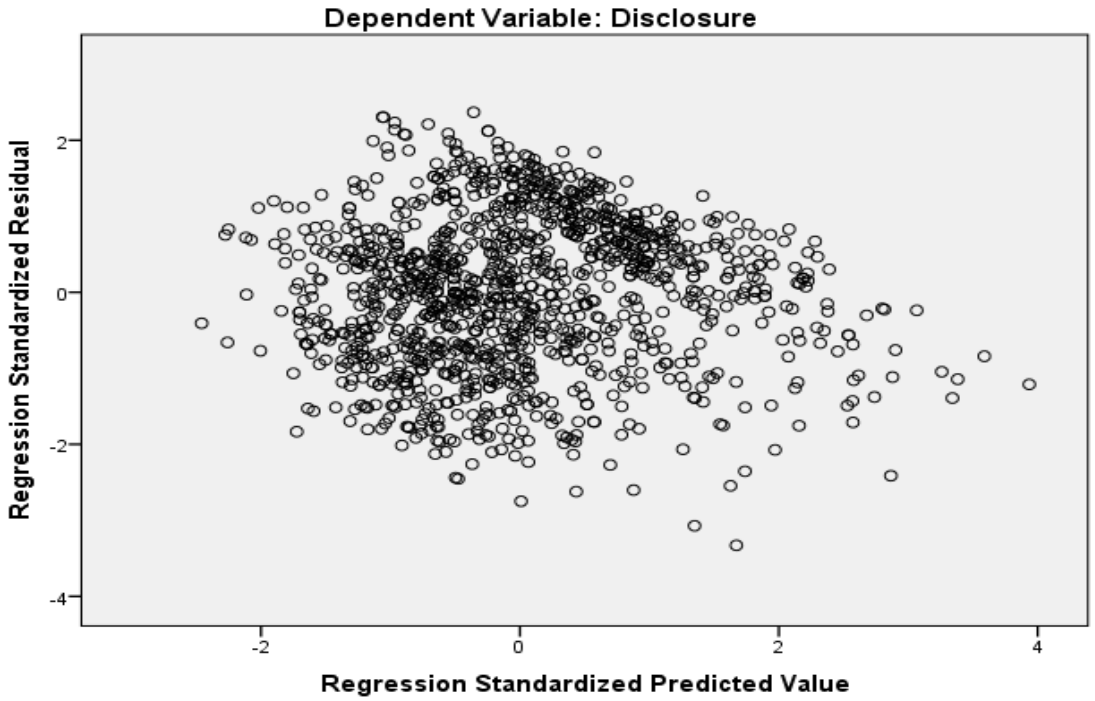

Figure 4.6: Scatter Plot of Residuals and Predicted Values

4.6.3 Test for Normality

Normality tests for disclosure level were performed using skewness and kurtosis. According to Gujarati and Porter (2009), the value of a distribution which is symmetric is zero. According to the findings in Table 4.12, the skewness of financial, social and overall disclosures was -0.105, -0.258 and -0.165 respectively. This indicated a slight skew to the left, which was an approximate symmetric curve (normally distributed). With regard to kurtosis, the hypothesis of non-normality was rejected if the value is 3 (Gujarati and Porter, 2009). According to the findings, the coefficients for kurtosis with regard to financial, social and overall disclosures were -0.004, 0.046 and -1.032 respectively, implying that the variables were flatly distributed.

Table 4.12: Skewness and Kurtosis for the Dependent Variable

	Skewness		Kurtosis	
Variable	Statistic	Std. Error	Statistic	Std. Error
Financial disclosure	-0.105	0.070	-0.004	0.140
Social disclosure	-0.258	0.070	0.046	0.140
Overall disclosure	-0.165	0.070	-1.032	0.140

As illustrated by the findings of the kurtosis and skewness, the dependent variable exhibited a relatively normal distribution. Further, normality checks using histograms and normal probability plots relevaled that the data were relatively normal (Appendices VI and VII). Therefore, such data were considered suitable for parametric analysis since the probability of outliers was minimal (Sekaran, 2003). The stationarity of the data was tested using the unit root test. The use of ordinary least squares relies on the stochastic process being stationary since its non-stationarity can produce invalid estimates (Gujarati & Porter, 2003). All the unit root results indicated the absence of a unit root ($p < 0.05$). Since the p-value was significant at the 0.05 level, the series for disclosure was stationary.

4.6.4 Test for Autocorrelation

The existence of autocorrelation or serial correlation, which could lead to incorrect standard errors, was checked using the Durbin-Watson statistic. Consistent with Ntim *et al.* (2012) and Waleed (2014), the Durbin-Watson test was utilized to test for autocorrelation. According to Gujarati and Porter (2009), the null hypothesis of no autocorrelation cannot be rejected if the Durbin-Watson statistic was equal or close to 2. The Durbin-Watson statistic was 1.733, which was close to 2, implying that autocorrelation did not pose a problem.

4.6.5 Multicollinearity Test

Due to the nature of the independent variables under investigation, there was anticipated multicollinearity. Lynch (2003) noted that multicollinearity was a problem which arose when two or more predictor (independent) variables in a multiple regression were highly correlated. Before performing the multivariate analysis, multi-collinearity problem was checked using the tolerance values and variance inflation factors (VIF). According to Belsley, Kuh and Welsch (1980), the i^{th} tolerance value was defined as $(1-R^2_j)$ where R^2_j is the coefficient of determination in the regression of explanatory variable X_j on the remaining explanatory variables of the model. A tolerance close to 1 meant there is little multicollinearity, whereas a value close to 0 suggested that multicollinearity may be a threat. The VIF indicated how much the variance of the coefficient estimate is being inflated by multicollinearity. It was calculated as: $1/(1-R^2_j)$ (El-Dereny & Rashwan, 2011). The largest VIF among all predictors was used as an indicator of severe multicollinearity.

Hair, Ringle, and Sarstedt (2013) and Mardikyan and Çetin, (2008) posited that when the VIF is greater than five (tolerance < 0.20), then the regression coefficients were poorly estimated. The presence of multicollinearity among the independent variables was checked using the variance inflation factors (VIFs) and the level of tolerance. Table 4.13 reports the findings of multicollinearity test using VIFs and level of tolerance values. The findings in Table 4.13 revealed that the VIFs for the independent variables ranged between 1.016 and 2.846. According to the findings, the tolerance values ranged between 0.351 and 0.984. Therefore, both the VIFs and tolerance values showed that multicollinearity was not a serious problem when interpreting the findings of the multivariate analysis.

Table 4.13: Results of the Multicollinearity Check Using Tolerance and VIFs

	Collinearity Statistics	
Variable	Tolerance (1/VIF)	Variance inflation factor (VIF)
Net income margin	0.984	1.016
Operating profit margin	0.403	2.482
Return on assets	0.391	2.557
Return on equity	0.819	1.221
Total assets	0.486	2.059
Members	0.441	2.269
Branches	0.703	1.422
Audit committee disclosure	0.361	2.769
Board size	0.916	1.092
Committees	0.351	2.846
Governance score	0.574	1.743
Insider to gross loans	0.953	1.049
Non-performing loans	0.884	1.131
Non-reconciling loans	0.969	1.032
Funds lost	0.969	1.032
Government auditor	0.767	1.304
Big four auditor	0.909	1.100

Note: To avoid the dummy variable trap, the “small auditor” variable was omitted (Gujarati and Porter, 2009).

A further test on the direction and extent of linearity among the variables using the correlation matrix was employed. The correlation matrix was also used to check for multicollinearity among the determinants of financial and social disclosure. Gujarati and Porter (2009) and Haniffa and Hudaib (2006) observed that there is possible

multicollinearity if the correlation coefficient is greater than 0.800. The highest correlation coefficient was 0.508 which was less than 0.8 and this implied that the independent variables did not exhibit multicollinearity.

4.7 Descriptive Analysis

4.7.1 Influence of Profitability on Disclosure

Table 4.14 presents the findings on the managerial perspectives regarding the influence of profitability on disclosure. According to the findings, only 14% of the respondents agreed that SACCO provided less information if profitability was lower. Interestingly, less than half of the respondents indicated that SACCOs provided more information if profitability was lower (43%). These findings implied that, according to the respondents, SACCOs' profitability does not have a substantial influence on the level of disclosure. As long as the SACCO was paying interest on deposits and dividends, the respondents felt that the profitability of the SACCO was not a major factor in influencing the level of disclosure information provided.

The findings were further supported by other findings relating to the influence of SACCO performance on disclosure as evidenced by the SACCO providing less information if profitability was higher (20%), the SACCO providing more information if profitability was higher (42%) and creditors demanding for more information if profitability was lower (48%). The findings were in agreement with prior studies that have found limited influence of profitability on disclosure (Ahmed & Courtis, 1999; Magness, 2006; Khlif & Souissi, 2010). Ngatia *et al.* (2015) argued that SACCOs in Kenya are faced with financial constraints and this has affected their extent of compliance with disclosure requirements. Kamwenji (2013) found an association between the extent of compliance with IFRS and the performance of SACCOs. This negated the view that profitability does not influence the level of compliance with disclosure requirements.

Table 4.14: Influence of Profitability on Disclosure

Statement	Agree	Neither agree nor disagree	Disagree	Mean	St. Dev.
The SACCO provides less information if profitability is lower	14%	5%	81%	2.670	0.713
The SACCO provides more information if profitability is lower	43%	8%	49%	2.057	0.964
The SACCO provides less information if the profitability is higher	20%	8%	72%	2.519	0.807
The SACCO provides more information if the profitability is higher	42%	10%	47%	2.047	0.950
Creditors demand for more information if the profitability is lower	48%	9%	42%	1.943	0.954
There is no influence on SACCOs' profitability and the level of information disclosed	34%	12%	54%	2.198	0.920

St. Dev – standard deviation.

4.7.2 Influence of SACCO Size on Disclosure

Table 4.15 reports the findings on the managers' perceptions on the influence of SACCO size on disclosure. The findings in Table 4.34 illustrated that 56% of the respondents indicated that the more the asset base of the SACCO is, the higher the level of disclosure demanded by members and other stakeholders. Further, the findings revealed that 66% of the respondents indicated that the number of SACCO branches influenced the level of disclosure. This finding concurred with Branco and Rodrigues (2006) who found that banks with more branch network provided higher disclosure due to their visibility. According to the findings in Table 4.15, SACCO members influence the level of disclosures through pressure exerted on SACCO management to provide more information (60%). The fear of member withdrawal due to inadequate disclosures was also found to influence the level of disclosure by SACCOs (55%). The findings showed that transparency was important in attracting membership, with 89% of the respondents alluding to this proposition.

The findings in Table 4.15 showed that 81% of the respondents agreed that the conversion of SACCOs into deposit-taking status and expansion in members led to

improved disclosure levels. Further, the findings revealed that 80% of the respondents indicated that disclosures by deposit-taking SACCOs were subject to closer monitoring and supervision because SACCOs took deposits from the public. The positive influence of SACCO size concurred with studies such as Chipalkatti (2002), Spiegel and Yamori (2004) and Barako (2007) who found that an organization's size was a significant determinant of disclosure practices. Larger SACCOs are more capable of providing more disclosure due to the resources at their disposal and the scale advantages which they possess.

Table 4.15: Influence of SACCO Size on Disclosure

Comment	Agree	Neither agree nor disagree	Disagree	Mean	St. Dev.
The more the asset base of the SACCO is, the higher the level of disclosure demanded by members and other stakeholders	56%	3%	42%	1.858	0.980
The more dispersed the SACCO in terms of number of branches, the more the level of disclosure the SACCO provides to its members and other stakeholders	66%	4%	30%	1.642	0.917
The more the number of members the SACCO has, the more the pressure to disclose more information.	60%	3%	37%	1.764	0.962
If the SACCO does not provide sufficient disclosure, members withdraw from it	55%	3%	42%	1.877	0.983
The more transparent the SACCO is, the more membership it attracts	89%	2%	9%	1.208	0.597
Since the SACCO converted to deposit taking status, it has been providing more disclosure information to members than before	81%	7%	9%	1.208	0.597
The disclosures by the SACCO are subject to closer monitoring and supervision because the SACCO takes deposits from the public	80%	7%	13%	1.330	0.700

St. Dev – standard deviation.

4.7.3 Contribution of Governance on Disclosure

Table 4.16 presents the views of SACCO managers on the influence of SACCO governance on disclosure. The findings revealed that 90% of the respondents perceived that the SACCO board had a significant influence on the level of disclosure. This was followed by 75% of the respondents who indicated that the audit committee had a significant contribution on the level of disclosures provided by the SACCO. According to the findings, respondents indicated that SACCOs had embraced good governance practices recommended by WOCCU and OECD such as fit and proper test (80%), frequent (monthly) board meetings in a year (75%), annual training of board members (71%) and the declaration of conflicts of interest by board members (47%). However, the findings revealed that only 58% of the deposit-taking SACCOs provide disclosure on insider lending. The findings supported the view that governance practices embraced by SACCOs assist in improving disclosure.

The findings were consistent with Alukwe *et al.* (2015) who found an association between SACCO governance and the extent of regulation compliance. The findings also concur with Saxton, Kuo and Ho (2012) who found that organizations with strong governance structures had lower agency problems and better performance. Further, the findings showed that 58% of the respondents indicated that SACCOs provided disclosures on insider lending to board members and SACCO executives, which was seen as a way of being transparent. The finding concurred with Gordon, Henry and Palia (2004) who highlighted the importance of related party lending in enhancing board transparency. In Kenya, SACCOs are required to disclose the amount of insider lending to executives and the board as a way of demonstrating transparency to the membership (GOK, 2010).

Table 4.16: Board Influences on SACCO Disclosure

Statement	Agree	Neither agree nor disagree	Disagree	Mean	St. Dev.
The board has a significant influence on the level of disclosure by the SACCO	90%	3%	8%	1.179	0.549
The audit committee contributes significantly to the level of disclosure by the SACCO	75%	4%	22%	1.472	0.830
The SACCO provides disclosure on insider lending to the members in the annual report	58%	5%	37%	1.783	0.956
Board members undergo a fit and proper test	80%	1%	19%	1.387	0.788
The board members are trained annually on transparency and accountability	71%	2%	27%	1.566	0.895
Board members declare any conflicts of interest on an annual basis	47%	1%	52%	2.047	0.999
Board members meet at least twice a year to discuss the performance of the SACCO	75%	1%	25%	1.500	0.865

St. Dev – standard deviation.

4.7.4 Contribution of Asset Quality on Disclosure

Table 4.17 presents the managerial views on the influence of asset quality on disclosures by SACCOs. The findings revealed that 83% of the respondents indicated that SACCO members demanded for more information if the SACCO was faced by negative publicity. This finding seemed to suggest that SACCOs facing negative publicity were likely to provide more disclosure. The finding was consistent with Deegan, Rankin and Tobin (2002) who found that negative news put pressure on the management to provide more disclosures. The findings showed that 55% of the respondents indicated that SACCOs provide information on the amount of funds lost. The finding demonstrated SACCO's willingness to disclose the amounts of funds lost,

either due to fraud or mismanagement, even though SACCO members demanded for more information when such information was disclosed.

According to the findings in Table 4.17, 73% of the respondents disagreed with the view that a higher level of non-performing loans led to lower disclosure. In addition, 57% of the respondents disagreed with the view that negative publicity surrounding the SACCO led to lower disclosure. A further 69% of the respondents disagreed with the view that a higher level of bad loans led to lower disclosure. The findings suggested that asset quality has an influence on the level of disclosures provided by SACCOs. According to Magali (2013), a higher level of non-performing to gross loans leads to higher default risk, and this contributes to SACCO losses. As a result, SACCO members demand for more disclosure regarding the level of non-performing loans and actions taken by the management to reduce this level, since it negatively impacts the SACCOs' performance.

