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Risk-Based Internal Audit and Corporate Governance on the Financial Performance of Deposit Taking Cooperatives in Nairobi Metropolis, Kenya

Julius Kimia Nyerere

Department Business and Economics,University of Embu,
P.O BOX 6 – 060100, Embu
Tel: +254715081557
Email: juliuskimia2@gmail.com
ORCID id: 0000-0002-9647-1071
Corresponding authors:

Dr. Duncan Mugambi Njeru

Department of Business and Economics,University of Embu,
P.O BOX 6 – 060100, Embu
Tel: +254721298411
Email: njeru.duncan@embuni.ac.ke

Dr. David MuchangiMugo

Department of Mathematics, Computing and Information TechnologyUniversity of Embu,
P.O BOX 6 – 060100, Embu
Tel: +254719574060
Email: mugo.david@embuni.ac.ke

ABSTRACT

Risk-based internal auditing enables a firm to use its internal audit function to improve risk management and management controls.The study focused on the deposit-taking savings and credit cooperatives (DT-SACCOs) in Nairobi Metropolis, Kenya. Some deposit-taking savings and credit cooperatives today are faced with the challenges of auditing in their operations despite having an audit department in place. The study was guided by the following specific objectives: to determine the effect of risk maturity on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya; to determine the effect of audit assignment on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya; to determine the effect of risk-based audit planning on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya; to evaluate the moderating effect of corporate governance on the relationship between risk-based internal audit and financial performance of DT-SACCOs in Nairobi Metropolis, Kenya. The study combined both descriptive and explanatory research designs. The study took a census survey of the 43 DT-SACCOs in Nairobi Metropolis, Kenya where primary data was collected from the respondents comprising one audit manager per DT-SACCO. Regression models were used to test hypotheses where audit assignment and risk-based audit planning were found to have positive statistical significance on the financial performance of DT-SACCOs. Corporate governance was also found to have a moderating effect on the relationship between risk-based internal audit and financial performance of SACCOs.

Keywords: DT-SACCOs, Risk maturity, RBIA, Audit assignment, Risk-based audit planning

BACKGROUND OF THE STUDY

Different continents have different names of SACCOs. Some have named them credit unions because they offer credit to their members but here in Africa, they are called SACCOs. Over 85,000 credit unions operate in 118 countries worldwide. SACCOs provide community-based financial services and empower people to access high-quality and affordable financial services (Van Rijn, 2018). Over 274 million members most of them reliant on low income depend on SACCOs on the creation of opportunities, building family homes, and educating their children. Unlike credit unions in the world, SACCOs in Africa emphasize savings before credit. In Africa, there are over 39,000 credit unions with over 35 million members according to the World Council Statistical Report (2018). In Kenya, there are 7,301 credit unions with a total membership of over 7 million members. There are 175 SACCOs licensed by SASRA to undertake deposits from its customers in Kenya, SASRA, (2021).

SACCOs are growing fast to respond to the client's needs and also due to the development of workplace SACCOs in Kenya. This has brought about the challenges associated with financial management which affect the financial performance of those SACCOs (Nkuru, 2015). Unlike banks and other lending institutions in Kenya, SACCOs have been providing credit facilities to all classes of citizens since the credit limit for the members of the SACCOs is dependent on their savings. Members, therefore, want a surety of the safeguard of their funds hence the issue of financial management comes into place. An increasing number of Kenyan SACCOs are whirling under the weight of mismanagement, fraud, and unscrupulous loans(Karimi, 2018).

Managers should focus on business risk and the process for controlling these risks which is not the case among the DT-SACCOs in Kenya. The high-risk area should be given more audit time and client controls are required. Besides focusing on the level of risk, the risk-based method helps to evaluate and build value into the financial reporting process and the client's business activities (Kariuki, 2017). This knowledge is gained through the way the client operates their business, management, internal and external environments. The knowledge gathered can help to design the audit program that includes the most effective combination of tests responsive to each client's unique circumstances (Hesborn, Moronya, Michael, Nyagol., 2016).

The DT-SACCOs are regulated by SASRA in Kenya, which is responsible for the licensing, setting rules, and regulations that govern the SACCO sub-sector. The statutory state corporation established under the SACCO Societies Act (cap 490B) of the laws of Kenya, came into full operation upon the gazettement of the SACCO societies (deposit-taking SACCO business) regulations,2010 on the

8^{th}June 2010. There are 175 DT-SACCOs licensed by SASRA to take deposits from their customers in Kenya (SASRA, 2021).

The SACCO sub-sector in Kenya is a key player in the realization of the Vision 2030 of mobilizing savings for Kenya's investment needs (Ndung'u, Otieno, Owino, Thugge, 2011). The Kenyan SACCO sub-sector was recognized by the World Council of Credit Unions (WOCCU) 2013 conference in Canada and won the 1^{st} award in the category of the fastest-growing SACCO movement globally.

According to a study conducted by SASRA (2019), it revealed that there exists a total population of slightly over 4.97 million persons as well as corporate or institutional membership among the DT-SACCOS. The drafters of the SACCO Societies Act 2010 and regulations provided four years transition period within which SASRA was to license all eligible SACCOs that were operating FOSAs at the commencement of the law in June 2010.

A new law was drafted in 2019 to safeguard the savings made by the SACCO members following cases of funds mismanagement and fraud, whereby the directors of SACCOs will be vetted to eliminate criminal officials from the sector. It also seeks to establish an investigative department that will look into irregular activities within the deposit-taking institutions.

