

# FIRM CHARACTERISTICS AND PROFITABILITY OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN NAIROBI CITY COUNTY, KENYA

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**Abstract:** The study sought to establish the effect of firm characteristics and profitability of deposit taking SACCOS in Nairobi, Kenya. The specific objectives are to determine the effect of firm size, capital adequacy and liquidity on profitability of deposit taking SACCOS in Nairobi, Kenya. The study made use of Market Power Theory, Capital Buffer Theory and Agency Theory to support the relationship between the independent and dependent variables of the study. Causal research design was applied on a population made up of all the licensed deposit taking SACCOS under SASRA in Nairobi County, Kenya for the period 2014 to 2017 which are 34 in number. The study was based on a census approach. The study findings on the descriptive analysis indicate that firm size and profitability Deposit Taking SACCOS in Nairobi Kenya had high fluctuations whereas capital adequacy and liquidity had minimal fluctuations over the study period. The study concluded that firm size had significant effect on profitability of Deposit Taking SACCOS in Nairobi Kenya. The study concluded that capital adequacy and liquidity insignificant effect on profitability of deposit taking SACCOS in Nairobi, Kenya. The study therefore recommends that deposit taking SACCOS should put in place a well-functioning structure in line with growing firm size. This should be done for purposes of eliminating the bureaucracies that comes along with a growing firm size which in turn will ensure the profitability of deposit taking SACCOS in Nairobi, Kenya.

**Keywords:** Firm Characteristics, Firm Size, Capital Adequacy, Liquidity and Profitability.

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## 1. INTRODUCTION

### 1.1 Background of the Study

World Council of Credit Unions (WOCCU) (2016) put forward that globally unions faced similar plights which have led to tougher regulations to avoid future financial crisis. Voinea (2014) posits that credit unions over the world need to regulate their staff for prudent reports and minimized operations costs. Further rapid changes in technology have seen most SACCOS losing their business while those that have survived are forced to invest heavily on technology development. As Voinea (2014) reports, most customers want credit unions that have adopted both the online access and mobile platforms.

In Africa, it has been reported that over 60 million people are dependent on SACCOS (Churk, 2015). The challenges faced by SACCOS in Africa are similar to that of other parts of the world. Notably, it is the economy under which SACCOS operate that is being characterized by weak systems of governance and poor regulatory framework. SACCOS in Sub

Saharan Africa (SSA) is faced with the needs to adopt new technology and intensify their competition capabilities with large financial institutions that offer similar products and services (Wanjiru & Muturi, 2016). In Sub Saharan Africa, SACCOs are characterized of loan delinquency, loan loss, nonearning assets, charging small interest rate, and increased level of illiquid assets, high operating costs and supporting non-financial operations for the small business (Meyer, 2015). In Tanzania, Churk (2015) reports that credit unions are challenged by poor loan repayment since most savers depend on unpredictable agriculture sector.

Kenya's SACCO sector stands as the largest in the African and seventh global contexts respectively. Kenya's SACCO movement comprises of 20 percent savings of the country (Makori, Munene, & Muturi, 2013). This therefore implies that SACCOs remain important to the social development and economy of Kenya. DT SACCOs in Kenya are registered and licensed for purposes of providing variety of services and products to customers and as well as members. They therefore carry out vital functions of promoting access to saving and credit and thrift culture in the economy of Kenya. In Kenya, a number of SACCOs have gone through rapid transformation over the years which have brought their existence to the common man. The Sacco Societies Regulatory Authority (SASRA) serves as the regulatory body which has the responsibility of regulating deposit-taking Sacco in the context of Kenya. Firm characteristics refer to the internal competencies peculiar to a SACCO that are within the SACCO management control and they include firm size, liquidity and capital adequacy.

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

Over the years, there has been continued growth and development in SACCOs which are so beneficial but also costly. Forming cooperative societies is based on the intention of empowering members via borrowings and savings (Mudibo, 2005). By so doing, SACCOs are ensuring sustainability in the long term through sensible financial strategies and practices. The contributions and value addition of SACCOs to members and GDP of a nation remains enormous. Various changes have taken place and still undergoing thereby serving as a challenge to SACCOs. Increasing new developments demand diverse resources for purposes of continuity and growth. Also, new legislations relating to SACCOs are also being passed for the regulation and supervision of SACCOs in a move to safeguard the interests of members. However, fact on the ground show that SACCOs are still faced with several challenges such as insufficient capital funding, loan delinquency, assessment and exposure (risk) management (Onyango, 2016).