Table 4.17: Influence of Asset Quality on Disclosure

Statement	Agree	Neither agree nor disagree	Disagree	Mean	St. Dev.
Negative publicity surrounding the SACCO leads to lower disclosure	42%	1%	57%	2.142	0.990
Members demand for more information if the SACCO is faced by negative publicity	83%	0%	17%	1.340	0.755
The higher the level of bad loans, the lower the disclosure provided by the SACCO	30%	1%	69%	2.387	0.921
The higher the level of non-performing loans, the lower the level of disclosure by the SACCO	26%	1%	73%	2.462	0.886
Members demand for less information if there are no bad loans in the SACCO	38%	1%	61%	2.236	0.972
The SACCO provides information on the amount of funds lost	55%	3%	42%	1.877	0.983

St. Dev – standard deviation.

4.7.5 Influence of Auditor Type on Disclosure

Table 4.18 presents the manager's views on the influence of auditors on SACCO disclosures. The findings revealed that 88% of the respondents indicated that the auditor provided more clarity in interpreting the requirements of reporting standards. A further 70% indicated that the auditor was usually satisfied with the information provided by the management when preparing the annual report. However, 62% of the respondents indicated that the auditor required more disclosures which meant that despite the fact that the auditors were satisfied with the level of disclosures, they also required more disclosures to be provided over and above what the managers provided. This finding showed that in addition to the presence of an external auditor being an important governance practice (Aboagye-Otchere *et al.*, 2012), the auditor was also useful in promoting good disclosure practices (Zainon, Atan & Wah, 2014). According to the findings, only 14% of the respondents indicated that the external auditor does not influence disclosures. The role of the external auditor in improving disclosure levels is in support of Msuya and Maleko (2015) who found that SACCO managers often benefit from the guidance provided by auditors during the preparation of the annual report.

Table 4.18: Influence of Auditors on Disclosures by SACCOs

Influence	N	Percent	St. Dev.
The auditor provides more clarity in interpreting the requirements of the reporting standards	93	88%	0.330
The auditor is satisfied with the information provided	74	70%	0.461
The auditor requires more information to be provided	66	62%	0.487
The external auditor has no influence on the level of information disclosed by the SACCO	15	14%	0.350

St. Dev – standard deviation.

4.7.6 Influence of ICPAK Guidelines on Disclosure

Respondents were asked whether they were aware of the ICPAK guidelines released in November 2010. According to the findings, 85% of the respondents were aware of the ICPAK guidelines with 15% not being aware of the ICPAK guidelines. Of the 15% (N = 16), 8 were accountants, 5 were SACCO managers, a finance manager, a chairman and a credit manager. This showed that despite the fact that the ICPAK guidelines aimed at assisting financial reporting, it implied that a number of SACCO

managers responsible for preparing the financial statements were not aware of them. The finding resonates with Msuya and Maleko (2015) who found that lack of awareness of reporting requirements was a challenge among SACCO managers. The study found that 60% of the SACCO managers surveyed were not aware of the IFRS requirements for SACCOs. The study by Kamwenji (2013) found that 100% of the deposit-taking SACCOs in Nairobi County had adopted IFRS, and this meant that the SACCOs examined in this study had been adhering to the same set of disclosures. As a result, the managers should familiarize themselves with the requirements set out in the IFRS and attend the trainings facilitated by the ICPAK on a regular basis.

According to the findings, most of the SACCOs (44%, N = 47) adopted the ICPAK guidelines in 2011, one year after they were released. According to the findings, a few (15%) SACCOs adopted the ICPAK guidelines in 2010 with 18% adopting the guidelines in 2012 and 7% adopting the guidelines in 2013. The findings revealed that 16% of the sampled SACCOs had not yet adopted the guidelines. These findings showed that the influence of the ICPAK guidelines on disclosure was felt from the release date (November 2010) through 2013. This observation motivated an examination of the moderating influence of the ICPAK disclosure guidelines on the relationship between disclosure level and its determinants. With regard to the SACCOs that had not adopted the ICPAK guidelines, respondents indicated that they had been utilizing disclosure frameworks such as the IFRS, the SACCO Societies Act of 2008, the SACCO regulations of 2010, the guidelines in the Co-operative Act and the PEARLS framework.

4.8 Selecting the Significant Determinants of Disclosure

A forward-selection method was applied to select the significant determinants of disclosure by SACCOs. Consistent with (Ratner, 2010), the forward-selection approach was used to identify the best subset among the 18 possible determinants of SACCO disclosure to include in the multiple regression model. According to Ratner (2010), the test statistic in the forward-selection method was the F-statistic for a continuous dependent variable. The forward selection criterion applied was to retain all variables whose F-value in the five models was greater than the F-critical of 3.84 and significant at the 0.05 level.

Out of the 18 variables examined, five most significant variables from each of the five categories of disclosure determinants were selected and used in the multiple regression. Table 4.19 illustrates the model summary using the forward-selection method.

Table 4.19: Model Summary Using the Forward Selection Method

Model Summary[f]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.508[a]	0.258	0.257	0.105	0.258	420.317	1	1210	0.000
2	0.572[b]	0.327	0.326	0.100	0.069	123.920	1	1209	0.000
3	0.602[c]	0.363	0.361	0.098	0.036	68.585	1	1208	0.000
4	0.624[d]	0.389	0.387	0.096	0.026	51.344	1	1207	0.000
5	0.640[e]	0.410	0.407	0.094	0.021	42.710	1	1206	0.000

a. Predictors: (Constant), GSCORE

b. Predictors: (Constant), GSCORE, GOVAUD

c. Predictors: (Constant), GSCORE, GOVAUD, NPLS

d. Predictors: (Constant), GSCORE, GOVAUD, NPLS, ASSETS

e. Predictors: (Constant), GSCORE, GOVAUD, NPLS, ASSETS, ROA

f. Dependent Variable: DISCL

The variable definitions in Table 4.19 are as follows GSCORE – governance score (governance), GOVAUD – government auditor (auditor), NPLS – non-performing loans (asset quality), ASSETS – asset value (size), ROA – return on assets (profitability) and DISCL – disclosure level. Based on the results in Table 4.19, the five selected determinants of disclosure are summarized in Table 4.19. The selected determinants of disclosure were then utilized in the final multiple regression to establish the significant determinants of the level of disclosure by SACCOs in Kenya.

Table 4.20: Selected Determinants of SACCO Disclosure

Type	Specific determinants of disclosure	Selected determinant of disclosure	t-statistic (p-value)
Governance	Audit committee presence Board size Number of committees Governance score Insider loans to gross loans	Governance score (GSCORE)	16.931 (0.000)*
Auditor type	Government auditor Small auditor Big four auditor	Government auditor (GOVAUD)	-7.039 (0.000)*
Asset quality	Non-performing to gross loans Non-reconciling to gross loans Funds lost to total assets	Non-performing to gross loans (NPLS)	8.283 (0.000)*
SACCO Size	Total asset value Number of members Number of branches	Total asset value (ASSETS)	7.208 (0.000)*
Profitability	Net interest margin Operating profit margin Return on assets Return on equity	Return on assets (ROA)	-1.227 (0.220)

Note: P-values are in brackets. * denotes significance at the 0.05 level.

Based on the results of the forward variable selection in Table 4.20, five variables were selected in each of the five broad categories of determinants for further analysis. The results in Table 4.20 showed that governance variable ranked first, followed by auditor type, then asset quality. According to the results in Table 4.20, SACCO size and profitability ranked fourth and fifth respectively. This finding demonstrated the importance of governance, auditor type, asset quality and size in influencing the level of disclosure by SACCOs in Kenya. The finding concurred with Alukwe *et al.* (2015) who found a significant association between SACCO governance and regulation compliance.

According to the findings in Table 4.20, the composite variable for governance (GSCORE) was chosen as the measure of SACCO governance (t-statistic = 16.931, p – value = 0.000). Total asset value (ASSET) was selected as the overall measure of SACCO size (t-statistic = 7.208, p-value = 0.000). According to the findings, the government auditor (GOVAUD) was selected as proxy for SACCO auditor (t-statistic

= -7.039, p-value = 0.000). Asset quality was measured using non-performing loans to gross loans (NPLS) (t-statistic = 8.283, p – value = 0.000). Finally, profitability was measured using the return on assets (ROA) (t-statistic = -1.227, p-value = 0.220).

4.9 Correlation Matrix

Spearman's correlation coefficients were used to establish the correlation between the identified determinants of disclosure and the level of disclosure by SACCOs. The Spearman's correlation coefficients were appropriate for both continuous and discrete variables, including ordinal variables (Gujarati & Porter, 2009). According to the findings in Table 4.21, the maximum coefficient was between the governance score and disclosure level (0.508), which was below 0.8. This showed that multicollinearity was not a problem among the independent variables. Inspection of the findings indicated a negative correlation between the return on assets (ROA) and disclosure level (coefficient = -0.006). However, the correlation coefficient was not significant at the 0.05 level of significance. This finding provided some preliminary evidence that the profitability of a SACCO was not associated with the level of disclosure.

According to the findings in Table 4.21, the correlation coefficient between asset value (ASSETS) and the level of disclosure was positive (coefficient = 0.359). The p-value of the coefficient was 0.000 which meant that it was significant at the 0.05 level. This demonstrated that there exists some association between asset value and the level of disclosure in SACCOs. Similarly, the coefficient on the governance score (GSCORE) was positive and significant at the 0.05 level of significance (coefficient = 0.508, p-value = 0.000). This meant that SACCOs that had adopted best practice governance practices were associated with a higher level of disclosure. According to the findings, the coefficient on the non-performing to gross loans (NPLS) was also positive and significant at the 0.05 level of significance (coefficient = 0.291, p-value = 0.000). This implied that SACCOs with higher levels of non-performing loans were associated with increased disclosure levels. Finally, the coefficient on the government auditor (GOVAUD) was negative and significant at the 0.05 level of significance (coefficient = -0.375, p-value = 0.000). This implied that SACCOs audited by the government auditor were associated with lower levels of disclosure.

Table 4.21: Spearman's Correlation Coefficients

Variable		DISCL	ROA	ASSETS	GSCORE	NPLS	GOVAUD
DISCL	Correlation	1.000	-0.006	0.359**	0.508**	0.291**	-0.375**
	Sig. (2-tailed)		0.836	0.000	0.000	0.000	0.000
ROA	Correlation		1.000	0.050	0.001	0.029	-0.038
	Sig. (2-tailed)			0.083	0.983	0.305	0.183
ASSETS	Correlation			1.000	0.212**	0.096**	-0.431**
	Sig. (2-tailed)				0.000	0.001	0.000
GSCORE	Correlation				1.000	0.153**	-0.237**
	Sig. (2-tailed)					0.000	0.000
NPLS	Correlation					1.000	-0.135**
	Sig. (2-tailed)						0.000
GOVAUD	Correlation						1.000
	Sig. (2-tailed)						
	N	1212	1212	1212	1212	1212	1212

Note: **. Correlation is significant at the 0.01 level (2-tailed).

4.10 Multiple Regression Results on the Determinants of Disclosures by SACCOs

The overall objective of the study was to examine the determinants of disclosure level by deposit-taking SACCOs in Kenya. To establish the specific and significant determinants of SACCO disclosure, multiple ordinary least squares regression was performed on the balanced panel data covering six years. The multiple regression approach adopted was consistent with studies such as Kribat *et al.* (2013), Quayes and Hasan (2014), Alukwe *et al.* (2015) and Msuya and Maleko (2015). The regression was used as inferential analysis to examine the significant determinants of disclosure by SACCOs in Kenya. The data were used to fit the regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$ to determine the statistical significance of the five determinants of disclosure extracted using the forward selection method. The five determinants included the governance score as a measure of SACCO governance (GSCORE), non-performing to gross loans as a measure of asset quality (NPLS), asset value as a measure of SACCO size (ASSET), government auditor as a measure

of auditor type (GOVAUD) and the return on assets as a measure of profitability (ROA).

Table 4.22 shows the model summary for the determinants of disclosure. The findings showed that the value of R and Adjusted R Square were 0.802 and 0.642 respectively. The R value of 0.802 showed that there was a positive linear relationship between the five determinants of disclosure and the level of disclosure. The adjusted R Square indicated that the explanatory power of the independent variables (the determinants) was 0.642. This meant that on aggregate, 64.2% of the variation in disclosure level was explained by the model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$. The model used was significant as demonstrated by the value of F Change = 310.980 which was greater than the F-critical of 2.01 and was highly significant (p = 0.000). The Durbin Watson statistic for the model was 1.733 which is close to 2, and this implied that autocorrelation was not a problem in the model. The Breusch-Pagan-Godfrey (Chi) test showed a coefficient of 17.847 whose p-value was 0.103 which is not significant at the 0.05 level. The finding supported the null hypothesis that the error variances were all equal and therefore the residuals from the regression model exhibited homoscedasticity. This provided proof that heteroscedasticity was not a problem in the model.

Table 4.22: Model Summary for Determinants of Disclosure

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	Sig. F Change	Durbin-Watson
1	0.802[a]	0.644	0.642	0.073	0.644	310.980	0.000	1.733
Breusch-Pagan-Godfrey test (Chi)				17.847				
Prob. Chi (5)				0.103				
Observations				1,212				

a. Predictors: (Constant), ROA, ASSETS, GSCORE, NPLS, GOVAUD
b. Dependent Variable: DISCL

Table 4.23 presents the results of the ANOVA for the regression model used. The ANOVA showed an F statistic of 310.980 that had a significance level of 0.000,

which was less than 0.05. Since the F-statistic (310.980) was greater that the F-critical of 2.01 (Appendix XI), this meant that the null hypothesis was rejected and conclude that there was a significant joint influence of the independent variables when taken together. This implied that the coefficients fitted in the multiple regression model were not equal to zero. Therefore, the model used was a good fit for the variables being tested. The finding meant that the five determinants of disclosure selected using the forward selection method had a significant effect on the level of disclosure by SACCOs in Kenya.

Table 4.23: ANOVA for Determinants of Disclosure

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.634	7	1.662	310.980	0.000[b]
Residual	6.434	1204	0.005		
Total	18.068	1211			

a. Dependent Variable: DISCL

b. Predictors: (Constant), ROA, ASSETS, GSCORE, NPLS, GOVAUD

Table 4.24 shows the results of coefficients of the model $Y= -0.179 + 0.204X_1 + 0.060X_2 + 0.012X_3 - 0.032X_4$. According to the findings, all the beta (B) coefficients were significant at the 0.05 level except for X_5 denoting the return on assets (ROA). The variance inflation factors for the independent variables were below 5, indicating absence of multicollinearity in the independent variables. The findings revealed that the level of disclosure by SACCOs is significantly influenced by governance, non-performing to gross loans, the value of assets and government auditor.

