Volume and Issues Obtainable at Center for Sustainability Research and Consultancy

Journal of Accounting and Finance in Emerging Economies
ISSN: 2519-0318 & ISSN (E): 2518-8488
Volume 7: Issue 4 December 2021
Journal homepage: www.publishing.globalcsrc.org/jafee

Ethnic Diversity and Financial Performance of Deposit-Taking Savings and Credit Co-Operative Societies in Nairobi County, Kenya

***Owalo Maurice Otieno,** Kenyatta University, Kenya
Frederick Ndede, Lecturer, Kenyatta University, Kenya
Gerald Atheru, Lecturer, Kenyatta University, Kenya

***Corresponding author's email**: owalomaurice@gmail.com

ARTICLE DETAILS

History
Revised format: Nov 2021
Available Online: Dec 2021

Keywords
Ethnic Diversity, Financial Performance, Deposit-Taking, Kenya, Nairobi county

JEL Classification
P34, Z23

ABSTRACT

Purpose: The DT-SACCOs have proved to be important in the development and growth of both individuals and economies. However, the overall financial performance of DT-SACCOs in Kenya has not been impressive. Between 2014 and 2018, there was general decline in return on assets and return on equity of DT-SACCOs. The average return on assets was 2.51% in 2014 and 2.25% in 2018. The average return on equity was 33.09% in 2014 and 21.89% in 2018. The study examined the effect of ethnic diversity on financial performance of Deposit-Taking Savings and Credit Cooperative Societies in Nairobi County.

Design/Methodology/Approach: Agency theory, stakeholder theory and resource dependence theory guided this study. Explanatory and correlational research designs were used. Descriptive and inferential analysis was conducted.

Findings: Ethnic diversity was found to insignificantly predict return on assets ($\beta2 = -.158$; $p > 0.05$) and return on equity ($\beta2 = -.800$; $p > 0.05$).

Implications/Originality/Value: The study concluded that ethnic diversity of board members negatively and insignificantly affects financial performance.

Recommended citation: Otieno, O. M., Ndede, F. and Atheru, G. (2021). Ethnic Diversity and Financial Performance of Deposit-Taking Savings and Credit Co-Operative Societies in Nairobi County, Kenya. *Journal of Accounting and Finance in Emerging Economies*, *7*(4), 991-1001.

Introduction

The management team of Deposit-Taking Savings and Credit Co-operative Societies (DT-SACCOs) is made up of employees and need not necessarily be shareholders of the organization. The shareholders may not have the capacity to supervise the operations of the organizations directly. They elect the board of directors which is mandated to ensure shareholder welfare in making financial decisions (Olando, 2012). SACCOs tend to attract more customers than firms offering related services because of the kind of environment offered to clients. Equally, SACCOs have become very instrumental in empowering low-income earners as they promote small savings and loan systems (Bwana & Mwakujonga, 2013). According to Olando (2012), SACCOs have become very instrumental in empowering communities on financial matters because of the financial performance strategies including low administrative costs and relatively wider pool of funds among deposit-taking SACCOs.

The modern concept of SACCO development can be dated back to 1844 with the Rockdale Society of Equitable Pioneers in Manchester, England. Over the years, several SACCOs have been developed around the world to fulfill the mission of economic empowerment in remote areas (Gatuguta, Kimotho & Kiptoo, 2014). Mathuva (2016) states that the cooperative movement has since spread across the world, with Africa being the last to join the queue from the immediate post-colonial times of the 1960s (Motompa, 2016). According to Motompa (2016), Father John Mcnulty formed the first SACCO in Africa in 1959 to help the rural farmers in Ghana to improve their economic conditions. The SACCO movement later became popular among the English-speaking African countries with Uganda, Nigeria, Tanzania, and Kenya joining the movement in the 1970s. As at 2010, the cooperative movement had been started in at least 28 countries in Africa (Motompa, 2016).