This subsector contributed notably 8.8, 5.63 and 5.59% respectively in the periods 2013, 2014, and 2015 to GDP (CBK, 2016; 2015; 2014). Decreasing contribution of the subsector has been witnessed significantly which were attributed to unfavorable conditions of 2014 and 2015 such as low opportunities of growth, high rates of interest, poor conditions of weather and insecurity (CBK, 2016, 2015). The profitability of SACCOs in Kenya was indicated to be generally on a declining trend, 13% decrease was reported in 2014, while 2015 and 2016 had a further decline of 6% and 10% in profits respectively (SASRA, 2017). SACCOs in 2017 were reported to have made losses running into billions of Kenyan Shillings with notable SACCOs losing KSh1b. Regardless of the linkage of firm characteristics and financial performance, there is lack of sufficient empirical evidence documenting this in the context of SACCOs in Kenya.

Firm characteristics and profitability has over time sparked the interest of researchers with studies including Buyinza (2010), Onjala (2012), Kaguri (2013), Okumu and Oyugi (2016). The researches were however, largely based on the context of other countries; studies focused on the Kenyan context were largely in the context of commercial banks. The study sought to fill the gap in literature and specifically establish the effect of SACCO characteristics and profitability of deposit taking SACCOS in Nairobi, Kenya.

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

#### **1.3.1 General objective**

To examine the effect of Firm characteristics on profitability of deposit taking SACCO in Nairobi City County, Kenya.

#### **1.3.2 Specific Objectives**

- i. To evaluate the effect of firm size on profitability of deposit taking SACCOs in Nairobi City County, Kenya
- ii. To assess the effect of capital adequacy on profitability of deposit taking SACCOs in Nairobi City County, Kenya.
- iii. To establish the effect of liquidity on profitability of deposit taking SACCOs in Nairobi City County, Kenya.

*The null hypotheses were formulated in view of the specific objectives of the study.*

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Review**

Market Power theory was introduced by Bhagwati (1965). The theory is concerned with how firms exert influences on items prices by exercising firm controls of supply and demand, sometimes concurrently. Perfect competition model asserts that market players are presumed to possess no market power. As such, other market players are forced to operate with the current prices in the market price without having the capacity to change the prices (Kamande, 2017). The Market Power theory asserts that increasing external market forces bring about improves firm performances (Mulwa, 2015). Additionally, the hypothesis imply that firms with large sizes or market shares are coupled with a portfolio of products that is well differentiated portfolio are the only ones which can have monopolistic or abnormal profits.

Buffer Capital Theory was brought forth by Calem and Rob (1996). As financial institutions engage in their day to day operations, the regulatory bodies for instance SASSRA requires them to maintain adequate level of capital to shield them in case of losses. Consequently most of them endeavour top keep the capital levels beyond the minimum regulatory requirements (Lotto, 2016). Milne and Whalley (2001) suggests that as a result of penalties that are imposed by regulatory authorities to those that do not meet or maintain the minimum set amount, financial institutions are inclined towards increasing their capital levels beyond the minimum requirement. Capital Buffer Theory underpinnings therefore link capital adequacy and its relationship with the profitability of SACCOs.

Agency theory was advanced by Jensen and Meckling (1976). It is concerned with the cost arising from asymmetry of information between owners of the firm and their managers. These costs comprises of the measurement, monitoring and the residual loss of agent performance and the engineering of incentive mechanisms. According to this theory, management and owners pursue different interests. As such, agency costs will be incurred where firms have separate functions (Lambert, 2001). Firms incurring low agency costs are indicative of their superior performance. There are two identifiable agency costs according to Jensen and Meckling. They include debt and equity costs. The prepositions of Agency Theory support the variable profitability. The profitability of SACCOs is therefore a function of the relationship between owners and management of SACCOs.