Table 4.24: Coefficients for Determinants of Disclosure

Coefficients[a]							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	-0.179	2.912		-9.248	0.000		
GSCORE (X_1)	0.204	0.024	0.164	8.322	0.000	0.763	1.310
NPLS (X_2)	0.060	0.024	0.046	2.519	0.012	0.877	1.140
ASSETS (X_3)	0.012	0.002	0.154	6.873	0.000	0.589	1.699
GOVAUD (X_4)	-0.032	0.005	-0.127	-6.515	0.000	0.780	1.282
ROA (X_5)	-0.080	0.072	-0.019	-1.116	0.265	0.995	1.005

a. Dependent Variable: DISCL

4.11 Hypotheses Testing

The results of the regression analyses indicated that four null hypotheses were not confirmed. Using the size and significance of the beta coefficients, the study established the following order of influence of the independent variables on the level of disclosure: governance as measured by governance score (GSCORE, beta = 0.204), auditor type as measured by government auditor (GOVAUD, beta = 0.060), asset quality as measured by non-performing to gross loans (NPLS, beta = 0.012), size as measured by asset value (ASSETS, beta = -0.032), and profitability as measured by the return on assets (ROA, beta = -0.080). Based on the findings, Table 4.25 presents a summary of the results of hypothesis testing.

Table 4.25: Summary of Hypotheses Testing

Objective	Hypothesis	Actual sign and beta	Status of the hypothesis
Objective 1: To establish the influence of profitability on the level of disclosure by deposit-taking SACCOs in Kenya.	*Hypothesis 1:* H_0: Profitability does not influence the level of disclosure by deposit-taking SACCOs in Kenya.	NS B = -0.080	H_0 supported
Objective 2: To investigate the influence of SACCO size on the level of disclosure by deposit-taking SACCOs in Kenya.	*Hypothesis 2:* H_0: SACCO size does not influence the level of disclosure by deposit-taking SACCOs in Kenya.	(+) B = 0.012*	H_0 not supported
Objective 3: To establish the contribution of governance on the level of disclosure by deposit-taking SACCOs in Kenya.	*Hypothesis 3:* H_0: SACCO governance does not contribute to the level of disclosure by deposit-taking SACCOs in Kenya.	(+) B = 0.204*	H_0 not supported
Objective 4: To establish the contribution of asset quality on the level of disclosure by deposit-taking SACCOs in Kenya.	*Hypothesis 4:* H_0: Asset quality does not influence on the level of disclosure by deposit-taking SACCOs in Kenya.	(+) B = 0.060*	H_0 not supported
Objective 5: To examine the influence of auditor type on the level of disclosure by deposit-taking SACCOs in Kenya.	*Hypothesis 5:* H_0: The type of an auditor does not influence the level of disclosure by deposit-taking SACCOs in Kenya.	(–) B = -0.032*	H_0 not supported

* - Significant at the 0.05 level, NS – not significant.

4.11.1 Hypothesis 1: Profitability and Disclosure Level

The findings revealed that the beta coefficient on the return on assets (ROA) was -0.080 with a t-statistic of -1.175. The p-value for ROA was 0.265 which was greater than 0.05, implying that the ROA was not a significant determinant of the level of disclosure. Therefore, the null hypothesis that profitability (as measured by ROA) does not influence the level of disclosure could not be rejected. The finding contradicted the studies by Kamwenji (2013), Lan *et al.* (2013) and Quayes and Hasan (2014) who found a significant association between profitability and disclosure levels. The insignificant influence of the ROA as a measure of profitability on disclosure mirrored the study by Khlif and Souissi (2010) who did not find any significant association between disclosure levels and profitability. Ullmann (1985) argued that for profitability to potentially influence disclosure, it should be considered together with active strategic posture of the organization. However, Neu, Warsame and Pedwell (1998) posited that there is no evidence to support Ullmann (1985)'s view that good financial performance combined with an active strategic posture promoted disclosure.

4.11.2 Hypothesis 2: SACCO Size and Disclosure Level

The coefficient on the variable, ASSET was 0.012 which was greater than zero. The t-statistic of this coefficient was 6.873 with a p-value of 0.000 which was less than 0.05. This implied that the coefficient on ASSET was significant and that SACCO size had a significant influence on the level of disclosure by SACCOs. This meant that a unit increase in the asset value resulted in an increase in the level of disclosure by 0.012 units. The null hypothesis that SACCO size does not influence the level of disclosure by deposit-taking SACCOs in Kenya was therefore rejected. The findings demonstrated that as the value of SACCO assets increased, the level of disclosure increased too.

The findings were in tandem with studies such as Menassa (2010), Luethge and Han (2012) and Msuya and Maleko (2015) who found that larger organizations provide more disclosures. The findings were also consistent with prior studies such as Khlif and Souissi (2010) and Quayes and Hasan (2014) who argued that large organizations have stronger incentives and resources to disclose more. Larger organizations provide more disclosure because they experience lower disclosure cost (Singhvi & Desai,

1971), are more complex (Cooke, 1989) and are likely to realize benefits such as greater marketability and ease of financing (Singhvi & Desai, 1971). Small organizations are not able to afford the costs of disclosure due to their limited resource base (Owusu-Ansah, 1998). The positive influence of size on disclosure further concurred with Alsaeed (2006) who argued that larger organizations are more exposed to public scrutiny (including regulatory monitoring) than smaller organizations. Therefore, larger organizations are more inclined to disclose more to supply information to different users.

This finding illustrated the importance of resources in shaping disclosure decisions by deposit-taking SACCOs despite the fact that SACCOs are grappling with lack of qualified and experienced accountants and resources as observed by Irungu (2013). In general, the findings emphasized the positive influence of resources on the level of disclosure. As part of their growth strategy, SACCOs should consider increasing their asset base since this provides them with the financial strength to improve their disclosure levels. Large SACCOs are also capable of taking advantage of the scale of operations to reduce disclosure costs and even provide higher quality information to the users. The SACCO Act and the SACCO Regulations provided guidelines on areas to focus on so as to improve disclosure. This, together with sufficient resources, will assist SACCOs in improving their disclosure levels and maintain higher standards of transparency and accountability. This will be useful in attracting investments in the sector and improving the level of credibility. It is important for SACCOs with more assets to provide adequate disclosures to meet stakeholder demands and minimize potential agency conflicts.

4.11.3 Hypothesis 3: SACCO Governance and Disclosure Level

The coefficient on the variable, GSCORE was 0.204 which was greater than zero. The t-statistic of this coefficient was 8.322 with a p-value of 0.000 which was less than 0.05. This implied that the coefficient on GSCORE was significant and that SACCO governance had a significant influence on the level of disclosure by SACCOs. This meant that a unit increase in the governance score resulted in an increase in the level of disclosure by 0.204 units. The null hypothesis that SACCO governance did not contribute to the level of disclosure by deposit-taking SACCOs in Kenya was

therefore rejected. This is because, as the value of the governance score increased, the level of disclosure increased too.

The positive contribution of the governance score on disclosure was in support of Johnson and Greening (2009), Kent and Zunker (2013) and (2015) who found a positive relation between the governance score and the level of disclosures. The finding indicated that SACCOs voluntary reporting and adopting best practice corporate governance practices were more likely to provide improved level of disclosure. The adoption of best practice corporate governance practices is emphasized by WOCCU, ICURN, the Organization for Economic Co-operation and Development (OECD) and the GRI. The results indicated that SACCOs have adopting corporate governance mechanisms as a way of gaining legitimacy and minimizing agency conflicts between SACCO members and those charged with governance.

4.11.4 Hypothesis 3: Asset Quality and Disclosure Level

The findings revealed that the beta coefficient on the non-performing to gross loans (NPLS) was 0.060 with a t-statistic of 2.519. The p-value for NPLS is 0.000 which was less than 0.05. This implied that the coefficient on NPLS was significant and that asset quality had a significant influence on the level of disclosure by SACCOs. This meant that a unit increase in non-performing to gross loans ratio would result in an increase in the level of disclosure by 0.060 units. The null hypothesis that asset quality did not influence on the level of disclosure by deposit-taking SACCOs in Kenya was therefore rejected. This is because, as the value of the non-performing to gross loans ratio increased, the level of disclosure increased.

The findings showed that deposit-taking SACCOs with a higher ratio of non-performing to gross loans (hence declining asset quality) provided more disclosure. A higher proportion of non-performing loans signifies declining quality of the loan portfolio. As a result, SACCO members demand for explanation from the management with regard to the declining portfolio quality. The positive influence of non-performing loans on disclosure is tandem with the argument by Teoh and Hwang (1991) that managers perceived to be less efficient would rather engage in imporved disclosure to demonstrate their credibiliy.

Disclosure of more information when users perceive managers to be inefficient serves as a positive signal of an organization's commitment towards handling asset quality problems. The findings contrast the results of Spiegel and Yamori (2004) who established that small co-operatives in Japan with more serious bad loan problems were less likely to voluntarily disclose. Overall, the findings demonstrated that asset quality had a significant influence on how much information SACCOs provide. The findings demonstrated that poor asset quality, as evidenced by an increase in the ratio of non-performing to gross loans, served as a signal of weakening loan portfolio quality. Therefore, reducing the level of non-performing loans in the SACCOs would be useful in terms of minimizing potential agency conflicts within SACCOs.

4.11.5 Hypothesis 4: Auditor Type and Disclosure Level

The findings revealed that the beta coefficient on the government auditor (GOVAUD) was -0.032 with a t-statistic of -6.515. The p-value for the variable, GOVAUD was 0.000 which was less than 0.05. This implied that the coefficient on GOVAUD was significant and that auditor type had a significant influence on the level of disclosure by SACCOs. The findings implied that SACCOs whose auditor was the government auditor were associated with lower levels of disclosure by 0.032 units. The null hypothesis that the type of an auditor did not influence the level of disclosure by deposit-taking SACCOs in Kenya was therefore rejected. Where SACCOs are audited by the government auditor, the level of disclosure was low. Interestingly, the government auditor was not included in SASRA's list of approved auditors that has been in issue from 2010.

The findings on the influence of government auditors on disclosure resonated with Wallace and Naser (1995). According to Wallace and Naser (1995), non-Big four audit firms may not have the power to influence the quantity of disclosure. Further, given the large number of SACCOs in Kenya, resource constraints at the Commissioner for Cooperatives in terms of number of auditors to audit the SACCOs may be a contributor to the low level of disclosure. Usually, the government auditor charges a lower audit fee than other types of auditors and this reflects in the low level of disclosures associated with SACCOs audited by a government auditor. Overall, the findings showed that the decision to choose an auditor by SACCOs is an important aspect that influenced SACCO's overall disclosure level and strategy. The findings

provided evidence that the type of auditor selected influenced the quality and level of disclosure by SACCOs either favourably or adversely.

4.12 The Optimal Model and Revised Conceptual Framework

Based on the findings of the analyses performed, the optimal model for the study was formulated as $Y= -0.179 + 0.204X_1 + 0.060X_2 + 0.012X_3 - 0.032X_4 + e_i$ where Y represented overall disclosure (DISCL), X_1 represented SACCO governance measured by the governance score (GSCORE), X_2 represented asset quality as measured by non-performing to gross loans (NPLS), X_3 represented SACCO size measured by total asset value (ASSETS) and X_4 was the auditor type measured by the government auditor (GOVAUD). As established earlier, 64.2% of the variation in the level of disclosure was explained by the independent variables included in the optimal regression model. With the exception of X_5, all the other four variables ($X_1 – X_4$) were found to have some influence on the level of disclosure level by SACCOs. Therefore, X_5 was rendered redundant. Since the ICPAK guidelines were established to have a moderating influence on the relationship between three determinants (X_1, X_2 and X_3) and the level of disclosure, it was retained in the revised conceptual framework. Therefore the revised conceptual framework is presented in Figure 4.7.

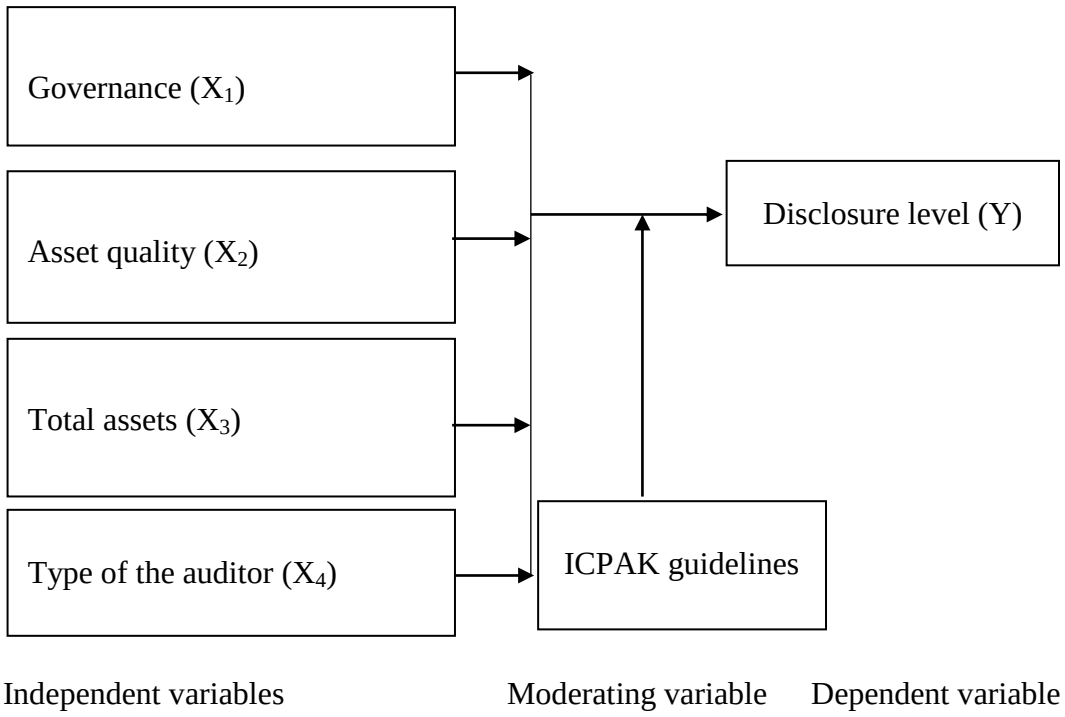

Figure 4.7: Revised Conceptual Framework

4.13 Regression Analysis with Moderator Variable

A moderator variable, ICPAK guidelines was introduced to regression model to determine the change in the adjusted R squared when the ICPAK guidelines are considered (i.e., from 2011 to 2013) and when the ICPAK guidelines are not considered (i.e., from 2008-2010). Moderation analysis was appropriate since the study had multiple independent variables (Kim *et al.,* 2001). The regression analysis was performed for each independent variable and the dependent variable to establish the individual moderating influence of each determinant of disclosure on the level of disclosure. Aldwin (1994), Holmbeck (1997) and Kim *et al.* (2001) posited that if the change in the coefficient of determination (R^2) for the interaction variable is positive and significant, then it is said to have a moderating effect, and thus, the moderation hypothesis is supported. The null hypothesis of no moderation was tested by regressing each interaction variable with the level of disclosure.

Regression analysis was performed to determine the effect of ICPAK guidelines on the relationship between profitability as measured by return on assets (ROA) and the level of disclosure. The interaction between ROA and ICPAK guidelines (ROA*ICPAK) was calculated and used in the regression model $Y = \beta_0 + \beta_1$ ROA * ICPAK + β_2ROA + e_i. Table 4.26 presents the model summary with the results of the moderation analysis on the relationship between profitability and disclosure level. According to the results, the value of adjusted R square without consideration of the ICPAK guidelines is 56.5%. The adjusted R square improves to 56.6% when the ICPAK guidelines are considered. This implies that the adjusted R square changed by 0.177%.

