

## **EFFECT OF HUMAN CAPITAL ON THE PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA**

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## **ABSTRACT**

Cooperatives significantly impact on growth and development of the Kenyan economy. However, despite their importance in the national economy, they are characterized by poor performance, leading to collapse, closure and restriction. In addition, there has been a decrease in the number of staff among SACCOs in Kenya. The objective of this study was to examine the effect of human capital on the performance of deposit taking Savings and Credit Cooperative Societies in Kenya. This study used a descriptive explanatory research design and pragmatic research paradigm. The target population was finance, human resource, information and communication technology and chief accountants in the selected 84 deposit taking SACCOs in five Counties in Kenya. The study used purposive sampling and stratified random sampling method to select 184 managers from the population. Semi structured questionnaire was employed to collect primary data while secondary data for the study was collected using data extraction tools. Quantitative data analysis was done with the assistance of inferential and descriptive statistics. Statistical Package for Social Sciences (SPSS version 22) also helped in the analysis. Descriptive statistics included percentages, frequency

distribution, mean, and standard deviation. Pearson correlation coefficient, and univariate regression analysis were employed for analysis of inferential data. This study found that human capital has positive and significant effect on the performance of deposit taking SACCOs in Kenya. The study revealed that the indicators of human capital adequacy of staff, skills and experience affect deposit taking SACCOs in Kenya. The study recommends that SACCOs should have clear human resource training and development policies. In addition, SACCOs should more often use training experts and personnel in training their staff on key concepts in sectors like financial management, security and customer service. Further, the management of deposit taking SACCOs in Kenya should come up with human resource policies that guide job promotion. It also recommends that there should be policy guidelines on the minimum qualifications and background of person eligible to serve both in the Boards and top management of SACCOs. It's further recommended that, the regulators should seek to have strict laws and regulations to deter employers and other institutions who fail to remit deductions on time.

**Key Words:** *human capital, performance, skills, experience*

## **INTRODUCTION**

Cooperatives are to be found in different sectors of the economy, namely agriculture, housing development, financial, insurance, Jua Kali, building and construction, consumer services, transport and handicraft. Cooperatives are so pervasive that worldwide they provide employment to about 300 million people, which is over 20% more than that provided by the multinationals. In

Europe they have a major stake in consumer, banking, and insurance businesses. For example, in Germany 1 in every 4 citizens is a member of a cooperative (Mathuva, Muthuma & Kiweu, 2016). However, the ongoing globalization, trade liberalization, and advancement in technology clearly show that the cooperative movement no longer enjoys the benefits of state protection that existed hitherto when they operated under monopolistic conditions. The new operating environment and the need to survive and continue delivering comparable benefits to members compelled cooperatives to embrace same management principles and techniques practiced by for-profit enterprises with which they compete for resources and customers.

In spite of the massive investment in training and capacity building and human resource deployment, cooperatives have tended to operate in a rigid framework where goals and objectives are not clearly defined or supported by well-articulated strategies (Mathuva, Muthuma & Kiweu, 2016). Through the one member one vote principle, however, not too many qualified persons are elected to the Management Committees and consequently are not able to hire competent staff to manage their operations (Marwa & Aziakpono, 2015). This coupled with the intense government control, cooperatives were ill prepared to face the challenges of liberalization and price decontrols. This has compelled cooperative managers to seek appropriate strategies to harness resources at their disposal for increased and sustainable benefits to their members. Meichang, Wenzhong and Dan (2017) argue that if a firm is to successfully meet its objectives, then it needs to have a human resource that is proficient in its tasks and internal systems. A firm should not expect to meet its operations if it does not have talented and efficient employees. These employees should also be skilled and have the needed intellect to get the work done. The skill set of a staff creates an understanding of work responsibilities and an effective and efficient way of performing daily activities. Employees with proper skills and experience, have a better understanding of their jobs and what is expected of them. For an employee to be effective he/she must have a broad skill set that extends to the knowledge of corporate safety procedures (Bakri, 2017).

Various studies show that human capital, as a strategic resource, has an effect on organizational performance, in different parts of the world. In Malaysia, Alnachef and Alhajjar (2017) indicate that human capital in terms of leaning and education, skills development, creativity and innovation, and adequacy of staff has a positive influence on performance of firms. In Islamabad, Arsalan, Awan and Sarfraz (2018) found that human capital investments in terms of training, remuneration, rewards, experience and adequacy of staff affects employee performance positively, which in turn affects organizational performance. One of the main problems that African firms have to deal with is adequacy of resources including competent human resource. For instance, Parent, Fromageot and Ketele (2015) indicate that human resources found in the sub-Saharan parts of Africa are inadequate when it comes to the needed skills compared to the professional needs in firms. In addition, Preko (2014) established that human resources development done through training, shadowing and mentoring had a significant effect on the performance of Kwame Nkrumah University of Science and Technology in Ghana and Chigozi

and Onyia (2018) noted that any firm that invest in human capital through enhancing competency skills on their staff perform better. In Kenya, Kogo and Kimencu (2018) indicate that proper linkage between human resources and the performance of the firm will see the managers in charge of human resource come up with programs that will be used to improve the operations and performance of the organization in insurance companies. Gakenia (2015) found that human resource is one of the key players when it comes to the firm performance, thus, there is need for the human resource departments to come up with more training programs to improve the employee's skills. Odhongo and Omolo (2015) indicate that human capital investment in terms of quality education provision, skills development, social networks and experience have a significant effect on pharmaceutical companies' performance.

