

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

Owalo Maurice Otieno

Email: owalomaurice@gmail.com
Student, Kenyatta University, Kenya

Dr. Frederick Ndede

Email: NDEDE.FREDRICK@ku.ac.ke
Lecturer, Kenyatta University, Kenya

Mr. Gerald Atheru

Email: ATHERU.GERALD@ku.ac.ke
Lecturer, Kenyatta University, Kenya

Abstract

Between 2014 and 2018, there was general decline in return on assets and return on equity of Deposit-Taking Savings and Credit Cooperative Societies. 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 specifically examined the effect of gender diversity on financial performance of Deposit-Taking Savings and Credit Cooperative Societies in Nairobi City County, Kenya. The study established that gender diversity insignificantly predicts return on assets ($\beta_3 = 0.456$; $p > 0.05$) and significantly predicts return on equity ($\beta_3 = 7.534$; $p < 0.1$). It was also concluded that gender diversity of board members positively and significantly affects return on equity. It is recommended that gender diversity of board members should be increased to ensure balanced participation of all genders in Savings and Credit Cooperative Societies management.

Keywords: Gender diversity, return on assets, return on equity

1. Introduction

1.1 Background of the Study

The board of directors (BOD) is mandated to ensure shareholders' welfare in making financial decisions (Olando, 2012). Bwana and Mwakujonga (2013) define Savings and Credit Co-operative Societies (SACCOs) as self-directed associations of voluntary individuals who seek to lift their economic strength in democratic cooperatives. Thus SACCOs, normally initiated locally, 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. In essence, they have the potential of reaching out to poverty-stricken rural areas which are unattractive to banks through mobilization of savings (Olando, 2012).

1.1.1 Gender Diversity of Board Members

In the recent past, firms have shown willingness to broaden the presence of women on the board. Despite this, their presence has remained minimal and in some cases, there was not found a woman director. For instance, firms headquartered in Germany, France, Singapore, Spain, Japan and the United Kingdom had witnessed 10 percent women on the board (Theune & Behr, 2016). In the European Union, Theune and Behr (2016) said there were minimal differences between firms dominated by males and those dominated by females. However, they saw firms led by females were generally smaller in size and had minimal risks as opposed to those firms led by male. Abdullah, Ismail and Nachum (2016) advocated for more females on the board as their presence caused firms to improve financial performance, whereas Johl, Kaur and Cooper (2015) argued that board gender diversity had negatively influenced the financial performance of Malaysian firms. However, in the Netherlands and Denmark, Marinova, Plantenga and Remery (2010), opined that board gender diversity did not influence the financial performance of a firm.

Ntim (2015), supported more female directors in the board as their presence enhanced board independence, decision-making and monitoring of top management which curtailed malpractices resulting to improved financial performance of listed firms in the Johannesburg Stock Exchange. Ntim (2015), went further to state that females on the board facilitated better linkage of a firm to its stakeholders thereby minimizing the conflicts resulting in improved financial performance. Akpan and Amran (2014), encouraged a greater proportion of women in the board as the current scenario was only window dressing and therefore could not bear noticeable gain. This meant that the more females on the board, the better financial results reported.

Zenger & Folkman (2012), reported that women could make better corporate leaders as compared to men, yet only 36% of the corporate leaders are women. The report suggests that women have “nurturing” tendencies, and they help in developing others while encouraging integrity in their day-to-day operations. In a study done among corporates in Malaysia, Julizaermaand Sori (2012) noted that women directors have managerial skills in areas such as public relations, communication, human resources, and legal matters. Despite studies indicating women to be more gifted than men in some selected areas, the representation of women in corporate leadership including boards is still very low thus denying the corporates the benefit of these competencies (Julizaerma& Sori, 2012).

In Kenya, Odero and Egessa (2021) noted that a board that is diverse in terms of gender, reports improved performance of organizations. Moreover, it is a legal requirement in Kenya that board be diverse such that male and female genders are all represented in making governance decisions, managing risk and thinking innovatively (Odero&Egessa, 2021). Kenaniand Bett (2018) also indicate that gender dynamics have substantial influence on cooperate governance among the cooperate societies at different levels. The study identifies these dynamism aspects to include emotional factors in decision-making, conflict of interest among different gender sets, public image and manipulation concerns, as well as other stewardship capacities. SASRA regulations and the legal framework of Kenya consider gender equity and representation as key in management and leadership even in the political landscape. However, they do not state minimum proportion of either gender that should be elected in the board of directors of a corporate institution (Kenani& Bett, 2018).

1.1.2 Financial Performance of DT-SACCOs

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. Loans grew at a rate of 12% reaching Kshs 359 billion while deposits grew by 12% recording Kshs 341.9 billion. Despite this rosy report, 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).