Table 4.26: Model Summary Showing Moderation Effect of Profitability on Disclosure Level

				Std. Error	Change Statistics		
Model[c]	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	Sig. F Change
Without moderator	0.753[a]	0.566	0.565	0.081	0.566	525.697	0.000
With moderator	0.753[b]	0.567	0.566	0.080	0.567	395.813	0.000

a. Predictors: (Constant), ROA
b. Predictors: (Constant), ROA, ROA*ICPAK
c. Dependent Variable: DISCL

Table 4.27 presents the ANOVA results for the moderation effect of profitability on the level of disclosure. According to the results, the F-statistic with the moderator variable is 395.813, which is greater than the F-critical of 3.000 (Appendix XI). The ANOVA shows that the F-change was significant at the 0.05 level. This shows that the coefficients in the model were not equal to zero and exhibited a good fit.

Table 4.27: ANOVA for Moderation Effect of Profitability on Disclosure Level

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
Without moderator	Regression	10.231	1	3.410	525.697	0.000[b]
	Residual	7.837	1210	0.006		
	Total	18.068	1211			
With moderator	Regression	10.252	2	2.563	395.813	0.000[c]
	Residual	7.816	1209	0.006		
	Total	18.068	1211			

a. Dependent Variable: DISCL

b. Predictors: (Constant), ROA

c. Predictors: (Constant), ROA, ROA*ICPAK

Table 4.28 shows that the coefficient on the interaction variable, ROA*ICPAK is 0.281. However, the coefficient on the interaction variable is not significant since its p-value was 0.072 which is greater than 0.05. Since the coefficient of ROA*ICPAK was insignificant, it implied that the ICPAK guidelines did not moderate the relationship between profitability (measured by ROA) and the level of disclosure.

Table 4.28: Coefficients for Moderation Effect of Profitability on Disclosure Level

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Without moderator	(Constant)	-0.988*	2.724		-3.547	0.000
	ROA	-0.017	0.079	-0.004	-0.218	0.828
With moderator	(Constant)	-0.605*	3.026		-3.909	0.000
	ROA*ICPAK	0.281	0.156	0.049	1.800	0.072
	ROA	-0.149	0.108	-0.036	-1.385	0.166

a. Dependent Variable: DISCL, * - Sig. $p < 0.05$

Regression analysis was performed to determine the effect of ICPAK guidelines on the relationship between SACCO size as measured by asset value (ASSETS) and the level of disclosure. The interaction variable between ASSETS and ICPAK guidelines (ASSETS*ICPAK) was calculated and used in the regression model $Y = \beta_0 + \beta_1 ASSETS + \beta_2 ASSETS^* ICPAK + e_i$. Table 4.29 presents the model summary of the regression analysis. According to the results in Table 4.29, the value of adjusted R square without consideration of the ICPAK guidelines is 60.3%. The adjusted R square improves to 62.4% when the ICPAK guidelines are considered. This means that 62.4% of the variation in the level of disclosure is explained by the model $Y = \beta_0 + \beta_1 ASSETS + \beta_2 ASSETS^* ICPAK + e_i$. The change in the adjusted R square is 3.483%.

Table 4.29: Model Summary Showing Moderation Effect of Size on Disclosure Level

				Std. Error	Change Statistics		
Model[c]	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	Sig. F Change
Without moderator	0.777[a]	0.604	0.603	0.077	0.604	615.407	0.000
With moderator	0.791[b]	0.625	0.624	0.075	0.625	503.697	0.000

a. Predictors: (Constant), ASSETS
b. Predictors: (Constant), ASSETS, ASSETS*ICPAK
c. Dependent Variable: DISCL

From Table 4.30, the ANOVA showed an F statistic of 503.697 with a significance of 0.000. According to the results, the F-statistic with the moderator variable (503.607) is greater than the F-critical of 3.000 (Appendix XI). This showed that the coefficients in the regression model fitted were jointly not equal to zero implying a good fit.

Table 4.30: ANOVA for Moderation Effect of Size on Disclosure Level

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
Without moderator	Regression	10.922	1	3.641	615.407	0.000[b]
	Residual	7.146	1210	0.006		
	Total	18.068	1211			
With moderator	Regression	11.299	2	2.825	503.697	0.000[c]
	Residual	6.769	1209	0.006		
	Total	18.068	1211			

a. Dependent Variable: DISCL

b. Predictors: (Constant), ASSETS

c. Predictors: (Constant), ASSETS, ASSETS*ICPAK

The results in Table 4.31 show that the coefficient on the interaction variable, ASSETS *ICPAK is 0.004. This means that the coefficient on the interaction variable is significant since its p-value was 0.000 which is less than 0.05. Since the coefficient of ASSETS *ICPAK was significant, it implied that the ICPAK guidelines moderated the relationship between SACCO size (measured by asset value) and the level of disclosure.

Table 4.31: Coefficients for Moderation Effect of Size on Disclosure Level

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
Without moderator	(Constant)	-0.294*	2.637		-8.035	0.000
	ASSETS	0.018*	0.002	0.235	10.807	0.000
With moderator	(Constant)	-0.666*	5.257		-11.920	0.000
	ASSETS*ICPAK	0.004*	0.000	0.303	8.202	0.000
	ASSETS	0.016*	0.002	0.212	9.879	0.000

a. Dependent Variable: DISCL, * - Sig. $p < 0.05$

Regression analysis was performed to determine the effect of ICPAK guidelines on the relationship between SACCO governance as measured by the governance score (GSCORE) and the level of disclosure. The interaction variable between GSCORE and ICPAK guidelines (GSCORE*ICPAK) was computed and used in the regression

model $Y = \beta_0 + \beta_1 GSCORE + \beta_2 GSCORE^* ICPAK + e_i$. Table 4.32 presents the results of the model summary. According to the results in Table 4.32, the value of adjusted R square without consideration of the ICPAK guidelines is 59.8%. The adjusted R square improves to 61.5% when the ICPAK guidelines are considered. This means that 61.5% of the variation in the level of disclosure is explained by the model $Y = \beta_0 + \beta_1 GSCORE + \beta_2 GSCORE^* ICPAK + e_i$. The change in the adjusted R square is 2.842%.

Table 4.32: Model Summary Showing Moderation Effect of Governance on Disclosure Level

				Std. Error	Change Statistics		
Model[c]	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	Sig. F Change
Without moderator	0.774[a]	0.599	0.598	0.077	0.599	601.879	0.000
With moderator	0.785[b]	0.616	0.615	0.076	0.616	484.402	0.000

a. Predictors: (Constant), GSCORE
b. Predictors: (Constant), GSCORE, GSCORE*ICPAK
c. Dependent Variable: DISCL

From Table 4.33, the ANOVA showed an F statistic of 484.402 with a significance of 0.000. According to the results, the F-statistic with the moderator variable (484.402) is greater than the F-critical of 3.000 (Appendix XI). This showed that the coefficients in the regression model fitted were jointly not equal to zero implying a good fit.

Table 4.33: ANOVA for Moderation Effect of Governance on Disclosure Level

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
Without moderator	Regression	10.825	1	3.608	601.879	0.000[b]
	Residual	7.242	1210	0.006		
	Total	18.068	1211			
With moderator	Regression	11.133	2	2.783	484.402	0.000[c]
	Residual	6.935	1209	0.006		
	Total	18.068	1211			

a. Dependent Variable: DISCL
b. Predictors: (Constant), GSCORE
c. Predictors: (Constant), GSCORE, GSCORE*ICPAK

The results in Table 4.34 show that the coefficient on the interaction variable, GSCORE*ICPAK is 0.138 with a t-statistic of 7.314. This means that the coefficient on the interaction variable is significant since its p-value was 0.000 which is less than 0.05. Since the coefficient of GSCORE*ICPAK was significant, it implied that the ICPAK guidelines moderated the relationship between SACCO governance (measured by the governance score) and the level of disclosure.

Table 4.34: Coefficients for Moderation Effect of Size on Disclosure Level

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
Without moderator	(Constant)	-0.705	2.938		-3.209	0.000
	GSCORE	0.254	0.026	0.205	9.959	0.000
With moderator	(Constant)	-0.377	4.824		-3.137	0.000
	GSCORE*ICPAK	0.138	0.019	0.272	7.314	0.000
	GSCORE	0.164	0.028	0.132	5.877	0.000

a. Dependent Variable: DISCL, * - Sig. $p < 0.05$

Regression analysis was performed to determine the effect of ICPAK guidelines on the relationship between asset quality as measured by non-performing to gross loans (NPLS) and the level of disclosure. The interaction variable between NPLS and ICPAK guidelines (NPLS*ICPAK) was calculated and used in the regression model $Y = \beta_0 + \beta_1 NPLS + \beta_2 NPLS^*\ ICPAK + e_i$. Table 4.35 presents the results of the model summary. According to the results, the value of adjusted R square without consideration of the ICPAK guidelines is 57.0%. The adjusted R square improves to 57.1% when the ICPAK guidelines are considered. This means that 57.1% of the variation in the level of disclosure is explained by the model $Y = \beta_0 + \beta_1 NPLS + \beta_2 NPLS^*\ ICPAK + e_i$. The change in the adjusted R square is 0.175%.

Table 4.35: Model Summary Showing Moderation Effect of Asset Quality on Disclosure Level

Model[c]	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
Without moderator	0.756[a]	0.571	0.570	0.080	0.571	536.265	0.000
With moderator	0.757[b]	0.573	0.571	0.080	0.573	404.619	0.000

a. Predictors: (Constant), NPLS

b. Predictors: (Constant), NPLS, NPLS*ICPAK

c. Dependent Variable: DISCL

From Table 4.36, the ANOVA showed an F statistic of 404.619 with a significance of 0.000. According to the results, the F-statistic with the moderator variable (404.619) is greater than the F-critical of 3.000 (Appendix XI). This showed that the coefficients in the regression model fitted were jointly not equal to zero implying a good fit.

Table 4.36: ANOVA for Moderation Effect of Asset Quality on Disclosure Level

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
Without moderator	Regression	10.319	1	3.440	536.265	0.000[b]
	Residual	7.749	1210	0.006		
	Total	18.068	1211			
With moderator	Regression	10.350	2	2.587	404.619	0.000[c]
	Residual	7.718	1209	0.006		
	Total	18.068	1211			

a. Dependent Variable: DISCL

b. Predictors: (Constant), NPLS

c. Predictors: (Constant), NPLS, NPLS*ICPAK

The results in Table 4.37 show that the coefficient on the interaction variable, NPLS*ICPAK is 0.160 with a t-statistic of 2.173. This means that the coefficient on the interaction variable is significant since its p-value was 0.030 which is less than 0.05. Since the coefficient of NPLS*ICPAK was significant, it implied that the ICPAK guidelines moderated the relationship between asset quality (measured by non-performing to gross loans) and the level of disclosure.

Table 4.37: Coefficients for Moderation Effect of Asset Quality on Disclosure Level

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
Without moderator	(Constant)	-0.553*	2.862		-3.487	0.000
	NPLS	0.097*	0.026	0.074	3.715	0.000
With moderator	(Constant)	-0.340*	2.911		-3.465	0.000
	NPLS*ICPAK	0.160*	0.074	0.116	2.173	0.030
	NPLS	-0.041*	0.068	-0.031	-0.593	0.553

a. Dependent Variable: DISCL, * - Sig. $p < 0.05$

Regression analysis was performed to determine the effect of ICPAK guidelines on the relationship between auditor type as measured by the government auditor (GOVAUD) and the level of disclosure. The interaction variable between GOVAUD and ICPAK guidelines (GOVAUD*ICPAK) was calculated and used in the regression model $Y = \beta_0 + \beta_1 GOVAUD + \beta_2 GOVAUD^* ICPAK + e_i$. Table 4.38 presents the model summary. According to the results in Table 4.38, the value of adjusted R square without consideration of the ICPAK guidelines is 60.2%. The adjusted R square improves to 60.3% when the ICPAK guidelines are considered. This means that 60.3% of the variation in the level of disclosure is explained by the model $Y = \beta_0 + \beta_1 GOVAUD + \beta_2 GOVAUD^* ICPAK + e_i$. The change in the adjusted R square is 0.166%.

Table 4.38: Model Summary Showing Moderation Effect of Auditor Type on Disclosure Level

				Std. Error	Change Statistics		
Model[c]	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	Sig. F Change
Without moderator	0.776[a]	0.603	0.602	0.077	0.603	611.034	0.000
With moderator	0.777[b]	0.604	0.603	0.077	0.604	460.086	0.000

a. Predictors: (Constant), GOVAUD

b. Predictors: (Constant), GOVAUD, GOVAUD *ICPAK

c. Dependent Variable: DISCL

From Table 4.39, the ANOVA showed an F statistic of 460.066 with a significance of 0.000. According to the results, the F-statistic with the moderator variable (460.086) is greater than the F-critical of 3.000 (Appendix XI). This showed that the coefficients in the regression model fitted were jointly not equal to zero implying a good fit.

Table 4.39: ANOVA for Moderation Effect of Auditor Type on Disclosure Level

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
Without moderator	Regression	10.891	1	3.630	611.034	0.000[b]
	Residual	7.177	1210	0.006		
	Total	18.068	1211			
With moderator	Regression	10.912	2	2.728	460.086	0.000[c]
	Residual	7.156	1209	0.006		
	Total	18.068	1211			

a. Dependent Variable: DISCL
b. Predictors: (Constant), GOVAUD
c. Predictors: (Constant), GOVAUD, GOVAUD *ICPAK

The results in Table 4.40 show that the coefficient on the interaction variable, GOVAUD*ICPAK is 0.016 with a t-statistic of 1.865. The coefficient on the interaction variable is not significant since its p-value was 0.062 which is greater than 0.05. Since the coefficient of GOVAUD*ICPAK was not significant, it implied that the ICPAK guidelines did not moderate the relationship between auditor type (measured by the government auditor) and the level of disclosure.

Table 4.40: Coefficients for Moderation Effect of Auditor Type on Disclosure Level

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Without moderator	(Constant)	-0.744*	2.673		-6.942	0.000
	GOVAUD	-0.050*	0.005	-0.201	-10.540	0.000
With moderator	(Constant)	-0.618*	3.152		-3.331	0.000
	GOVAUD *ICPAK	0.016	0.009	0.046	1.865	0.062
	GOVAUD	-0.057*	0.006	-0.229	-9.434	0.000

a. Dependent Variable: DISCL, * - Sig. $p < 0.05$

According to the findings, three independent variables (ASSETS, GSCORE and NPLS) were positively moderated by the ICPAK guidelines. Given the level of significance of the ANOVA for the three variables, the results of the regression analyses reveal that the ICPAK guidelines moderated the relationship between the three determinants of disclosure and the level of disclosure by SACCOs in Kenya. The findings implied that the null hypothesis that the ICPAK guidelines did not moderate the relationship between the determinants of disclosure and disclosure levels by deposit-taking SACCOs in Kenya was therefore rejected. The findings support the proposition held by Spiegel and Yamori (2004) and Hyndman and McKillop (2004) that regulator-driven disclosure guidelines enhance disclosure levels.

The findings illustrate that whereas the regulator-driven ICPAK guidelines improved disclosure by SACCOs significantly, their benefits appear varied across different SACCOs. These findings are in support of the regulatory actions of requiring SACCOs (especially licensed ones) to adhere to the ICPAK guidelines as a way of improving disclosure. The overall effect of adopting the ICPAK guidelines is an improvement in transparency and accountability by Kenyan SACCOs. Overall, the findings demonstrate empirically that there is felt moderating effect of the ICPAK guidelines on disclosure determinants relating to SACCO size, governance and asset quality.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary on the findings in this study and outlines the conclusions thereof. The summary of findings is presented as per the research objectives set out in chapter one. Finally, the chapter provides recommendations and possible areas of further research based on the analyzed data related to the objectives of the study.