## **STATEMENT OF THE PROBLEM**

Cooperatives significantly impact on growth and development of the Kenyan economy. They contribute or manage about 45% of Kenya's GDP. A large proportion of Kenyan population derives their livelihood from cooperatives (Karagu & Okibo, 2014). It is estimated that 63% of Kenyans derive their livelihoods directly or indirectly from cooperative based activities or sources. In the year 2017, SACCOs had mobilized savings of over Kshs 305.3 billion, an increase from Kshs 297.6 Billion recorded in 2016. This led to an increase in the gross loan portfolio by 11.3% in 2017 to reach Kshs 331.21 billion from Kshs 297.6 billion recorded in 2016 (Sacco Societies Regulatory Authority, 2017). Despite their importance in the national economy SACCOs in Kenya are characterized by poor performance, leading to collapse, closure and restriction (Mathuva, Muthuma & Kiweu, 2016). In the year 2017, two DT-SACCOs had their licenses revoked and 12 DT-SACCOs were operating on conditionally restricted half-year licenses for failing to meet their financial obligations. In addition, even though total income in SACCOs has been increasing for the last five year, non-performing loans have been on the increase, having increased from 5.23% in 2016 to 6.14% in the year 2017. In addition, the total loans grew by 11.3% between 2016 and 2017 to reach Kshs 331.21 Billion. In addition, SACCOs reduced their total number of staff from 8,194 in 2016 to 7,740 in 2017. However, despite having human capital, SACCOs in Kenya are still experiencing poor performance in terms of returns on investments, customer satisfaction and efficiency in service delivery. Various studies have been done on human capital and organizational performance in Kenya. For instance, Rotich (2016) conducted a study on the effect of human resource capabilities on sustainable organizational competitiveness of mobile phone service providers in Kenya; and Maithya (2016) examined the influence of human resource on implementation of strategic change management practices at the University of Nairobi. However, these studies did not show how human capital affects organizational performance. This study therefore sought to examine the effect of human capital on the performance of Deposit taking SACCOs in Kenya.

## **RESEARCH HYPOTHESIS**

**H<sub>0</sub>:** Human capital has no significant effect on the performance of deposit taking SACCOs in Kenya

## **THEORETICAL REVIEW**

Human Capital theory was developed in 1962 by Becker and it was later collaborated by Jacob Mincer and Theodore Schultz (Bartocho, 2016). Becker developed the theory so as to indicate the effect of general training on the performance of employees, and overall setting of skills. Specified training competencies enhance the staff skills at their current area of work (Meichang, Wenzhong & Dan, 2017). The three key elements which are included in the theory of human capital are conducive working environment, training investment as well advancement of opportunities. Becker also acknowledged how specific as well as general training affects the burn out level of staffs in their respective organizations. Moreover, the proponents of the human capital theory tend to indicate that there is a direct association between labor cost and profitability of the organization (Bustanza, Vendrell-Herrero & Parry, 2016).

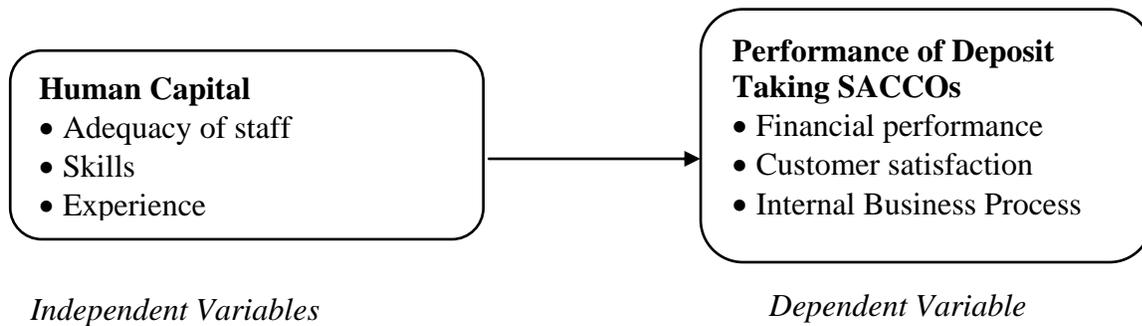
The theory outlines that employees tend to enhance their skills and knowledge and productivity by investing regularly in training, education as well as adoption of other competencies. Becker stipulated that investment in human capital is advantageous to any organization in that it enhance staff knowledge, health and skills (Chigozie, & Onyia, 2018). Becker used the tenets of human capital to indicate that various organizations may generate substantial benefits through adopting the use of the theory. With regard to Coff and Raffiee (2015), Theodore developed the theory with the aim of outlining the importance of management leaders of a particular organization to invest in education, job creation opportunities and ethical practices. Moreover, Schulz expanded the tenets of the theory so as to include the significance of investing on human capital (education as well as training) as more effective compared to physical capital. The proponents of this theory over that education and training will improve the productivity of workers. In addition, Holden and Biddle (2017), who are also proponents of the human capital theory, indicate that education and training investment results to high returns and low risks than those provided by financial and physical capital.

