# EFFECT OF INFORMAL FINANCIAL GROUPINGS' PRACTICES ON THE GROWTH OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KISUMU COUNTY, KENYA

BY

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# SCHOOL OF BUSINESS AND ECONOMICS

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## DECLARATION

## **Student's Declaration**

I certify that this research thesis has not been previously presented for an award of a degree in Maseno University or any other University. The work herein has been carried out by myself and all sources of information have been acknowledged by way of references.

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## **DEDICATION**

I dedicate this work to my late Mum, Jenipher Maloba Okelo, posthumously. Until her untimely demise she was my life coach, indefatigable intercessor, source of extra-ordinary life lessons and spiritual inspiration.

#### ABSTRACT

Savings and Credit Co-operative Societies (SACCOs) are critical players in providing affordable credit to over one billion people worldwide, either directly or indirectly. As the second most popular type of co-operatives after those that are agricultural-oriented, statistics indicate that 300 leading SACCOs have revenues in excess of USD1.6 trillion. In Africa, SACCOs' loan portfolio has grown at an average of 12%, lower than 35% around 2007. Kenya is second amongst African countries with respect to uptake of SACCO products. Records show over 4.97million direct beneficiary-members use SACCO financial services but this has dropped from 12.9% in 2016 to 11.3% in 2019. Informal Financial Groupings (IFGs) are financial models presenting financial products and services premised on traditionally unwritten social norms and practices. While the popularity of IFGs have led to their collaborations with banks and micro finance institutions, existing literature focuses much on the mutual gains accruing to the two entities but not the trends of members' socio-financial practices. Little is known on the effect of the practices of the IFGs subscribing to SACCO membership on the growth of the latter. This study sought to determine the effect of IFGs' practices on growth of SACCOs in Kenya. Specifically, the study sought to establish the association between IFGs' practices and growth of SACCOs, establish effect of IFGs' practices on member loan volumes and determine effect of IFGs' practices on deposits. The study was grounded on the postulates of behavioral finance theory and the social capital theory. It adopted a combination of correlation and descriptive research designs. The target population was 512 respondents, comprising of 482 members IFGs that subscribe to corporate membership of SACCOs and 30 SACCOs' officials. Primary data was collected using structured questionnaires to IFGs' members and SACCOs. Simple random sampling was applied to select a sample size of 224 members of both IFGs and SACCOs. Validity was conducted through expert review, while Cronbach's alpha was run to test for instrument reliability with results of 0.748. Data was analyzed using correlation and multiple regression methods, to establish association and effect relationships. From the study results, the first and third hypotheses of the study failed to be accepted and the second hypothesis failed to be rejected. Analysis of findings revealed a generally positive association between IFGs' practices and SACCOs' growth factors; with credit frequency being significantly positively correlated to loan volumes (r=0.8041, p=0.0000), while savings were positively correlated to deposits (r=0.5147, p=0.0000). Subsequently, multiple regression results provided  $R^2$  of 0.339 for effect of IFGs on SACCO loan volumes and 0.376 for effect of IFGs on SACCO deposits. The study concluded that IFG practices are associated with growth of SACCOs and that patronizing group financial products reduces the propensity of members to consume SACCO loans. It is recommended that SACCO's should introduce incentive-driven deposit collection strategies targeting IFG members to inspire loans' uptake. Further studies may be undertaken to establish the financial implications arising from interactions between IFGtargeting entities such as MFIs and investment banks.

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# LIST OF ABBREVIATIONS

ASCA	-	Accumulating Saving and Credit Association
BOSA	-	Back Office Service Agency
Chama	-	Swahili word for 'group'
Fin Access	-	Financial Access
FOSA	-	Front Office Service Agency
FSD	-	Financial Sector Deepening
GoK	-	Government of Kenya
ICA	-	Institutional Capital Adequacy
IFG	-	Informal Financial Grouping
RoK	-	Republic of Kenya
ROSCA	-	Rotating Saving and Credit Association
SACCO	-	Savings and Credit Co-operative Society
SME	-	Small and Medium Enterprises
MFI	-	Microfinance Institutions
TZS	-	Tanzanian Shillings

#### **OPERATIONAL DEFINITION OF TERMS**

Chama: Swahili for informal grouping

**Check-off system:** The practice of deducting loan repayments and periodic savings straight from the employer of the contributor to the receiving SACCO

**Contagion effect:** Situation where panic in the SACCO financial sub-sector may spread to negatively affect the smooth running of other SACCO players within the economy

**Credit Frequency:** The rate of consistency with which members take loans from their respective informal financial groups

**Credit Size:** Quantity of lump sum loan amount taken by members of informal groups for eventual periodic repayment

**Group Savings:** Periodic monetary deposits made by members of Informal Financial Groupings to their respective groups

**Growth:** Steady rise in the volume of financial resources available for the expansion and profitable running of SACCOs

**Deposits:** Money contributed by members to SACCOs to enhance their borrowing qualification, regardless of whether they are withdrawable savings or not. Deposits and savings have been adopted in this study as synonyms

**Financial inclusion:** The motive and practice of seeking to avail financial services to as many citizens desirous of the services as possible

**Formal financial institution:** Institutions that offer financial services under licensing and strict compliance requirements by the Central Bank

**Group membership:** Members subscribing to informal groups through registration and consistent participation in their scheduled activities, practices and programmes

**High-value savers:** Individuals who regularly save substantial amounts of money with given financial institutions

**Informal finance:** Refers to contracts or agreements conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future

**Informal finance groupings:** Groups of individuals operating outside strict government regulations, established on account of social relations to meet arising common financial needs amongst members.

**Investment group:** Group of individuals formed based on social networks with the motive of contributing funds to purchase long term assets for their collective mutual benefit

Loan Volume: The quantity value of the loan applied by members of SACCOs

**Merry-go-round:** Rotational loaning scheme where social group members collect and distribute money amongst themselves in turns at no interest

**Multiple loan culture:** The practice where individuals obtain loan facilities from more than one financial provider

**Social capital:** The networks of relationships among people who live and work in a given society

**Socio-finance:** An interrogation of group behaviour to explain how financial activities are affected and shaped by social processes

**Table Banking:** Social group of members who practice collection of money and immediately loaning out the same to members at minimal interest to sustain their immediate financial needs

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#### **CHAPTER ONE**

#### **INTRODUCTION**

This chapter presents the conceptual and theoretical background of the study; research problem; objectives and the hypotheses that guided the study. Scope, justification and the conceptual framework of the study are also presented in this Chapter.

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

Savings and Credit Cooperative Societies (SACCOs) are organizations founded on the concept of pooling resources by individuals in a common pool (RoK,2008). The motive of raising resources is to facilitate lending to the members at low interest rates of 12% p.a. SACCOs, like other co-operatives are user-owned, user-controlled and user-benefitting organizations which operate in all sectors of the economy (Aredo,1993). Like informal financial groups (IFGs), SACCO members contribute to their capital through monthly or periodic deposits (Floro and Ray, 1997).

SACCOs are critical players in providing affordable credit to over one billion people worldwide, either directly or indirectly. As the second most popular type of co-operatives after those that are agricultural-oriented, statistics indicate that 300 leading SACCOs have revenues in excess of USD1.6 trillion (ILO 2015). The SACCO movement in the United States of America has been accredited with uplifting the living standards of the low and middle income earners (Mvula, 2013). Though the co-operative movement is not as entrenched given the USA's established financial system, there has been a steady rise in alternative relationship-based investment initiatives (Atieno 2001).

The experience in Africa indicates that SACCOs have been in existence since 1955 (Aura and Mwangi, 2013). They were intended to offer an alternative to improving the desirable

situation in low income African countries (Cheruiyot, Kimeli and Ogendo 2012). The potential accounts for their being defined as a key pillar to empower the low and middle income earners (Gathurithu, 2011). Soyibo (1996), accredits SACCOs with fast tracking economic empowerment among the rural and urban parts of Nigeria. A similar trend is reported in Ghana where SACCOs were largely born from individual collaborative initiatives which derived from members' relational bond advantages (Steel, 2006). In Malawi, it is reported that the growth of SACCOs has been slow paced on account of lack of motivation to save amongst members, which is a behavioural finance element traceable to social influence (Mvula 2013).

SACCOs in Tanzania became dominant in the cooperative sector from the 1990s (Maghimbi, 2010). At the time of this work, they were the leading of all the cooperative types in Tanzania, commanding a membership of over 758, 829. The total deposits and savings combined by the end of 2008 were in excess of TZS 91,569,441,530 while loans issued amounted to TZS 186,582,194,810. The deposits were reported to have been affected by periodic decline in savings as a result of seasonal drop in crop sales, which according to the study, was the major source of funds for investments in SACCOs.

One out of every two Kenyans directly or indirectly derives their livelihoods from SACCOs or a similar type of co-operative movement (Bwana and Mwakujonga, 2013). It is evident that high level of reliance attached to SACCOs by majority of low and medium income earners has positioned them strategically in the economy as critical players in the financial sector (FSD Kenya, 2013). Ademba (2013) shows that savings models in SACCOs had diversified to accommodate informal trends. Originally, these models were designed to respond to the unique needs of individuals outside the common bond. Some SACCOs provide for corporate membership of IFGs as a strategic business model to expand their deposits and

liquidity bases (Kahuthu et al., 2015). Additionally, the business model for SACCOs and *Chamas*, the Kenyan euphemism for informal financial groups, is similar. The similarity is traced to the social bond bringing members together and the cash accumulation approaches that border on motivation.

Growth is the continued improvement in returns of a given organization (Dupas and Robinson, 2009). For SACCOs, growth is reflected through the capital an institution is capable of retaining after its financial year's operations (Muchoki, 2012). The extent to which growth extends is largely dependent on the cash reserves an individual SACCO commands (Kioko, 2016). There are two major drivers of financial resources accruing to a SACCO, namely; the savings made by way of deposits from members and interest collected from the loans advanced to members (Kahuthu, Muturi and Kiweu, 2015). IFGs members are not morally or legally barred from participating in their cash accumulation and sharing practices even while subscribing to SACCO membership. Hitherto, there is evidence that SACCOs are active but with shrinking financial bases owing to fluctuating cash inflows from members (Olando, Jagongo and Mbewa, 2013).

Informal finance refers to the contracts or agreements conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future (Schreiner 2001). Recent studies show informal financial groupings (IFGs) as gaining ground within the Kenyan financial sector at a rate significantly higher than that of SACCOs (FSD Kenya, 2019).

	2009	2013	2016	2019
SACCOs	9.0%	11.0%	12.9%	11.3%
Informal Groups	36.0%	27.7%	41.1%	30.1%
Others (Combined)	55.0%	61.3%	46.0%	58.6%
	EGD V	2010		

**Table 1.1:** Changing Landscape of Growth amongst Kenyan Financial Service Providers

Source: Adopted from FSD Kenya, 2019

Table 1.1 shows that between 2013 and 2016, IFGs recorded a surge in uptake of 13.4% compared to SACCOs which recorded a marginal growth of just 1.9% over the same period. Even though there was a reduction in the use of both SACCO and IFGs' products between 2016 and 2019, the trajectory still shows informal groups attracted higher numbers of financial consumers than SACCOs, with a difference of 18.8% in favour of IFGs. Even though there are other parameters capable of influencing the growth trend reflected in Table 1.1, the displayed information motivates the need to interrogate the growth of SACCOs, which is mainly discernible from the pattern of loans disbursed and deposits made by members.

Whereas studies have shown members of IFGs as saving and borrowing in SACCOs through their groups, little is empirically known of the nexus between the IFGs' practices, and the growth of SACCOs. Since the saving patterns and borrowing habits of IFG members are influenced by the groups' self-driven practices, there is need to establish the association of such practices to the primary growth elements of SACCOs.

Table banking, a group based funding initiative where money collected in a meeting is immediately loaned out to members (Asseto, 2014) has been reported to be an offshoot of the failure by financial institutions to address and loaning needs of the majority outside conventional banking circles (FSD Kenya, 2010). Similarly, merry-go-rounds, which are elsewhere referred to as accumulated savings and credit associations (ASCAs) or rotational savings and credit associations (ROSCAs) are known for their fund accumulation procedures (Sabana, 2005) which are enforced through strict personal savings repayment of the money advanced to members (Jones et al., 2003). While money in table banking is loaned to members and repayable with interest, all the collected money in merry go rounds is rotationally shared amongst members at no interest (Cheruiyot *et al.*, 2012). At the same time, studies have substantially attempted to justify table banking and merry-go-rounds as members of the same family with Small and Micro Enterprises (SMEs) (Kariuki and Ngugi, 2014). Findings in Asseto (2014) augmented by those in Misra (2008) went further to show how the two informal formations, though operationally distinct, blend their loaning programmes with SACCOs.

CUSTOMERS	2009	2011	2013	2015	2016	2017	2018
Save only at the SACCO	65%	62%	56%	48%	42%	42%	41%
Saved through another SACCO	1%	4%	3%	4%	5%	6%	4%
Save through Chama (Table Banking)	23%	25%	30 %	42 %	45%	44%	48%
Save with both Commercial Banks and SACCO	11%	8%	7%	5%	6%	6%	3%
Others	4%	1%	4%	1%	2%	2%	4%

**Table 1.2:** Established Monetary Saving Trend in the Co-operative Sector

Source: Adopted from ACAL, 2018

From Table 1.2, it is evident that there has been a registered significant drop in members saving with SACCOs only, from 65% in 2009 to just 41% in 2016. At the same time, there was an apparent steady increase in individuals saving through *Chamas* from 23% to 48% over the same period. It was outside the scope of that study to establish the effect of *Chamas* on the negative saving trend shown by SACCOs. What seems apparent though, is the declining deposits' trend within SACCOs at a time informal entities appear to be recording relative growth. Even though the tabular analysis may receive varying interpretations as regards apparent changing preferences on the part of the saving public, the data corroborates the information shown in Table 1.1 on the perceived popularity of IFGs.

Past studies have alluded to the effect of table banking and merry-go-round groups on the performance of other financial entities, mainly SMEs and MFIs (Olando*et al.*, 2013; Ademba, 2013; Mumanyi, 2014). While some of these groups join SACCOs without any restrictions, banking institutions have even created special loan products to suit their unique needs (Mungiruand Njeru, 2015). This school of thought classifies IFGs as a subset of SMEs (Olando*et al.*, 2013), and argues that they complement the emerging dynamics in the banking sector.

The Sacco Societies Regulatory Authority (SASRA) in its supervision report recently analyzed the loaning trends amongst the deposit-taking SACCOs (against the active membership and the declining number of qualifying SACCOs. Among the objectives of the report was to isolate the factors that contribute to the success rate of loan products in DT-SACCOs. The numerical outcome was captured as shown in Table 1.3.

	2015	2016	2017
No. of DT-SACCOs	177	176	174
Active Membership	2,675,050	3,143,485	3,116,674
Total Deposits(Kshs. Millions)	237,440	272,579	305,305
Gross Loans	258,183	297,604	331,212

Table 1.3: Growth and Performance trends of DT-SACCOs

#### Source: Adapted from SASRA's Annual Supervision Report, 2017

It is evident from the analysis in Table 1.3 that there is a trend of declining number of DT-SACCOs qualifying for licensing under that category of SACCOs. This is indicative of the liquidity shortfalls facing that category of the SACCOs.