5.2 Summary of the Findings

Multiple regression analysis was performed to analyze the determinants of the level of disclosure by SACCOs in Kenya. The multiple regression model, with and F-statistic of 310.980, which was greater than F-critical of 2.02. The overall model used was significant at the 0.05 level, indicating that the predictors reliably influenced the dependent variable. The model's predictive power as measured by the adjusted R-square was also high at 64.2%, illustrating that 64.2% of the variation in the level of disclosure is explained by the independent variables analyzed. Five determinants of disclosures by SACCOs were considered: profitability, size, governance, asset quality and auditor type. The moderating influence of the ICPAK guidelines of 2010 on the determinants of disclosure was also examined.

The study found an overall disclosure level of 60% comprising of general disclosure (60.4%), financial disclosure (81.9%) and social disclosure (29.5%). The forward selection method identified five independent variables from each of the five categories for further analysis, governance score (beta = 0.204, p = 0.000), non-performing to gross loans (beta = 0.060, p = 0.012), asset value (beta = 0.012, p = 0.000), government auditor (beta = -0.032, p = 0.000) and return on assets (beta = -0.080, p = 0.265). The study also found moderation effect on the relationship between the determinants of disclosure and the level of disclosure with regard to governance (beta = 0.138, p = 0.000), assets (beta = 0.004, p = 0.000) and non-performing to gross loans (beta = 0.160, p = 0.030). The findings further revealed that SACCOs

provide more disclosures on income statement items (88.9%) compared to the statement of financial position items (72.9%). With regard to social disclosures, the study found that human resource welfare (42.1%), member welfare (39.1%) and products and services (32.4%) were the top three aspects focused by SACCOs in Kenya. The study established weak disclosure on environmental conservation by deposit-taking SACCOs at 0.4%.

5.2.1 The Influence of Profitability on the Level of Disclosure

The study sought to establish the influence of profitability of a deposit-taking SACCO on the level of disclosure. Based on the forward selection method, the return on assets was selected (out if the four measures) as a measure of profitability in SACCOs. The findings illustrated an insignificant influence of the return on assets on the level of disclosure at the 0.05 level. The beta for return on assets was -0.080 with a p-value of 0.265 which was greater than the significance level of 0.05. The questionnaire findings revealed that the level of profitability may or may not influence the level of disclosure. The insignificant influence of the ROA as a measure of profitability on disclosure mirrors prior studies which did not find any significant association between disclosure levels and profitability.

5.2.2 The Influence of SACCO Size on the Level of Disclosure

The study sought to examine the influence of the size of a deposit-taking SACCO on the level of disclosure. Using the forward selection method, total asset value was selected as a measure of SACCO size. The findings showed that total asset value was an important determinant of the level of disclosure in SACCOs with a beta of 0.012 and p-value of 0.000, which was lower than the significance level of 0.05. This implied that a one unit increase in total assets increased the level of disclosure by 1.2%. The finding illustrated the importance of resources (assets) in shaping disclosure level. According to the finding, SACCOs with more assets (hence more financial strength) provide more information in the annual report.

The questionnaire findings showed that majority of the respondents indicated that SACCO members were interested in the level of assets held by the SACCO and how the assets were utilized. This demonstrated the importance of providing adequate disclosures, especially where asset holdings are significant. Further, the respondents

indicated that the growth in membership led to more disclosure. This is because of the need to reach out to the dispersed membership after SACCOs attained deposit-taking status. According to the findings, respondents highlighted the influence of SACCO branches on the level of disclosures. These findings emphasize the importance of resources, membership and outreach in improving the level of disclosures provided by SACCOs.

5.2.3 The Contribution of Governance on the Level of Disclosure

The study sought to establish the contribution of governance of a deposit-taking SACCO on the level of disclosure. Based on the forward selection method, the governance score was selected as a measure of SACCO governance. The findings showed that the governance score was significant and positively related to the level of disclosure with a beta of 0.204 and p-value of 0.000, which was lower than the significance level of 0.05. The finding implied that a one unit increase in the governance score improved the level of disclosure by 20.4%. This finding indicated that SACCOs voluntarily adopting best practice corporate governance practices are more likely to provide higher disclosures. The questionnaire findings corroborated the findings that SACCOs that have embraced more governance mechanisms provide more disclosures. The findings highlighted the influence of board committees such as finance and administration, supervisory and audit on SACCO disclosures. Further, the respondents indicated that the SACCO board has a significant influence on the level of disclosure. The findings suggest that a number of deposit-taking SACCOs seem to have voluntarily adopted best practices in corporate governance recommended by WOCCU and OECD, which have positively impacted on the level of disclosure.

5.2.4 The Contribution of Asset Quality on the Level of Disclosure

The study sought to establish the contribution of asset quality on the level of disclosure by deposit-taking SACCOs. Using the forward selection method, the ratio of non-performing to gross loans was selected as a measure of asset quality. The findings revealed that asset quality, as measured by the ratio of non-performing to gross loans, had a significant and positive contribution on the level of disclosure. The beta on the ratio of non-performing to gross loans was 0.060, with a p-value of 0.012 which was lower than the significance level of 0.05. This implied that a one unit

increase in the ratio of non-performing to gross loans improved the level of disclosure by 6%. This means that SACCOs with lower asset quality and challenges in their accounting systems provide disclosures. The pressure to provide more information by SACCOs when faced by asset quality challenges could be as a result of member pressure on the management to explain the situation.

The findings from the questionnaires indicated that majority of the respondents were of the view that SACCO members demand for more information if they perceive that there are weaknesses in the management of the loan assets in the SACCO. The respondents indicated that asset quality problems are associated with higher disclosure. In support of the regression findings, the opinions from SACCO managers illustrated that SACCOs faced by inefficiencies in the management of loan portfolio provide relatively higher disclosures to manage the potentially negative effects associated with a growing level of non-performing loans.

5.2.5 The Influence of Auditor Choice on the Level of Disclosure

The study sought to examine the influence of three auditor categories (that is, Big four, government and small) on the level of disclosure by SACCOs. Using the forward selection method, the government auditor was selected as a determinant of the level of disclosure by SACCOs. The findings established a significant and negative relationship between the government auditor and the level of disclosure. The beta on auditor type was -0.032 with a p-value of 0.000, which was lower than the significance level of 0.05. This implied that SACCOs audited by the government auditor with experience reduction in the level of disclosure by 3.2% compared to SACCOs audited by other auditors. Although the influence of government auditor is not well documented in literature, this study provided evidence of possible lower quality audits carried out by the government auditor. This could be due to the numerous SACCO audits the government auditor carries out and the relatively lower fees charged compared to the small and big four auditors.

The findings from the questionnaires seem to be in support of the influence of SACCO auditors on disclosure. This is because the respondents were of the view that the external auditor provides more clarity in interpreting the requirements of reporting standards. Other respondents opined that the external auditor is usually satisfied with

the information provided in the annual report. Nevertheless, the respondents indicated that the auditor required more disclosures.

5.2.6 The Moderating Effect of the ICPAK guidelines on the Determinants of Disclosure

Finally, the study sought to examine the moderating effect of the ICPAK guidelines on the relationship between the determinants of disclosure and the level of disclosure by deposit-taking SACCOs. The study found an improvement in the level of disclosure when the ICPAK guidelines are considered (2011-2013) compared to when the ICPAK guidelines are not considered (2008-2010). This demonstrated that disclosure levels improved with the release of the ICPAK guidelines. It is also around the issuance of the ICPAK guidelines when the SACCO Regulations of 2010 were enacted which could have played a role in improving the level of disclosures by SACCOs.

The regression findings supported the moderating effect of the ICPAK guidelines on the relationship between disclosure determinants and the level of disclosure with regard to governance (beta = 0.138, p = 0.000), assets (beta = 0.004, p = 0.000) and non-performing to gross loans (beta = 0.160, p = 0.030). The findings demonstrated that the ICPAK guidelines played a role in improving the level of transparency by improving the level of disclosures by SACCOs. The study is timely in that it attempts to examine the influence of regulatory effort aimed at improving the level of disclosure by deposit-taking SACCOs in Kenya. The analysis performed permitted an examination of disclosure three years before and three years after the release of the regulatory-driven disclosure guidelines in 2010.

5.3 Conclusions

The study reviewed both theoretical and empirical literature and established an interrelationship between the level of disclosure and five categories of independent variables. The independent variables were profitability, size, governance, asset quality and auditor type. The study found that disclosures by SACCOs are influenced by SACCO size as measured by asset base, governance as measured by the governance score, asset quality as measured by the ratio of non-performing to gross loans and auditor type as measured by the government auditor. The findings did not find a

significant influence of profitability on disclosures by SACCOs in Kenya. Further, the study provided evidence of a moderating influence of the ICPAK guidelines on the relationship between disclosure determinants (asset value, governance score and non-performing to gross loans) and the level of disclosure.

This study found that disclosures by SACCOs in Kenya are useful in promoting accountability and transparency in the sector. Despite the relatively lower level of disclosures by SACCOs in Kenya, there have been efforts by the regulator to improve the quality of reporting in the sector. This is evidenced by the release of the ICPAK guidelines in November 2010 aimed at assisting SACCOs in terms of the required financial disclosures. However, the apparent lack of a disclosure guideline incorporating social disclosures seems to be contributing to lower overall disclosure level, which is at 60.1%. This creates the need for a disclosure guideline that encompasses a broad spectrum of disclosures, including financial and social disclosures.

The findings revealed the economic influences on disclosure level with resources playing a greater role in shaping disclosure decisions by SACCOs. Whereas SACCOs have faced resource constraints in terms of funds to hire, develop and retain qualified accounting personnel, the study found that it is imperative for SACCOs to allocate some funds to cater for this. The need for funds increases with increase in membership and branch network. Increased membership means increased pressure to be more transparent. This can be achieved by providing adequate information through appropriate and timely disclosure of information on how member funds have been utilized to generate a return to them. An increase in branch network implies an increase in visibility which would require more information disclosure as to how the SACCO and its branches are performing.

The study also found that governance characteristics also shape disclosures by SACCOs. The findings showed that SACCOs with a higher governance score, which was a composite measure incorporating 16 governance characteristics, provided more disclosures. This illustrates that the governance mechanisms in a SACCO are important in influencing disclosures. The study found that disclosure levels are also influenced by asset quality. The findings showed that SACCOs with asset quality problems provide more disclosures. This highlights the need by SACCO managers to

devise ways of improving loan asset quality. When a SACCO reports an ever increasing level of non-performing assets, members are concerned with the deteriorating quality of the loan portfolio and want to know what the management is doing to deal with the situation. Although SACCOs have over time relied on the guarantorship system for loans, they are now seeking alternatives such as physical collateral and seeking services of credit reference bureaus. These are efforts aimed at reducing the level of non-performing loans in the SACCO.

Finally, the choice of an auditor is important as it influenced the level disclosures provided by the SACCO. The study found that SACCOs audited by the government auditor exhibit lower level of disclosure. This may dissuade SACCOs from engaging the government auditor. Since larger auditors are more expensive, and the fact that the government auditor is associated with low level of disclosure, SACCOs may result in contracting especially the small auditors who charger relatively lower fees. This study found that even though the choice of a small auditor is a highly likely option for SACCOs, caution should be exercised in selecting an auditor who has experience in the sector and is reputable.

5.4 Recommendations

SACCOs should provide higher level of disclosure to the various stakeholders. This study revealed a relatively lower level of compliance with required disclosures by SACCOs in Kenya. Despite the regulatory actions of steering the development and release of the ICPAK guidelines, one of the reasons for the lower level of compliance with required disclosures is the lack of awareness created by the regulatory on the ICPAK guidelines. The study found that a number of the preparers of financial statements for SACCOs were not aware of the ICPAK guidelines. While the current efforts are recognized, it is necessary for SACCO regulators (both SASRA and the Commissioner of Co-operatives) and the ICPAK to create more awareness and sensitization for SACCOs to embrace good disclosure practices.

Given the importance of financial resources in enhancing disclosures, SACCOs should consider setting aside funds aimed at improving disclosure as this enhances market discipline and confidence by the members. Further, SACCOs should invest in qualified accounting personnel to improve disclosures. The study also found that

governance mechanisms improve disclosure. Therefore, SACCOs need to improve their governance mechanisms, by adopting best practice governance practices, which have a positive influence on the level of disclosure. Among the governance aspects SACCOs can consider improving on include: disclosures relating to the board, committees and their characteristics, board diversity (gender, age, education and experience), disclosure of benefits to board members (including insider lending) and the inclusion of the chairperson's report in the annual report.

The study found that asset quality influences disclosure. This implies that SACCOs should aim at improving the quality of their loan asset especially in terms of reducing the value of non-performing loans. The findings provided evidence that the choice of an auditor in SACCOs is important in influencing its disclosure strategy. Therefore, SACCOs should exercise caution when choosing their auditors and should not focus only on the fees charged. They should also focus on other aspects such as auditor experience and reputation.

The study revealed dismal level of social disclosure by SACCOs. The study recommends the development of a social disclosure guideline tailored for SACCOs which can guide them as to what social information they can provide. The social disclosure guideline can be integrated with financial disclosure guidelines and this would be a step towards integrated reporting by SACCOs. Integrated reporting is an emerging concept which can be achieved gradually through the provision of both financial and social disclosures in one platform: the annual report. SACCOs should be encouraged to provide an integrated annual report which communicates more comprehensive information to its membership and other stakeholders.

5.5 Contribution to Knowledge

In advancement of the stewardship theory, this study is one of the few studies that have performed comprehensive analyses on a broad spectrum of disclosure levels by owner-managed mutual businesses such as SACCOs in a developing country context. The study utilized a forward selection approach to establish the significant determinants of disclosure levels by SACCOs in Kenya. The study also contributes to literature by highlighting the contribution of a composite governance score on disclosure. A number of prior studies have examined the influence of individual

governance aspects on disclosure. The study also establishes regulatory influences on the level of disclosure by SACCOs. The study finds that regulatory actions, as evidenced by the issuance of ICPAK guidelines, are useful in shaping disclosure levels by SACCOs in a developing country context. This study establishes the need for the regulator and ICPAK to improve on the existing disclosure guideline by incorporating social and environmental disclosures to make it more comprehensive.

5.6 Suggestions for Further Research

The study relied heavily on the SACCOs' audited annual reports as the main source of disclosure information. Additional studies can examine other disclosure platforms such as the internet and publications by the SACCOs. In determining the level of financial and social disclosures by SACCOs, the study employed a binary coding system. Although binary coding is popular among prior studies, it has limitations. Therefore, further studies can consider utilizing other coding techniques such as counting the number of words, sentences or graphics to establish the level of disclosure. To establish the level of disclosure, further studies can consider using a weighted disclosure index.

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APPENDICES

Appendix I: Letter of Introduction

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1st December 2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: LETTER OF INTRODUCTION- DAVID MUTUA MATHUVA – HD433-3524/2012

This is to confirm that the above named is a student pursuing PhD in Business Administration Programme at Jomo Kenyatta University of Agriculture and Technology, NCBD Campus.

He has completed his coursework and is now working on his research thesis titled **"The Drivers of Financial and Social Disclosure Practices by Savings and Credit Cooperative Societies in Kenya "**as partial fulfilment of the requirements of the Programme. As such, he will be contacting you for data collection for his research study.

Any assistance accorded to him will be highly appreciated. Please do not hesitate to contact the undersigned for any more information.