In relation to this study, the theory tends to give explanation on the effect of the human capital on performance of the SACCOs. As a vital resource, human capital basically represents the knowledge and individual capability as well as skills of the staff in the SACCOs. Human capital tends to leverage on employees' level of education, experience as well as specific competencies (Chuang, Liu & Chen, 2015). The concept of human capital is of significance to this study in that it offers tactical knowledge which the SACCOs may adopt in order to improve on efficient and effective service delivery. Since explicit knowledge is vital for competitive advantage of a

particular organization, tactical competencies tend to vary among individuals within an institution and in case of its availability it can positively contribute to competitive advantages.

## **CONCEPTUAL FRAMEWORK**

This study sought to examine the effect of human capital on the performance of deposit-taking Savings and Credit Cooperative Societies. The independent variable was human capital and the dependent variable was the performance of deposit-taking Savings and Credit Cooperative Societies.



**Figure 1: Conceptual Framework**

### **Performance of Savings and Credit Cooperative Societies in Kenya**

The performance of an organization is affected by its operations' effectiveness and efficiency (Li, Zhou & Tian, 2018). Effectiveness is the achievement of results that relate to the objectives of the customer needs. On the other hand, efficiency is the use of organization resources in an economic manner to achieve a business goal or objective. Efficiency and effectiveness form the basis on which a firm chooses to pursue a given strategy. Effectiveness leads to focus on strategies that satisfy customer's needs while efficiency leads to strategies whose focus is on the internal processes and operations. Financial and non-financial methods can be used to quantify efficiency and effectiveness (Bakri, 2017). Financial and non-financial measures include delivery of services, customer's satisfaction, efficiency, leaning and innovation, market share, flexibility, quality of products, introduction of new products and responsiveness.

This study will use Balanced Scorecard model of performance measurement (Amoah-Mensah, 2013) as it is broad enough to include quantitative and non-quantitative parameters. Specific measures included financial performance, internal businesses processes, learning and growth and customer satisfaction. Kaplan and Norton (2004) explain that the business strategies as well as its objectives, target initiatives and measures flow from the critical success factors. The perspectives of performance include financial performance, internal business processes, customers' satisfaction and learning and growth. Financial perspective is measured using revenue, market share, assets and cost leadership (Kogo & Kimencu, 2018). Customer perspective is measured

using quality, speedy purchase and appropriate selection. Internal perspective is measured using process innovation, efficiency, relationships, and convenience. Learning and growth perspective is measured in terms of competencies, operational excellence and climate of action.

Different authors in Kenya have examined the performance of SACCO's using different measures. For instance, Muriuki (2016) in a study on the factors Affecting Sacco Performance in Meru South District measured performance in terms of Dividend, profitability, total assets and liquidity. Karagu and Okibo (2014) examined financial factors influencing performance of SACCOs in Kenya and examined performance using number of members, total assets, customer satisfaction, dividends and profitability.

## **Human Capital**

The main source of sustainable competitive advantage, when considering employees management, is acknowledging the value of human resource (HR) (Nyabuti, Chepkilot & Zakayo, 2016). Another prerequisite that is as important as human resource management is the capability and commitment of the human resource. Coming up with HR capabilities is characterized by developing knowledge for the organizations human resource. The effect of empowering human resource in organization performance and its influence in the development of organization strategies is becoming more obvious in the larger firms and even on SMEs. Today when it comes to HRM the debate is on the link between human resource capabilities and performance of the organization (Yen, 2013).

Ali and Chaudhry (2013) examined the effect of human capital on organization performance in the service sector of Punjab, Pakistan. The data for the study was derived from five Pakistan cities found in Punjab and the results revealed that human capital influences satisfaction, job and career of staff members which are factors that affect the performance of an organization. Yen (2013) studied the impact of bank's human capital on organizational performance in Taiwan. The study which was a case study looked at eight Taiwan commercial banks and the results found that human capital positively affects innovation, which in turn affects performance of a firm.

In Ghana, Preko (2014) conducted an assessment of the impact of human capital development on effective work performance at selected departments in Kwame Nkrumah University of Science and Technology. The descriptive research design was used and the findings were that the different departments had developed effective systems that allowed for effective communication of the development and training programs. Human resources development was possible due to training, shadowing and mentoring. In Nigeria, Chigozi and Onyia (2018) examined the effect of human capital on organizational performance in manufacturing industries in South-East Nigeria and the study revealed that any firm that does not invest in learning and does not take continuous development, learning, sharing, mobilization, distribution, cultivation and practicing, reviewing and spreading knowledge cannot compete well in the dynamic business markets.

In Kenya, Rotich (2016) conducted a study on the effect of human resource capabilities on sustainable organizational competitiveness of mobile phone service providers in Kenya. The study was guided by pragmatism philosophical paradigm with the help of explanatory research design. The results revealed that there was a positive and significant relationship between sustainable competitive advantage of the firm and competency of the firm's human resource. In addition, Maithya (2016) examined the influence of human resource on implementation of strategic change management practices at the University of Nairobi. The research design used was a case study and both primary data and secondary data were collected. The results indicated that the University should continuously train and develop its employees to enable them cope with environmental changes and reduce resistance to change.