In Kenya, SACCOs movements have existed since 1908. The cooperative movement has spread so fast that as at the end of 2017, the number of registered SACCOs had grown to at least 5,000 cooperative societies (Motompa, 2016). The emergence of devolved system of governance further led to managerial devolution in the regional influence of the SACCOs. As at December 2018, SASRA reported 174 SACCOs registered as DT-SACCOs, evaluating their financial performance as a core competence aspect of economic development in the country. In Nairobi County alone, the regulating authority records have 42 DT-SACCOs registered to undertake deposit-taking transactions as at the end of financial year 2018. Such trend in numbers indicates how important SACCOs have become in the modern society (SASRA, 2019). Ideally, SACCOs should operate on the core ethical principles that consider the welfare of all. At the same time, the firms have to adhere to the core cooperative values of transparency, self-reliance and responsibility, equity, democracy, mutualism, etc. (SASRA, 2019).

The SACCOs have been recognized globally as a major contributing factor in vibrant economic growth as well as social empowerment because they avail finances to the poor people in the communities through savings and credit (Barus, 2018). Wanyama (2013) estimates that at least 70% of the African population including children belong to a cooperative society. To underscore the importance of DT-SACCOs in provision of financial services, SASRA (2019) gives a comparison on some performance parameters between DT-SACCOs, commercial banks, and microfinance banks between 2016 and 2018. While the networks of DT-SACCOs are increasing in terms of number of branches, the branch networks of commercial banks are showing a gradual decline. The lesser interest on loans and better interest offered on deposits as compared to commercial and microfinance banks are perhaps the reasons why DT-SACCOs have seen growth in their networks while the other institutions show a decline (Ochung, 2013).

In Nigeria, Ujunwa (2012) indicates that ethnic diversity in boards of directors could lead to better corporate governance which leads to more profitable business. In Nairobi County Kenya, board diversity positively and insignificantly relates with SACCO performance. Omwenga (2017) noted that board diversity has positive insignificant effect on financial performance of large tier SACCOs in Kenya.

The return on assets and return on equity are the main indicators of performance. SASRA uses loans, membership, assets, capital reserves, and deposits as the main parameters in monitoring performance increase of DT-SACCOs in the country. The report (SASRA, 2019) indicates a huge growth trend with combined total assets held by DT-SACCOs valued at Kshs 495.2 billion, 11.97% growth rate from the previous year. However, some DT-SACCOs have faced punitive measures such as de-registration or having limited licenses due to failure to reach the asset threshold (SASRA, 2019).

Statement of the Problem

The DT-SACCOs have proved to be important in the development and growth of both individuals and economies. Since the enactment of SASRA in 2010, the DT-SACCOs have realized a vibrant culture of small-scale savings and loaning among local people in the country. The overall financial performance of DT-SACCOs in Kenya has not been impressive despite the contribution that these financial institutions make to the economy. Between 2014 and 2018, there was general decline in return on assets and return on equity of DT-SACCOs. The average return on assets was 2.51% in 2014 and 2.25% in 2018. The average return on equity was 33.09% in 2014 and 21.89% in 2018 as shown in Figure 1.1 (SASRA, 2019).

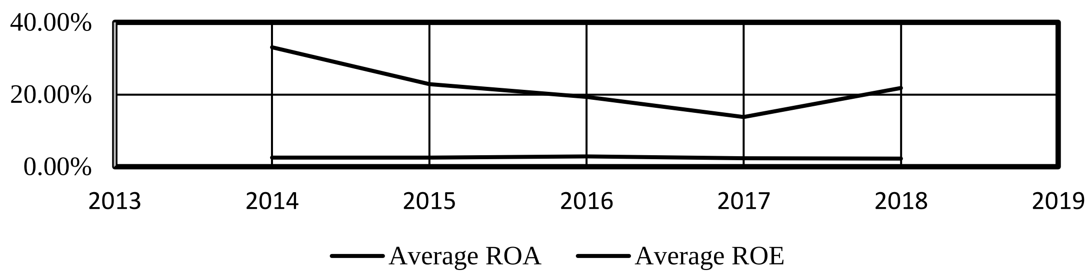

Figure 1: Trend for ROA and ROE for DT-SACCOs between 2014 and 2018
Source: Author's compilation