Your sincerely,

Associate Chairperson
CES NAIROBI CBD CAMPUS

Gladys Rotich (PhD)
Associate Chair - CES

Appendix II: Questionnaire

Dear Participant:

I am David Mathuva, a PhD student at JKUAT conducting research on "The Determinants of Financial and Social Disclosure Practices by Deposit-Taking Savings and Credit Co-operative Societies in Kenya". At this stage of my thesis, I am concerned with collecting data from deposit-taking SACCOs operating in Kenya. Successful completion of this project should lead to insights and recommendations that are important for preparers, regulators and users of annual reports in SACCOs. This, however, would not be possible without your contribution, and I would therefore be very grateful if you could spare a few minutes of your time to complete the enclosed questionnaire. I assure you that your response was treated with complete confidentiality and used only for research purposes. Should you have any questions, feel free to contact me on my phone +254 710 403 501 or email: dmathuva@gmail.com.

Section A: General information:

The following part of the questionnaire is designed to obtain general information. Please respond by ticking in the appropriate space.

1. Please fill in the following details:

   Name of your SACCO: ……..

   Gender: Male [ ] Female [ ]

2. Please indicate your main occupation.

   Chairman of board [ ] Vice-chair of the board [ ]

   Member of the board [ ] SACCO manager [ ]

   Finance manager [ ] Accountant [ ]

   Other [ ]

   Please specify……

3. Length of experience in this profession.

Less than 1 year [ ] Between 1 and 5 years [ ] Between 5 and 10 years [ ]

Between 10 and 15 years [ ] Over 15 years [ ]

4. Are you professionally qualified in accountancy or finance?

   Yes [ ] No [ ]

Which professional qualification do you possess? (CPA, CPS, CFA, CFE, ACCA, CIPS, CISA e.t.c.) ……..

5. Your highest academic qualification: Diploma [ ] Degree [ ] Master [ ] Doctorate [ ]

Section B: Adoption of ICPAK guidelines in 2010

1. Are you aware of the Mkopo SACCO disclosure guidelines issued by ICPAK in 2010? Yes [ ] No [ ]
2. When did the SACCO adopt the ICPAK guidelines (Mkopo guidelines)?
   2008 [ ] 2009 [ ] 2010 [ ] 2011 [ ] 2012 [ ] 2013 [ ]
   Not adopted [ ]
3. Have the ICPAK guidelines assisted in influencing the level of information disclosed?
   Yes [ ] No [ ]
4. Please explain how the ICPAK guidelines have influenced the disclosures provided by your SACCO (Tick all that apply).

Influence of ICPAK guidelines	Please tick
More clarity in terms of required disclosure	
More information disclosed to members	
Greater compliance with financial reporting standards	
Won more corporate awards relating to disclosure (e.g. FIRE, COYA)	
Greater comparability of information with other SACCOs	
Limited the level information disclosed by the SACCO	
Any other influence, (please specify) ……	

5. If your SACCO has not adopted the ICPAK guidelines, please explain what framework you have been utilizing to report on SACCOs financial performance.
   ……
6. Do you think there is a need for specific SACCO guidance (e.g. the ICPAK guidelines) on disclosure?
   Yes [ ] No [ ]
   Please explain: ……

Section C: Profitability

1. Kindly provide an estimate of the SACCOs profitability after tax in Kenya shillings over the following years:

2008	2009	2010	2011	2012	2013

2. How does the profitability of the SACCO influence the level of information provided by the SACCO in the financial statements? (Tick all that apply)

Statement	Agree	Neither agree nor disagree	Disagree
The SACCO provides less information if profitability is lower			
The SACCO provides more information if profitability is lower			
The SACCO provides less information if the profitability is higher			
The SACCO provides more information if the profitability is higher			
Creditors demand for more information if the profitability is lower			
There is no influence on SACCOs' profitability and the level of information disclosed			

Section D: Size of the SACCO

1. Please provide an estimate of the SACCOs total assets in Kenya shillings over the following years:

2008	2009	2010	2011	2012	2013

2. Please respond to the following (Tick where appropriate):

Comment	Agree	Neither agree nor disagree	Disagree
The more the asset base of the SACCO is, the higher the level of disclosure demanded by members and other stakeholders			
The more dispersed the SACCO in terms of number of branches, the more the level of disclosure the SACCO provides to its members and other stakeholders			
The more the number of members the SACCO has, the more the pressure to disclose more information.			
If the SACCO does not provide sufficient disclosure, members withdraw from it			
The more transparent the SACCO is, the more membership it attracts			
Since the SACCO converted to deposit taking status, it has been providing more disclosure information to members than before			
The disclosures by the SACCO are subject to closer monitoring and supervision because the SACCO takes deposits from the public			

Section E: Governance

1. How many members comprised the SACCO's board/management committee in the following years?

2008	2009	2010	2011	2012	2013

2. Please respond to the following by ticking the appropriate box.

Statement	Agree	Neither agree nor disagree	Disagree
The board has a significant influence on the level of disclosure by the SACCO			
The audit committee contributes significantly to the level of disclosure by the SACCO			
The SACCO provides disclosure on insider lending to the members in the annual report			
Board members undergo a fit and proper test			
The board members are trained annually on transparency and accountability			
Board members declare any conflicts of interest on an annual basis			
Board members meet at least twice a year to discuss the performance of the SACCO			

Section F: Asset Quality

1. Please respond to the following by ticking the most appropriate box.

Statement	Agree	Neither agree nor disagree	Disagree
Negative publicity surrounding the SACCO leads to lower disclosure			
Members demand for more information if the SACCO is faced by negative publicity			
The higher the level of bad loans, the lower the disclosure provided by the SACCO			
The higher the level of non-performing loans, the lower the level of disclosure by the SACCO			
Members demand for less information if there are no bad loans in the SACCO			
The SACCO provides information on the			

Statement	Agree	Neither agree nor disagree	Disagree
amount of funds lost			

Section G: External auditor

1. Please specify the name of the SACCO's external auditor:

Ernst and Young	[ ]	Deloitte	[ ]
Pricewaterhouse Coopers (PWC)	[ ]	KPMG	[ ]
Ministry of co-operatives auditors	[ ]	PKF	[ ]
Any other	[ ]		

Please specify)……..

2. How does your external auditor influence the level of information disclosed by the SACCO?

Influence	Please tick
The auditor is satisfied with the information provided	
The auditor requires more information to be provided	
The auditor provides more clarity in interpreting the requirements of the reporting standards	
The external auditor has no influence on the level of information disclosed by the SACCO	
Any other Please explain ……	

Section H: Disclosures by SACCOs

1. What types of disclosure does your SACCO's annual report contain?

Disclosure	Please tick
Income statement	
Balance sheet	
Statement of cash flows	
Statement of changes in equity	
Notes to the financial statements	
Background information on the SACCO	

Disclosure	Please tick
Information on the management committee meetings	
Information on qualifications for management committee members	
Information on the various committees in the board	
Community involvement	
Environmental participation	
Information on member welfare, e.g. training	
Information on products offered	
Information on employee welfare, e.g. training, allowances	
Budget for the next year	
Information on future plans by the SACCO	
Information on competition in the industry	
Information on SACCO's strategy	

2. What do you think contributes to the level of (general, financial and/or social) disclosures information provided by the SACCO? Please explain.

……

……

I thank you for taking time to fill in the questionnaire.

Appendix III: Detailed Disclosure Levels Over the Period 2008 to 2013

NO	DETAIL	CATEGORY	Total	Mean
A	*GENERAL DISCLOSURE ITEMS*			
1	Name of the SACCO	General Background	1212	1.000
2	Registered office	General Background	989	0.816
3	Location of SACCO	General Background	987	0.814
4	Bankers	General Background	1131	0.933
5	Incorporation information	General Background	889	0.733
6	Principal activity mentioned	General Background	965	0.796
	Total			*0.849*
7	Board or Management Committee members	General Governance	1203	0.993
8	Supervisory Committee members	General Governance	1084	0.894
9	Credit Committee	General Governance	110	0.091
10	Education Committee	General Governance	89	0.073
11	Audit Committee	General Governance	87	0.072
12	The Manager or Chief Executive Officer	General Governance	714	0.589
13	Disclosure of other officials of the SACCO (e.g. accountant)	General Governance	202	0.167
14	Auditor	General Governance	1212	1.000
15	Chairman's report or statement	General Governance	275	0.227
16	Report of the Management Committee or Board	General Governance	1016	0.838
	Total			*0.494*
17	Summary of current year's financial results in the preliminary pages	General Performance	1041	0.859
18	Disclosure of dividend for the year	General Performance	978	0.807
19	Disclosure of interest on members' deposits	General Performance	1024	0.845
20	Membership numbers – all members	General Performance	1001	0.826
21	Disclosure of active members	General Performance	722	0.596
22	Disclosure of dormant members	General Performance	543	0.448
23	Total Assets	General Performance	1045	0.862
24	Total liabilities	General Performance	488	0.403
25	Members' deposits	General Performance	1094	0.903
26	External Borrowing	General Performance	374	0.309
27	Loans and advances to members	General Performance	1044	0.861
28	Investments, both quoted and unquoted	General Performance	731	0.603
29	Core Capital	General Performance	504	0.416
30	Share capital	General Performance	1104	0.911

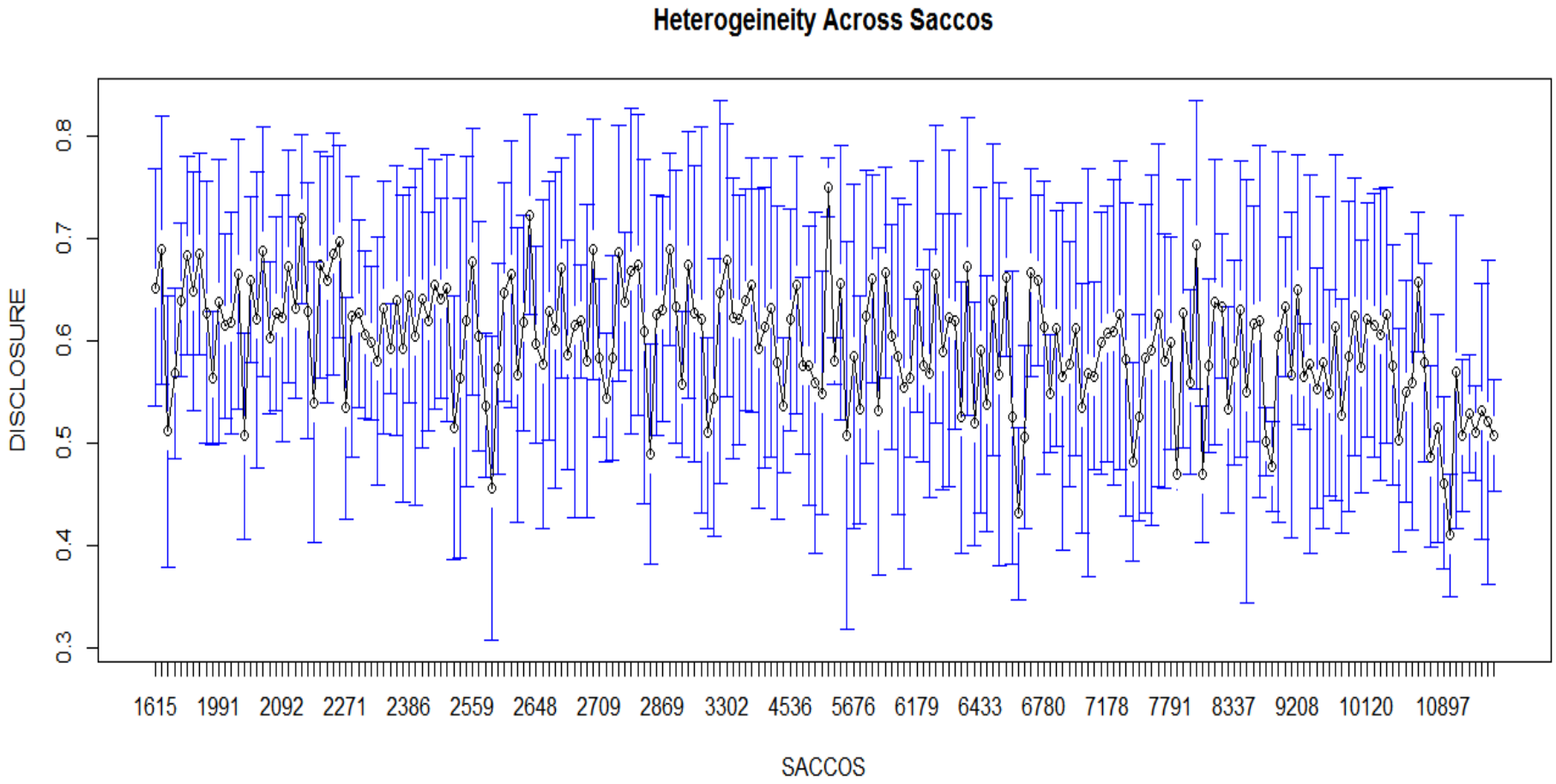
NO	DETAIL	CATEGORY	Total	Mean
31	Institutional Capital	General Performance	501	0.413
32	Total Revenue	General Performance	1021	0.842
33	Total Interest Income	General Performance	820	0.677
34	Total expenses	General Performance	756	0.624
35	Employees of the Sacco	General Performance	465	0.384
	Total			*0.662*
36	Core Capital/Total Assets	General Ratios	512	0.422
37	Core Capital/Total Deposits	General Ratios	494	0.408
38	Institutional Capital/Total Assets	General Ratios	483	0.399
39	Liquid Assets/Total deposits & Long term liabilities	General Ratios	551	0.455
40	Total Expenses / Total Revenue	General Ratios	511	0.422
41	Interest on member deposits/Total revenue	General Ratios	502	0.414
42	Interest rate on member's deposits	General Ratios	567	0.468
43	Dividend rate on members share capital	General Ratios	465	0.384
44	Total Delinquency Loans/Gross loan portfolio	General Ratios	379	0.313
	Total			*0.409*
B	*FINANCIAL DISCLOSURES*			
45	Statement of cash flows	Statement of cash flows	1211	0.999
46	Statement of cash flows- last year's comparison	Statement of cash flows	1201	0.991
	Total			*0.995*
47	Statement of changes in equity	Statement of changes in equity	1201	0.991
48	Statement of changes in equity - last year's comparison	Statement of changes in equity	1194	0.985
	Total			*0.988*
49	Statement of Financial Position	Statement of financial position	1212	1.000
50	Two-year comparatives	Statement of financial position	1211	0.999
51	Cash and cash equivalents	Statement of financial position	1205	0.994
52	Receivables and prepayments	Statement of financial position	1200	0.990
53	Loans to members	Statement of financial position	1202	0.992
54	Other financial assets	Statement of financial position	298	0.246
55	Investment property	Statement of financial position	939	0.775
56	Intangible assets	Statement of financial position	496	0.409
57	Property plant and equipment	Statement of financial position	1200	0.990
58	Members' deposits [in balance sheet]	Statement of financial position	1202	0.992
59	Current income tax payable	Statement of financial position	729	0.601
60	Dividends payable	Statement of financial position	651	0.537
61	Retirement Benefits Liability	Statement of financial position	110	0.091