## **RESEARCH METHODOLOGY**

This study made use of a descriptive explanatory research design. This research design is also referred to as causal research technique and it is done to deduce the cause and effect relationship between variables (Adrian, 2010). In addition, the study adopted a pragmatic research paradigm. This is because pragmatic research approach advocates for the use of quantitative and qualitative research techniques. The unit of analysis in this study was all the Deposit-taking SACCOs in five selected counties in Kenya. These Counties included Kiambu County, Meru County, Mombasa County, Nairobi City County and Nyeri County. These counties were selected because they have the highest concentration of the registered head-offices (44%) of deposit taking SACCOs in Kenya (SASRA, 2017). The unit of observation of this study was Finance, Human Resource, ICT and Property managers/chief Accountants in the selected 84 deposit-taking SACCOs in the Five Counties in Kenya. The target population was therefore 354 staff working in finance, human resource, ICT and property managers/chief accountants in the 84 deposit-taking SACCOs in these five counties in Kenya. The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2013). The formula used to get the sample size was;

$$n = \frac{\chi^2 NP(1 - P)}{(ME^2(N - 1)) + (\chi^2 P(1 - P))}$$

Where: n=sample size;  $\chi^2$ =Chi-square for the specified confidence level at 1 degree of freedom; N=Population size; P = is the proportion in the target population estimated to have characteristics being studied. As the proportion was unknown, 0.5 was used. ME=desired margin of Error (Expressed as a proportion)

$$n = \frac{1.96^2 354 * 0.5 * 0.5}{(0.05^2 * 353) + (1.96^2 * 0.5 * 0.5)}$$
$$n = 184$$

Purposive sampling helped select finance, human resource, ICT and property managers. In addition, the 184 managers were chosen with the help of stratified random sampling technique. In this study, the strata comprised of finance managers, human resource managers, ICT managers

and property manager chief accountant. Primary and secondary data were used in the study. The study's primary data was obtained using semi-structured questionnaires. Secondary data was collected by use of a data extraction tool, which was a checklist. The researcher carried out a pilot study to ensure the data collection tool was reliable and valid. The pilot test helped correct some of the challenges encountered before under taking the final study. Quantitative and qualitative data was generated from the closed-ended and open-ended questions, respectively. Qualitative data was analyzed on of thematic basis and the findings provided in a narrative form. Inferential and descriptive statistics were employed for analysis of quantitative data with the assistance of Statistical Package for Social Sciences (SPSS version 22). Descriptive statistics such as frequency distribution, mean (measure of dispersion), standard deviation, and percentages were used. Inferential data analysis was conducted by use of univariate regression analysis, Pearson correlation coefficient, and multiple regression analysis. Before conducting inferential statistics, the researcher conducted diagnostic tests, which included Shapiro Wilk test for normality, variance inflation factor (VIF) for Multicollinearity, Durbin-Watson test for autocorrelation and Breusch-Pagan/Cook-Weisberg test for heteroscedasticity. The following was the regression models for testing the hypotheses:

**H<sub>01</sub>:** Human capital has no significant effect on the performance deposit taking SACCOs in Kenya

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Performance; B<sub>0</sub> = Constant; B<sub>1</sub> =Coefficients of determination; X<sub>1</sub> = Human Capital, and ε = Error term

## **RESEARCH FINDINGS AND DISCUSSION**

The sample size of the study comprised of 184 managers working in deposit-taking SACCOs in five selected counties in Kenya. Out of 184 questionnaires which were distributed, 176 were duly filled and returned. The drop-off and pick-up-later method yielded the high response rate of 95.65%. According to Nulty (2011), a response rate of 75 per cent is adequate for analysis, for making conclusions and making inferences about a population. This implies that the response rate of 95.65% was adequate for analysis, drawing conclusions and reporting.

### **Demographic Information**

The human resource managers, ICT managers, chief accountants and finance managers in the deposit taking Savings and Credit Cooperative Societies were asked to indicate their highest level of education. According to the results, 50% of the staffs specified that they were undergraduates, 34.7% had masters' degrees, 10.8% had college diplomas, 2.8% had others and 1.7% had school certificates. Those who indicated that they had others also specified that they had PhDs. The findings imply that the staffs at deposit taking SACCOs had the required academic background to perform their respective duties and also to understand and answer

appropriately questions related to the study objectives. The staffs were asked to specify their duration in the deposit taking SACCOs. According to the findings, 49.4% of the managers indicated that they had been working in their SACCOs for between 6 and 15 years, 38.6% indicated for between 1 and 5 years, 6.3% indicated for less than one year and 5.7% indicted for more than 15 years. These findings show that most of the managers in deposit taking SACCOs had been working in their organizations for more than 6 years.