Empirical information indicates IFGs approach SACCOs, for funds to plug their monetary deficit (Kariuki and Ngugi, 2014). The more loans issued by SACCOs, the higher the revenue income. Furthermore, the IFG members' loan-borrowing ability is highly influenced not only by their projected expectations but also their social group ties (Mungiru and Njeru, 2015). This socio-financial behavior amongst the IFG membership is outside the control of SACCOs but directly determines whether or not they take loans and in what volumes. To this end, there is limited information on the effect of such informal groupings' initiatives on the growth of SACCOs.

Another perspective of SACCO growth relates to member deposits. Members with steady incomes, drawn from both the business community and employment circles have been shown to identify with these IFGs (FSD Kenya 2009). SMEs have been reported to benefit from the saving discipline of IFGs (Kariuki and Ngugi, 2014)but the driving motivation behind the culture was not explored. Atieno (2001) reports that employees with steady earnings felt attracted to ASCAs due to the manner in which their operations impose self-discipline

towards savings. Consistent with the findings in Mungiru and Njeru (2015), Stanley & Bhattacharya (2005) records that the habit of regular savings in informal groups is what sustains their very existence. FSD Kenya (2016) postulates that the connecting link between merry-go-round groups and other financial entities, especially commercial banks has been shown to be complementary, and thereby enjoying compensating advantages between them as confirmed by Tsai (2001).

At the same time, investment groups, which target the real estate market, are known to have enhanced collaborations with other financial entities to enhance their capacity to achieve set targets and cushion their financial inadequacy (Olando et al., 2012, Fin Access, 2014, FSD Kenya, 2016). Since the motive of joining either of the entities is distinct, Karumuna and Akyoo (2011) suggest that people are ordinarily inclined towards diversifying their investments either to spread risk or as a means to achieve their financial obligations faster. The departure though, arises when the entities invested in share common attributes in terms of their formation structure. Faced with changing priorities amidst limited resources, an individual is bound to align their target financial plans to conform to their ability to meet arising monetary obligations.

Past research work has pointed to SACCOs as financial entities that are woven around individual member contributions, enhanced by the social capital advantages that come with it. Even though it is evident that IFGs and the SACCOs collaborate, no known study has made direct reference to SACCO members' saving discretion and how this cascades to influencing its growth patterns.

#### **1.2 Statement of the Problem**

Records indicate that the uptake of SACCOs' financial products to over 4.97 million direct beneficiary-members in Kenya has fluctuated from 11.0%, 12.9% and 11.3% in 2013, 2016 and 2019 respectively, compared to that of IFGs at 27.7%, 41.1% and 30.1% over the same proportionate period. The fluctuating growth rate in SACCOs is way lower than that of IFGs comparatively. Granted, SACCOs' membership framework is structured around social relations, which is similarly the underlying characteristic defining IFGs. The grass root popularity of IFGs and their practices pertaining to cash accumulation are the core attributes that have inspired the close ties between them and SACCOs, banks together with MFIs. Available empirical data indicates that SACCOs allow for corporate membership of IFGs. Essentially, this gives the individual members latitude to retain the control of their saving and borrowing preferences between the two formations. Consequently, these members' financial behaviour is bound to be strongly shaped and influenced by their social atmosphere and group practices, beyond the manipulation or control of SACCOs. It has been shown that the force driving SACCOs to embrace IFGs' corporate membership is the latter's members' practices, which hitherto have not been associated with SACCOs' growth. Empirical evidence indicate that growth in SACCOs has been analyzed in terms of governance, management, industry dynamics and economy-based parameters but there is no known study linking the socio-financial based practices of IFGs to the growth of SACCOs. Therefore, this study was necessitated by the paucity of empirical information associating IFGs' practices and the growth trends of SACCOs besides interrogating the trends in loans and deposits from the perspective of their shared membership.

#### **1.3 Objectives**

#### **1.3.1 General Objective**

The main purpose of this study was to analyze the effect of informal financial groupings' practices on the growth of SACCOs in Kisumu County, Kenya.

#### **1.3.2Specific Objectives of Study**

The study was guided by the following specific objectives;

- 1. Establish the association between Informal Financial Groupings' practices and growth of SACCOs.
- To establish effect of Informal Financial Groupings' practices on SACCOs' Loan Volumes.
- To determine effect of Informal Financial Groupings practices on SACCOs' Deposits.

#### **1.5 Research Hypotheses**

In addressing the objectives of the study, the following hypotheses were tested;

 $H_{0I}$ : There is no association between Informal Financial Groupings' practices and growth of SACCOs

 $H_{02}$ : Informal Financial Groupings' practices do not affect SACCOs' loan volumes

 $H_{03}$ : Informal Financial Groupings' practices do not affect SACCOs' deposits

#### **1.6 Justification of the Study**

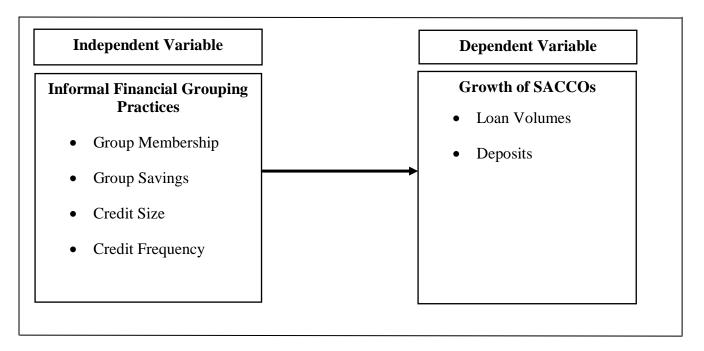
The study was necessary as it set out to establish the effect of the practices of members of IFGs subscribing to SACCO membership on the growth of SACCOs. The findings of this study will contribute to both the literature and practice arena in several ways. To begin with, it provides a platform on which players in the SACCO sub-sector will position their products

and adjust their operations to assure them of business continuity and sustainability. Secondly, the findings will help SACCO industry policy makers in designing operational models that will protect both established and infant SACCOs from chocking due to intertwined financial projections amongst actors within the social-linked financial sub-sector. From the perspective of SACCOs' management, the study contributes to the body of knowledge by supplying supporting data to explain how the growth of their entities are influenced by the study variables. Additionally, scholars and researchers with interest in cooperative finance will find this study critical by identifying gaps for further study.

#### **1.7 Scope of the Study**

The scope of this study was evaluated from three fronts; subject, area, and time. In terms of subject scope, the study was limited to the broad field of finance and the subfields of informal and cooperative finance. In terms of area scope, the study was conducted in Kisumu County, where the presence of SACCO organizations is representative of the status across Kenya, making the results capable of generalization. There are 312 SACCOs in Kisumu County but majority of them are inactive. The active SACCOs are 103, out of which, only 10 allow for informal group corporate membership. They are essentially concentrated within Kisumu City (GoK, 2007). Similarly, the informal finance groups that operate accounts with SACCOs are mainly concentrated around the County's headquarters, Kisumu City and its environs. The study was conducted through stratified and simple random design and a sample size was determined from members of the groups subscribing to SACCOs. Data was collected by the researcher through questionnaires and document analysis. Specifically, the study sought to determine the effect of the informal financial groupings' practices on the growth of SACCOs.

#### **1.8 Conceptual Framework**



# Figure 1.1: Relationship between Informal Financial Groupings' practices and growth of SACCOs

Source: Adapted from Kamrava, 2004

The conceptual framework outlines the relationship between the dependent and independent variables. Group membership, group savings, Credit size and credit frequency; represent the Informal Financial Groupings' practices, the independent variables while the Dependent Variables were operationalized by Loan Volumes and Deposits. All the independent variable attributes were measured against SACCOs' growth, represented by loan volumes and member deposits.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

This chapter reviews the theoretical and empirical literature on the key study variables so to identify research gaps. It examines the existing literature on informal financial groupings' practices and their relationships with SACCOs' growth.

#### 2.1 Theoretical Literature Review

#### **2.1.1 Behavioral Finance Theory**

Sewell (2010) defines behavioural finance as the study of the influence of psychology on the behaviour of financial practitioners and the subsequent effect of that influence on the markets. The existence of several alternative sources of funds to individuals has not by itself diminished informal financial sources which are arguably costly to consumers in terms of interest rates charged. Essentially, despite the high cost of interest costs associated with informal financial products, they still seem popular among users of finance. The behavioural finance theory is grounded on the notion that investors act rationally while making financial decisions.

Proponents of this theory posit that people conform to the pressure of adopting a financial trend taken by others within their sphere of influence for the mere need of group acceptance (Shiller, 2003). Others have conceptualized the theory in attempting to interrogate how individuals in groups engage in mental accounting, that is, the practice where people divide up their money into different accounts for subjective reasons (Hammond, 2015). But the discernment of Hirshleifer (2014) accurately resonates with the application of behavioural finance theory to this study. The study forecasted the need to use behavioural finance to explain the attitudes and motivation pertaining to financial decisions such as borrowing and

saving. Hirshleifer (2014) linked behavioural finance to social finance, which focuses on how social interactions affect financial outcomes.

This Behavioural Finance Theory was relevant to this study because decisions to access funds are influenced by individual psychological perceptions. Within the financial sector, individuals are motivated with different factors that tend to inform their choices when interacting with entities from which they source financing for their various needs. Heukelom (2014) shed light on this perspective when he attempted to associate behavioural finance theory with the prospect theory. Heukelom postulates that much as the roots of behavioural finance are traced to explaining the financial market inefficiencies, behavioural biases significantly affect an individual's investment decisions. The behavioural aspect is conceptually the price of parting with liquidity while the institutional attribute encompasses the profit element and the opportunity cost of the lender's capital. The behavioural finance theory guided this study in seeking to establish whether the practices by members of IFGs ordinarily condition them to making rational financial decisions in a manner capable to influence the growth of SACCOs.

#### 2.1.2 Social Capital Theory

Social capital refers to the relational interactions that individuals exploit to secure benefits through membership in networks and designed to solve common problems (Claridge, 2004). These structures are defined by bounded solidarity and network-mediated benefits. Pierre Bourdieu, one among the pioneer scholars of social capital posits that whereas economic capital is in people's bank accounts and human capital inside their heads, social capital is inherent in the structure of their relationships (Woolcock and Narayan, 2000).Narayan and Cassidy (2001) highlighted group characteristics as one among the principal dimensions of social capital. Claridge (2020) posits that group characteristics fall under the relational school

of thought, which is one of the three broad dimensions of social capital, the others being structural and cognitive dimensions. He attempted to bring out the different levels conceptualizing social capital as micro, meso and macro typologies.

In the typology, the micro level is dedicated to analyzing society as made up of individuals, meso level analysis looks at society as made up of groups, while micro level analysis focuses on society as made up of communities. Though there exists inseparable interrelationships conjoining the three typologies, this study adopted this theory in the context of groups, which identifies with the meso classification of social capital. IFGs are entities comprised of individuals that unite with a common goal of growing their welfare (Nkuru, 2015). They are established to champion and propagate the economic concerns of members through social setups that are mainly made up of closely related individuals. SACCOs are organizations premised on social interactions and targeting individuals identifying with a particular trade, vocation, profession or work environment (Mumanyi, 2014). The group characteristics were reflected through the number of memberships, money contributed and the frequency of participation in identified groups.

Social capital is equally regarded as resources inherent in social relations which facilitate collective action (Claridge, 2004). These resources include trust, norms and networks of associations representing any group which gathers consistently for a common purpose. Trust levels indicate cooperation among people of a given group (Coleman, 2007). Social capital helps people to take advantage of social interactions in obtaining given benefit. Social capital theory was relevant to this study since the networking perspective is significant for table banking, merry go rounds and investment groups. These informal finance groups are woven in networked interactions based trust, organizational norms and common purpose.

Practices identified with members of groups that are common to SACCOs include Group membership; which affords an individual the right of identity, savings; which enhances the stake of ownership and ability to access the loanable financial products, quantity of available credit; which is the parameter that defines the extent to which members can borrow and the frequency or consistency with which such loan facilities are applied for. On the part of SACCOs, interest on loans is the prime source of revenue defining their growth. The quantity of loans advanced, based on the three-times deposits multiplier are therefore the prime determinants of growth. Consequently, the parameters to measure IFGs in this study were; group membership, group savings, credit size and credit frequency. Loan volumes and member deposits were taken to represent SACCO growth.

#### 2.2 Empirical Literature Review

#### 2.2.1 Association between informal financial groupings and SACCOs

IFGs and SACCOs have been shown along the structure and set up of their cash accumulation orientations (Cheruiyot, Kimeli and Ogendo, 2012). Since they are all relationship-influenced financial entities (Mvula, 2013), the bedrock of their operations are hinged on the ideals of social capital. The model defining the skeletal structure underlying membership to SACCOs clearly indicates parameters that find their origin in informal financial groupings. Mvula (2013) shows that the metamorphosis of groups such as rotating savings and credit associations (ROSCAs) into the present day merry-go-rounds and table banking groups have gained ground in the informal finance sub-sector. Both formal and informal workers are reported to identify with these IFGs.

Similarly, existing empirical information shows that SACCOs and IFGs draw from a common pool of membership (Nkuru, 2015). There are members of SACCOs that identify with formal employment where ordinarily, their monthly savings are deducted from their

salary and remitted directly to the SACCOs' reserves (Sawani and Patterson, 2002). Additionally, there are SACCOs whose membership is made up of individuals that are largely unemployed, indicating all their investment stake is dependent on their personal saving discipline. This involves making periodic deposits from time to time to grow the finance base against which borrowing is premised. This category of members are referred to in this study as non-check-off SACCO members. The prevailing regulations in the loaning trends of SACCOs is that every member is allowed to access loans equivalent to three times the deposited amount of money in their account at any given point in time preceding such loan application (Mudibo, 2005).

Noumigue (2015) analyzed the association between table banking and Small and Medium Enterprises (SMEs). The report indicates that the formation of SMEs borrowed heavily from the structure and design of IFGs in relation to saving and lending procedures. Okello (2013) reported that merry-go-round groups formed the basis that influenced banks to closely interact with them as a source of organized and disciplined saving members. The merry-goround groups were identified as an effective model of raising finances and as means to alternative wealth creation. Olando, Jagongo and Mbewa (2013) in their study to establish the contribution of village-based groups to conventional banking reported that majority of members of these groups accessed banking services as groups and not in their individual capacity.

According to Gathurithu (2011), Unaitas Sacco Ltd, a non-check-off SACCO whose foundation membership is drawn from coffee farmers, is reported to be operating several products targeting IFGs. The study shows that resources collected from merry-go-rounds and table banking groupings combined, form in excess of 54% of the institution's base deposits. Gujerty (2007) reported of the trend in the financial sector where entities draw membership from each through informal collaborations that serve to achieve their respective operational objectives. While associating the role of informal finance in the growth of rural finance, Meyer and Nagarajan (1991) similarly reported of the unwritten operational collaborative links that subsist amongst financial entities with distinct legal backgrounds. At the time of the study, members maintained their operations within their limited resources.