NO	DETAIL	CATEGORY	Total	Mean
62	Payables and accrued expenses	Statement of financial position	1192	0.983
63	Deferred income tax	Statement of financial position	171	0.141
64	Interest bearing liabilities	Statement of financial position	507	0.418
65	Share capital	Statement of financial position	1184	0.977
66	Reserves	Statement of financial position	1199	0.989
	Total			*0.729*
67	Statement of Comprehensive Income/Income statement	Statement of profit or loss	1212	1.000
68	Two-year comparatives of statement of profit or loss & OCI	Statement of profit or loss	1210	0.998
69	Separation between interest on loans and other interest income	Statement of profit or loss	1175	0.969
70	Interest expenses netted off	Statement of profit or loss	636	0.525
71	Disclosure of net interest income	Statement of profit or loss	641	0.529
72	Disclosure of other operating income separately	Statement of profit or loss	1185	0.978
73	Disclosure of other expenses other than interest expenses	Statement of profit or loss	1200	0.990
74	Net operating surplus / (deficit) before income tax	Statement of profit or loss	1204	0.993
75	Income tax expense	Statement of profit or loss	1146	0.946
76	Net surplus/ (deficit) for the year (for distribution or appropriation)	Statement of profit or loss	1187	0.979
77	Transfer to statutory reserve (20%)	Statement of profit or loss	1053	0.869
	Total			*0.889*
78	Notes to the financial statements	Notes to the financial statements	1174	0.969
79	Clarity of the notes to the financial statements	Notes to the financial statements	1077	0.889
	Total			*0.929*
80	Signed statement of the Management Committee responsibilities	Financial statement signed and other reports	1212	1.000
81	Signed report of the Independent Auditor to the members of Sacco	Financial statement signed and other reports	1212	1.000
82	Auditor's observation on SACCO performance (separate from report of independent auditor)	Financial statement signed and other reports	72	0.059
83	Financial statement signed by board member (at least one member)	Financial statement signed and other reports	1208	0.997
84	Financial statements signed by chairman	Financial statement signed and other reports	1208	0.997
	Total			*0.811*
C	*SOCIAL DISCLOSURES*			
85	Nature of charitable and social	Community involvement and	480	0.396

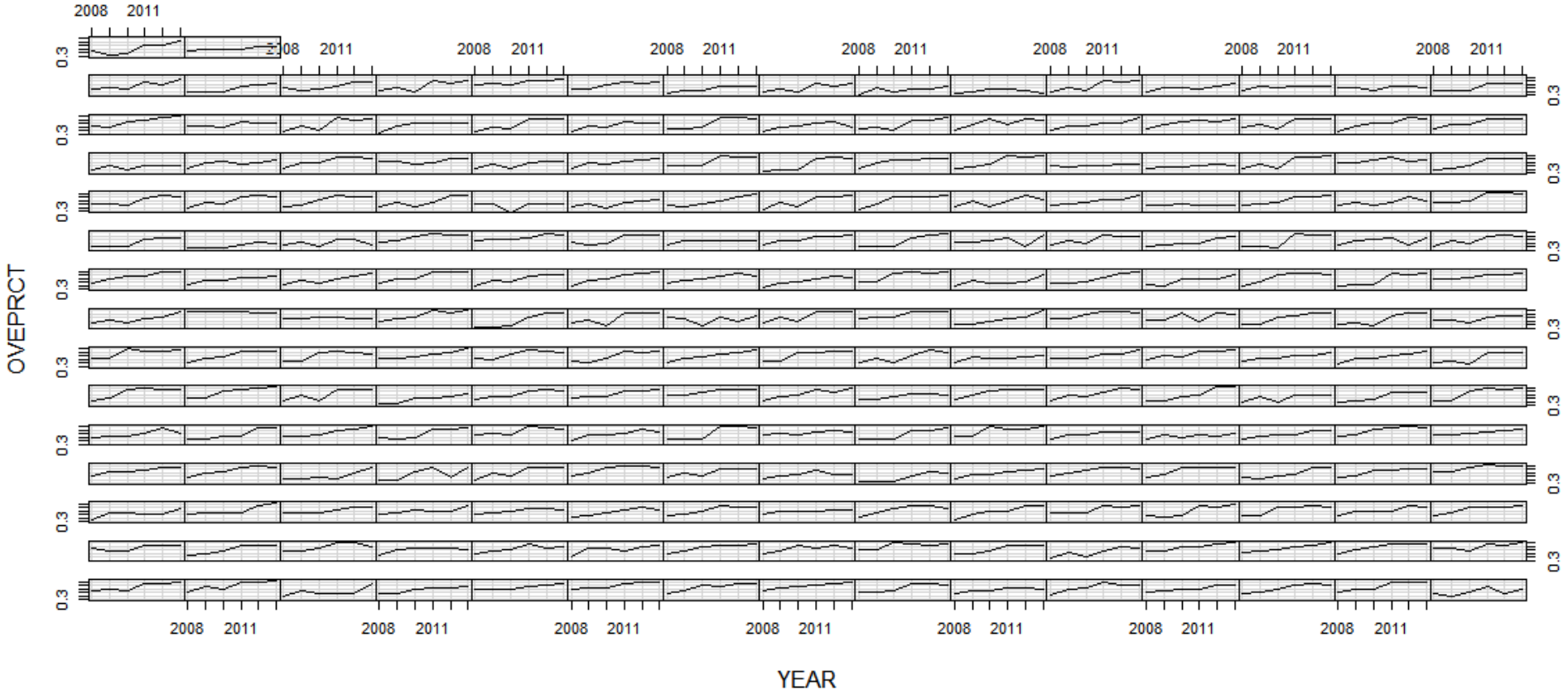
NO	DETAIL	CATEGORY	Total	Mean
	responsibility activities sponsored by the SACCO	other social activities		
86	Amount spent on charitable and social activities	Community involvement and other social activities	238	0.196
87	Contribution to and participation in Ushirika day	Community involvement and other social activities	329	0.271
88	Source of funds utilised to sponsor charitable and social responsibility activities	Community involvement and other social activities	0	0.000
	Total			*0.216*
89	Nature of environmental conservation activities the SACCO is engaged in.	Environmental conservation	3	0.002
90	Amount spent on environmental conservation	Environmental conservation	0	0.000
91	Environmental policies or a statement indicating SACCO's concern for the environment	Environmental conservation	0	0.000
92	Conservation of natural resources, energy and recycling activities in the business	Environmental conservation	0	0.000
93	Provision of green loans to support businesses	Environmental conservation	24	0.020
	Total			*0.004*
94	Number of employees for the last two or more years	Human resources welfare	456	0.376
95	Brief employee profiles	Human resources welfare	8	0.007
96	Indication of employee morale e.g. trips, turnover, strikes	Human resources welfare	7	0.006
97	Information on employee education and/or training	Human resources welfare	1137	0.938
98	Amount spent on employee education and/or training	Human resources welfare	1163	0.960
99	Employee salaries, allowances and benefits	Human resources welfare	1212	1.000
100	Employee health and safety	Human resources welfare	604	0.498
101	Policies or information on employment of minorities or women	Human resources welfare	7	0.006
102	Industrial relations	Human resources welfare	2	0.002
	Total			*0.421*
103	Number of members for the last two or more years	Member welfare	1001	0.826
104	Information on member education or training	Member welfare	599	0.494
105	Amount spent on member education	Member welfare	756	0.624

NO	DETAIL	CATEGORY	Total	Mean
	or training			
106	Information relating to recruitment of members	Member welfare	11	0.009
107	Provision for disabled, aged, and difficult-to-reach customers	Member welfare	2	0.002
	Total			*0.391*
108	Marketing of the SACCO's products and services	Products and services	882	0.728
109	Products and services offered by the SACCO	Products and services	1018	0.840
110	Information on the quality and terms of the products and services	Products and services	52	0.043
111	How the SACCO handles customer matters e.g. complaints and feedback	Products and services	3	0.002
112	Lending and investment policies	Products and services	10	0.008
	Total			*0.324*

Appendix IV: Heterogeneity in Overall disclosure Over the Period 2008-2013

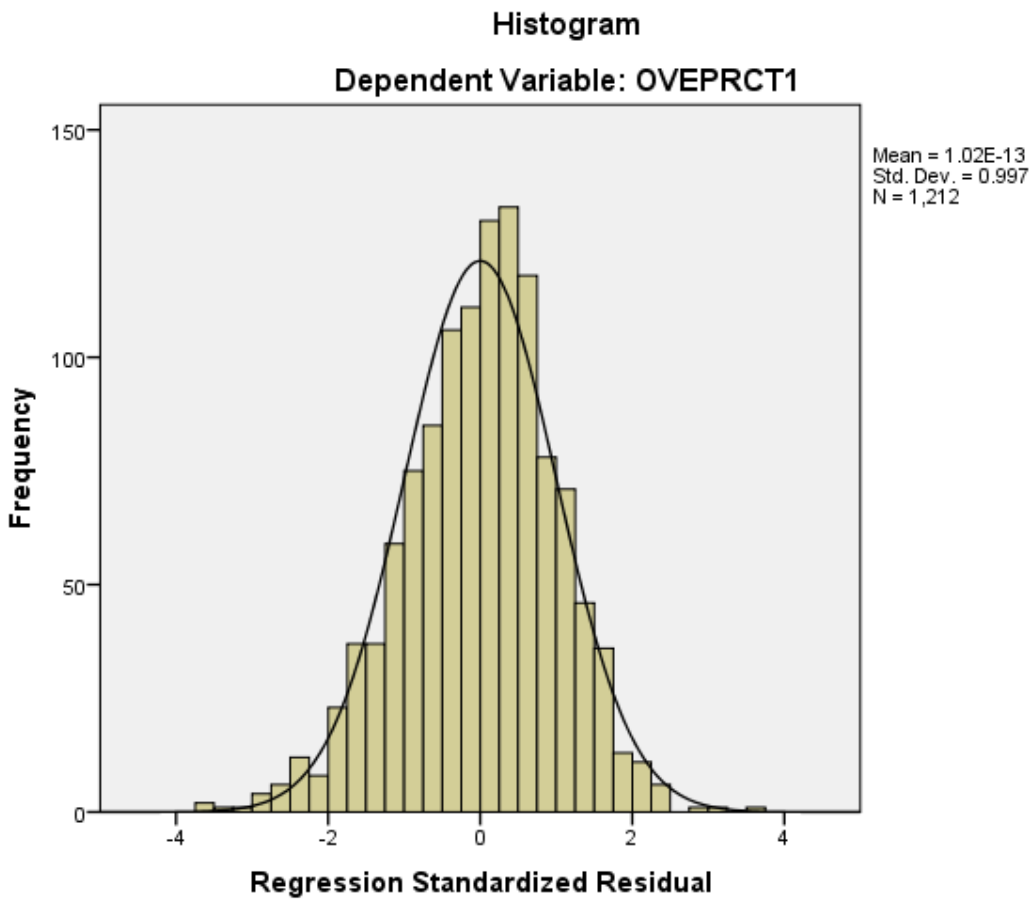


Appendix V: Trends in Overall Disclosure Over the Period 2008 to 2013

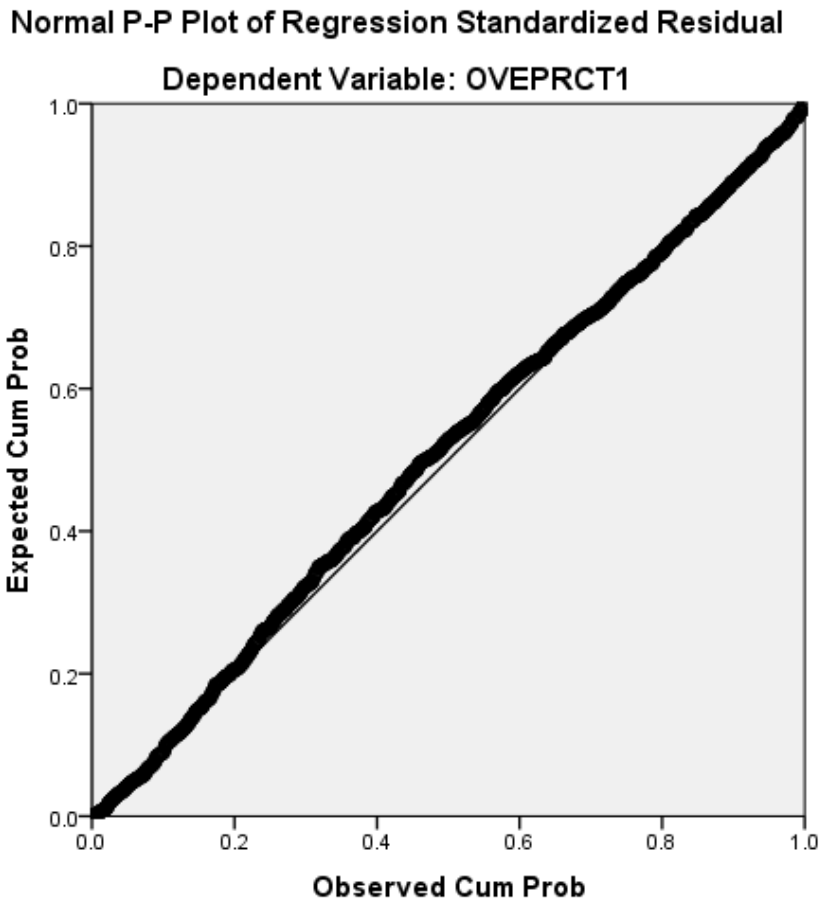


Note: OVERPRCT represents overall disclosure

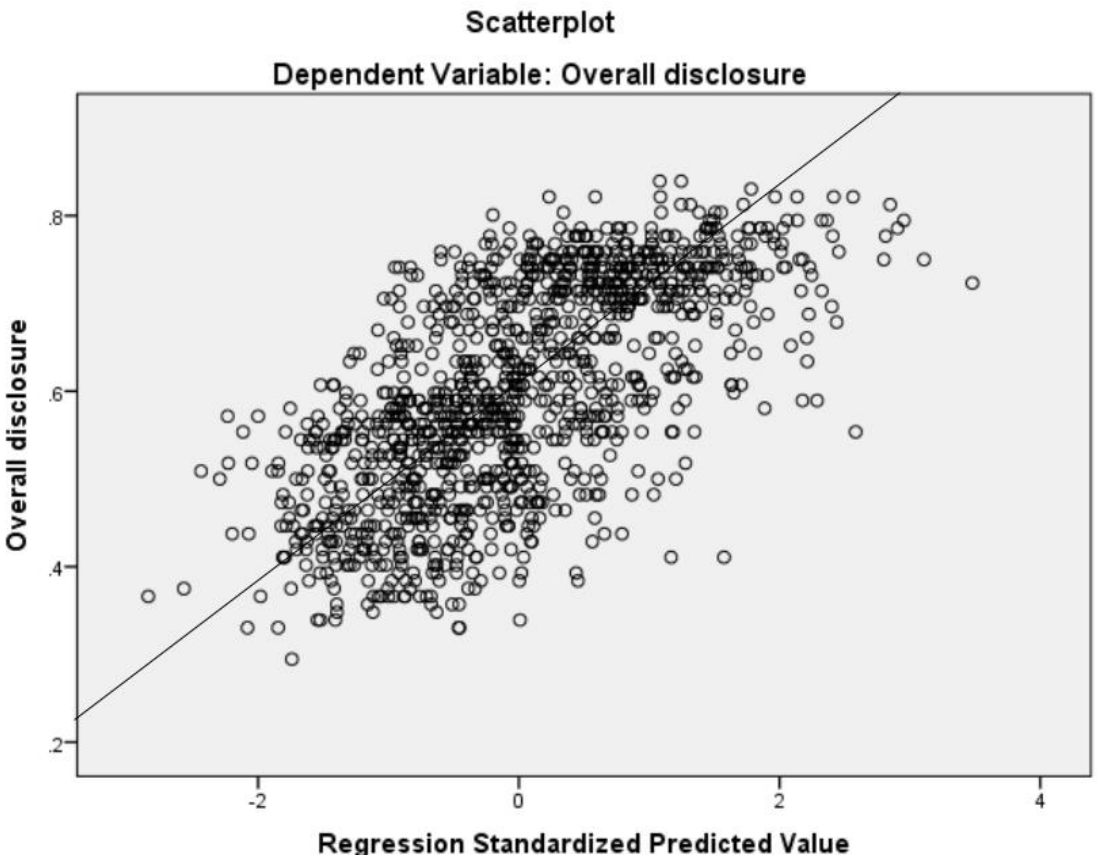
Appendix VI: Histogram on Disclosure Level