### **Performance of Savings and Credit Cooperative Societies**

Organizational performance in Savings and Credit Co-Operative Organizations was measured in terms of number of members, total assets, customer satisfaction, dividends and profitability. The staffs working at the deposit taking SACCOs were asked to indicate their level of agreement on various statements on the performance of their deposit taking SACCOs. From the findings, the staffs at deposit taking SACCOs strongly agreed with a mean of 4.522 (standard deviation (SD) = 0.632) that their organizations offer reliable services. With a mean of 4.420 (SD = 0.736) the managers agreed that their organizations ensured the members got value for money. Further, the staff at deposit taking SACCOs agreed with a mean of 4.392 (SD = 0.650) that their organizations ensured that the services are responsive. In addition, the managers agreed with a mean of 4.204 and (SD = 0.695) that their organizations had the ability to deliver the promised service in a consistent and accurate manner. The staff at deposit taking SACCOs were neutral on the statement indicating that the turnaround time in the organization is low as shown by a mean of 3.255 (SD = 1.179). According to Bakri (2017), efficiency is the use of organization resources in an economic manner to achieve a business goal or objective. Additionally, the managers were neutral on the statement indicating that cost of service delivery is low as shown by a mean of 3.147 (SD = 1.237). Further, the managers were neutral on the statement indicating that the waiting time in service delivery is low as indicated by a mean of 2.744 (SD = 1.268). However, the staff at deposit taking SACCOs disagree with the statement indicating that delivery time in the organization was low as shown by a mean of 2.426 (SD= 1.211). This implies that delivery time in SACCOs was high meaning that most of the SACCOs had low efficiency.

Customer satisfaction entailed determining the number of clients who reported their experience when utilizing the firms' products and services. Customer satisfaction is a part of customers' experience that exposes a supplier's behavior on customers' expectation. According to the results, the staff at deposit taking SACCOs agreed with a mean of 4.403 (SD= 0.606) that their SACCOs ensure that customers were satisfied. With a mean of 4.221 and a 0.710 the staff at deposit taking SACCOs agreed that the process in service delivery was characterized by clarity and simplicity. Further, the managers agreed with a mean of 4.193 (SD= 0.690) that customers were satisfied with the SD= 0.733) that customers show satisfaction with cost of service delivery. The managers also agreed with a mean of 3.801 and (SD= 0.814) that customers are satisfied with the timeliness in service delivery. These findings agree with Black and Boal (2010) findings

that institutions such as SACCOs should ensure customer satisfaction through ensuring efficiency and effectiveness in service delivery.

### Financial Performance of SACCOs

From the annual reports of Sacco Societies Regulatory Authority (SASRA), data on total assets, total income, liquidity ratio, number of members and return on assets were obtained for the years between 2012 and 2017 for the entire deposit- taking SACCOs sampled.

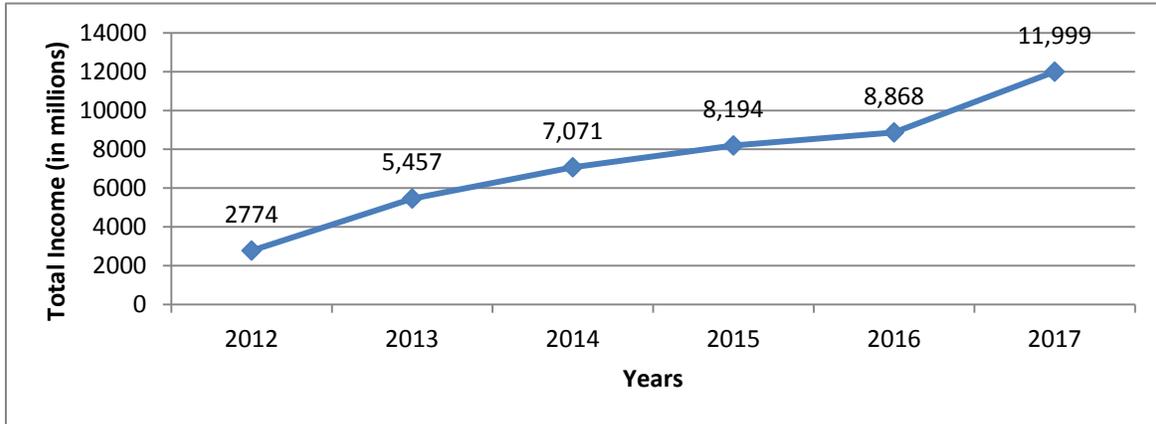


Figure 2: SACCOs' Total Net Income (2012-2017)

As illustrated in Figure 2, the total net income in the deposit taking SACCOs in Kenya had been increasing exponentially over the years. In the year 2012, total net income was Kshs. 2,774 million, which increased to Kshs. 5,457 million in 2013, Kshs. 7,071 million in 2014, Kshs. 8,194 million in 2015, Kshs. 8,868 million in 2016 and Kshs. 11,999 million in 2017. These findings agree with Muriuki (2016) findings that total net income in deposit taking SACCOs had been increasing over the years.