1.2 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. However, 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 Appendix I (SASRA, 2019).

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 have 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 gender diversity of board members on financial performance of DT-SACCOs in Nairobi City County.

1.3 Objective of the Study

To examine the effects of gender diversity of board members on financial performance of DT-SACCOs in Nairobi City County, Kenya.

1.4 Hypotheses

Gender diversity does not bear significant effects on the financial performance of DT-SACCOs in Nairobi City County, Kenya.

2. LITERATURE REVIEW

2.1 Introduction

This chapter contained a summary of theories applicable for the study as well as their relevance in financial performances of DT-SACCOs. Moreover, it gives review previous studies that helped in establishing a potential research gap for this study. Review of methodologies used in previous and relevant studies helped in enhancing relevance and validity of this document.

2.2 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 and resource dependence theory as discussed in the subsequent sections.

2.2.1 Agency Theory

Ross and Mitnick (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's (board'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 gender diversity of board on financial performance of DT-SACCOs.

2.2.2 Resource Dependency Theory

The theorists, Pfeffer and Salancik (1978) argue that understanding the organization requires comprehension of its ecology. According to Hillman, et al., (2009), 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.

Scholars have followed Pfeffer's 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 gender diversity of board members affects financial performance of SACCOs.

2.3 Empirical Review

Mandala, Kaijage, Aduda and Iraya (2017) noted that diversity in gender of board does not significantly affect performance. Kenani and Bett (2018) noted that gender diversity positively and significantly affects SACCO performance. However, the study did not collect secondary data on financial performance. Mwangi and Kimunguyi (2018) found out that diversity in board's gender enhances speed of decision making and significantly relates with financial performance of Kenya's microfinance institutions. However, the study was not done in Kenyan DT-SACCOs.

Mwendia (2018) noted a positive and insignificant correlation between diversity in gender and financial performance in Nairobi's SACCOs. It was noted that gender diversity has positive and insignificant effect on 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, were 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.

Oludele, Oloko and Olweny (2016) examined the effect that gender diversity has on 34 Nigerian listed manufacturing firms' performance for the period 2006 to 2015. It was noted that a board that is diverse in terms of gender reports significant improvement in financial performance. It was established that board gender diversity explains 4.3% of variance in ROA. However, the study was not done in Kenyan DT-SACCOs and did not focus on return on equity.

In Netherlands, Van Diepen (2015) noted that diversity in gender does not significantly affect performance. However, the study findings may not be applicable in Kenyan context of DT-SACCOs. In listed firms at Kenya's NSE, gender diversity does not significantly affect ROA and Tobin's Q. However, this Kenyan study was not done specifically in DT-SACCOs. Mutuku (2016) established that gender diversity positively and significantly affects SACCO's financial performance in Machakos and Athi River, though the effect is weak. However, there exist contextual differences as the current study focuses on SACCOs in Nairobi City County.

2.4 Conceptual Framework

A conceptual framework diagrammatically shows relationship between study variables. The independent variable was gender diversity. The dependent variable was financial performance of DT-SACCOs as shown in Appendix II.

3. METHODS

3.1 Introduction

This chapter outlines design to be adopted, philosophy of the research, the empirical model to be applied, variable operationalization, the target population and nature of the targeted data, instruments used to collect data and procedures used, and data presentation and analysis researcher employed.

3.2 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 City County (Searle, 2015). This approach enabled a controlled and structured approach as indicated in the identification of the research topic and hypothesis to help identify the correlation of the variables at stake (Kivunja & Kuyini, 2017).

3.3 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).

3.4 Model Specification

The study assumed that board diversity does not have great effect on financial performance of the selected SACCOs as the main hypothesis for the study. Therefore, the hypotheses were tested using multiple regression models. The study adopted the following multiple regression models to examine the effect of the independent variables on the dependent variable without the moderator.

$$Y1 = \alpha + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \beta_4 X4 + \epsilon \dots \dots \dots \text{Equation 3.1}$$

$$Y2 = \alpha + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \beta_4 X4 + \epsilon \dots \dots \dots \text{Equation 3.2}$$

Where: Y1 is the dependent variable, return on assets; Y2 is the dependent variable, return on equity; X1, X2, X3 and X4 represent level of education, ethnic diversity, gender diversity and professional skill mix of board members respectively; α is constant; $\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 represent regression coefficients for level of education, ethnic diversity, gender diversity and professional skill mix respectively; and ϵ = error term.