### **2.2 Empirical Review**

#### **2.2.1 Firm Size and Profitability of Deposit Taking SACCOs**

Okumu and Oyugi (2016) examined variables which influenced the factors influencing performance of Kenyan SACCOs in Kisumu. The research adopted survey research design, and collected primary data among twenty two (22) finance managers of the SACCOs. Primary data was collected using semi structured questionnaires. Quantitative data was analyzed using descriptive methods and inferential statistics while qualitative data was transformed by the use of using content and thematic analysis. Outcome indicated significant linkages of firm size and Sacco performances. It was concluded that it is important to enhance the asset base of Sacco as such to foster superior firm performances.

Kaguri (2013) studied firm specifics effect on life insurance firms' profits while focusing on Kenya. It was documented that premiums of insurance firms were positively affecting insurance firms' performances. This outcome showed that life insurance firms specifics considered were key in influencing profits as designated by the affirmative mean values and their corresponding standard deviations. Specifically, results shows that firm size significant affect profitability of Insurance companies were however the research focuses and not SACCOs. Life Insurance companies which were the study focused are guided by varying guidelines as compared to SACCOs, thus the underlying contextual gap.

Onjala (2012) carried out an explanatory research in order to assess the main drivers of Kenya commercial banks' profits. The research used descriptive methods while regression and correlation analyses were done as well in determining relationships. The test was based on 5 percent level of significance. IT was concluded in the research that firm size positively influence bank equity returns. Generally, the independent variables represented for 95.3% movements in equity returns. Furthermore, outcome depict that bank size had positive effects on ROA.

An enquiry was undertaken by Buyinza (2010) for purposes of examining commercial banks' profits with emphasize on SSA nations. The analyses was centered on profitability of twenty (23) banking institutions which covered the years 1999 – 2006. Panel data methodology was applied in the research. The findings indicate that sizes have strong influences on bank profitability. Though the study is key to this investigation, cross country analyses (commercial banks) was the

approach which was used whereas country specific analysis (Kenyan SACCOs) were explored, thus providing having findings specific to Kenya.

### **2.2.2 Capital adequacy and Profitability of Deposit Taking SACCOS**

A study was conducted by Onyango (2018) for examining the relationship which exists between capitals and performance of DT Sacco in Meru, Kenya. 14 deposit taking SACCOs in Meru were targeted in the examination and the data was sourced from the audited statements of the respective SACCOs. The results obtained from a panel regression method revealed that the ratio of institutional capital to total assets had direct and strong effect on the return on asset which was used in assessing performances of the SACCOs. The analysis however used a small sample size and was confined to one region in Kenya. This analysis examined the SACCOs within Nairobi City County, Kenya.

Barus, Muturi, Kibati and Koima (2017) examined the link between capital adequacy and Kenyan SACCOs performances. An explanatory research design was employed in this investigation with a target population of 83 Sacco operating from 2011 to 2015. A census methodology was used and data was from both primary as well as secondary sources. Based on the findings, it became apparent to the fact that capitals positively and insignificantly influence on the financial performance of Sacco in Kenya.

Njeri (2017) also did a study on capital adequacy determinants of SACCOs in Kenya by considering the DT SACCOs. Thirty five (35) licensed DT SACCOs were studied and a causal research design was used. Liquidity and total deposit was considered as the predictor variable with capital adequacy being the dependent variable. All the variables were found to significantly influence capitals. Deposits had inverse significant influences on capital adequacy while liquidity directly influenced capitals. The study however examined capital adequacy as a dependent variables which in the current study is examined as an independent variable.

Okumu and Oyugi (2016) researched on performances determinants of SACCOs in Kisumu county. Data was based primary sources among thirty one SACCOs' managers twenty two (22) finance managers functioning in Kisumu. Inferential and descriptive techniques were plied so as to analyse research data while content and thematic analyses were further applied. The findings from the regression analysis show that capitals have weak impact on Sacco performances. The enquiry however utilized multiple regression techniques and panel regression methods was the case for this analysis.

### **2.2.3 Liquidity and Profitability of Deposit Taking SACCOS**

Wanjiru and Muturi (2016) researched on the variables impacting on SACCOs performances in Kiambu County. This was based on descriptive research design where secondary data was used for the five (5) year period ranging from 2010 to 2014. Both descriptive and inferential statistics were applied in analyzing data. Regression output shows an inverse and insignificant link between liquidity and Sacco performances. Additionally, the research did not conduct panel data diagnostic tests.