Mwakajumilo (2011) undertook a study to trace the role of informal microfinance institutions in savings mobilization. The study associated the vibrancy in micro-finance institutions to the informal networks resident within individuals living in the rural set ups. The inspiration was designed to propel the pooling of funds as a model geared towards poverty alleviation. The institutions, though not primarily focused on the social networks binding the rural-folk, succeeded in achieving their objectives that were essentially crafted around taking advantage of the established goodwill to penetrate the saving poor.

SACCO and IFGs draw from a common pool of membership, however, there are SACCOs that accommodate corporate group membership. Even though members are shown as exercising the freedom to save and borrow from both entities where they subscribe membership, the practices defining their financial conduct holds key to where their money ends up. Reviewed literature (Gathurithu 2011, Okello 2013) was limited to the lessons learnt from IFGs that helped in the formation of semi-formal financial entities and, by extension, improvement of services rendered by the formal financial entities, but the decision remains that of the investing members' saving and borrowing practices. By extension, they studies did not analyze the association subsisting between the said practices and the growth of the mainstream financial entities.

The focus on the operational infrastructure of IFGs and SMEs as espoused in the objectives of Olando, Jagongo and Mbewa, 2013, brings rather an incomplete picture of the ultimate impact of the social-engineered association between IFGs and SACCOs. Since members retain the unfettered liberty to determine the destination of their resources, an understanding of group financial behaviour in a social atmosphere is critical in whether group practices influences outcomes formal financial entities. Moreover, the findings in Mwakajumilo (2011) cannot be adequately relied on in predicting the association between the IFGs and semi-formal financial entities. This is because the study was undertaken in a rural environment whose group financial orientations are bound to be significantly distinct from those in urban set ups.

On a structural front, Noumigue (2015) attempted to associate IFGs and MFIs in the context of how the two entities accessed and used loans and the ensuing partnership with banks. This association, other than the analysis of events in a geographical environment completely distinct from that of this study in many respects, was not designed to accommodate the consumer-attributes of members in its findings. Further, the legal and operational structure of conventional banking entities and SACCOs are distinct enough to enable a reliable assessment of their association to be favorably measured for comparative purposes. This therefore sets the ground for the need to establish the extent to which IFG practices are associated to the growth of SACCOs.

#### 2.2.2 Informal financial groupings practices and loan volumes

The largest segment of the asset management business in the United States of America is made up of registered investment companies, managing more than \$19 trillion in assets as at the end of 2016 (Reid, Collins, Holden and Steenstra, 2017). They represent an estimated 95 million US retail individual investors.

Ghate*et al.*, (1992) undertook a study on the interaction between formal and informal finance institutions in the Philipines. The study shows how ROSCAs endeared themselves to formal entities in order to enhance their credit reserves. The study findings indicate that much as informal groups were popular with low income earners, they lacked capacity to sustain their financial needs. The study in Chiteji (2002) focused on the role of ROSCAs in the economy where it was reported that a high loan uptake trajectory was noted amongst informal banking models than formal entities, despite the weak legal enforcement atmosphere. This led to the popularity of the groups and hence exponential returns, albeit in low volumes. Sabana (2005) highlighted the strong influence that the table banking savings' concept had on people's financial behaviour. The study mainly focused on linkages between SME banking with other financial intermediaries. It was reported that the table banking practices strongly influenced the operational activities of SMEs to the extent that they adopted their cash accumulation model.

Investment groups for instance, identify a common project towards whose acquisition, funds are mobilized from members (Heavener, 2006). Strict targets are set for members in regard to the expected amount of money to be collected and timelines within which specified saving goals are to be achieved at individual levels (Chiteji, 2002; Gujerty, 2007). An outstanding distinction between investment groups and table banking formations is that whereas collected funds are eventually distributed back to members in the former, they are retained for the purpose of acquiring the identified projects in the latter (Gichuki et al., 2014). Purchasing long term assets in this manner enables members to exploit the economies of scale that comes with bulk purchase.

Gikonyo*et al.*, (2006) compared table banking and the Malaysian model of saving among women. The study perspective was inclined towards linking IFGs and the empowerment of

women groups through micro and small enterprises. It was recorded that group savings and credit frequency practiced by members resulted in improved reserves and created a culture which was adopted by the country's formal financial institutions. Gujerty (2007) attempted to put up a strong case to outline group influence on resource mobilization. The study aimed at highlighting the influence amongst members as a driver towards group resource mobilization mechanisms. The findings show that cohesion in group memberships, demonstrated through close ties and general peer influence towards savings was correlated with the growing credit requirements. Looked at conversely, the results confirm that the social bond defining IFGs is a major catalyst behind the coordinated nature with which saving and borrowing is undertaken amongst group members.

Atieno (2001) undertook an empirical study to assess the factors determining entrepreneurs' credit choices between informal and formal sources. The results show that 67% of those who sought credit used informal sources as it was most to access. The study disclosed the relationship between credit consumers and their bias towards informal finance sources as against formal finance institutions. The size of credit with regard to volume of loans taken from informal set ups was way higher than that taken from conventional formal finance institutions put together. It further records that due to this trend, merry go round groups had largely matured into self-reliant entities with practices that were attractive to the low-end credit consumers.

The practices of credit frequency and credit sizes evident in table banking have been shown as stimulating practices that have made it popular in the informal financial market (FSD Kenya, 2010). The eventual saving model accounts for the growth of the pool of resources from which loans are advanced (Sabana 2005). Formal financial organizations are reported to have successfully adopted their practices (Gikonyo et al., 2006). The perspective of the influential nature of the saving patterns of the practices have successfully been shown as the inspiration behind their adoption in formal set ups. Deposits and loan uptake are correlated in the sense that the former dictates the volume of the latter (Mwangi, 2016). Impio (2014) records that SACCOs have established products that attract table banking groups to direct their savings with them. Karunagoda (2007) undertook a study to analyze how financial services were improved owing to the diversified products offered by semi-formal entities based on informal structures. The findings revealed that the practice of consistent savings acted as an incentive to low income earners to be involved with micro finance organizations.

Mwangi (2016) attributed the spread and steady growth of the informal financial sector to the reluctance by banks to fund evolving small and medium enterprises. This pressure has pushed members of these groups to cultivate alternative sources of funds to sustain their needs. Commercial banks in Kenya however, have recently discovered the potential in these groups and swiftly designed programmes and products targeted at embracing them in the formal banking bracket (FSD Kenya, 2010).

Babajide (2011) pointed to table banking as a group-based fund pooling arrangement where members save money once or twice monthly. The study was conducted to establish linkages between semi-formal and informal financial sectors. The findings reported that 61.2% of respondents save with banks, 23.8% with SACCOs and 14.8% with *esusus*, Nigerian euphemism for ROSCAs. The study recommended that established financial entities should reach out to *esusu* groups to grow their reserves. Mwakajumilo (2011) on the other hand analyzed the role of informal microfinance institutions in savings mobilization. The study shared the Tanzanian experience and reported the need for SACCOs to collaborate with informal groups to grow their reserves. However, Babajide (2011) and Mwakajumilo (2011) were case studies on selected groups whose unique attributes may not be generalizable to the

Kenyan context. Additionally, the studies were dedicated at demonstrating the complementary nature of table banking groupings and how their savings and credit practices have been replicated amongst the semi-formal financial entities.

Aura and Mwangi (2013) analyzed factors influencing SACCO members when seeking for loaning services from other financial entities in Kenya. The study reported that members affiliated to IFGs demonstrated high frequency with which credit changed hands within their groups. The report indicates that majority of the credit borrowers did so in their regular meetings, based on set targets. The saving ceilings were largely member-determined, not quite because they so desired, but they were compelled by peer influence from fellow group members. Members of SACCOs that were reported to participate in the group saving structures attributed their dual membership to the pressure to supplement their financial needs through alternative additional credit.

Having disclosed members' involvement in both saving models, Aura and Mwangi (2013) went further to augment the findings in Gikonyo*et al.*, 2006, that group savings and credit frequency were the key drivers attracting other financial entities to work closely with table banking groupings. However, it goes without saying that engaging members affiliated to a saving group with strict saving and borrowing practices (Aura and Mwangi, 2013) to another complementing entity, presents a conflict of choice and preference, from the members' standpoint. The election to determine where to save and borrow from is, by and large, the discretion exercised by the saving members. The scope of this study did not extend to interrogate why IFGs attracted high credit frequency levels, neither did it view this construct in the lenses of competing or complementing financial entities with which IFGs collaborate.

FSD Kenya (2010) sought to analyze table banking from the perspective of its ability to raise sustainable and independent financial support to its beneficiaries. It records that most table banking groups were found to suffer inadequate resources, which were largely insufficient to accommodate many members' growing loaning needs. This position was corroborated by the findings in Aura and Mwangi (2013) but both studies limited their findings to the shortcomings of table banking and not their practices and how they affect the loaning ability of closely complementing firms like SACCOs.

Kariuki and Ngugi (2014) analyzed the effect of table banking on the performance of micro and small enterprises. The study findings indicated that social capital was a key component of table banking and that members enjoyed mentorship and loan guarantee from their peers. 95% of the participants in the study attributed their association to table banking as the reason behind their businesses' exponential growth. Gitobu*et al.*, (2017) undertook a related study on the effect of table banking on growth of women owned SMEs. The study focused on the effect of savings mobilization, access to credit and pooled investment on the growth of women owned SMEs. The findings indicated that the table bankings' strategy of funds accumulation accounted for the growth of women SMEs. Savings mobilization was positively and significantly associated with SMEs growth (R=0.235, p-value 0.050). Besides, the study reported that access to credit was positive but not significant to SMEs' growth (R=0.200, pvalue 0.098). Kariuki and Ngugi (2014) was limited to analyzing table banking-funded businesses as an intervention to mitigate the weaknesses and challenges found in SMEs.

The consistent nature with which group members save and the amount of loans they take are prominent parameters defining IFG practices (Nelson and Gash, 2016). Indeed, informal groups thrive courtesy of inspiring individual member savings as the primary qualification preceding loan applications. As Levine (2004) opines, growth of financial entity is best conceptualized by the factors contributing to its very survival and, by extension, the players that support its performance and relevance in maintaining its financial strategic position. Performance can be analyzed for the short-term but growth is an outcome of a continuous long-term process (Muchoki, 2012). This suggests that easy access to credit may not have an impact on the growth of SMEs and, by extension, SACCOs. Social capital has been shown as the engine driving the consistent saving culture in table banking groups through maintaining close links between members. Reviewed literature has disclosed that the practices of group savings and credit frequency significantly contribute towards growth.

Ghateet al (1992) posits that IFGs are indeed popular with low income earners but lacked the financial muscle to sustain their arising financial needs. The study attributed to IFG members as subscribing to loans from other credit entities on account of the inability by their group formations to satisfy their demand for cash in a sustainable manner. This perspective appears to have gained from the work of Sabana (2005) whose findings rooted for linkages amongst low-end financial intermediaries and Karunagoda (2007) that advocated for the co-existence between informal cash-saving schemes and microfinance entities. With the passage of time and the changing financial landscape, however, IFGs are not exclusively patronized by low income earners. Consistent with the recommendation in Babajide (2011) that groups IFGs collaborate with established financial entities, FSD Kenya (2010) identified credit frequency and credit size as the prime practices attracting banking institutions to design IFG-focused products. Even though reviewed literature was inclined towards guiding IFGs to tap into the financial resources available from established financial entities, the social constructs behind group loaning were not substantially factored. Additionally, the scope of the studies did not extend to interrogate the practices of credit frequency and credit size in the context of their adverse or favourable impact to the loans issued by the affiliated financial bodies.

## 2.2.3 Informal financial groupings' practices on SACCO deposits

IFGs are popular with pooling resources and distributing it according to their level of individual requests (FSD Kenya, 2010).As for merry-go-rounds, the pooled resources are rotationally are shared amongst members in predetermined equal proportions (Gujerty, 2007). Investment groups are distinguished as strong financial powerhouses since they set ambitious targets, making them attractive to financial institutions for mutual partnerships (Onchanwa and Memba, 2012).

Chipeta and Mkandawire (1992) showed that whenever members of the informal groups enhanced deposits to their groups, the formal entities reported a marginal reduction in their reserves over the same period. This precipitated an atmosphere of complementarities and competition between formal and informal firms. Evidence from Ghana indicates that there exists a strong collaboration between SACCOs and IFGs (Jones *et al.*, 2003). It was reported in the study that much as SACCOs attracted attention amongst formal finance consumers at 34% of polled users, merry go rounds registered a considerably higher attraction interest as their key source of operating cash at 45%, with the rest relying on conventional banking institutions. Mutesasira and Nthenya (2003) sought to establish the role played by IFGs to enhance financial deepening in Uganda. The report shows IFGs, like SACCO, were seen to be playing a significant role in financial deepening among other entities included in the investigation. With 28% customers expressing strong association with merry go rounds compared to 17% affiliated to SACCOs, the study echoed the findings in Jones *et al.*,(2006), pointing to the strong influence merry go rounds had on finance users in comparison with SACCOs. In Kenya, it has been shown that IFGs' resource mobilization model has been replicated in national poverty eradication programmes (FSD Kenya, 2009). While analyzing the country's changing financial landscape, the study reflected on the fluctuating fortunes for SACCOs in the face of growing interest in the IFGs' deposit model, especially in the rural areas. Cheruiyot *et al.*, (2012) introduced the urban dimension in the study which analyzed the effect of SACCOs' strategies on members' savings mobilization in Nairobi. The study results revealed that various IFGs are a common phenomenon in urban set ups and that their presence had enhanced the saving culture amongst the working population. Besides, contrary to the stereotype associating *chamas* with ladies, the study showed significant interest of men in IFGs.

In yet another study on group savings and loan associations, FSD Kenya (2010) reported that IFGs' cyclic cash collection patterns motivated members' influence towards the practices of consistent savings and credit frequency. The study revealed that nearly half of all Kenyans who access financial services use some form of informal finance with average deposits ranging between Kshs.200 to Kshs.2000 weekly. Further, it emerged that there was a significant overlap between formal and informal financial groupings and that over half of those accessing SACCOs' services also use other informal financial products. Merry-goround groups were singled out as being popular among SACCO users. There is empirical evidence that choices of projects to invest in are selected through collective decisions (Gujerty, 2007), influenced by the drive to achieve long term investment ambitions. Mwakajumilo (2011) shared the Tanzanian experience and recorded that the contributions received from IFGs enhanced growth of their reserves. It shows deposit reserves as a critical component in enabling SACCOs meet their day-to-day financial obligations to members.

Impio (2014) investigated merry go round activities in the informal sector as a driver of the economy. It was shown that over 38% of bankable women identified themselves with *Chamas*in rural areas while about 80% of the 38% were members of different SACCOs. While analyzing factors affecting growth of SACCOs, Muchoki (2012) reports that people coalesce around groups due to the perception of the advantages that come with engaging in numbers to achieve a common cause. The study also aimed to show the psychological wellbeing of members through their participation in these groups, based on the Homan's theory of group formation and human interactions. The researchers' perspective of analysis however, did not disclose the true psychological disposition that would demonstrate why members regularly attend meetings and religiously contribute as they do. The study was also a survey study of a rural setting targeting women groups only.