As at 2015, Kenya had a total of 181 registered DT-SACCOs out of which five DT-SACCOs as opposed to three recorded in 2014 had their licences revoked for failing to comply with the minimum licensing requirements (SASRA, 2015). In 2016, out of the 177 registered DT-SACCOs, 2 licences were revoked. By the year, 2018, only 166 had their licences intact. These trends in performance reports from SASRA de-registering and restricting licences of certain SACCOs indicate that there was need to understand what makes the differences in organizational management.

The global market is continuously embracing the idea of diversity in corporate leadership across all sectors. Mwendia (2018) noted that ethnic diversity positively and insignificantly correlates with return on assets, and the effect on ROA is also positive but insignificant. The study did not focus on return on equity as done by the current study. Moreover, earnings before interest and tax, and not earnings after interest and tax, was used in computation of return on assets. The researcher also collected secondary data from 2012 to 2016 as opposed to the current study that collected data from 2014 to 2018. Phan (2016) noted that academic qualifications attained by members of the board of directors has no significant correlation with ROA. However, the study was not done in Kenyan DT-SACCOs and did not focus on return on equity. The empirical studies reviewed show methodological gaps in terms of measurement of financial performance and also knowledge gaps in terms of the context within which studies were conducted. To bridge these gaps, the study determined the effect of board diversity on financial performance of DT-SACCOs in Nairobi City County.

Objective

To determine the effect of ethnic diversity of board members on financial performance of DT-SACCOs in Nairobi County, Kenya.

Hypothesis Testing

Ethnic diversity of board members does not have significant effect on financial performance of

DT-SACCOs in Nairobi County, Kenya.

Literature Review

Theoretical Review

Relevant theories to the research are reviewed in this section. In the contexts of board roles in corporate governance and financial performance, there are several theories to consider. For this task, the researcher focused on the following theories: Agency theory, stakeholder theory and resource dependence theory as discussed in the subsequent sections.

Agency Theory

Ross and Mitnick, in 1973, proposed this theory which seeks to understand some of the problems emerging when management acts on behalf of the owner. Agency theory principally argues that because of divergent views and interests of shareholders and the management, there is need for costs of agency such as contract specifications and managerial monitoring to ensure realization of corporate goals (Jensen & Meckling, 1976). Hence, trusting managers, the agent, is not optimal as per this theory (Mitnick, 2015). While Ross was responsible for the economic theory, Mitnick is associated with the institutional theory, although the two approaches to the theory are anchored on the same principles. The agency theory stems from concerns raised by Adam Smith in 1776 that professional managers handling money other than their own were being negligent. It assumes that there is always a cost attached to any kind of decision in the corporate governance of the firms. This idea is based on the concept that the owner and the manager are different hence conflicts of interest may arise (Mitnick, 2015).

Consequently, this theory tends to examine performance implications of corporate governance based on the cost associated to leadership and decision-making skills (Jensen & Meckling, 1976; Mitnick, 2015). Directors are elected to run the affairs of DT-SACCOs on behalf of members and therefore, they essentially play the role of an agent while the members are the principal. Some of the decisions made by the directors involve external players such as suppliers and lenders. A study by Kumburu, Pande & Buberwa (2012) in Moshi Municipality noted that 36.1% of variance in the SACCOs' performance could be explained by the management (boards)'s decision to borrow funds from external lenders. This study clearly explains how choices made by the board can affect the performance of SACCOs, and if these choices are made based on biased considerations, the SACCOs can suffer severe losses. The theory is relevant to the objectives of determining the consequences of ethnic diversity of board on financial performance of DT-SACCOs.