3.5 Target Population

The study focused on board members of DT-SACCOs. Geographically, the study covered Nairobi City 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 City 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-SACCOs from 2014 to 2018. The dependent variables were obtained from the SACCOs' financial statements filed with the DT-SACCOs regulator, SASRA. Apart from the board diversity variables, the data on the SACCOs' net income, dividends paid and interest paid on members' deposits was collected.

3.6 Sampling Technique and Sample Determination

The technique adopted for data collection was census. Census survey was adopted to collect information from all the identified DT-SACCOs in Nairobi City 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).

3.7 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 a semi-structured questionnaire. Likert scale was used to rate opinions of respondents. The questionnaire was appropriate because they allow respondents 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. The DT-SACCOs financial reports published were used (SASRA, 2019; Mugenda & Mugenda, 2013).

3.8 Pilot Study

Research instrument pre-testing was done to confirm methodological feasibility. 7 SACCOs in Nairobi City 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.

3.8.1 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).

3.8.2 Reliability Tests

The Cronbach's alpha coefficient (CAC) determined reliability. A reliable questionnaire has a CAC of at least 0.7 (Heale & Twycross, 2015). The CAC test results are revealed in Appendix III. The results indicated that gender diversity of board members had a CAC of 0.769 with 5 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.

3.9 Data Analysis

Editing and organization of data was done to ensure relevancy, standardization and completeness in readiness for 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. Essentially, these help in drawing of valid conclusions and recommendations based on the data.

4. RESEARCH FINDINGS

4.1 Introduction

In this chapter, descriptive analysis and inferential analysis results are outlined.

4.2 Descriptive Analysis

4.2.1 Gender Diversity of Board Members

The study examined the distribution of the board members in the DT-SACCOs according to gender. The findings reveal that 31 (100.0%) SACCOs had 220 male directors. 31 (100.0%) SACCOs had 72 female directors.

The views of respondents on the extent to which SACCOs employ gender balance as a strategy of board diversity was examined. The study found out that the selection of the board members always ensures gender balance to a moderate extent (mean = 2.68; STD = 1.249). It was noted to a great extent, men have been the majority in the board membership over the last five years in the SACCO (mean = 4.42; STD = 0.992). It was established that to no extent, women have been the majority in the board leadership of the SACCO over the last five years (mean = 1.35; STD = 0.790). It was determined that to a little extent, women have had a better leadership results in the financial performance of the firm during the last five years (mean = 2.35; STD = 0.915). The findings reveal that 9 (29.0%) SACCOs had 8 male directors, 5 (16.1%) SACCOs had 6 male directors. It was found out that to a great extent, men have had a better leadership and financial performance in the SACCO (mean = 3.58; STD = 1.024). These findings generally disagree with those of Mandala et al. (2017) who contended that gender diversity has benefits on financial performance of corporations. They also disagree with findings by Eagly and Carli (2003) which established that women are better in decision making.

4.2.2 Financial Performance of SACCOs in Nairobi City County

The study found out 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 affects 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 the years 2014 - 2018 (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).

4.3 Regression Analysis

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 are shown in Appendix IV.

The study established that gender diversity of board members insignificantly predicts return on assets of SACCOs in Nairobi City County ($\beta_3 = 0.456$; $t = 0.765$; $p > 0.05$). This means that gender diversity of board members and ROA of SACCOs in Nairobi City County have a positive and insignificant relationship. The findings disagree with those of Ujunwa (2012) who noted that gender diversity has negative effect on performance. The reason could be due to the difference in firms under study as Ujunwa included quoted firms some of which were not DT-SACCOs. These findings generally agree with those of Mandala et al. (2017) who contended that gender diversity does not significantly influence performance of corporations.

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 are presented in Appendix V.

The study established that gender diversity of board members significantly predicts return on equity of SACCOs in Nairobi City County ($\beta_3 = 7.534$; $t = 1.790$; $p > 0.05$; $p < 0.1$). Hence, gender diversity and return on equity of SACCOs in Nairobi City County have a positive and insignificant relationship.

The findings disagree with those of Ujunwa (2012) who noted that gender diversity has negative effect on performance. The reason could be due to the difference in firms under study as Ujunwa included quoted firms some of which were not DT-SACCOs. The results agree with those of Mandala et al. (2017) who contended that gender diversity does not significantly affect corporate performance.

The results of the t-test of individual regression coefficients clearly depict that gender diversity of board members would be included in the regression equation as shown in Equation 4.2.

$$Y = 7.534\beta_3 \dots\dots\dots \text{Equation 4.2}$$

The findings indicate that enhancing gender diversity of board members by 1 unit improves return on equity of SACCOs in Nairobi City County by 7.534 units. The findings disagree with those of Ujunwa (2012) who noted that gender diversity has negative effect on performance. The reason could be due to the difference in firms under study as Ujunwa included quoted firms some of which were not DT-SACCOs.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the summary, the conclusions and recommendations are presented.