Pooled funds are made at the instance and discretion of members based on their perceived financial goals (Bhuyan, 2007). Since investment groups are made up of a composition of individuals whose aspirations change with a shift in their financial projections and targets (Gardeklint 2009), they are bound to upset their saving practices from time to time. The mind of group members, at the point of making deposits, is influenced much with perceived anticipated benefits than anything else (Mvula, 2013).

Reviewed literature confirms that IFGs and SACCOs collaborate (Jones *et al.*, 2003; FSD Kenya 2009; Cheruiyot *et al.*, 2012). The popularity of IFGs has even embraced men in urban centers (FSD Kenya, 2009) and the middle class, irrespective of gender, have joined in to make deposits both to IFGs and SACCOs (FSD Kenya 2010; FSD Kenya 2012). The social influence propelling group members to consider making deposits both to IFGs and SACCOs were not factored in these studies. Related to this is the psychological analysis connecting the desire to save money and the reserved decision of channeling it to the desired entity. Muchoki

(2012) attempted to explain the psychological attributes of groups using the Homan's theory which focuses on patterns of group behaviour as influenced by internal and external factors. This study sought to establish the financial behaviour of group members as influenced by the social factors and how this translates to shape the growth to deposit into SACCOs.

#### **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

This Chapter explains the methods which was adopted and applied in the study. It therefore describes the research design, study area, data sources, data collection tools, data analysis and presentation of the study findings. Cooper and Schindler (2006) define research as any systematic examination of a subject matter intended to come up with solutions for decision making. Schindler (2006) adds that research goes beyond common knowledge to acquire specialized and detailed information. This therefore means that research follows a particular methodology, which encompasses the techniques and procedures of collecting data; population of the study; sampling methods among others (Mugenda and Mugenda, 2003). Research methods therefore, are the ways and means with which data is collected in a study (Kothari, 2004). Sekaran (2000) adds that research is categorized based on the data collection methods, analysis and purpose.

## **3.1 Research Design**

This study adopted a mix of descriptive and correlational research designs, which provided the ideal framework to realize the objectives of the study. Correlation research design involves the use of correlational statistical tests to measure the degree of association or relationship between two or more variables (Leedy and Ormrod 2010). Descriptive research design involves provision of explanation of the state of variables as they occur without manipulating them. It therefore involves collecting data by interviewing or administering a questionnaire to a sample of individuals which can be used when collecting peoples' attitudes, opinions, habits and other social concerns (Orodho, 2003). According to Kothari (2004), descriptive research design employs the interaction with the respondents to bring out the depth and breadth of the study by way of using questionnaires. It involves the description of features of a person or group of people. Mugenda and Mugenda (2003) describes it as a method of collecting data with a view of using such data to test hypothesis at hand. Since the description of the features of groups of people was required to answer the questions: who, what, where, when or how much in answering stated hypotheses, the research used the descriptive research design.

#### 3.2 Study Area

The area of study was Kisumu County; which lies between longitude 0.0884° South and latitude 34.7770° East( Appendix II). Kisumu City being its headquarters is third largest City in Kenya and the business hub of Western Kenya. With a population of about 800,000 people in 2017, majority of the people actively engaged with both SACCOs and informal financial groupings are resident in the City and its environs. As a prime urban center, Kisumu town's activities in the co-operative sector largely reflects the trend in other urban centers within Kenya.

# **3.3 Target Population**

Cooper and Schindler (2006) define population as the collection of elements about which we wish to make reference to. The target population consisted of group members of Informal Financial Groupings (IFGs) that are members of SACCOs in their corporate status. According to the Ministry of Industrialization and Enterprise Development, there are 312 registered SACCOs in Kisumu County. Of these only 103 are active and of the active, only 10 allow for informal group corporate membership. From each of the 10 SACCOs, the top management, comprising of the General Manager, Financial Accountant and Credit Officers formed the target population of 30 respondents. At the same time, the 10 SACCOs allowing for group corporate membership identified a total of 104 active groups in their customer

profiles with a total of 482 respondents, bringing the global target population to 512 respondents.

## **3.4 Sampling Size and Sampling Techniques**

Cluster random sampling was used to select a sample size of 224 of which 211were sourced from IFGs while 13 were drawn from SACCOs. A sample is a part of the target population, carefully selected to represent that population (Cooper and Schindler, 2011). It is a true representative of the entire population to be studied (Mugenda and Mugenda, 2003). In cluster sampling, the unit of sampling is not referring to an individual entity but rather a group of entities selected by virtue of location; to which random sampling is employed to choose elements from each sub-group (Kombo and Tromp, 2009). In simple random sampling, every element in the population has a known and equal chance of being selected as a subject (Sekaran and Bougie, 2016).

The following Yamane sampling formula was used to arrive at the sample size (Yamane, 1967);

n =	<u>N</u> 1+N(e)	$)^2$	
Where:	Ν	=	Population Size
	e	=	Level of precision (acceptable sampling error)
			0.95 confidence level is assumed
		n	= Sample Size

n = 
$$\frac{512}{1+512(0.05)^2}$$

= 224.561, approximately 224 respondents

Proportionally, the sample size of 224was apportioned between the IFGs' members and the SACCOs as follows;

SACCOs  $= \frac{30}{512} \times 224$ 

= 13.125, approximately 13 respondents

Informal Finance Groupings =  $\frac{482}{512}$  X 224

= 210.875, approximately 211 respondents

## 3.5 Data Type and Collection Methods

The research used primary and secondary data. Primary data was collected by use of structured and open-ended questionnaires administered on respondents while secondary data was obtained from the financial reports of SACCOs. A questionnaire is a set of questions or statements that assesses attitudes, opinions, beliefs and biographical information (McMillan & Schumacher, 2001). They were used to collect data relating to the effect of informal financial groupings' practices on the growth of SACCOs from the members subscribing both to the selected IFGs and SACCOs. Primary data was collected using interviews to validate the secondary data. The secondary data was obtained from the records kept by all the SACCOs within the area of study. The secondary data collected was recorded in a data collection sheet and analyzed.

#### 3.6 Data Validity and Reliability

#### **3.6.1 Instrument Validity**

Validity is the degree to which an assessment tool measures what it is intended to measure and the extent to which it provides information that will answer specific important questions (Mugenda and Mugenda, 2003). There are two types of validity, namely internal and external validity. A research study has internal validity if the outcome is dependent upon the variables specifically under study. On the other hand, external validity refers to the extent to which the results of a study can be generalized to and across other situations, people, stimuli and times. In the study, construct and content validity was evaluated by giving the questionnaire to two professional finance experts in the Department of Accounting and Finance of Maseno University, three senior officials of the Ministry of Industrialization and Enterprise Development, Kisumu County and five SACCO managers within the study area.

## **3.6.2 Instrument Reliability**

Mugenda and Mugenda (2003) indicates that the reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. In order to test for the reliability of the instrument, the questionnaire was administered to fifty five randomly selected members of informal financial groups that were members of SACCOs. This was done twice within an interval of two weeks after which an alpha coefficient reliability test was conducted and a reliability value calculated for each of the objectives. The internal consistency of the questions was determined via Cronbach's coefficient alpha (Cronbach, 1951).

Cronbach's Alpha	Internal Consistency
a≥0.9	Excellent
0.7≤a≤0.9	Good
0.6≤a≤0.7	Acceptable
0.5≤a≤0.6	Poor
a <0.5	Unacceptable

 Table 3.1:Cronbach's Alpha

Source: Cronbach, 1951

Ideally, the Cronbach's alpha coefficient of a scale should be above 0.70. Cronbach's alpha was run to test for the reliability of the research instrument using Likert scaled variables. The research instrument was found reliable, at 0.748, which was greater than the rule of thumb of 0.7, showing the instrument was reliable.

## **3.7 Analytical Model**

According to Cooper and Schindler (2011), multiple regression is a flexible method of data analysis that may be appropriate whenever quantitative variables (the dependent) is to be examined in relationship to any other factors (expressed as independent variables).A multivariate regression model was used to link informal financial grouping activities (independent variables) and the growth of SACCOs (dependent variable).

The generic linear regression and specific models would be as:

With r being correlation coefficient

n being the number of scores (sample size)

 $\sum$  xy being the products of paired scores

 $\sum x$  being the sum of x scores

 $\sum$  y being the sum of y scores

 $\sum x^2$  being the sum of squared x scores

 $\sum y^2$  being the sum of squared y scores

$\mathbf{Y}_1 = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_1 \mathbf{X}_2 + \boldsymbol{\beta}_1 \mathbf{X}_3 + \dots \cdot \boldsymbol{\varepsilon}_1$	
$Y_2 = \beta_0 + \beta_2 X_1 + \beta_2 X_2 + \beta_2 X_3 + \dots + \varepsilon_2$	

Where: Y = Growth indicator of SACCOs, measured in Loan Volumes ( $Y_1$ ) and Deposits ( $Y_2$ )

 $\beta_0$  = a constant, the value of Y when all X values are zero

 $\beta_1...\beta_3$  =slope of the regression coefficient, that is, measuring the sensitivity of the dependent variable (Y) to unit change in the predictor variables X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub>.

- $X_1$  = Group Membership
- $X_2 = Group Savings$
- $X_3 = Credit Size$
- X<sub>4</sub> = Credit Frequency
- $\varepsilon$  = Error term which captures the unexplained variations in the model

The model has been derived from Bahovec*et al.*, (2017) which was a study undertaken in Croatia on the impact of financial literacy and gender on financial performance using the regression analysis.

#### **3.8 Tests for Statistical Assumptions**

Tests for statistical assumptions are important to ensure that the basic assumptions for parametric tests are observed. This section discusses the significance of multicollinearity in regression analysis and test results for multicollinearity analysis of the independent variables.

# **3.8.1 Tests for Multicollinearity**

According to Gujarati (2013), Multicollinearity refers to the existence of more than one exact linear relationship. It is said to exist when two or more independent variables are intercorrelated. Pedace (2013) states that multicollinearity will have a significant influence on data analysis only when the correlation coefficient of the interacting predictor variables is equal to or greater than 0.7. Tolerance levels and Variance Inflation Factors (VIF) are measures of multicollinearity. The rule of thumb states that if the VIF of a variable exceeds 10, that variable is said be highly collinear (Gujarati (2013). Further, the closer the Tolerance level is to zero, the greater the degree of Collinearity. This effectively means, Tolerance level ranges from 0 to 1. Besides, a VIF of more than 10 is an indication of serious multicollinearity in a model.

# **3.8.2 Test results for Multicollinearity analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.	Collinearity	V Statistics
	В	Std. Error	Beta	•		Tolerance	VIF
(Constant)	2.090	.398		5.253	.000		
Mean of Group Membership	212	.043	437	- 4.932	.000	.812	1.236
Mean of Group Savings	.147	.092	.136	1.596	.114	.873	1.146
Mean of Credit frequency	.380	.090	.369	4.230	.000	.838	1.196

**Table 3.2:** Results for Multicollinearity test

Source: Research Data, 2019

The tolerance levels while testing the independent variables of group membership, group savings and credit frequency were; 0.812, 0.873 and 0.838 respectively while the Variance Inflation factors were 1.236, 1.146 and 1.196 respectively. The tolerance levels were all tending towards 1 and above the lower limit for significant multicollinearity of 0.7. The VIF factors on the other hand were all close to 1 and far below the limit of 10. This implies, there was no significant amount of information that would make the variables compete to explain the tested growth parameters in SACCOs. Hence given that the tolerance level and VIF were higher than 0.4 and less than 10 respectively, the data therefore did not suffer from multicollinearity.

#### CHAPTER FOUR

#### **RESULTS AND DISCUSSION**

This study investigated the effect of informal financial groupings' practices on the growth of SACCOs in Kisumu County, Kenya. Specifically, the study investigated the effect of informal financial groupings' savings consistency, frequent meeting attendance and frequent taking of loans on growth of SACCOs. This chapter deals with the analysis of data. Data analysis is in line with the specific objectives where patterns were investigated, interpreted and inferences drawn on them.

## 4.1.1 Response Rate

The number of questionnaires that were administered to all the respondents was 224. Whereas 224 were administered, a total of 18 questionnaires were not returned. The remaining 206 questionnaires were properly filled and therefore used in the analysis. This represented an overall successful response rate of 91.96%, generally acceptable for social science studies as supported by Mugenda and Mugenda (2003) as adequate. The study would therefore generate valid results.

#### **4.2** General Frequency of demographic factors of the respondents

Frequencies show how often an event occurs, i.e. repetitiveness of an event. The number of times an event occurs of a given observation, shows its role in describing the outcome of the events (Kawulich, 2005). In this regard, the questionnaires frequencies' based issues are; Gender, Age and membership.

Demographics	Category	Frequency	Percentage (%)
Gender	Male	101	49.0
	Female	105	51.0
Years	18-24	23	11.2
	25-40	115	56.1
	41-55	68	32.7
Education	Not applicable	101	49
	Primary	25	12.1
	Secondary	42	20.4
	Degree	36	17.5
	Masters	2	1

 Table 4.1: Demographic Characteristics

Source: Field Data, 2019

Table 4.1 describes the gender of respondents. This looked at the number of men and female respondents who were interviewed. The results indicated that there were a total of 206 respondents and from this sample, 51% (105 respondents) were female while 49% (101 respondents) were male. This suggests that the number of men engaged with informal financial groupings is as high as that of female. It is safe to conclude therefore that IFGs are no longer a preserve for ladies, consistent with the findings in Aura and Mwangi (2013).

There was the need to find out the age differences of the respondents therefore 11.2% (23 respondents) were aged between 18-24 years, 56.1% (115 respondents) were aged between 25-40 years, and 33% (68 respondents) were aged between 41-55 years while 5.1% (11 respondents) were over 56 years. The spread of age of respondents signifies that majority members of the IFGs fall between the age gaps of 25 years to 55 years. The most active participants are between 25-40 years which could be explained with the fact that this is the prime age period when people are actively engaged in their respective gainful engagements.

With regard to getting to know about the respondents' education levels, the findings indicated that 49% of the respondents never went to school, 12.1% of the them never went to secondary school, 20.4% respondents did not go to university, 17.5% respondents reached up to the university level while only 1% did their masters' degree. This data suggests that IFGs' membership cuts across among the educated, literate, semi-literate and illiterate groups of people. The highest prevalence of membership is among the illiterate which could highlight the fact that most low income earners tend to associate with IFGs in large numbers unlike those with average or medium income clusters. This data similarly lends credence to the previous findings which associated IFGs with individuals with very modest financial capacities. Additionally, the table reveals that members of IFGs in urban set ups with degrees are increasingly developing interest in IFGs at 17.5%, which is significantly higher than 20.4%, representing those with high school education. In the same breath, the findings shown confirms that a significant number of the educated in the society, who are potentially employed, transact with the informal financial groups.

# **4.3 Informal Financial Grouping Practices**

The study sought to establish the extent to which informal financial groupings' practices were carried out. These entailed; group memberships, group savings, credit size and credit frequency. The findings are shown in Table 4.2.