Resource Dependency Theory

The theorists, Pfeffer and Salancik's (1978) argue that understanding the organization requires comprehension of its ecology. This framework includes the arguments on the influence of environmental factors, which include both the external and internal aspects and how they affect the performance of the organization. One such concern is on the influence of power expressed by managers and how they can act to help to reduce uncertainties in the environment. Therefore, it is arguable that the financial performance of DT-SACCOs relies on the capacities of the board members as they express their power in the industry (Hillman, Withers & Collins, 2009). Scholars have followed Pfeffer arguments in studies related to board of directors. The theorists opine that the boards are vital in helping the firm to gain resources and/or reduce dependence. Nonetheless, the agency theorists explicitly explore how board of directors can influence organizational performances and sustainable development. Thus, the framework looks into board size and composition as the major diversity indicators. Consequently, the fundamental beliefs in this theory can help us to understand how ethnic diversity affects financial performance of SACCOs.

Stakeholder Theory
Ian Mitroff's (1983) theory provides ground to study the link between performance, diversity of boards and inclusiveness that entails the aspects of these relationships that are qualitative (Jones, Wicks & Freeman, 2017). The theory focuses on the nature and features of groups that constitute the relevant stakeholders for an organization. Having a governance approach that takes into account stakeholders is important in partnerships between private and public sector and arrangement on delivering services collaboratively as it emphasizes a systems approach for representation of multi-stakeholder interests (Freeman et al., 2010).

Conceptually, the theories of dependence on resource and the stakeholder theory are similar as regards the understanding, which is common on strategic leadership value. However, the point of difference is the argument that members of the board representing various stakeholders serve both the organizational and constituent groups' interests. The point of interest is if organizations enhance their performance through collaboration involving stakeholders in governing the entity (Freeman et al., 2010). This theory aids to understand how ethnic diversity of board members affect financial performance of SACCOs of interest in the study.

Empirical Review
Mwendia (2018) noted that ethnic diversity members, positively and insignificantly correlates with ROA. It was noted that boards ethnic diversity, positively and insignificantly affects return on assets. The study did not focus on return on equity as done by the current study. Moreover, earnings before interest and tax, and not earnings after interest and tax, was used in computation of return on assets. The researcher also collected secondary data from 2012 to 2016 as opposed to the current study that collected data from 2014 to 2018.

Ogboi, Opemipo and Enilolobo (2018) studied corporate board diversity and performance of deposit money banks in Nigeria. It was revealed that the contribution of ethnic diversity has negative but statistically insignificant effect on ROA but its effect on market performance is positive and significant. However, the study was not in Kenyan DT-SACCOs hence contextual differences. In Kilifi County's SACCOs, it was noted that boards were not adequately diverse and the composition of the board positively influences performance. However, the study was not done in Nairobi City County hence contextual differences in findings.

Conceptual Framework
A conceptual framework diagrammatically shows relationship between study variables. The independent variable was ethnic diversity. The dependent variable was financial performance of DT-SACCOs while the moderating variable was SASRA regulations as shown in Figure 2.