Appendix VII: Normal Probability Plot for Disclosure Level



Appendix VIII: Scatterplot on Disclosure Level



Appendix IX: Linearity Tests Using Deviation from Linearity

ANOVA Table

Linearity between disclosure level (DISCL) and			Sum of Squares	df	Mean Square	F	Sig.
ROA	Between Groups	(Combined)	8.389	552	0.015	1.035	0.337
		Linearity	0.001	1	0.001	0.043	0.835
		Deviation from Linearity	8.388	551	0.015	1.037	0.329
	Within Groups		9.679	659	0.015		
	Total		18.068	1211			
ASSETS	Between Groups	(Combined)	17.816	1181	0.015	1.797	0.025
		Linearity	2.334	1	2.334	278.016	0.000
		Deviation from Linearity	15.482	1180	0.013	1.563	0.066
	Within Groups		0.252	30	0.008		
	Total		18.068	1211			
GSCORE	Between Groups	(Combined)	5.344	11	0.486	45.814	0.000
		Linearity	4.658	1	4.658	439.302	0.000
		Deviation from Linearity	0.686	10	0.069	6.465	0.082
	Within Groups		12.724	1200	0.011		
	Total		18.068	1211			
NPLS	Between Groups	(Combined)	6.700	324	0.021	1.613	0.000
		Linearity	1.533	1	1.533	119.644	0.000
		Deviation from Linearity	5.166	323	0.016	1.248	0.077
	Within Groups		11.368	887	0.013		
	Total		18.068	1211			
GOVAUD	Between Groups (1 Group) Deviation from Linearity		2.545	1209	2.545	198.390	0.061
	Within Groups		15.523	2	0.013		
	Total		18.068	1211			

Appendix X: Aspects Used in the Governance Index

No	Description	Criteria	Score	Criteria	Score
1	Size of board of directors (management committee)	> 5	1	≤ 5	0
2	Size of supervisory committee	> 2	1	≤ 2	0
3	Number of board meetings in a year	> 10	1	≤ 10	0
4	Identity of external auditor	Big four	1	Non-Big four	0
5	Presence of social responsibility committee	Yes	1	No	0
6	Presence of audit committee	Yes	1	No	0
7	Presence of credit committee	Yes	1	No	0
8	Presence of education committee	Yes	1	No	0
9	Presence of other committees other than above	Yes	1	No	0
10	Chairman's report to credit union members	Yes	1	No	0
11	Training of board members	Yes	1	No	0
12	Insider loan (related party lending) disclosure	Yes	1	No	0
13	Board election	Every year	1	More than 1 year	0
14	Gender diversity in the board (management committee)	> ⅓ of total	1	≤ ⅓ of total	0
15	Gender diversity in the supervisory committee	> ⅓ of total	1	≤ ⅓ of total	0
16	Board members fill in a fit and proper test as required by regulator	Yes	1	No	0

Appendix XI: List of Deposit-Taking SACCOs in the Census as of 2013

F Values for $\alpha = 0.05$

	d_1								
d_2	1	2	3	4	5	6	7	8	9
1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5
2	18.51	19.00	19.16	19.25	19.3	19.33	19.35	19.37	19.38
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04
120	3.92	3.07	2.68	2.45	2.29	2.17	2.09	2.02	1.96
inf	3.84	3.00	2.60	2.37	2.21	2.10	2.01	1.94	1.88

Appendix XII: List of Deposit-Taking SACCOs in the Census as of 2013

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
1	1615	Kenya Canners	776,956,175	2010
2	1726	Mombasa Port	1,853,300,993	2010
3	1781	Masaku Teachers	1,926,102,940	2014
4	1834	Jitegemee	804,224,356	2014
5	1872	Teleposta	991,994,983	2014
6	1916	Harambee	17,633,141,570	2010
7	1920	Chemelil	320,889,783	2010
8	1946	Magereza	4,321,807,965	2012
9	1981	Afya	11,885,165,365	2010
10	1984	Mwendiwega	32,417,336	Not licensed
11	1991	Hazina	3,574,790,356	2011
12	2001	Ardhi	1,302,008,254	2014
13	2022	Tembo	926,294,645	2011
14	2026	Ukulima	7,321,315,579	2011
15	2031	Tuungane Tujijenge	41,818,767	Not licensed
16	2032	Elimu	644,751,986	2014
17	2033	Imenti	180,240,475	2011
18	2044	Jamii	1,802,016,744	2010
19	2077	Asili	1,577,396,176	2010
20	2085	Ufundi	1,308,202,152	2014
21	2092	Kenya Police	11,522,841,000	2010
22	2102	Sheria	2,835,831,928	2010
23	2149	Ufanisi	115,144,314	2013
24	2169	Chai	1,533,892,016	2010
25	2185	Sukari	1,083,476,171	2011
26	2196	Ndosha	140,464,648	2011
27	2207	Stima	12,401,789,000	2010
28	2248	Maisha Bora	1,504,251,618	2012
29	2255	Kilifi Teachers Society	2,907,396,670	2010
30	2265	Mwalimu National	24,540,360,722	2010

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
31	2271	Nufaika	73,450,731	2014
32	2275	K-Unity	2,283,613,742	2010
33	2293	Kimute	126,517,966	Not licensed
34	2299	Kenya Bankers	5,020,885,142	2011
35	2310	Tupendane	69,650,317	2014
36	2314	Egerton University	1,421,550,409	2012
37	2349	Bandari	4,495,868,134	2010
38	2365	Transcom	542,808,133	2014
39	2375	United Nations	7,569,117,689	2010
40	2381	Koru-Homaline Company	56,262,269	2014
41	2386	Nation	925,307,025	2010
42	2406	Nacico	2,564,895,649	2010
43	2466	Chuna	1,740,316,115	2011
44	2467	Lengo	137,685,846	2014
45	2483	Kenversity	1,101,343,095	2012
46	2484	Mombasa Teachers	508,533,392	2010
47	2494	Muhigia	2,055,145,270	2010
48	2511	Isiolo Teachers	209,736,289	2013
49	2523	Taita Taveta Teachers	900,963,259	2011
50	2549	Boresha	3,398,554,000	2010
51	2559	Tower Limited	2,273,321,899	2010
52	2563	Reli	271,849,926	Not licensed
53	2567	Nyeri Teachers	3,556,870,000	2010
54	2609	Jacaranda	108,632,928	2014
55	2624	Wareng Teachers	1,018,548,817	2010
56	2626	Lamu Teachers	175,382,892	2014
57	2628	Metropolitan	5,058,769,436	2010
58	2633	Winas	1,845,123,982	2010
59	2635	Kwale Teachers	485,139,452	2014
60	2641	Gusii Mwalimu	4,847,710,969	2010
61	2648	Mentor	2,685,943,000	2010
62	2655	Busia Teso Teachers	538,389,595	2012

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
63	2658	Laikipia Teachers	1,418,029,214	2013
64	2660	Trans-National Times	655,133,441	2010
65	2664	Magadi	409,574,162	2010
66	2675	Cosmopolitan	2,332,995,565	2010
67	2678	Simba Chai	826,215,131	2010
68	2686	Comoco	578,342,069	2010
69	2690	Kapenguria	547,926,292	2014
70	2700	Wanandege	1,179,389,848	2010
71	2709	Nandi Teachers	582,432,689	2014
72	2724	Tana River Teachers	122,718,786	Not licensed
73	2735	Nzoia	93,402,167	Not licensed
74	2738	Kateco	4,199,261,042	2010
75	2747	Nafaka	294,804,571	2012
76	2749	Narok Teachers	518,689,914	2010
77	2757	Kite	745,147,800	2010
78	2795	Marsabit Teachers	327,613,497	2012
79	2843	Methodist	197,594,596	Not licensed
80	2865	Taraji	370,150,869	2010
81	2869	Ndege Chai	1,919,157,604	2010
82	2876	Bungoma Teachers	1,246,199,150	2010
83	2885	Imarisha	5,218,676,165	2010
84	2895	Nanyuki Equator	133,761,195	2014
85	3047	Mwito	791,949,383	2010
86	3109	Mo SACCO	448,096,784	2010
87	3110	Wanaanga	986,763,398	2011
88	3144	Flouspar	37,252,089	Not licensed
89	3176	Kerenga	169,300,137	Not licensed
90	3248	Samburu Teachers	200,556,148	2013
91	3302	Waumini	2,130,630,266	2011
92	3350	Washa	140,446,374	2011
93	3363	Puan	227,918,485	2013
94	3468	Kenpipe	1,461,652,952	2010

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
95	3626	Fundilima	554,000,143	2012
96	3829	Agro-Chem	76,437,620	2014
97	3983	KMFRI	201,808,052	2010
98	4107	Bingwa	2,713,222,082	2010
99	4319	Moi University	1,179,360,610	2014
100	4446	Baraton	65,468,568	2014
101	4536	Kitui Teachers	2,120,640,901	2010
102	4541	Rea Vipingo	24,126,670	Not licensed
103	4615	Uchongaji	58,661,803	2014
104	4830	Mudete Tea Growers	138,359,876	2012
105	4918	Dhabiti	288,725,258	2011
106	5014	Thamani	353,099,500	2010
107	5142	Supa	152,079,439	2012
108	5370	Sheraco	110,457,582	Not licensed
109	5459	Vision Point	303,912,100	2010
110	5641	Skyline	349,333,278	2010
111	5676	Tenhos	156,203,123	2010
112	5749	Ainabkoi Farmers	61,759,647	2014
113	5932	Bureti	330,498,865	2010
114	5937	Jijenge	108,439,944	2011
115	5939	Muki	425,936,854	2014
116	5988	Baraka	233,666,365	2010
117	6061	Nandi Hekima	190,272,793	2010
118	6070	Nassefu	937,057,088	2012
119	6128	Sotico	115,827,616	2011
120	6172	Aberdare Rural	119,894,924	Not licensed
121	6179	Maseno University	302,568,124	Not licensed
122	6180	Ogembo Tea Growers	62,959,318	2014
123	6228	County	292,387,777	2012
124	6267	Daima	518,288,142	2010
125	6302	Kipsigis Edis	68,870,759	2013
126	6336	Kenya Highlands	1,529,676,992	2010

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
127	6366	Yetu	1,560,105,754	2010
128	6387	Githongo Majani	109,629,757	2014
129	6403	Universal Traders	467,450,167	2010
130	6432	Biashara	509,670,960	2010
131	6433	Wakenya Pamoja	1,061,675,951	2010
132	6447	Tai	987,301,386	2010
133	6531	Wananchi	966,246,899	2010
134	6569	Konoin	176,883,461	2010
135	6570	Sot Tea Growers	379,226,561	2010
136	6645	Elgon Teachers	136,215,974	2014
137	6679	Mwea Rice Farmers	242,665,216	2014
138	6721	Migori Teachers	285,601,339	Not licensed
139	6749	Ndetika Rural	288,568,432	2013
140	6760	Unaitas	5,550,898,016	2010
141	6780	Chepsol	335,475,985	Not licensed
142	6825	Solution	2,491,503,000	2011
143	6826	Tharaka Nithi Teachers	1,709,492,212	2010
144	6864	Times U	190,219,424	2012
145	6894	Nawiri	977,847,028	2013
146	6917	Nyambene Arimi	172,034,303	2011
147	6918	Trans-Counties	79,553,154	2014
148	6919	Naku	1,497,683,660	2011
149	6977	2NK	318,211,920	2014
150	7057	Limuru Traders	18,050,721	Not licensed
151	7178	Meru South Farmers	712,324,012	2010
152	7221	Kuria Teachers	175,187,721	2011
153	7315	Airports	421,339,972	2011
154	7320	MMH	237,418,055	2010
155	7460	Omoreni	38,883,780	Not licensed
156	7479	Micii Mikuru	17,668,386	Not licensed
157	7497	Mwingi Mwalimu	259,741,830	2014
158	7590	Marakwet Teachers	682,092,196	2011

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
159	7591	Keiyo Teachers	503,457,856	2010
160	7593	Nyamira Tea Farmers	235,454,196	2010
161	7791	Suba Teachers	101,901,283	2014
162	7896	Chesikaki Rural	8,674,970	Not licensed
163	7979	Siraji	121,250,685	2011
164	8012	Orient	531,894,509	2011
165	8056	Murata	1,530,024,161	2011
166	8261	Kikai Rural	20,136,156	Not licensed
167	8275	Nyando-Kisumu	37,935,329	Not licensed
168	8315	Taifa	1,560,211,645	2010
169	8320	Rachuonyo Teachers	133,221,063	2014
170	8333	Bonde La Kerio	85,703,936	Not licensed
171	8337	Banana Hill Matatu	101,933,171	2014
172	8379	Fortune	1,338,077,790	2011
173	8721	Dimkes	455,099,436	2012
174	8804	Vihiga District Tg	28,867,563	2014
175	8843	Kenya Achievas	315,227,537	2010
176	8982	Kiamokama Tg	18,871,303	Not licensed
177	9026	Ihururu	8,704,165	Not licensed
178	9111	Kiambaa Dairy Rural	107,062,118	2010
179	9141	Bondo Teachers	141,299,254	Not licensed
180	9187	Enea	109,890,064	2011
181	9208	Kingdom	537,513,126	2010
182	9227	NGP Bamburi	83,080,514	Not licensed
183	9231	Fariji	110,709,949	2010
184	9233	Ntiminyakiru	201,808,052	2011
185	9241	Kinamba Jua-Com	19,025,417	Not licensed
186	9302	Nandi Farmers	116,598,913	2014
187	9510	Safaricom	1,535,197,310	2010
188	9709	Good Faith	55,075,952	2014
189	9927	Kaimosi Tea Growers	33,260,489	2014
190	10020	Githunguri Dairy	539,617,797	2010

No.	Code	Name of the SACCO	2013 total assets (Kshs)	Year Licensed
191	10068	Centenary	229,930,201	2010
192	10120	Miliki	75,214,519	2010
193	10226	Wakulima Commercial	176,791,538	2010
194	10243	Wevarsity	197,594,596	2014
195	10474	Kolenge Tea	55,381,050	2014
196	10541	Ukristo Na Ufanisi	797,530,791	2013
197	10576	Rongai Rural	18,735,375	Not licensed
198	10624	Vision Africa	173,453,487	2014
199	10633	All Churches	38,577,162	2014
200	10672	Capital	1,706,782,290	2014
201	10718	Lenga Tumaini	15,343,547	2011
202	10737	Ilkisonko Rural	54,824,653	2014
203	10782	Nyankoba	26,651,182	Not licensed
204	10897	Gastameco	46,427,899	2014
205	11005	Nyabiera	742,655	Not licensed
206	11121	Nyahururu Umoja	71,139,972	2013
207	11181	Nest	50,219,536	2014
208	11194	Tescom	28,321,422	2014
209	11346	Chebosobon	10,761,762	2014
210	11434	Rubet	13,722,288	Not licensed
211	11933	Kenya Midland	128,194,115	2013
212	11934	Mulot FSA Rural	26,239,058	2014

Source: Commissioner of Co-operatives and SASRA list of registered deposit-taking SACCOs as of 31 December 2013.