Practices	Never	Rarely	Somehow	Frequently	Very	Total	
			frequently		frequently		
Group	1(0.49)	2(0.97)	35(16.99)	87(42.23)	81(39.32)	206	
Membership	1(0.49)	2(0.97)	33(10.99)	87(42.23)	01(39.32)		
Group Savings	4(1.94)	41(19.90)	113(54.85)	48(23.30)	98(47.57)	206	
Credit Size	5000-	50000-	150000-	250000-	. 500000		
	50000	150000	250000	500000	>500000		
Frequency (%)	6(2.91)	15(7.28)	41(19.90)	91(44.17)	53(25.73)	206	
Credit Frequency	6(2.91)	2(0.97)	52(25.24)	109(52.91)	37(17.96)	206	
Source: Field Data 2019							

#### Table 4.2: Informal Group Meetings

With regard to group memberships, the findings shows that cumulatively, majority of the respondents87, representing 42.99%, frequently attended the meetings and adhered to all group membership regulations followed by 81 respondents, representing 39.32% who adhered very frequently. It however emerged that 35respondents, accounting for 16.99%, somehow frequently adhered, 2 respondents (0.97%) rarely adhered while only 1 respondent, accounting for just 0.49%, never attended.

Based on group savings, the findings suggest that the high meeting attendance was seen as concentrating around more frequently. This trend could be due to the compelling nature of the rules of informal groups encouraging members to go for loans. This finding concurs with the report in Gichuki, Mutuku and Kinuthia (2014) which reported that the bond existing between members and the nature of investment information shared during informal group meetings acted as a motivation to members to patronize their meetings. It further corroborates the findings of Kariuki & Ngugi (2014) who attributed the unity level in Saccos as being informed by penalty associated with non-attendance which serves to naturally whip members

to meetings, coupled with the fact that loanable funds are disbursed strictly to members present in the group meeting sessions (Gikonyo et al., 2006).

Commitment to group savings refers to the demonstrated dedication with which individual members patronize their respective groups with money to grow their personal accounts. Table 4.2 indicated that majority of members registered in the informal groups and SACCOs had 113 of the respondents, accounting for 54.85% of the total, moderately committed to savings, followed by those who very frequently saved, 98 respondents, representing 47.57% while48respondents, representing 23.30%, saved frequently, 41 of them (19.90%) rarely saved and 4 respondents, representing 1.94% never saved completely.

These findings show that SACCO and group saving is more frequently practiced by majority of the group and Sacco members in informal groupings. The outcome of this analysis corroborates the findings in Babajide (2011) who compared the relationship between informal and formal financial institutions in Nigeria. The recorded findings suggested that the savings' drive in informal groups surmounted that witnessed in the formal entities on account of the pressure to grow group reserves. Gujerty (2007) reported that the commitment to savings in ROSCAs was mainly informed by inspiration amongst members through the exploitation of their numerical advantage. The findings in this study extends the focus on savings commitment by introducing how such preference affects the dynamics in the co-operative financial sector growth. The findings demonstrate that since the saving volume by members concentrate around moderate commitment their sustained saving trend has led to the accumulation of substantial resources which inevitably positions them favourably in the market. This position substantially contradicts the findings in Gujerty (2007) which suggested that the capacity of informal group members was weak, making them perennially reliant on conventional banks and other organized financial institutions to grow their

Credit size illustrates the quantity bands or span of loan application categories which respondents reported to be accessing from time to time. This study looked at the various loan uptake levels that the respondents had so far taken. Table 4.2 shows that 91 respondents, who were the majority of the members, accounting for 44.17%, borrowed loans of between Kshs.250000-500000 followed by 53 members, representing 25.73%, who borrowed above 500000, 41 respondents accounting for 19.90% who borrowed between Kshs.150, 000 and Kshs.250, 000, 15 respondents (7.28% of the polled) who borrowed between Kshs.5000 and Kshs.150, 000and finally 6 respondents (2.91%) who borrowed between Kshs.5000 and Kshs.50, 000.

This outcome lends credence to the findings in Aura and Mwangi (2013) where a collaboration between IFGs and other financial entities such as conventional banks and SMEs was reported to plug the arising financial deficit. Additionally, the findings introduce an emerging shift from the position in Babajide (2011) which had seen IFGs as largely relying on conventional banks to liquidate their operations. The results point to a dependence shift from high cost external funding as reported in Gichukiet al.,(2014) to cheaper homegrown options. The findings indicate that IFG members tend to lean in the direction of their groups while sourcing for high value loans.

On the other hand, the findings in Table 4.2 appear to conflict those reported in Kahuthu, Muturi and Kiweu (2015) which proposed that growth in member numbers in SACCOs translated into increased savings. Even though this may hold true in SACCOs mainly collecting savings via check-off system, the member-initiated savings model adopted by noncheck off SACCOs report fluctuating revenue streams (Muchoki, 2012). The findings also suggest that members of IFGs have embarked on growing their installment savings, a shift from the position reported in Dupas and Robinson (2009) where minimal collections of Kshs.1000 and below were noted. These findings therefore point to the growing interest that people are showing in informal groupings. The corresponding resolve to enhance their base savings, which translates to improved borrowing pools promotes their credit and the Saccos. Additionally, there is indication that informal group savings are attracting high value members with stable incomes or saving abilities, consistent with the trend reported in Onchanwa and Memba (2012) where people with varying financial incomes were seen to have significantly enhanced their saving culture.

The frequency of taking loans refers to the rate at which individual respondents patronize the loan products either from IFGs or SACCOs over a notable period of time. Table 2 disclosed that for the respondents who were in all the groups, the findings indicate that majority, 109 respondents (52.91%) of the members borrow frequently, 52 respondents (25.24%) moderately borrowed, 37 respondents (17.96%) borrowed very frequently except 6 respondents (2.91%) and only 2 respondents (0.97%) who never or rarely borrowed credit.

This may be attributed to the high number of members who embrace the saving culture in order to borrow credit from the Saccos. This findings agree with Cheruiyot *et al* (2012) who reported that the ease of accessing loans on account of straight-forward application and approval procedures amongst Saccos make them attractive to small-value borrowers. Still, these findings may be justified by the fact that since the volume of the loans taken are drawn from the regular repayments and savings made by members, they are paid off within shorter periods, so as to sustain the cycle. This finding is consistent with the report in Chiteji (2002) and Sabana (2005) which identified IFGs as a substantive source of finance among savers in the economy. However, on the other hand, the results may be interpreted to mean that majority of respondents turned to IFGs for loans, perhaps to cushion their recurrent financial needs, which may range from personal to business use.

# 4.4 Loan Repayment History and Loan Repayment Rate

Loan repayment history refers to the past record associated with the respondents in regard to their commitment to honour their scheduled loan repayment obligations over the past one year from the time of the study. On the other hand, Loan repayment rate is the percentage of compliance reported by respondents in honouring arising loan repayment obligations as and when they arise. The findings are presented as shown in Table 4.3.

Membership	ip Loan Repayment History In Table Banking							
History	Persistent	With major	With minor	Regular	Always			
	defaults	defaults	defaults		prompt			
Frequency (%)	4(1.94)	2(0.97)	60(29.13)	88(42.72)	52(25.24)	206		
Rate	Below	30-49%	50-75%	Above				
	10%			75%				
Frequency (%)	4(1.94)	52(25.24)	99(48.06)	51(24.76)		206		

**Table 4.3:** Loan Repayment History and Rate

**Source:** Research Data, 2019

Pertaining to finding out the loan repayment history of the respondents in all the categories, 52(25.24%) were very prompt payers, 88(42.72%) observed that they paid their loans regularly, 60(29.13%) reported minor defaults, while other 4(1.94%) and 2(0.97%) were persistent defaulters. Concerning loan repayment rate, the findings indicates that majority ranged 50-75% rate, followed by 52(25.4%) with a rate of 30-49%, 51(24.76%) with above 75%.

The data points to a regular trend of loan repayment amongst informal group savings, which indicates few defaulters as compared to those who pay regularly or promptly. In connection to this study, the possible explanation to justify persistent default among some respondents who identified with all categories could be the spread of resources amongst both the members. The findings by Mwangi (2016) however reports that even though SACCOs have predefined loan recovery strategies, they do not realize loan repayment collections commensurate to the disbursements they make. Katuland Kiriinya (2018) attributed loan repayment inconsistency amongst SACCOs to lack of follow up mechanisms and loan appraisal procedures. Mungure (2015) directed the repayment unpredictability to voluntary savers, mainly patronizing non-check-off SACCOs. This study observed low loan repayment in SACCOs, compared to IFGs, on account of choice and preference by the respondents. In effect, the findings suggest that respondents preferred to repay IFG loans than those from SACCOs. Since loan default in one SACCO may have a contagion effect on the entire SACCO sub-sector (Mwangi and Muturi, 2016), it is imperative that gaps in loan repayment was a significant element in this study.

## 4.5 Growth of SACCOs

The growth of SACCOs was evaluated using two indicators namely; member deposits and loans' uptake.

## 4.6 Loan Volumes

Loan Volumes relates to the quantity of monetary disbursements taken up by individual members of SACCOs consistent with their established savings at any given time.

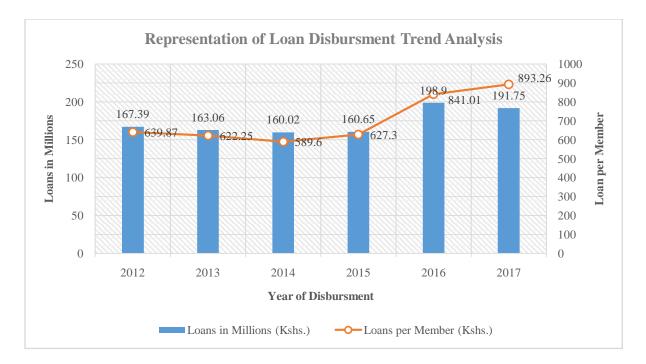


Figure 4.1: Loan Disbursement Trends Analysis

The study sought to establish the amounts of loans disbursed to the members across the past six years. Figure 4.1 indicates that between the years 2012 to 2015, there was noted a marginal reduction in the overall loans' uptake, which went in the same direction with individual loans' uptake. But in 2015, there was a slight positive increment loan disbursement by SACCOs, which substantially improved in 2016 but again dropped marginally in 2017. However, the findings reveal that the borrowing appetite in 2017 by individual members grew in the opposite direction of the SACCOs disbursed loans. This means that there was a significant drop in the amount of loans disbursed generally, suggesting many members applying for loans were opting for low value loan amounts. These findings are significantly at variance with the findings of Tuyishime*et al.*, (2015) who reported that deposit mobilization substantially influences loan uptake. The results suggest that SACCOs seem to be reaching out to other liquidity sources to plug the revenue deficit necessary for them to disburse loans to members. The findings show that SACCOs are faced with reduced high-value loan applications and that their liquidity position is hardly capable of sustaining received loan applications from internally generated deposits. This position authenticates the findings in Mwangi (2016) in which it was explained that the capital bases of SACCOs experienced depressed growth, forcing them to enhance collaboration with other financial entities like banks and MFIs. The variance in the findings by Tuyishime*et al* (2015) and Mwangi (2016) points to the missing link in the determination of SACCOs' liquidity from the perspective of the members' saving and borrowing patterns as influenced by alternative related informal financial formations.

# **4.7SACCO Deposits**

SACCO member deposits are savings made by individual members against which they borrow loans using the three multiplier rule.

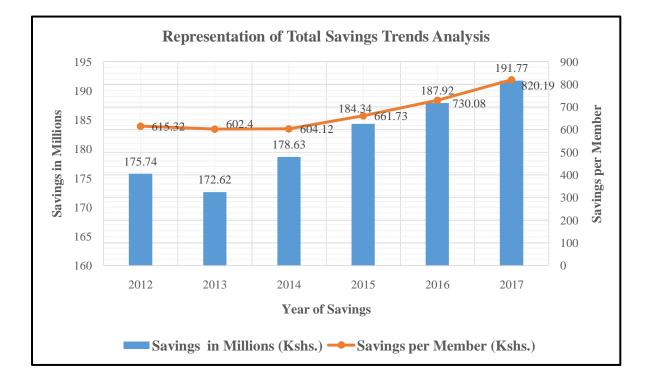


Figure 4.2: Savings Trends Analysis

The study sought to determine the saving culture of the members of SACCOs, from the perspective of the SACCOs management. The results, presented in Figure 4.2, revealed that there was gradual increase in the savings over the period covered by the study. The study findings indicate that increase in member savings and growth of SACCOs move in the same direction. This suggests there is a correlation between member savings and SACCO growth, consistent with the findings in reviewed literature (Kahuthu, Muturi and Kiweu, 2015; Katula and Kiriinya, 2018; Kiaritha, 2015; Mwangi, 2016; Onchanwa and Memba, 2012). Therefore, the more each member contributes in deposits to the SACCO, the more the SACCO growth levels are enhanced. This finding is consistent with the report in the SASRA 2017 indicating a growth of 12% to Kshs.305.3billion in deposits for the year 2017 compared with that of the deposits reported in 2016. Similarly, it corroborates the findings in Nkuru, 2015 which pointed to an upward trend amongst SACCOs in the agricultural sub-sector on account of regular member savings.

#### **4.8 Descriptive Statistics**

This study purposed to establish the level of association between Informal Financial Groupings' practices and growth of SACCOs, to establish effect of Informal Financial Groupings' practices on Loan Volumes and to determine effect of Informal Financial Groupings' practices on SACCO deposits. In order to achieve these objectives, the descriptive statistics were taken into consideration to assess the nature of the data before the relationships between the dependent and the independent variables were done. Table 4.4 gave out the results.

	Ν	Min.	Max.	Mean	Std.	Ske	wness	Ku	rtosis
					Dev.				
	Stat.	Stat.	Stat.	Stat.	Stat.	Stat.	Std.	Stat.	Std.
							Error		Error
Mean of Group	206	1	5	3.38	1 015	512	.244	-	.483
Membership	200	1	5	5.50	1.015	312	.244	.924	.405
Mean of Group	206	3	5	3.80	156	859	244	.390	.483
Savings	200	5	5	5.80	.450	039	.244	.390	.403
Mean of Credit Size	206	2	5	3.65	.478	-	244	.332	.483
filean of creat Size	200	2	5	5.05	.170	1.038	.211	.352	.105
Mean of Credit	206	2	4	3.63	192	903	244	586	.483
frequency	200		-	5.05	.+72	705	.277	500	.+05
Valid N (List-wise)	206								

**Table 4.4:** Descriptive Statistics to the Second Objective

Source: Research Data, 2019

From Table 4.4, the total respondents were 206 and the mean for the group membership, group savings, credit size as well as credit frequency were all moving closer to 4; meaning that the respondents somehow met frequently, were moderately committed, but borrowed frequently hence contributed closer to Kshs.2,500 to Kshs.5,000 monthly. The standard deviation, which measured the dispersion from the mean, indicated that there was a positive dispersion of 1.015, 0.456, 0.478 and 0.492 for group membership, group savings, credit size and on credit frequency respectively.