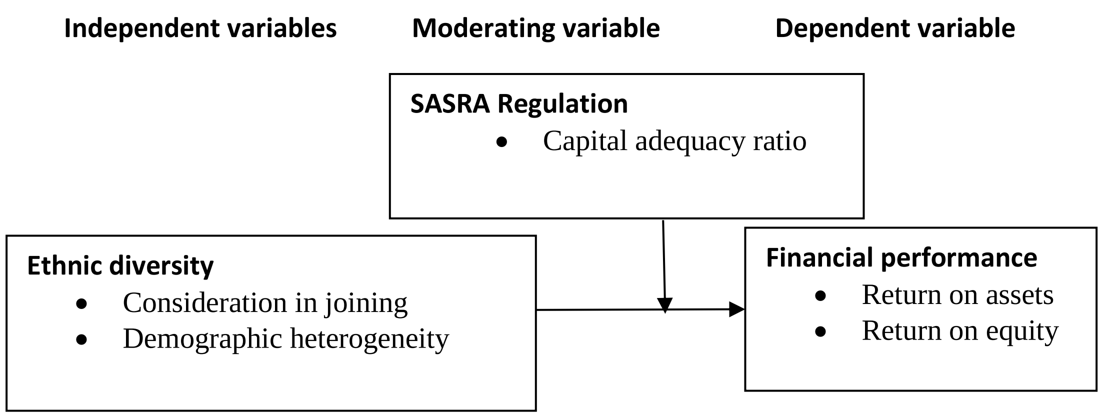

Figure 2: Conceptual Framework on Board Diversity and Financial Performance
Source: Author's compilation

Research Methodology

Research Philosophy

Research philosophy gives a brief description of how data is collected, analyzed and used besides the reasons for choice (Hughes & Sharrock, 2016). The researcher employed a positivist philosophy to determine and interpret the correlation between the financial performance and diversity in the society among the selected DT-SACCOs in Nairobi County. The philosophy aims at ensuring that there is a generalization of correlating factors because the actions are bound to real causes that are superior to just behavior. Thus, positivism was adopted owing to the research problem at hand (Shah & Al-Bargi, 2013; Kivunja & Kuyini, 2017; Searle, 2015).

Research Design

The explanatory and correlational designs were considered appropriate. Explanatory research is conducted when there is need to establish the magnitude to which changes in one variable are reflected in changes in another variable. In this study, the correlation between board's diversity and financial performance of DT-SACCOs was explained (Creswell, 2008). In correlational research, variables can either be linearly correlated, non-linearly correlated, or uncorrelated. On the other hand, the degree of a correlational relationship, if it exists, may be perfect, strong or weak. This research design has been adopted by scholars such as Mathuva (2016) and Kahuthu (2016).

Model Specification

The study hypotheses were tested using multiple regression analysis. The study adopted the following multiple regression models to examine the effect of the independent variables on the dependent variable.

$Y_1 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \acute{\varepsilon}$……………………… Equation 3.1

$Y_2 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \acute{\varepsilon}$………………………. Equation 3.2

Where:

Y_1 is the dependent variable, return on assets

Y_2 is the dependent variable, return on equity

X_1, X_2, X_3 and X_4 represent level of education, ethnic diversity, gender diversity and professional skill mix of board members respectively

α is constant

β_1, β_2, β_3, β_4 and β_5 represent regression coefficients for level of education, ethnic diversity, gender diversity and professional skill mix respectively

$\acute{\varepsilon}$ = error term.

Target Population

The study focused on board members of DT-SACCO. Geographically, the study covered Nairobi County and covered all the registered DT-SACCOs in the geographic region of interest. The target population was all 42 registered DT-SACCOs in Nairobi County (SASRA, 2018). The respondents were the CEOs who were the units of observation. The data collected included details of all the board members who have served in the DT-SACCO from 2014.

Sampling Technique and Sample Determination

Census survey was adopted to collect information from all the identified DT-SACCOs in Nairobi County. The target respondents were the Chief Executive Officers of the DT-SACCOs, representing the boards. Since the CEO's office is the central office with all official documents, the CEOs were the only respondents that data was collected from (Mugenda & Mugenda, 2013).

Data Collection Instruments

Primary data on level of education, ethnic diversity, gender diversity, professional skill mix of board members and financial performance of DT-SACCOs was collected using semi-structured questionnaires. The questionnaire was appropriate because they allow responds to answer questions willingly (Mugenda & Mugenda, 2013). The secondary data on financial performance for the last five years from 2014 to 2018 was collected from annual financial report records as well as electronic platforms like SASRA website (SASRA, 2019; Mugenda & Mugenda, 2013).

Pilot Study

7 SACCOs in Nairobi County were involved in pilot study, and were not involved in final study. Cooper and Schindler (2011) assert that at least 10% of study population should be involved in pilot study.