5.2 Summary of the Findings

The objective was to establish the effects of members' diversity in gender on financial performance of DT-SACCOs in Nairobi City County, Kenya. It was hypothesized that members' diversity in gender does not have significant effect on financial performance. The study finding was that gender diversity of board members positively and insignificantly affects return on assets of DT-SACCOs in Nairobi City County. Members' diversity in board positively and significantly affects return on equity.

5.3 Conclusions

It was concluded that gender diversity of board members positively and significantly affects ROE of DT-SACCOs in Nairobi City County. The effect on performance is positive and significant, hence increased gender diversity results in improved financial performance

5.4 Recommendations

To policy makers, the appropriate gender balance for organizations should be established so that there is consistent application of the principle of gender diversity as it is crucial in managerial decision making. It is recommended that members' diversity in gender should be emphasized by DT-SACCOs to ensure balanced participation of all genders in DT-SACCOs management. Future researchers should examine the effect of other factors other than diversity in board on DT-SACCOs' financial performance (R square for Model with ROA = 0.178; R square for Model with ROE = 0.159).

References

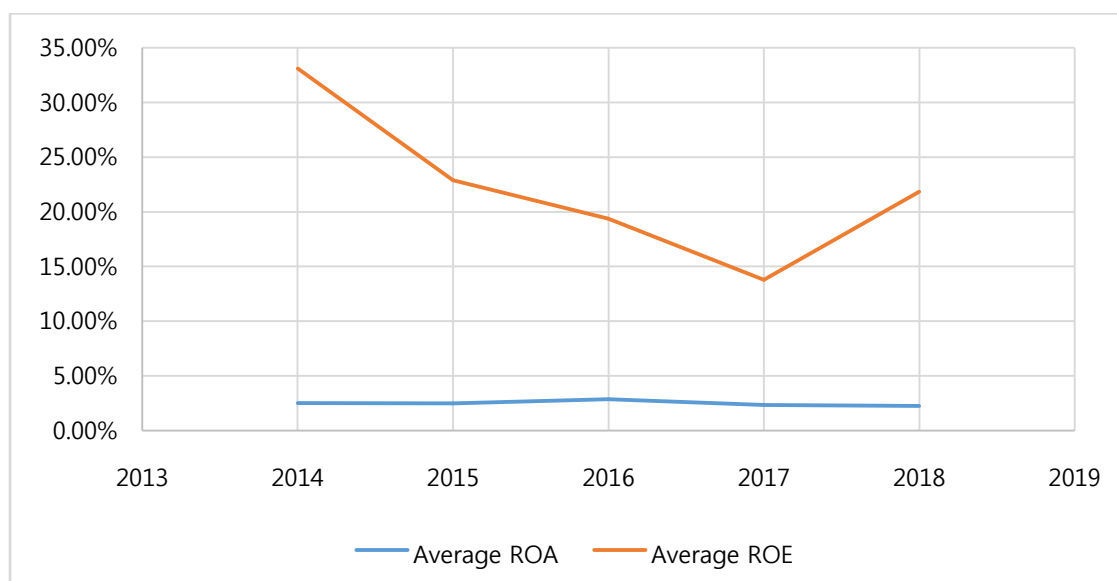
- Abdullah, S. N., Ismail, N. I., & Nachum, L. (2016). Does women on board create value? The impact of societal perceptions and corporate governance in emerging markets. *Strategic Management Journal*, 37, 466-476.
- Akpan, E. O., & Amran, N. A. (2014). Board characteristics and company performance: Evidence from Nigeria. *Journal of Finance and Accounting*, 2(3), 81-89.
- 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.
- Cooper, D. R., & Schindler, P. S. (2011). *Business research methods* (11th edition). New York: McGraw-Hill.
- Creswell, J. W. (2008). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (3rd Ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, 14(6), 807-834.