Skewness defines the extent to which a distribution differs from a normal distribution or rather the extent to which the mean is greater than the mode or vice versa. From the results, group membership, group savings, credit size and credit frequency were all negatively skewed. The magnitudes of skew were -0.512, -0.859,-1.038 and -0.903 respectively.

Kurtosis is the measure of how thick or thin the distribution's tails are. The kurtosis of a normal distribution is always 3. If it is more than 3, then the distribution has a thick tail but if it is less than 3, the distribution has a thin tail. From the table above, frequency of meetings, saving commitments, frequency of taking loans and savings had kurtosis of less than 3 i.e. - 0.924, 0.390, 0.332 and -0.586 respectively, meaning, they had a thin tail. In general, the elements were not normally distributed. The variables were transformed into a functional rank in order to ensure normality and the results were as tabled below.

		Rank of Group	Rank of Group	Rank of Credit Size	Rank of Credit	
		Membership	Savings		Frequency	
N	Valid	206	206	206	206	
Ν	Missing	0	0	0	0	
	Mean	49.50000	49.50000	49.50000	49.50000	
	Std. Deviation	28.055909	25.593975	26.217764	25.860949	
	Skewness	034	318	410	481	
	Std. Error of	244	244	244	244	
	Skewness	.244	.244	.244	.244	
	Kurtosis	-1.178	747	-1.408	-1.373	
Std. I	Error of kurtosis	.483	.483	.483	.483	

**Table 4.5:** Normalized Statistics

Source: Research Data, 2019

From Table 4.5, all the variables were gravitating around a mean of 49.5, indicating that they were normally distributed. Kurtosis also gravitated around negative one meaning that they now had a thin tail.

# 4.9 Association between Informal Financial Groupings' practices and growth of SACCOs

The first objective of the study was to establish the association between Informal Financial Groupings' practices and growth of SACCOs. The study used Pearson correlation coefficient to show how closely the variables are related or how well the variables move together in a straight-line fashion. The results are as shown in Table 4.6.

		Membership	Savings	Credit Size	Credit	Loan	Deposits
					Frequency	Volume	
Membership	Pearson	1.0000					
	Correlation						
	Sig. (2-Tailed)						
Savings	Pearson	0.4014	1.0000				
	Correlation						
	Sig. (2-Tailed)	(0.037)					
Credit Size	Pearson	0.440	0.6452	1.0000			
	Correlation						
	Sig. (2-Tailed)	(0.0201)	(0.0300)				
Credit	Pearson	0.5192	0.3226	0.4352	1.0000		
Freq.	Correlation						
	Sig. (2-Tailed)	(0.026)	(0.022)	(0.015)			
Loan	Pearson	0.5081**	0.7280**	0.7037**	0.8041**	1.0000	
Volume	Correlation						
	Sig. (2-Tailed)	(0.000)	(0.000)	(0.000)	(0.000)		
Deposits	Pearson	-0.1272	0.5147**	0.7990**	0.5330**	0.6699*	1.0000
	Correlation					*	
	Sig. (2-Tailed)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	

\*\*Correlation is significant at the 0.01 level (2-tailed) ( $\alpha$  =0.01); N=206

Source: Research Data, 2019

Correlation analysis assesses whether there exists a linear association between the variables. Correlation often oscillates between -1 and +1. If the correlation between the variables approaches +1, it means that there is a strong positive association and the variables moves strongly in a straight line. If the correlation is approaching -1, the degree of association between the variables is also strong but negative. If the correlation is approaching zero, it means that there is no strong (weak) association between the variables. A statistically significant correlation is indicated by a probability value of less than 0.05. This means that the probability of obtaining such a correlation coefficient by chance is less than five times out of 100, so the result indicates the presence of a relationship.

From Table 4.6, the results indicate that there is a moderate significant positive correlation between group membership and loan volume(r = 0.5081, p=0.000). Regarding the level of association between Group Savings and member deposits, there was a strong, significant positive association i.e. r = 0.5147, p= 0.000. The level of association between credit frequency and members' deposits indicated a positive and significant relationship of r =0.533, p = 0.000, while credit size and deposits are similarly positively and significantly correlated at r=0.7990, p=0.000.

From the results shown, the reported value of p=0.000 is lower than the conventional p=0.05. The probability of 0.000 suggests therefore that there was a very low probability that the statement 'there is no association between informal financial groupings' practices and the growth of SACCOs' was not true. Therefore, it is safe to conclude that based on this parameter, there is association between informal financial groupings' practices and the growth of SACCOs.

The association between credit frequency and members' deposits (r=0.533, p=0.000) implies that increase in the uptake of loans corresponds to increase in members' deposits. This shows therefore, that members' desire to grow their potential to qualify for higher-value loans moves in the same direction with enhancement of their deposit reserves. The findings are consistent with those of Reyes and Lensink (2010) who reported that the formal and informal rural credit institutions were associated in terms of the loan preference. The banking population shifted their preference from taking loans from conventional banks to rural informal institutions in Central Chile. Additionally, Onchanwa and Memba (2012) reported a positive significant association (r=0.325, p=0.005) between SACCO influence on members' savings' culture to grow their loan uptake ability. The results of this study confirm the established link of loans and deposits as parameters defining the association between the informal financial groupings and growth of SACCOs.

Additionally, the indication of there being a significant positive correlation between credit frequency and loan volumes (r=0.8041, p=0.000) implies that the more group members seek to access credit, the more they are bound to take SACCO loans. Olando, Jagongo and Mbewa (2013) attributed groups to conventional banking, reporting that majority of members of these groups accessed banking services as groups and not in their individual capacity. The study associated the preference to approach banks to economies of scale and the advantages that come with it. However, this study incorporated the influence on individuals by group members in making credit decisions. At the same time, the results indicate a strong positive relationship between credit size and loan volumes (r=0.7037, p=0.000). This indicates that the members' savings' trends are correlated with their loan application projections. At the same time, it was noted that there is a significant but negative correlation between group membership and SACCO deposits (r= -0.1272, p=0.000). This implies that even though

informal groups and SACCOs may have mutual members, either individually or corporately, this does not in itself translate to affect SACCO deposits positively. This outcome could be on account of other destinations where group members direct their funds in the place of SACCOs. This position adds to the outcome in Sawani and Patterson (2002)whose results were limited to SACCO check-off collections from employed members and the general unemployed members in defined common bonds. Additionally, the results are significantly inconsistent with the findings in Mungiru and Njeru (2015) who reported that informal and formal financial entities complement each other owing to common features defining their operations, such as shared motivational experiences administered during their respective meetings and pressure from the leadership towards resource mobilization. It has been disclosed that besides the common characteristics between them, IFGs that subscribe to SACCO membership pursue their distinct financial goals.

A null hypothesis is a statement that no difference exists between a measure taken by a prior measurement of a sample of a population and the statistic being measured compared to it, from a recently drawn sample. The process of accepting or rejecting the null hypothesis involves comparing the *p*-value and the significance level ( $\alpha$ ). If *p*-value is less than the significance level ( $\alpha$ ), the null hypothesis is rejected (that is; p value <  $\alpha$ , reject the null hypothesis). But if the p-value is greater than or equal to the significance level ( $\alpha$ ), the null hypothesis is not rejected (that is; p value  $\geq \alpha$ , do not reject the null hypothesis). Other than the negative but significant association between group membership and deposits (p= -1272<0.000), the rest of the parameters point to the rejection of the null hypothesis, which stated that there is no association between informal financial groupings' practices and the growth of SACCOs.

This implies therefore, that the study findings have shown that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected. The findings in this study show that the behavioural influence amongst members of groups plays a key role in shaping the decision regarding where one saves and or borrows. The outcome of this objective therefore, contributes to the body of knowledge by tracing the connection between social networks in group activities to the behaviour of individuals while making credit access decisions within semi-formal financial establishments.

# 4.10 Informal Financial Groupings' practices on SACCOs Loan Volumes

The second objective was to establish effect of Informal Financial Groupings' practices on SACCOs' Loan Volumes. The results were presented using regression analysis and correlation. Table 4.7 recorded the solutions.

 Table 4.7:
 Model Coefficients on the Contribution of Informal Financial Groupings'

 practices on Loan Volumes

Coeff	ïcients <sup>a</sup>						
Model		Unstandar	rdized	Standardized	t	Sig.	
		Coefficier	nts	Coefficients	Coefficients		
		В	Std. Error	Beta			
	(Constant)	1.148	.747		1.537	.008	
1	Group Membership	.231	.060	.362	3.844	.072	
1	Group Savings	311	.043	458	-7.232	.000	
	Credit Size	466	.178	391	-2.618	.005	
	Credit Frequency	.373	.151	.302	2.480	.006	

a. Dependent Variable: Y-Loan Volume

Source: Research Data, 2019

2

001 1

4 8

Regression analysis is a statistical tool for the investigation of relationships between variables. It generates an equation to describe the statistical relationship between one or more predictor variables and the response variable. The p-value for each term tests the null hypothesis that the coefficient is equal to zero (no effect). A low p-value (p < 0.05) indicates that you can reject the null hypothesis. In other words, if a predictor has a low p-value, it is a meaningful addition to the model because changes in the predictor value are related to changes in the response variable. Conversely, a larger (insignificant) p-value suggests that changes in the predictor variable are not associated with changes in the response variable.

To estimate a model to explain the growth of SACCOs' in terms of loan volumes, the study regressed the informal financial groupings' practices of group membership, group savings, credit size and credit frequency against SACCO growth, represented by loan volumes and deposits. To achieve this, a multiple linear regression model was done on the indicators of group membership, group savings, credit size and credit frequency as independent variables of Informal Financial Groupings. The assumption was that, the mean of IFGs practices' index changes at a constant rate as the values of independent variables decrease or increase. The model is given as:

$$\hat{Y} = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + \varepsilon.$$
Equation 1

Based on the analysis model, the estimated equation is;

Loan Volume 
$$(LV) = 1.148(Constant) + 0.231(GM) - 0.311(GS) - 0.466(CZ) + 0.373(CF).$$

All the coefficients are significant at P=0.05; based on unstandardized coefficients, except for group membership (p=0.072)

The results reveal that for every unit increase in the predictor variable of group membership, the predicted variable (Loan Volumes) experience an increase of r=0.231, p = 0.072. This

means that whereas increase in the informal financial group membership positively influences with loan volume, the magnitude of change is very low and insignificant. This finding shows that even though IFGs and SACCOs draw from a common pool of members, not all respondents actively borrow loans, making their membership to be of little effect insofar as it pertains SACCO loan volumes.

For every unit increase in the predictor variable of group savings, the predicted variable (Loan volumes) experiences a decrease of r = -0.311, p = 0.000. The results imply that as members of IFGs increase savings in their groups, the uptake of loans from SACCOs marginally decrease. It is evident from the results that whenever members increase their savings in the Informal Financial Groups (IFGs), the resources are starved from the SACCOs, in which they are also members. The results may as well be interpreted to mean that as savings towards IFGs increase, there is corresponding preference by members to borrow more from IFGs than from SACCOs. While undertaking a study of savings as a determinant of the volume of loans advanced by banks, Mukoya*et al* (2015) reported that 54.3% of the respondents confirmed that savings' accounts highly affect loans advanced by banks than current accounts (31%), Onchanwa and Memba (2012) reported that the practice of savings is positively and significantly related to members' savings' culture (r = 0.245, p = 0.0000). Onchanwa and Memba (2012) analyzed savings as a credit accumulation attribute on the part of SACCOs and not as an element of cash outflow as presumed in this study.

Additionally, the results show that for every unit increase in the predictor variable of Credit Size, the predicted variable (Loan volumes) experiences a significant decrease (r= -0.466, p = 0.005. The results reveal that when members increase credit sizes taken from their Informal Financial Groups (IFGs), they not only retain limited financial borrowing capacity to access high value loans but also reduce the chances of applying for additional credit from the

SACCOs. These results disagree with the findings in Kinya*et al* (2015) who reported that there is a positive but insignificant relationship between the loan terms and conditions and the loan volumes (r=0.220, p=0.060). The distinction could be as a result of the presumption by this study that loans are generally issued without factoring the control aspects associated with borrowing. Looked at conversely, the terms and conditions for loan issuance as taken in Kinya et al (2015) are merely a credit risk initiative designed not to prohibit or restrict loan issuance. From this perspective, qualifying members would still take up loans, were SACCOs be the only borrowing option, leading to growth of loan volumes. This strand of argument therefore shows that spreading the study focus on members beyond one loaning entity tilts the study outcomes. The results corroborate the findings in Katula and Kiriinya (2018) who reported that the size of loans issued to members was strongly associated with the overall performance of SACCOs (r=0.321, p=0.0000).

Subsequently, for every unit increase in the predictor variable of Credit frequency, the predicted variable (Loan volumes) experiences an increase of 0.373, p = 0.006. This finding shows that credit frequency by members of IFGs significantly explains changes in loan volumes in SACCOs by 37%. This results reveals that as members of informal financial groupings regularly access credit from their group formations, they tend to enhance their borrowing power for higher loans from SACCOs.

Standard errors being values for a regression equation assuming all of the variables are standardized to have a mean of zero and a standard deviation of one. Because the standardized variables are all expressed in the same units, the magnitudes of the standardized coefficients indicate which variables have the greatest effects on the predicted value. This is not necessarily true of the unstandardized coefficients. Because the magnitudes of the unstandardized coefficients can largely depend on the units of the variables, the effects of the variable on the prediction can be difficult to gauge. While the standardized coefficients may vary significantly from the unstandardized coefficients in magnitude, the sign (positive or negative) of the coefficients remain unchanged.

Table 4.8: Relationship between Informal Financial Groupings' practices and Loan Volumes

Model	R	R	AdjustedR	Std. Error of	f Chang	ge Statistics	
		Square	Square	the Estimate	R	Square F Change	df1
					Chang	ge	
1	.582 <sup>a</sup>	.339	.306	.605	.339	10.424	4

## Model Summary<sup>b</sup>

#### Model Summary<sup>b</sup>

Model	Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	206 <sup>a</sup>	.000	2.076

a. Predictors: (Constant), Group membership, Group Savings, Credit size and Credit Frequencyb. Dependent Variable: y Loan volume

Source: Research Data, 2019

R-Square is the proportion of variance in the dependent variable (Loan Volume) which can be predicted from the independent variables (group membership, group savings, Credit size and Credit frequency). According to the adjusted R<sup>2</sup> as shown in Table 4.8, 33.9% variation in loan volumes offered by the SACCOs is explained by all the examined predictor variables in this study. The remaining 66.1% change is explained by other factors beyond the scope of this study.

Adjusted R-square explains that as predictors are added to the model, each predictor will explain some of the variance in the dependent variable simply by chance. As predictors are

added to the model it continues to improve the ability of the predictors to explain the dependent variable. The adjusted R-square attempts to yield a more honest value to estimate the R-squared for the population. The value of R-square was 0.339, while the value of Adjusted R-square was 0.306. Adjusted R-squared is computed using the formula 1 - ((1-R-sq)(N-1/N-k-1)). From this formula, it is evident that when the number of observations is small and the number of predictors is large, there will be a much greater difference between R-square and adjusted R-square (because the ratio of (N-1/N-k-1) will be much less than 1. By contrast, when the number of observations is very large compared to the number of predictors, the value of R-square and adjusted R-square will be much closer because the ratio of (N-1)/(N-k-1) will approach 1. The findings of this objective show that increase in credit size in IFGs leads to decrease in the SACCO loan volumes. This is an indicator to the finding of this thesis that members of groups in SACCOs, contrary to conventional expectation.