A study was carried out by Kombo (2014) on firm factors and profits of MFIs in Nakuru, Kenya. The regression analysis results into firm characteristics effects on performances of microfinance reported that liquidity had a strong influence on financial performances of microfinance institutions of the area. The study concluded that firm characteristics had significant positive effects of the profitability of Micro Financial Institutions in Nakuru, Kenya. The research was focused on MFIs while SACCOs was the concern of this research.

A study was done by Onjala (2012) the determinant of bank profitability in Kenya. The research employed descriptive techniques where regression and correlation analyses were used in transforming data. The test was based on 5% level of significance. Findings indicate that liquidity had insignificant influence on both ROA and ROE. The predictors represented for variation of 95.3% in equity returns. The analyses however focused on commercial banking institutions unlike this research which was SACCOS.

Buyinza (2010) did an empirical analysis on the profits of commercial banking institutions in SSA countries. 23 commercial banks in SSA were considered for the period 1999 to 2006. Panel data regression was used and outcome indicates that liquidity ratio has weak influences banking institutions' profits level. Notably, cross country approach was the focus based on commercial banks and not SACCOs. The research was on Kenya based on SACCOs, thereby presenting country specific findings.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Research Design**

Causal research design was utilized in the course of this research which is used when ascertaining the effect and cause relationships among research variable. Causal design is therefore best for the investigation as it sought to assess the effects of firm characteristics and profitability of deposit taking SACCOS in Nairobi, Kenya.

#### **3.2 Target Population**

The population is made up of all DT SACCOS under SASRA in Nairobi County, Kenya that have been in existence from 2014 to 2017 which are 34 in number (SASRA, 2018). Cooper and Schindler (2009) are of the view that population is the entire elements to be covered in a research for purposes of making inferences.

#### **3.3 Sampling Design**

The analyses were based on a purposive sampling design as it focused on the 34 SACCOS licensed in Nairobi Kenya by SASRA for the period spanning from 2014 to 2017. Mugenda and Mugenda (2011) indicated that purposive sampling is utilized in a research where the researcher uses his or her judgment in selecting the sample of the study. This therefore makes it appropriate for the current study as it deems reasonable to use the SACCOS which were operational within the study period. The sample size was therefore thirty four (34) SACCOS.

#### **3.4 Data Collection**

The research made use of secondary data. The data was extracted from the financial statements of the 34 SACCOs located in Nairobi, Kenya and also SASRA (that is, regulatory organization) of SACCOs in Kenya. The study is focused on 2014 to 2017 period. Data was obtained from the financial statements of the 34 SACCO in Nairobi.

#### **3.5 Empirical Model**

Panel data methodology was used where the profitability of SACCOs was expressed as a function of firm size, capital adequacy and liquidity.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon_{it}$$

Where:

$Y_{it}$  – Profitability of SACCOs

$\beta_0$  - Constant

$X_{1it}$  – Firm Size

$X_{2it}$  – Capital adequacy

$X_{3it}$  – Liquidity

$i$  – Firms (1-34)

$t$  – Time period (2014-2017)

$\beta$  = Regression coefficients

$\epsilon$  = Error term

### **4. RESEARCH FINDINGS AND DISCUSSIONS**

#### **4.1 Descriptive Analysis**

This section presents the descriptive analysis of the study which contains the basic features of research variables. It presents statistics such as standard deviation, mean, min and maximum number of observation and as well as the total number of observation. These statistics aid in providing more understanding of the research variables. The descriptive statistics are therefore presented in Table 4.1.

**Table 4.1 Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
Profitability	136	1.93	2.02	0.01	15.12
Firm Size	136	21.31	1.30	16.29	24.20
Capital Adequacy	136	0.12	0.08	-0.06	0.31
Liquidity	136	15.04	15.56	-85.48	64

**Source: Study Data (2020)**

Table 4.1 captures the descriptive analysis of the study which was based on the research variables. The descriptive statistics shows that all the research variables namely firms size, profitability, capital adequacy and liquidity had a total observation of 136 each which is an indication that the study was based on panel data. Profitability had a mean of 1.93 and standard deviation of 2.02. Also, minimum and maximum values of 0.01 and 15.12 are attributed to profitability.