- 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(4), 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.
- Julizaerma, M. K., Sori, Z. M. (2012). Gender diversity in the boardroom and firm performance of Malaysian public listed companies. *Procedia - Social and Behavioral Sciences*, 65(3), 1077-1085.
- 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.
- Kenani, I. M. & Bett, S. (2018). Corporate governance and performance of savings and credit cooperative societies in Kisii County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(4), 101-123.
- 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.
- Mandala, N., Kaijage, E., Aduda, J., & Iraya, C. (2017). Gender diversity of boards, board composition and firm performance. *European Scientific Journal*, ESJ, 13(34), 62.
- Marinova, J., Plantenga, L., & Remery, C. (2010). Gender diversity and firm performance: Evidence from Dutch and Danish boardrooms. *The Journal of Human Resource Management*, 27(15), 1777-1790.
- 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.
- Mugenda, O M., & Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press.
- Mutuku, D.M. (2016). Effects of corporate governance on financial performance of Savings and Credit Cooperative Societies in Machakos and Athi-River Sub-Counties (Master's project). South Eastern Kenya University, Kitui, Kenya.
- Mwangi, M.D., & Kimunguyi, S. (2018). Effect of board diversity on financial performance of micro finance institutions regulated by SASRA in Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 2(1), 39 -51.
- 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.
- Ntim, C.G. (2015). Board diversity and organizational valuation: Unravelling the effect of ethnicity and gender. *Journal of Management & Governance*, 19(1), 167-195.
- 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.
- 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.
- Oludele, O.I., Oloko, M.A., & Olweny, T. (2016). The impact of board gender diversity on the financial performance of manufacturing companies in Nigeria. *International Journal of Economics, Commerce and Management*, 4(12), 591-605.
- Pfeffer, Jeffrey, and Gerald R. Salancik, 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.
- Phan, H. (2016). Board of director education and firm performance: A dynamic approach (Master's thesis). Aalto University School of Business.
- 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.
- Searle, J.R. (2015). Seeing things as they are: A theory of perception. Oxford University Press. Retrieved from <https://doi.org/10.1093/acprof:oso/9780199385157.001.0001>
- Theune, K., & Behr, A. (2016). Female firm leadership: Extent and performance in 14 EU member states.
- 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.
- Van Diepen, N. (2015). The effect of gender, age and nationality diversity on company performance-Evidence from the Netherlands. Netherlands: University of Twente.
- Zenger, J. & Folkman, J. (2012, March 15). Are women better leaders than men? *Harvard Business Review*. Retrieved from <https://hbr.org/2012/03/a-study-in-leadership-women-do>.

APPENDICES

Appendix I: Trend for ROA and ROE for DT-SACCOs between 2014 and 2018



Source: SASRA, 2019

Appendix II: Conceptual Framework

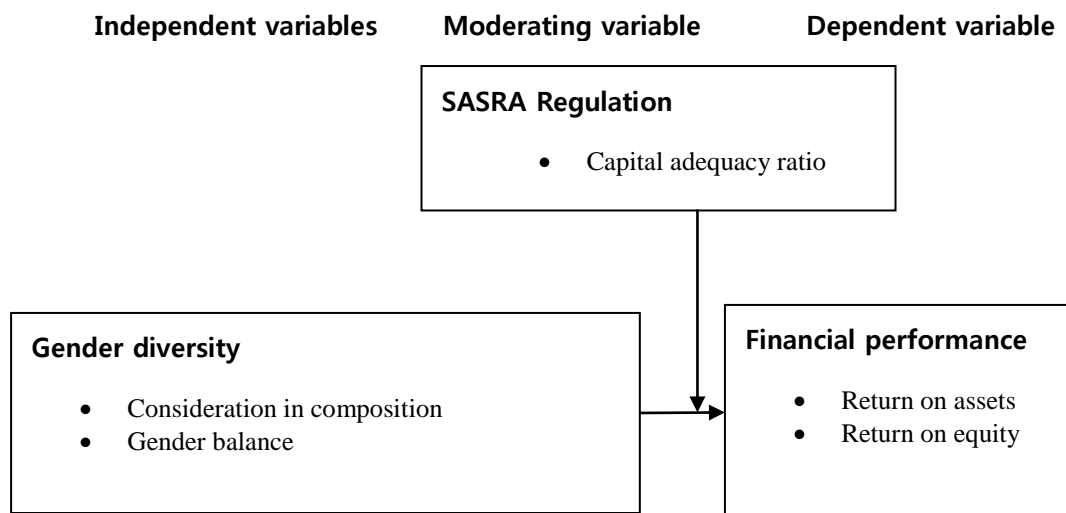


Figure 2.1: Conceptual Framework on Board Diversity and Financial Performance

Source: Researcher, 2021

Appendix III: Reliability of the Research Questionnaire

Constructs	CAC	Test Items
Gender diversity of board members	0.769	5
Financial performance	0.843	6

Source: Researcher, 2021

Appendix IV: Individual Regression Coefficients for Return on assets

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Gender diversity of board members	.456	.596	.149	.765	.452

Source: Researcher, 2021

Appendix V: Individual Regression Coefficients for Return on Equity

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Gender diversity of board members	7.534	4.209	.353	1.790	.086

Source: Researcher, 2021