#### 4.11 Informal financial groupings' practices on SACCO deposits

The third objective of this study was determine the effect of informal financial groupings' practices on SACCOs deposits. To achieve this, a multiple linear regression model was done on the indicators of group membership, group savings, credit size and credit frequency as independent variables of Informal Financial Groupings. The assumption was that, the mean of IFGs practices' index changes at a constant rate as the values of independent variables decrease or increase. The model is given as:

Y predicted = 
$$b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + E$$
.....Equation 2

Model		Unstanda	rdized	Standardized	t	Sig.
		Coefficie	nts	Coefficients		
		В	Std. Error	Beta		
	(Constant)	1.187	.603		1.968	.004
1	Group Membership	375	.101	397	-3.713	.000
1	Group Savings	251	.081	320	-3.099	.003
	Credit Size	264	.119	147	-2.218	.002
	Credit Frequency	304	.215	.321	-1.414	.041

 Table 4.9: Model Coefficients on the Contribution of Informal Financial Groupings'

 practices on Deposits

Source: Research Data, 2019

Based on the analysis model, the estimated equation is;

## SACCO Deposits, $\hat{Y} = 1.187$ (Constant) -0.375(GM) - 0.251(GS) - 0.264(CZ) -0.304(CF).

All the coefficients are significant at P=0.05; based on unstandardized coefficients.

The results reveal that for every unit increase in the predictor variable of group membership, the predicted variable (Deposit) experience an decrease of 0.375, p = 0.000. This means that increase in the informal financial groupings' membership negatively associates with Deposits, with a magnitude change of 0.375; which is although low is significant at p = 0.000. The results show that group savings in IFGs and SACCO deposits move in different directions but are a critical determinant in explaining the relationship between IFGs and SACCOs' growth. From the results, it can be safe to conclude that the mere increase or decrease of people joining IFGs does not translate into deposit reduction to the SACCOs. But at the same time, members joining IFGs are at the same time direct a portion of their

resources to their groups in form of savings, which could have been used to improve their deposits in SACCOs.

The results differ from the position reported in Chipeta and Mkandawire (1992) who observed that increase in groups' savings led to decrease in deposits (r=0.25,p=0.004). Chipeta and Mkandawire (1992) observed that growth in group membership by itself was an indicator of potential growth of savings in the groups and subsequent reduction from the formal entities. The difference in the findings may be informed by the premises of the two studies, where one study focused on the complimentary and competition attributes of IFGs and the general formal groups and the other on influence of member practices.

For every unit increase in the predictor variable of group savings, the predicted variable (Deposits) experiences a decrease of 0.251, p = 0.003. It is evident from the results that whenever members increase their group savings to the Informal Financial Groups (IFGs), SACCO deposits decrease by 0.251. This means that the practice of group savings negatively impacts on the growth of SACCO deposits. The results corroborate the findings in Nguyen, Tripe and Ngo (2018) who while examining the operational efficiency of bank loans and savings, reported that they have a significant but negative relationship (r= -0.029, p=0.048). However, these findings are at variance with those in Olando, Mbewa and Jagongo (2012), who reported that savings were positively and significantly correlated with the growth of SACCOs' capital structure (r=0.185, p=0.0003). The distinction in these findings may be associated with the varying alignments informing the interpretation standpoints. Olando, Mbewa and Jagongo (2012) viewed savings as a critical parameter in the calculation of the SACCOs' Capital Structure while this study focused on the members' saving patterns triggered by peer behavioural influence.

Tuyishime, Memba and Mbera (2015) while analyzing the effect of deposits mobilization on financial performance in commercial banks, reported that savings was positively and significantly correlated to financial performance (r=0.325, p=0.0000). These findings closely relate to those in Olando, Mbewa and Jagongo (2012) since the study objectives were framed to assess an indicator of growth of the dependent variable. The inconsistency noted in the outcomes in the perspectives of the analyzed results show that savings relate differently with deposits based on whether or not the saver's influence is factored in the study.

On the other hand, when analyzing the relationship between credit size and SACCO deposits, the results indicated that for every unit increase in the predictor variable (credit size), the predicted variable (Deposits) experiences a decrease of 0.264, p = 0.002. These results indicate that there is a significant negative relationship between IFGs' credit size and SACCOs' deposit growth. The results show that when members increase the value of loans taken from IFGs, they sacrifice their potential to enhance their deposits to the SACCOs. The more money they are advanced from IFGs, the less deposits they direct towards growing their SACCO finances.

At the same time, Table 4.9 shows that for every unit increase in the predictor variable of Credit frequency, the predicted variable (Deposits) experiences a decrease of 0.304, p = 0.041. This implies that change in the dependent variable of SACCO deposits is explained by negative 30.4% in favour of the independent variable. The finding shows that whenever members regularly obtain credit from informal financial groupings, SACCO deposits experience marginal reduction to the extent of 30.4% on account of members concentration on sourcing for credit from IFGs. This finding is consistent with the report in Mwangi (2016) which indicated that micro financial institutions experienced a reduction in loan uptake of a variety of products at leading to massive loan defaults on account of pressure from IFGs.

According to Mwangi (2016), the frequency in the taking up of IFG-related products, mainly table banking, accounted for 27% of the negative loan repayment history experienced in MFIs (r=0.27, p=0.0000). The study reported that the findings were attributed to the switch in preference by borrowers from MFIs after establishing a favourable borrowing regime of requirements in IFGs. A related study carried out earlier by Mumanyi (2014) cited the frequency of taking up credit offered by competing financial service providers such as IFGs as leading to delinquency on the part of SACCOs.

The findings in both Mwangi (2016) and Mumanyi (2014) were established independent of segregating the cluster of SACCO members and analyzing their financial behaviour, while engaging alternative financial service providers.

Table 4.10: Relationship between Informal Financial Groupings' practices and Deposits

Model	R R Square	Adjusted R Std. Error of C		Change Statis	Change Statistics		
			Square	the Estimate	R Square	F Change	df1
					Change		
1	.613 <sup>a</sup>	.376	.345	.506	.376	12.227	4

## Model Summary<sup>b</sup>

#### Model Summary<sup>b</sup>

Model	Model Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	206 <sup>a</sup>	.000	2.433

a. Predictors: (Constant), Group membership, Group Savings, Credit size and Credit Frequencyb. Dependent Variable: Deposit

Source: Research Data, 2019

R-Square is the proportion of variance in the dependent variable (Deposit) which can be predicted from the independent variables (group membership, group savings, Credit size and Credit frequency). The R-Square as shown in Table 4.10 reveals that 37.6% variation in deposits made in the SACCOs is explained by all the examined predictor variables in this study. The remaining 62.4% change is explained by other factors beyond the scope of this study.

The study results have revealed that group membership and the regular nature with which members borrow strongly influences their determination on where to obtain loans. It is safe to infer from these findings therefore, that the mere identity with a more financially stable entity does not entirely influence the financial behaviour and dedication of IFG members out of their group formations.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the study and points out the important findings with their conclusions and recommendations.

#### **5.1Summary of the Findings**

# 5.1.1 Association between Informal financial groupings' practices and growth of SACCOs

The study findings revealed that informal financial groupings' practices of group membership and credit frequency were associated to loan volumes. Additionally, the practices of group savings, credit frequency and credit size were associated with SACCO member deposits.

However, the association between group membership and member deposits was significant but negative, implying that increase or decrease in SACCO deposits is not merely affected by the mutual sharing of membership between them and the informal financial groupings.

The findings of this study have traced the connection between social networks in group activities to the behaviour of individuals while making credit access decisions within semi-formal financial establishments.

This objective sought to test the hypothesis that there was no association between informal financial groupings' practices and the growth of SACCOs. The results revealed that besides the practice of group membership, the rest of the parameters of the independent variable of the study were statistically significant in explaining the association between informal financial groupings' practices and the growth of SACCOs. The results implied therefore, that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

#### 5.1.2 Informal Financial Groupings' practices on SACCOs' Loan volumes

The dominant outcome of this study with respect to the second objective indicated that 30.6% variation in SACCO loan volumes is explained by the examined predictor variables. Specifically, it has been shown that group membership positively though insignificantly influences loan volumes, while credit frequency explains 37% of the changes in SACCO loan volumes. Additionally, the results indicated that group savings negatively influence loan volumes while increase in credit size amongst IFGs leads to decrease in the uptake of SACCO loan products.

This objective was premised on the hypothesis that informal financial groupings' practices do not affect SACCOs' loans volumes. The findings revealed that indeed making IFGs a preferred loaning option significantly affects the amount and volume of loans disbursable by SACCOs.

The findings of this study have shown that members of groups in SACCOs still give preference to obtaining loans more from their groups than from SACCOs, contrary to conventional expectation.

Effectively, the null hypothesis failed to be rejected and the alternative hypothesis failed to be accepted.

## 5.1.3 Informal Financial Groupings' practices on SACCOs' Deposits

The overall outcome with respect to the third objective of this study indicated that 34.5% variation in deposits made in SACCOs is explained by the examined predictor variables.

Specifically, it was established that for every unit increase in group membership and credit frequency, the predicted variable of SACCO deposits decreased by 37.5% and 30.4% respectively. This implies that even though all operationalized parameters representing the

independent variables depicted a significant but negative influence on SACCO deposits, group membership and credit frequency stood out as most significant.

The study results have disclosed that group membership and the regular nature with which members borrow strongly influences their determination on where to obtain loans. It is further inferred from the results that the mere identity with a more financially stable entity does not divert the dedication of IFG members from the products offered by their respective group formations.

This objective had hypothesized that Informal Financial Groupings' practices do not affect SACCOs' deposits. The findings of the study disclosed that group membership and credit frequency to IFGs are statistically significant parameters that may explain the growth of SACCOs in regard to deposit levels. Therefore, the null hypothesis failed to be rejected and the alternative hypothesis failed to be accepted.

#### **5.2.** Conclusion

The conclusions were arrived at on the influence of the independent variables (group membership, group savings, credit size and credit frequency) on the growth of SACCOs, based on the findings of the study.

To begin with, , the study findings with regard to the first objective indicated that the practices of group membership and credit frequency are associated to SACCO loan volume. At the same time, group savings, credit frequency and credit size are associated with the deposits made by members to SACCOs. Therefore, the findings of this study disclosed association between the practices adopted by informal financial groupings and the growth of SACCOs. It can be inferred from the outcome of this study therefore, that the significant but negative association between group membership and member deposits is an indicator that

SACCO deposits are not necessarily affected by the mutual sharing of membership between IFGs and SACCOs.

With respect to the second objective, the study findings showed that one-third of the variations in the SACCO loan volumes can be explained largely by group membership and credit frequency. It can be deduced from the findings that by IFGs' members patronizing their loan products and regularly accessing credit from their group formations, they simultaneously reduce their propensity to obtain loans from SACCOs.

Further, by group savings negatively influencing loan volumes, the study results points to the likelihood that whenever members of IFGs dedicate their savings to their relational financial outfits, they limit their preference to SACCOs as their alternative savings' destination.

On the other hand, the study findings pertaining to the third objective showed that increase in group membership and credit frequency respectively led to decrease in SACCO deposits. These findings suggest that the option for IFGs' loans substantially compromises the choice by the mutual members to save with SACCOs. This may be attributed to the likelihood that borrowing from IFGs provide the consequent expectation from the members to patronize the latter's financial products at the expense of building their savings base with SACCOs.

#### 5.3 Recommendations of the Study

The recommendations were made with respect to each objective, regarding the influence of the independent variables; operationalized as group membership, group savings, credit size and credit frequency on the growth of SACCOs, based on the findings of the study.

Firstly, the study sought to establish the association between IFGs' practices and the growth of SACCOs in Kisumu County. Based on the findings, the association between group membership and SACCOs' loan volume is significant and positive yet significant but negative in relation to SACCO deposits. This result suggests that the attention of IFG members is drawn more to loan products offered by SACCOs and that loans are a motivation that leads to deposits accumulation and not vice versa. From these findings, it is recommended therefore, that SACCOs' loan products should be differentiated in a manner structured to attract IFG members in order to inspire their saving discipline to the benefit of SACCOs.

Secondly, the study sought to establish the effect of informal financial groupings' practices on the SACCOs' loan volumes. The results indicated that more than one-third of the variation in SACCOs' loan volumes are explained by the IFG variables of the study. More particularly, increase in credit size leads to decrease in SACCOs' loans volume up to 46.6%. It is recommended from this outcome, that SACCO loans ought to be made attractive to IFGs' members through relaxing the loan approval procedures criteria. This approach would serve to accommodate a high number of loan applicants which would effectively enhance the amount of loans disbursed by SACCOs.

Thirdly, the study sought to establish the effect of informal financial groupings' practices on the growth of SACCOs. All the variables of the study showed a significant influence on SACCO deposits. The study recommends that SACCOs should devise innovative avenues of mobilizing resources to grow their financial bases. To benefit from the established saving culture of members of IFGs, SACCOs need to adopt incentive-driven deposit collection strategies that would differentiate them from other alternatives available to low-end and middle-income savers within the informal financial market.

#### **5.4Limitations of the Study**

The study was focused on SACCOs that allow for group membership only. Members of IFGs that also subscribe to SACCO products in their individual capacity were outside the scope of this study. Additionally, the study focused on group members from IFGs predominantly operating within Kisumu County. Qualitative information supplied by the respondents from different geographical settings may vary depending on changing financial behavioural patterns influenced by factors which were outside the scope of this study. Besides, the study used cluster random sampling which has the inherent limitation of over or underrepresentation of the sample size.

#### **5.5 Suggestions for Further Research**

This study focused on the informal financial groupings practices and their effect on SACCOs' growth. Further research may be undertaken on the relationship between other financial entities targeting IFG members such as microfinance institutions, investment banks and other players in the financial market.

This thesis established that members of IFGs give these groups preference over SACCOs whenever they consider taking up loans to meet their financial needs. Further studies should be undertaken to investigate what motivates IFGs' members to sustain their patronage to group lending, even while subscribing membership to more financially sound entities.

Future studies could also be undertaken to establish other socio-financial factors influencing financial behaviour in group members such as group management dynamics, financial integrity amongst group members and the overall effect of such attributes on the formal or semi-formal financial entities with which groups collaborate in their corporate form. On the other hand, further studies may be undertaken to investigate other factors that may affect the growth of SACCOs such as competition from financial-lending companies, other than banks and banking institutions.

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## **APPENDICES**

## Appendix I: Questionnaire for Informal Financial Groupings' Members

Instructions: Kindly take a few minutes to respond to this questionnaire. Information supplied is purely for academic research purposes and will be treated with utmost confidentiality.