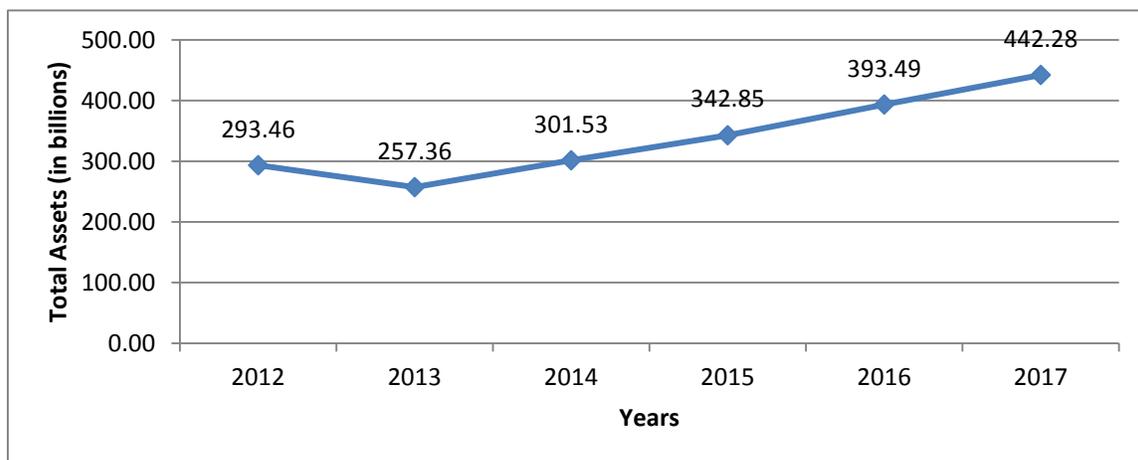
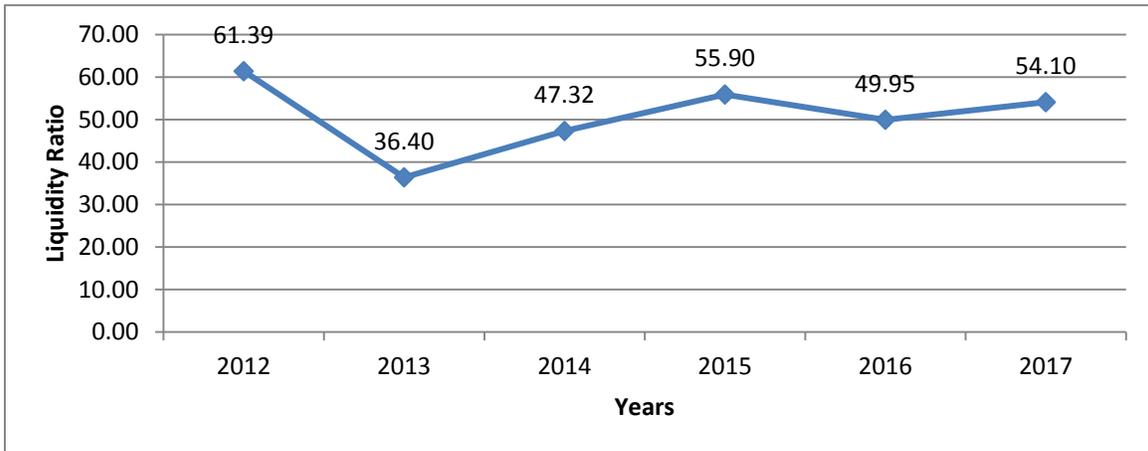


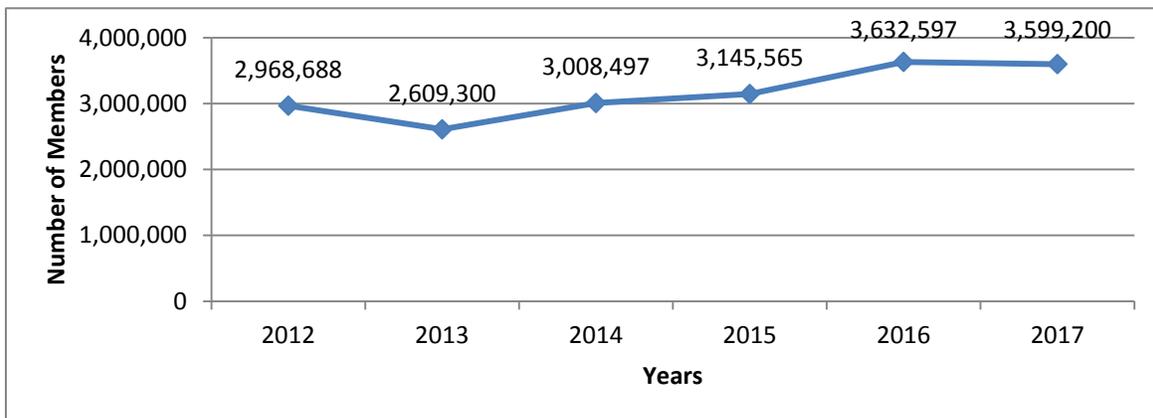
Figure 3: SACCOs' Total Assets (2012-2017)

According to the results as shown in Figure 3, total assets in the deposit taking SACCOs were worth Kshs. 293.46 million in 2012, decreased to Ksh. 257.36 million in 2013. In the year 2014, the total assets in deposit taking SACCOs were Ksh. 301.85 million, which increased to Ksh. 342.85 million in 2015, Ksh. 393.49 million in 2016 and Ksh. 442.28 million in 2017. These findings imply that the total assets in deposit taking SACCOs in Kenya have generally been increasing.