Firm size had mean of 21.31 and standard deviation of 1.30, this therefore indicates high fluctuations in firm size of deposit Taking SACCOs in Nairobi, Kenya over the study period. Capital adequacy had mean of 0.12 and standard deviation of 0.08 with a minimum of -0.06 and maximum of 0.31. Liquidity of Deposit Taking SACCOs in Nairobi Kenya had mean of 15.04 and standard deviation of 15.56 which indicates that over the study period, liquidity had minimal fluctuations.

#### 4.2 Diagnostic Tests

This section presents the various diagnostic contains the various diagnostic tests that were carried out in the study. The diagnostic tests were test for multicollinearity, heteroskedasticity. Hausman specification test was further carried out for purposes of selecting the best panel regression model for estimation.

##### 4.2.1 Multicollinearity Test

Multicollinearity is considered as the scenario where the independent variables are highly correlated. To assess the multicollinearity levels of the predictor variables, the VIF was used. Results are presented in Table 4.2

**Table 4.2: Multicollinearity Test Results**

Variables	VIF	Remark
Firm Size	1.04	No Multicollinearity
Capital Adequacy	1.16	No Multicollinearity
Liquidity	1.12	No Multicollinearity

**Source: Study Data (2020)**

Table 4.2 provides the results of the VIF test for assessing the level of collinearity. The threshold is that for multicollinearity to be tolerated, VIF values of 1.04, 1.16 and 1.12 were obtained for firm size, capital adequacy and liquidity respectively. The test had a mean VIF value of 1.107, therefore both individually and collectively, the research variables are not characterized by excessive collinearity levels. The variables are therefore in good condition for inferential analysis.

##### 4.2.2 Heteroskedasticity Test

Heteroscedasticity test was done for purposes of examining if the error terms across periods are. The test was done using Breusch-Pagan technique and findings contained in Table 4.3.

**Table 4.3: Heteroscedasticity Test Results**

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
H <sub>0</sub> : Constant variance		
Variable: fitted values		
chi2(1)	=	1.22
Prob> chi2	=	0.2697

**Source: Study Data (2020)**



Table 4.3 contains the output from the heteroscedasticity test. The null hypothesis under this test is that residuals are homoscedastic. The findings reveal 0.2697 as p-value, therefore, there was no issues of heteroskedasticity. As such, the null hypothesis which stated that the residuals are homoscedastic was not rejected.

#### 4.2.3 Hausman Specification Test

The study carried out the test for fixed and random effect which was based on hausman test. The test is done in order to choose between fixed or random effect model for purposes of estimation.

**Table 4.4 Hausman Test**

The hausman test was carried out so as to select the best model for estimation between the fixed effect model and random effect model.

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) Fixed	(B) Random		
FirmSize	-.1364239	-.1405376	.0041137	.0087867
CapitalAde~y	.0118621	-.0658055	.0776676	.0306948
Liquidity	-.0262454	.0187415	-.0449869	.0126203

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(3) &= (b-B)' [(V_b-V_B)^{-1}] (b-B) \\ &= 15.86 \\ \text{Prob}>\text{chi2} &= 0.0012 \end{aligned}$$

#### Source: Study Data (2020)

Table 4.4 presents the findings of the study on hausman test which is based on the null hypothesis that the preferred model is the random effect model. A p-value of 0.0012 was found which at 0.05 significance level implies the rejection of the null hypothesis that the random effect model is the preferred model. The fixed effect model was therefore used for purposes of estimation.

#### 4.3 Regression Analysis

The inferential analysis of the study was based on panel regression analysis based where the fixed effect model was used. The study findings from the regression analysis are documented in Table 4.5.

**Table 4.5 Regression Analysis Results**

Profitability	Coef.	Std. Err.	T	P> z	[95% Conf. Interval]
Firm Size	-0.1364239	0.034133	-4.00	0.000	-0.2041597 -0.0686881
Capital Adequacy	0.0118621	0.0874064	0.14	0.892	-0.1615931 0.1853173
Liquidity	-0.0262454	0.0207793	-1.26	0.210	-0.0674813 0.0149905
_cons	4.217858	0.7794739	5.41	0.000	2.671017 5.764698

R<sup>2</sup>=0.1546

F statistics=5.97

Prob> chi2=0.0009

#### Source: Study Data (2020)

Table 4.5 contains the output of the inferential analysis which was done using panel regression analysis. An R squared of 0.1546 was found with an F statistics of 5.97. A p-value of 0.0000 was obtained which revealed that the model is significant therefore, firm size, capital adequacy and liquidity are key in predicting the financial performance of deposit taking SACCOs in Nairobi City County, Kenya. A constant value of 4.22 was found for the model thereby implying that in the absence of firm characteristics (firm size, capital adequacy and liquidity), the value of financial performance of deposit taking SACCOs in Nairobi City County, Kenya is 4.22.