Validity Test

The researcher consulted the supervisors for expert opinion on the content validity of the research questionnaire before undertaking the final study (Mugenda & Mugenda, 2013).

Reliability Tests

The Cronbach's alpha coefficient (CAC) test results are revealed in Table 3.1.

Table 1: Reliability of the Research Questionnaire

Constructs	CAC	Test Items
Ethnic diversity of board members	0.774	4
Financial performance	0.843	6

Source: Author's compilation

The results indicated that ethnic diversity of board members had a CAC of 0.774 with 4 test items. Financial performance had a CAC of 0.843 with 6 test items. This implies that the research questionnaire was reliable as all the four variables had CAC greater than 0.7 (Heale & Twycross, 2015).

Data Analysis

Descriptive statistics was computed in terms of frequencies, percentages, means and standard deviations. Correlation and multiple regression analysis were also conducted. Data presentation was done using tables, graphs and charts.

Results and Findings

Descriptive Analysis

Descriptive analysis was based on ethnic diversity. The findings indicate that 45 directors from 20 (64.5%) SACCOs came from Central province. 33 directors from 15 (48.5%) SACCOs came from Nyanza province. 37 directors from 19 (61.3%) SACCOs came from Western province. 4 directors from 4 (12.9%) SACCOs came from Coast province. 31 directors from 20 (64.5%) SACCOs came from Rift Valley province. 64 directors from 12 (38.7%) SACCOs came from Nairobi province. 18 directors from 15 (48.4%) SACCOs came from Eastern province. 1 director from 1 (3.2%) SACCO came from North Eastern province.

The opinion of respondents on extent of adoption of ethnic diversity of board members was examined. The study determined that to a moderate extent, regional balance is a key consideration in board membership in the DT-SACCO (mean = 2.55; STD = 1.234). It was noted that ethnic diversity enhances greater creativity, innovativeness and quality decision making hence financial performance to a moderate extent (mean = 3.00; STD = 1.342). It was found out that to a moderate extent, ethnic diversity does not affect the financial performance of DT-SACCO (mean = 3.23; STD = 1.283). It was determined that the presence of the demographic heterogeneity at top management level tends to increase firm performance to a moderate extent (mean = 3.42; STD = 1.119). These findings tend to disagree with the findings in a study by of

Ujunwa (2012) which noted that a diversity of board of directors on the basis of their regional diversity could eventually result to good financial performance.

Further results with regard to financial performance show that there was agreement to a great extent that the interest on deposits has been varying, either reducing or increasing, over the years (mean = 3.74; STD = 1.237). It was generally agreed to a great extent that the return on dividends was varying, either reducing or increasing, over the years (mean = 3.58; STD = 1.385). It was established that there was general agreement to a moderate extent that gender diversity in leadership affect the financial performance of the DT-SACCOs (mean = 2.68; STD = 1.166). There was agreement to a moderate extent that the level of education of the board members has been a major factor in determining the financial performance results over year (mean = 3.42; STD = 1.148). There was agreement to a little extent that ethnic diversity in the board composition tend to affect the return on assets and investment of the firm (mean = 2.19; STD = 1.223). There was agreement to a great extent that the professional skill mix is very important in shaping the outcome of each financial venture in the DT-SACCO (mean = 4.39; STD = 0.715).

Inferential Analysis

Multiple regression analysis was conducted in order to examine the effect of ethnic diversity and financial performance of SACCOs in Nairobi County. The study conducted the t-test to ascertain the statistical significance of the regression coefficient of each independent variable. The results of test of the statistical significance of each independent variable are shown in Table 4.1.