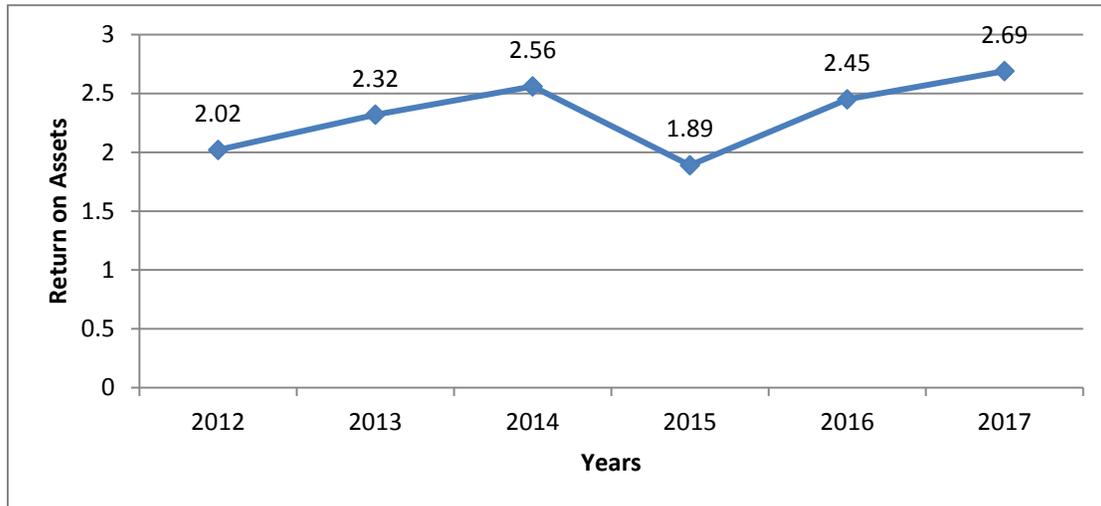
**Figure 4: SACCOS' Liquidity Ratio (2012-2017)**

Liquidity ratio is the ratio of current liabilities to current assets. This indicates the ability of an organization to meet its obligations arising in the short term of under 12 months. The results as shown in Figure 4 show that liquidity ratio of deposit taking SACCOs in Kenya has been fluctuating for the last six years (2012-2017). In the year 2012, liquidity ratio among deposit taking SACCOs was 61.39, which decreased to 36.40 in 2013 before increasing to 47.32. In the year 2015 Liquidity ratio among deposit taking SACCOs was 55.90, which increased to 49.95 in 2016 and 54.10 in 2017. The findings imply that liquidity ratio among deposit taking SACCOS in Kenya had been fluctuating.



**Figure 5: SACCOS' Number of Members (2012-2017)**

According to the results as shown in Figure 5, deposit taking SACCOs in Kenya had 2,968,688 members in 2012. In the year 2013, this number decreased to 2,609,300 before increasing to 3,008,497 in 2014, 3,145,565 in 2015 and 3,632,597 in 2016. In the year 2017, the number of members in deposit taking SACCOs decreased to 3,599,200 in 2017. These findings imply that during the period ranging from 2012 to 2017, the number of members in deposit taking SACCOs had an increase.



**Figure 6: SACCOS' Return on Assets (2012-2017)**

According to the results, return on assets (ROA) in the year 2012 was 2.02%, which increased to 2.32% in 2013 and 2.56% in 2014. Between the year 2014 and 2015, return on assets decreased from 2.56% and 1.89%. In the year 2016 return on assets increased to 2.45%, which increased again to 2.69 in 2017. While there were some fluctuations in the return on assets in deposit taking SACCOs, there was a general increased for the period ranging from 2012 to 2017.

### **Human Capital**

The managers were asked to indicate the level of agreement with various statements on human capital in their deposit taking SACCO. From the findings, the managers agreed with a mean of 3.750 (SD = 0.838) that their SACCOs match the numbers of staff with the available workload. With a mean of 3.721 (SD = 0.892) the managers agreed that there were enough staff in each of the departments in their organizations. These findings agree with Rotich (2016) findings that there was a positive and significant relationship between sustainable competitive advantage of the firm and adequacy of the firm's human resource. Also, with a mean of 3.556 (SD=1.001) the managers agreed that their organizations have low employee turnover. The managers were neutral on the statement that their organizations have been increasing the number of staff every year as shown by a mean of 3.375 (SD = 1.050). According to the findings, the managers agreed with a mean of 4.250 (SD= 0.580) that staff in their organization have the knowledge required in

the assessment of members' credit worthiness. The managers also agreed with a mean of 4.181 (SD = 0.685) that staff in their organizations have the technical knowledge required in management of members' funds. These findings are in line with Yen (2013) findings that human capital elements such as skills, knowledge and abilities have an effect on employee performance and productivity, which in turn affects performance.

The managers also agreed with a mean of 4.159 (SD = 0.715) that staffs in their organizations are excellent in communication. According to Preko (2014) effective communication is a key component in the general organizational performance. Further, the managers agreed with a mean of 4.017 (SD = 0.871) that their organizations had training programmes to increase staff knowledge. Additionally, they agreed with a mean of 3.971 (SD = 0.712) that staffs in their organizations are excellent in problem solving and decision making. The managers agreed with a mean of 4.056 (SD= 0.673) that all employees are always focused in achieving the set organization goals. In addition, the managers agreed with a mean of 4.034 (SD = 0.675) that all staff in their organization have experience in their specific departments. Also, the managers agreed with a mean of 3.823 and (SD = 0.746) that all staff in their organizations put physical effort in their work. Further, the managers agreed with a mean of 3.534 (SD= 0.925) that their organizations recruit staffs who have been working in specific areas for a long duration of time.