## **PART I: Background Information**

- 1. What is your gender? (Tick one)
  - (a) Male [ ] (b) Female [ ]
- 2. Please indicate your age in years (Tick as appropriate)

 (a)18 - 24 Years
 []

 (b)25-40 Years
 []

 (c) 41-55 Years
 []

 (d)Over 56 Years
 []

- 3. What is your highest level of education (Tick once as appropriate)
  - 1. Masters
     []

     2. Degree
     []

     3. Secondary
     []

     4. Primary
     []
  - 5. Not Applicable [ ]
- 4. Please tick the groups in which you are a member

All	Table Banking and SACCO	Merry-go-round and SACCO	Investment Group and SACCO

## **PART II: Group Practices**

1. On a scale of 1-5, with 5 being the best, state the level of your commitment as a member of your Group and SACCO respectively

	Group	Very	Frequent	Somehow	Rarely	Never attends
	category	Frequent	4	frequent	attends	1
		5		3	2	
1	Group					
2	SACCO					

6. On a scale of 1-5, with 5 being the best, state the extent of your commitment to Saving money in the Group and in SACCO (**tick once**)

		Most	Moderately	Somehow	Not	Never
		committed	committed	committed	committed	committed
		5	4	3	2	1
1	Group					
2	SACCO					

7. How often do you take loans from your group and from the SACCO?

		Quite Frequent	Frequent	Once in a while	Rarely	Never borrows
		1	2	3	4	5
1	Group					
2	SACCO					

8. On average, how much do you save on a monthly basis in your group and in the SACCO? (tick once)

		Above	Shs2500-5000	Shs1000-2500	Shs500-1000	Shs100-500
		Shs5000	4	3	2	1
		5				
1	Group					
2	SACCO					

9. On average, what is the range of highest loans taken from your group and SACCO in the past one year?

		Above	250,000-	Shs150,000-	Shs50,000-	Shs5,000-
		Shs500,000	500,000	250,000	150,000	50,000
		5	4	3	2	1
1	Group					
2	SACCO					

10. Please rate your average loan repayment history

		Always Prompt 5	Regular 4	With minor defaults 3	With Major defaults 2	Persistently defaults 1
1	Group					
2	SACCO					

11. What is the average loan repayment rate?

	IFG	Above 75%	50-75%	30-49%	10-29%	Below 10%
		5	4	3	2	1
1	Group					
2	SACCO					

## THANK YOU

## **Appendix II: Questionnaire for SACCOs**

Instructions: Kindly take a few minutes to respond to this questionnaire. Information supplied is purely for academic research purposes and will be treated with utmost confidentiality.

1. Position held by Respondent in the SACCO (Tick as appropriate)

2. Period from when Informal Financial Groups have been admissible as corporate members

(a) Before Year 2000	[	]
(b) Between 2000-2005	[	]
(c) Between 2006-2010	[	]
(d) Between 2011 to date	[	]

3. Average Volume of Loans taken by Informal Financial Groups over the last six years in the table below:

Amount (Kshs)/	1-200	201-400	401-600	601-800	801 Million
Years	Million	Million	Million	Million	and more
2013 - 2018					

4. Average amount of money issued s loans in six months from the groups in the best performing financial year from the time group membership was allowed by the SACCO

Amount (Kshs)/	1-10	11-30	31-60	61-100	100 Million and more
Year	Million	Million	Million	Million	

5. Average Deposits made by Informal Financial Groups over the specified periods in the table below:

Amount (Kshs)/	1-200	201-400	401-600	601-800	801 Million
Years	Million	Million	Million	Million	and more
2013-2018					

6. What is the highest amount of collections ever made from the groups in the best performing financial year

Amount (Kshs)/	1-200	201-400	401-600	601-800	801 Million
Year	Million	Million	Million	Million	and more

7. What is the average loan repayment rate from member groups?

Above 75%	50-75%	30-49%	10-29%	Below 10%
5	4	3	2	1

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#### **Appendix IV: Informal Financial Groupings**

#### NO. NAME

- 1. Abasani Minto Self Help Group
- 2. Abuche Friends Self Help Group
- 3. AkadoAgutu Gi Were S/H/G
- 4. Akado Beauty Handicrafts W/G
- 5. Arina Diamonds Self Help Group
- 6. Be Carefull Sister's W/Group
- 7. Bibuta Self Help Group
- 8. Blessed Retired Nurses W/G
- 9. Brilliant Steps S/H/G
- 10. Car Wash Multi Junior S/H/G
- 11. Cariegious Business Friends Women Group
- 12. Chiga Obote Young Stars S/H/G
- 13. Cota Women Group
- 14. DungaMeyo Nam Development Group
- 15. Faith Sacred Heart Self Help Group
- 16. Fikiri Self Help Group
- 17. Gef Youth Group
- 18. Green Super Star W/G
- 19. Guu Women Group
- 20. Happy Yellow Sisters Women Group
- 21. Hard Working Konyango Sisters Women Group
- 22. HasbunallahuWaNi'mal Wakeel Women Group
- 23. Hawi Maber Women Group
- 24. Hayer Digital BodaBoda S/H/G
- 25. High Hoppers Women Group
- 26. Hope Paradise Women Group
- 27. Hunt Of Hope Self Help Group
- 28. Jangs Home Neighbours W/G
- 29. JoberMondisore Star W/G
- 30. Jokairo Self Help Group
- 31. Kadero Express Mothers W/G
- 32. KadijuLerLinje S/H/G
- 33. Kajulu West East Friends S/H/G
- 34. Kapenesa Valley Sisters W/G
- 35. Kasarani InukaJuu S/H/G
- 36. KayodoMoyie Self Help Group
- 37. KaziNgumu Resilient Mentors Women Group
- 38. Kibuye Gate One Wholesale S/H/G
- 39. Kibuye High Score TukTuk S/H/G
- 40. Kilo Ladies Hope W/G
- 41. Kisumu Town Leather Dealers S/H/G

REGISTRATION **NUMBER CENT/SH/1030** EAST/SH/18470 EAST/SH/18449 EAST/WG/1109 **CENT/SH/1040** EAST/WG/10038 **CENT/SH/1017** CENT/WG/0386 CENT/SH/1009 **CENT/SH/1041** CENT/WG/0384 EAST/SH/18435 CENT/WG/5440 **CENT/SH/1029 CENT/SH/1026** EAST/SH/18446 CENT/SH/4239 CENT/WG/9747 **CENT/WG/1227** EAST/WG/11481 CENT/WG/0374 CENT/WG/0380 CENT/WG/6782 **CENT/SH/1031** CENT/WG/0377 CENT/WG/0379 **CENT/SH/1022** EAST/WG/11483 CENT/WG/0385 EAST/SH/18442 EAST/WG/11475 EAST/SH/18459 EAST/SH/18437 **CENT/WG/0389 CENT/SH/1007** EAST/SH/6062 EAST/WG/11477 **CENT/SH/1037 CENT/SH/1010 CENT/WG/0391 CENT/SH/1016** 

**CERTIFICATE** 

42.	Koluoch Pamoja S/H/G	EAST/SH/18455
43.	Kondele Flyover Brothers Taxi Operators Self Help Group	CENT/SH/1015
44.	Kosimbo Women Group	CENT/WG/0383
45.	Kowino Orphans Support Women Group	EAST/WG/7376
46.	Lake Achievers Women Group	CENT/WG/0375
47.	Lok Toki Okwodhi S/H/G	EAST/SH/18467
48.	MaduduKochola S/H/G	EAST/SH/18454
49.	Manyatta Ten Great Achievers Women Group	CENT/WG/0387
50.	Mawo Women Group	CENT/WG/3485
51.	MayenyaOsumo Women Group	EAST/WG/11480
51. 52.	Merry Fortune Women Group	CENT/WG/10103
52. 53.	Migosi God's Amazing Grace Self Help Group	CENT/SH/1018
55. 54.	MiyumoMoutyie S/H/G	EAST/SH/18436
55.	Mombi Self Help Group	EAST/SH/13398
55. 56.	Mon KenduKendgi W/G	CENT/WG/9929
50. 57.	Moreco Women Group	CENT/WG/5743
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58.	MusandaRohoKajulu S/H/G	EAST/SH/18450
59.	Muungano 98 Women Group	CENT/WG/4356
60.	Nice Brilliant Kindu Sisters W/G	EAST/WG/11482
61.	NyalendaBetni Ok Miyi Women Group	CENT/WG/0378
62.	Nyamasaria Determined Traders S/H/G	EAST/SH/18473
63.	NyategeYieniPkonyi W/G	EAST/WG/11474
64.	NyategeYieniPkonyi W/G	EAST/WG/11474
65.	Nyawita Gold Touch W/G	CENT/WG/0382
66.	NyikwaAkeye Self Help Group	CENT/SH/1024
67.	NyikwaOlembeRweya S/H/G	EAST/SH/18469
68.	NyikwaOmbimaSel Help Group	CENT/SH/1006
69.	NyikwaOpon Self Help Group	CENT/SH/1023
70.	Nyimine Apar Women Group	CENT/WG/10182
71.	NyimineLer Women Group	CENT/WG/10064
72.	Nyiwende Friends W/G	CENT/WG/5517
73.	NykwaChuanyaKanimon S/H/G	EAST/SH/18447
74.	Oasis MilimaniBoda Noda Riders Self Help Group	CENT/SH/1013
75.	Odeso Creative S/H/G	EAST/SH/18451
76.	Ok Oloo Women Group	EAST/WG/11476
77.	Olual Development Self Help Group	CENT/SH/13048
78.	Ongadi Big Team S/H/G	EAST/SH/18468
79.	Oriwo Tee Development Group	EAST/SH/18471
80.	Ovuhambani Women Group	CENT/WG/2846
81.	Paul Mboya Road Cats Stars BodaBoda Self Help Group	CENT/SH/102
82.	Prosperous Great Family S/H/G	CENT/SH/1011
83.	Ragumo Serious Actors S/H/G	EAST/SH/18457
84.	Ramogi Friends S/H/G	CENT/SH/0337
85.	Rasenya Women Group	CENT/WG/10012
86.	RobieroSiany Self Help Group	EAST/SH/10992
87.	SianyChiga Support S/H/G	EAST/SH/18453
88.	Smart Team Ladies W/G	EAST/WG/11845
89.	Smiling Maroon Super Ladies Nyamasaria W/G	EAST/WG/11845 EAST/WG/11478
90.	Solar Traders Self Help Group	CENT/SH/1008
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- 91. Star Of The Lake Friends S/H/G
- 92. Super Faith Women Group
- 93. Super Nyale Women Group
- 94. The Head Of Households Singles Women Group
- 95. The Matrics Self Help Group
- 96. Tiger Brand Stars Women Group
- 97. Tumaini Mall Nyalenda 'B' BodaBoda Riders S/H/G
- 98. Tushinde Divas Women Group
- 99. Tutaendelea Pamoja Self Help Group
- 100. Usaidizi Women Group
- 101. WataalamuMarafikiDaima Self Help Group
- 102. Western Malo Malo S/H/G
- 103. WinjoWachNyaseye Ber W/G
- 104. Yugasuma Friends W/G

CENT/SH/1012 CENT/WG/10766 EAST/WG/11484 EAST/WG/11479 EAST/SH/18452 CENT/WG/0381 CENT/SH/1014 CENT/WG/0388 EAST/SH/18444 CENT/WG/5165 CENT/SH/1020 EAST/SH/13471 CENT/WG/0376 CENT/WG/6288

## **Appendix V: Savings and Credit Co-Operative Societies**

- 1. Afya Savings and Credit Cooperative Society Ltd
- 2. Kisumu Teachers Savings and Credit Cooperative Society Ltd
- 3. Magereza Savings and Credit Cooperative Society Ltd
- 4. Mhasibu Savings and Credit Cooperative Society Ltd
- 5. Mwalimu Savings and Credit Cooperative Society Ltd
- 6. Nairobi City Council Savings and Credit Cooperative Society Ltd
- 7. Stima Savings and Credit Cooperative Society Ltd
- 8. Unaitas Savings and Credit Cooperative Society Ltd
- 9. Ushuru Savings and Credit Cooperative Society Ltd
- 10. Wanandege Savings and Credit Cooperative Society Ltd



## MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

FROM: Secretary - MUERC

TO: Nadebu Philbert Caleb MSC/BE/00213/2014 Department of Accounting and Finance School of Business and Economics, Maseno University P.O. Private Bag, Maseno, Kenya E-mail: <u>calebjumah08@yahoo.com</u> DATE: 20<sup>th</sup> June, 2019

REF: MSU/DRPI/MUERC/00584/19

20110

RE: EFFECTS OF INFORMAL FINANCIAL GROUPINGS' PRACTICES ON GROWTH OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KISUMU COUNTY, KENYA.

Proposal Reference Number MSU/DRPI/MUERC/00584/19

This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 20<sup>th</sup> day of June, 2019 for a period of one (1) year.

Please not that authorization to conduct this study will automatically expire on 20<sup>th</sup> June 2020. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 20<sup>th</sup> June 2020

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 20<sup>th</sup> June 2020

Please note that any unanticipated problem resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior initiation. Please advice MUERC when the study is completed or discontinued.

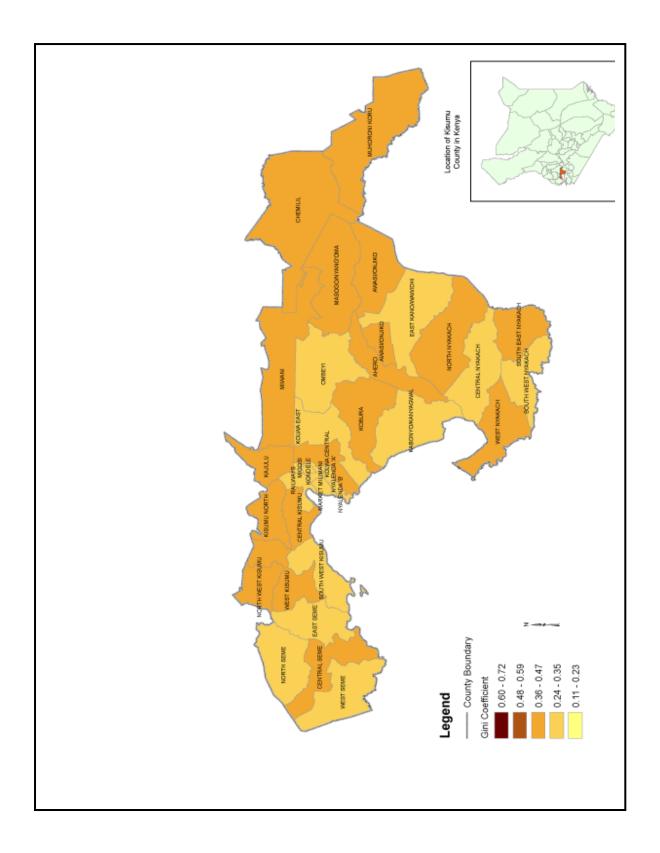
ORATE OF RESE Thank you. PUBLICATION & Yours faithfully, CONSULTANCIES 20 JUNE 2019 Dr. Bonuke Anyona Secretary, Maseno University Ethics Review Committee

Cc: Chairman, Maseno University Ethics Review Committee

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED



# Appendix VII: Map of the Study Area



#### **Appendix VIII: Approval**