Table 2: Individual Regression Coefficients for Return on assets

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
Ethnic diversity of board members	-.158	.309	-.097	-.510	.615

Source: Author's compilation

The results showed that ethnic diversity in board membership insignificantly predicted the return on assets of SACCOs in Nairobi County ($\beta 2 = -.158$; $t = -0.510$; $p > 0.05$). This contradicts results of Cho et a. (2017) who argue that workforce diversity is crucial and affects the performance of the organization positively. These findings tend to disagree with those of Ujunwa (2012) which noted that a geographically diverse board could eventually result to good financial performance. Ujunwa (2012) carried out research in quoted firms in Nigeria which include other firms apart from SACCOs and hence the research contexts are not the same.

The study also conducted the t-test to ascertain the statistical significance of the regression coefficient of each independent variable. The results of test of the statistical significance of each independent variable are presented in Table 4.2.

Table 3: Individual Regression Coefficients for Return on Equity

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
Ethnic diversity of board members	-.800	2.183	-.070	-.366	.717

Source: Author's compilation

It was determined that ethnic diversity of board members insignificantly predicts return on equity of SACCOs in Nairobi County ($\beta 2 = -.800$; $t = -.366$; $p > 0.05$; $p > 0.05$). The implication is that ethnic diversity of board members and return on equity of SACCOs in Nairobi County are negatively and significantly related. The findings contradict those of Cho et a. (2017) who argue that workforce diversity is crucial and affects the performance of the organization positively. These findings tend to disagree with those of Ujunwa (2012) which noted that a geographically diverse board could eventually result to good financial performance. Ujunwa (2012) carried out research in quoted firms in Nigeria which include other firms apart from SACCOs and hence the research contexts are not the same.

Conclusions and Recommendations

Conclusions

Ethnic diversity negatively affects return on assets of DT-SACCOs in Nairobi County. There is a moderate effect of regional balance on financial performance of DT-SACCOs.

Recommendations

The study recommendation for policy is in training programs for directors to acquire necessary capacity for board of management. For practice, the study recommends that directors and management of DT-SACCOs should be empowered to advise members on achieving ethnic balance. Future researches should focus more on non-regulatory factors such as internal controls in operations and best practices in financial management.

References

Barus, J. J. (2018). *Effect of internal factors on financial performance of deposit taking savings and credit societies in Kenya* (Doctoral dissertation). JKUAT-COHRED

Bijman, J., *et, al*. (2012). *Support for farmers' cooperatives.* Retrieved November 10, 2021, from https://library.wur.nl/WebQuery/wurpubs/fulltext/245008.

Bwana, K. M. & Mwakujonga, J. (2013). Issues in SACCO's development in Kenya and Tanzania: The historical and development perspectives. *Developing Country Studies, 3*(5), 114-121.

Creswell, J. W. (2008). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research (3rd Ed.).* Upper Saddle River, NJ: Pearson Education, Inc.

Garson, G.D. (2012). *Testing statistical assumptions*. Retrieved from http://www.statisticalassociates.com/assumptions.pdf.

Gweyi, M. O., & Karanja, J. (2014). Effect of financial leverage on financial performance of deposit taking savings and credit co-operative in Kenya. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 4*(2), 180-188.

Hayes, A.F. (2018). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach* (2nd ed.). New York, London: The Guilford Press.

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based Nursing, 18*(3), 66-67.

Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management, 35*(6), 1404-1427.

Hughes, J. A., & Sharrock, W. W. (2016). The Philosophy of Social Research. *Routledge*.

Jensen, M.C., & Meckling, W.H. (1976) Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics,* 3, 305-360.

Johl, S. K., Kaur, S., & Cooper. (2015). Board characteristics and firm performance: Evidence from Malaysian public listed firms. *Journal of Economics, Business and Management, 3,* 239-243.

Jones, T. M., Wicks, A. C., & Freeman, R. E. (2017). Stakeholder theory: The state of the art. *The Blackwell Guide to Business Ethics*, 17-37.

Kahuthu, D. G. (2016). *Impact of prudential regulation on financial performance of deposit taking savings and credit cooperative societies in Kenya* (Doctoral dissertation,

COHRED), JKUAT.