## **CORRELATION ANALYSIS**

The results show that there exists a positive correlation between human capital and performance of deposit taking SACCOs in Kenya ( $r=0.436$ ,  $p\text{-value}=0.000$ ). The findings concur with Shady (2011) argument that human capital has a positive effect on performance of organizations. The effect of empowering human resource in an organization and its influence in the development of organization strategies is becoming more obvious in all types of firms today.

**Table 1: Correlation Coefficients for Human Capital and Performance of SACCOs**

		<b>Performance of SACCOs</b>	<b>Human capital</b>
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
Human capital	N	176	
	Pearson Correlation	.436**	1
	Sig. (2-tailed)	.000	
	N	176	176

## **REGRESSION ANALYSIS**

The study used a univariate analysis to investigate the effect of human capital on performance of deposit taking SACCOs in Kenya. The null hypothesis stated:

**H<sub>0</sub>2:** Human capital has no significant effect on performance of deposit taking SACCOs in Kenya

As indicated in table 2, the r-squared for the relationship between human capital and performance of performance deposit taking SACCOs in Kenya was 0.190. This shows that human capital can explain 19.0% of the performance of deposit taking SACCOs in Kenya. This implies that 81% of the performance of deposit taking SACCOs in Kenya is accounted for by other factors not considered in the model.

**Table 2: Model Summary for Human capital and Performance of SACCOs**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 <sup>a</sup>	.190	.186	.36280

a. Predictors: (Constant), Human capital

As shown in Table 3, the F-calculated (40.866) was greater than the F-critical (3.84) and the p-value (0.000) was less than the significance level (0.05), which implies that the model is a good fit for the data and hence can be used to predict the effect of human capital on the deposit taking SACCOs in Kenya.

**Table 3: ANOVA for Human capital and Performance of SACCOs**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.379	1	5.379	40.866	.000 <sup>b</sup>
	Residual	22.902	174	.132		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Human capital

From the results (Table 4) the regression model was;

$$Y = 2.260 + 0.402X_2$$

The findings, as depicted in Table 4, show that the performance of deposit taking SACCOs in Kenya will be having an in index of 2.260 when human capital is held constant. In addition, the Beta coefficient was 0.402 for the relationship between human capital and the deposit taking SACCOs in Kenya. This shows that a unit improvement in human capital would lead to a 0.402 improvement in the performance of deposit taking SACCOs in Kenya. The relationship is significant as the P-value (0.000) was less than the significance level (0.05). Therefore we can reject the null hypothesis that “Human capital has no significant effect on deposit taking SACCOs in Kenya”. These findings are in line with Ali and Chaudhry (2013) findings that human capital has a positive effect on organization performance in the Service Sector of Punjab. In addition, the findings agree with Yen (2013) findings that human capital has a significant effect on organizational performance in Taiwan.

**Table 4: Regression Coefficients for Human capital and Performance of SACCOs**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.260	.246		9.206	.000
	Human capital	.402	.063	.436	6.393	.000

a. Dependent Variable: Performance of SACCOs

## CONCLUSION

The study also concludes that human capital has positive and a significant effect on the deposit taking SACCOs' performance in Kenya. The study revealed that the indicators of human capital adequacy of staff, skills and experience affect deposit taking SACCOs in Kenya.

## RECOMMENDATIONS

The study found that many SACCOs did not have well skilled personnel in their respective roles due to absence of clear human resource development policies. It is recommended that Sacco should have clear human resource training and development policies. It is further recommended that SACCOs should more often use training experts and personnel in training their staff on key concepts in sectors like financial management, security and customer service.

The study found that job promotions were not very regular in deposit taking SACCOs as more than one fifth of the SACCOs had not promoted employees to senior positions. Being one of the non-financial rewards that ensure employee motivation and retention, the study recommends that the management of deposit taking SACCOs in Kenya should come up with human resource policies that guide job promotion. It was found that their skill gaps in members elected to Boards of Directors to provide leadership and governance to the SACCOs. It is recommended that shareholders are adequately educated on the need to elect leaders who have demonstrated possession of critical governance skills.

It also recommends that there should be policy guidelines on the minimum qualifications and background of person eligible to serve both in the Boards and top management of SACCOs. It's further recommended that, the regulators should seek to have strict laws and regulations to deter employers and other institutions who fail to remit deductions on time. The study showed that there were not adequate rules and guidelines to ensure that only competent and skilled persons with relevant knowledge were elected to the Boards of Sacco Societies. It is recommended that the regulators design clear policy guideline to ensure competent governance in SACCOs.

The Resource Based Theory developed by Birger Wernerfelt in 1984 postulates that a firm can only achieve competitive advantage by use of its available resources and capabilities. This study found out that Human resource is a more significant and critical resource, accounting for 26.3%

of SACCOs' performance than even finance resource. The aim of a critical resource or capability is the improvement of other resources. This is perhaps due to the role human resource plays in the allocation, utilization and manipulation of other resources. Human resource with the right skills and competencies will harness other strategic resources including finance and technology with efficiency and effectiveness. The study therefore adds to the existing body of knowledge in that it empirically brings out the need for SACCOs to bring on board experienced and skilled staffs to improve performance on return on investments, service delivery to members and even total assets.

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