#### 4.4 Hypothesis Testing

##### 4.4.1 Hypothesis One

The first specific objective was to examine the effect of firm size on profitability of deposit taking SACCOs in Nairobi City County, Kenya. In order to achieve this objective, a null hypothesis was formulated which stated that firm size has no significant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. A coefficient of -0.14 and a p-value of 0.0000 were obtained which is an indication that firm size had significant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. The null hypothesis which stated that firm size has no significant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya was therefore rejected. Higher firm size implies more procedural activities in firms, as a result due to growing bureaucracies; the financial performance of deposit taking SACCOs can adversely be impacted. The study findings correspond with those of previous empirical literature. Okumu and Oyugi (2016) Kaguri (2013), Onjala (2012) and Buyinza (2010) documented sizes have strong influences on profitability.

##### 4.4.2 Hypothesis Two

The second specific objective was to examine the effect of capital adequacy on profitability of deposit taking SACCOs in Nairobi City County, Kenya. In view of this objective, a null hypothesis was tested which stated that capital adequacy has no significant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. The regression output depicts a coefficient of 0.01 and p-value of 0.892. Therefore, capital adequacy had insignificant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. Firms largely strive to meet up with the capital adequacy requirements as stipulated by SASRA. Firms upon reaching the minimum capital requirements strive to create additional buffers, thereby, increases in capitals does may not directly increase the profits of deposit taking SACCOs. The study findings on the effect of capital adequacy on profitability of deposit taking SACCOs in Nairobi City County, Kenya concur with literature. Barus *et al.* (2017) and Okumu and Oyugi (2016)

##### 4.4.3 Hypothesis Three

The third specific objective was to examine the effect of liquidity on profitability of deposit taking SACCOs in Nairobi City County, Kenya. In order to achieve this objective, a null hypothesis was formulated which stated that liquidity no significant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. The study findings reveal -0.02 and p-value of 0.210 as coefficient and p-value respectively. This notably indicates non significance therefore liquidity has insignificant effect on profitability of deposit taking SACCOs in Nairobi City County, Kenya. The null hypothesis was therefore not rejected at 0.00 significance level. SACCOs majorly source for income through the intermediation role of lending, higher liquidity levels imply lower loan uptake by customers, thus the insignificant effect of liquidity on profitability of deposit taking SACCOs in Nairobi City County, Kenya. The study findings on liquidity and profitability of deposit taking SACCOs in Nairobi City County, Kenya are in line with past studies. Wanjiru and Muturi (2016), Onjala (2012) and Buyinza (2010)

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

Based on the study findings from the panel regression analyses, various conclusions have been made. On the effect of firm size on profitability, the study concluded that firm size is key in influencing the profitability of Deposit Taking SACCOs in Nairobi Kenya. This can be linked to the notion that a growing firm entails more bureaucratic procedures which in turn hamper on profitability of Deposit Taking SACCOs in Nairobi Kenya.

However, with respect to the effect of capital adequacy on profitability, the study concluded that capital adequacy was not a key determinant of Deposit Taking SACCOs in Nairobi Kenya. Firms mostly strive to reach the minimum capital requirements and upon achieving that, they strive to add more buffers for purposes of absorbing shocks in the operating environment. Additionally, on the effect of liquidity on profitability, the study concluded that liquidity was not significant in predicting the profitability of deposit taking SACCOs in Nairobi, Kenya.

### 5.2 Policy Recommendations

Various policy recommendations have been derived which are informed by the study findings. Specifically, the policy recommendations are based on variables which significantly predict the profitability of deposit taking SACCOs in



Nairobi, Kenya. The study concluded that firm size had a significant effect on profitability of deposit taking SACCOS in Nairobi, Kenya. The study therefore recommends that deposit taking SACCOS should put in place a well-functioning structure in line with growing firm size. This should be done for purposes of eliminating the bureaucracies that comes along with a growing firm size which in turn will ensure the profitability of deposit taking SACCOS in Nairobi, Kenya.

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