Kivunja, C., & Kuyini, A.B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education, 6*(5), 26-41.

Kumburu, N.P., Pande, V. & Buberwa, E. (2012). Agency Theory and Performance of Savings and Credit Co-operative Societies (SACCOS) in Kilimanjaro Region: The Case of Selected SACCOS in Moshi Municipality. *Moshi Cooperative University*.

Langevoort, D. C. (2016). Puzzles about Corporate Boards and Board Diversity. *North Carolina Law Review, 89*(4), 841 - 53.

Mathuva, D. M. (2016). Drivers of financial and social disclosure by savings and credit cooperatives in Kenya: A managerial perspective. Journal of Co-operative Organization and Management, 4(2), 85-96.

Mitnick, B. M. (2015). Agency theory. *Wiley Encyclopedia of Management*, 1-6.

Mokua, V.O. (2015). Factors influencing financial performance of deposit-taking savings and credit co-operative societies in Kisii County, Kenya. *University of Nairobi*.

Motompa, D.K. (2016). *Factors influencing growth of saving and credit cooperative societies in Kenya: A case study of Kajiado East Sub- County* (Dissertation). Management University of Africa, Kenya.

Mugenda, O M., & Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches.* Nairobi, Kenya: Acts Press.

Munisi, G. H., & Mersland, R. (2016). Ownership, board compensation and company performance in sub-Saharan African countries. *Journal of Emerging Market Finance, 15*(2), 191-224.

Mwendia, R.M. (2018). *Corporate governance practices and financial performance on deposit-taking savings and credit co-operatives in Nairobi City County, Kenya* (Masters project). Kenyatta University, Nairobi, Kenya.

NCSS Limited Liability Company. (2016). *Chapter 305: Multiple regression*. Retrieved November 09, 2021, from https://ncss-wpengine.netdna-ssl.com/wp-content/themes/ncss/pdf/Procedures/NCSS/Multiple_Regression.pdf

Odero, J.A., & Egessa, R. (2021). Towards realization of board gender diversity in deposit taking SACCOs in Kenya: A critical review and synthesis. *International Journal of Science and Management Studies (IJSMS), 4*(5), 172-182.

Ogboi, C., Opemipo, A.V., & Enilolobo, O.S. (2018). Corporate board diversity and performance of deposit money banks in Nigeria. *International Journal of Humanities and Social Science, 8*(1), 112-120.

Olando, C. O. (2012). An Assessment of financial practice as a determinant of growth of Savings and Credit Co-operative Societies wealth in Kenya: The case of Meru County. Nairobi, Kenya. *Kenyatta University*.

Omwenga, J.O. (2017). *Effect of corporate governance on financial performance of large tier Savings and Credit Cooperatives in Kenya* (Master's project). University of Nairobi, Nairobi, Kenya.

Pfeffer, J., & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective*. New York, USA: Harper and Row.

Sacco Societies Regulatory Authority-SASRA (2018). *The SACCO supervision annual report 2017*. Nairobi, Kenya.

Sacco Societies Regulatory Authority-SASRA (2019). *The SACCO supervision annual report 2018*. Nairobi, Kenya.

Shah, S.R., & Al-Bargi, A. (2013). Research paradigms: Researchers' worldviews, theoretical frameworks and study designs. *Arab World English Journal, 4*(4), 252 -264.

Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. Corporate Governance: *The international journal of business in society, 12*(5), 656-674.

Wambui, K. (2018). Influence of board diversity on the financial performance of commercial banks in Kenya. *Strathmore Business School*, Strathmore University, Kenya.

Wangui, G.K. (2019). Influence of corporate governance on performance of SACCOs in Nairobi County (Master's project). United States International University – Africa, Nairobi, Kenya.

Wanyama, F.O. (2013). Cooperatives for African development: Lessons from experience. *School of Development and Strategic Studies*, Maseno University, Kenya.