STATEMENT OF THE PROBLEM

Some DT-SACCOs today are faced with the challenges of financial performance despite having incorporated auditing in their practices because they are not able to provide sufficient information about the state of affairs of the firm (Jagongo & Mbewa,2013). A risk-based internal audit helps the organization in the identification of high-risk areas in the firm which helps in giving priorities to such areas which, in turn, helps in the provision of high-quality reports that help enhance the financial performance of the firm (Jagongo & Mbewa, 2013). An increasing number of Kenyan DT-SACCOs are whirling under the weight of mismanagement, fraud, and unscrupulous loans (Karimi, 2018). Notwithstanding the presence of the audit department in those DT-SACCOs, if they could have adopted a risk-based approach of auditing and have strong corporate governance maybe the fraud could not have occurred.Despite the presence of Risk-Based Internal Audit in DT-SACCOs, there is a dearth of literature confirming its effect on the financial performance of DT-SACCOs in Kenya. This study therefore sought to establish the effect of RBIA on financial performance of DT-SACCOs(Magiri, 2014). Additionally, the study sought to establish the moderating effect of corporate governance on the relationship between RBIA and the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.

Risk Maturity

Risk maturity is the measure adopted by firms for their enhancement of the understanding of their overall risk position as well as the benefits accrued from risk management initiatives. Risk maturity is underpinned by four key pillars: culture, people, process, and application. For this study, four sub-variables of risk maturity which also form the process of risk maturity: risk determination, risk assessment, risk management, and risk monitoring were investigated.

In a study conducted on risk management, a maturity model based on ISO 31000 provided an assessment tool for organizations to use to get their current risk maturity level (Wieczorek-Kosmala, 2014). Therefore, that research focused on a maturity model as opposed to this study which looked at the key sub-variables of risk maturity. Most firms do not take into consideration of their risk maturity levels which affects the implementation of risk management standards.

Research conducted on risk-based internal audit perspectives offered to corporations and banks indicated that assessment of risk maturity enables the creation of an audit plan in an organization (Danescu & Sandru, 2010). The study also outlined the steps for practical implementation. Although this study based its approach on the assessment of risk maturity, the current study captured all the sub-variables of risk maturity to repudiate the same.

Risk monitoring involves the tracing and tracking of risk management execution practices and the continued establishment of new ways to manage new risks. Risk monitoring is a crucial process of risk maturity. A study conducted on the role of credit reference bureaus on credit access in Kenya established that risk monitoring can be used to make sure that risk management practices are in line and help banks to better manage their risk levels (Gaitho, 2013). This research sought to establish the fact that risk monitoring affects the financial performance of DT-SACCOs. A study conducted on the effect of credit risk management practices on nonperforming loans in commercial banks in Kenya established that risk management is an important aspect of good management practice and also poor credit risk management leads to rising non-performing loans (Jaldesa, 2013). This study shows that risk management is crucial as an aspect of risk maturity.

Audit Assignment

Individual audit assignments assure on part of the risk management framework, including on the mitigation of individual or group risks (CIIA, 2014). According to the Association of Chartered Certified Accountants (ACCA), internal audit reports enables stakeholders to give an opinion on the effectiveness of the controls in place to manage risk, a balanced overview of key effective controls, and the agreed-upon actions to address any areas of improvement identified from the audit.

A study conducted on the impact of risk-based internal audit on the operational efficiency of deposit-taking SACCOs in Nairobi County, Kenya, established a positive influence on the operational efficiency through increased profitability, business turnover, and volume of sales (Riungu, 2018). This study could have looked at individual assurance audits as a key component for increased operational efficiency. The focus of the current study was on the assessment of individual audit assignments on the financial performance of DT-SACCOs.

A study conducted on business consultancy services and performance of KMPG top 100 small and medium enterprises in Kenya, showed that consultancy is a critical part of every business as it enhances the performance of firms (Mungai, 2012). Audit assignment and consulting are interlinked in that the individual assignments carried by auditors to enable them to group risks and setup an audit universe enables them to be able to report to stakeholders hence providing consulting services.

Another study was conducted on the effect of credit risk management practices on the profitability of DT-SACCOs in Nairobi County, Kenya (Makori, 2015). The study showed a positive relationship between the independent variables under study against the dependent variable. Some variables of the study such as credit monitoring, debt collection practices, and credit appraisal activities are somehow related to this variable under study which helped determine its effect on financial performance in DT-SACCOs.

Risk-Based Internal Auditing Planning

Most of the organizations do not take into consideration the planning of the audits. Proper planning enables the management to accomplish the audits for some time and therefore ensuring efficiency (Njeri, 2013). In most cases, the firms do not plan for the number of audits they would like to conduct in a given period but the management always has a strategic plan in which the audit is stipulated. Regular planning of audits enables the availability of information as the audits are conducted as and when needed to enable the management to be able to make informed decisions based on the information available to them.

Research on the effect of RBA on the financial performance in commercial banks in Kenya by Mutua (2012), concluded that risk management, annual risk-based planning, internal auditing standards, and internal auditing should be enhanced. This shows that risk-based audit planning should be encouraged in all firms to improve the effectiveness of the firm, improving the financial performance of the firms. Planning of regular audits enables the firm to detect risks on time and concentrate on high-risk areas leading to increased accountability and transparency, hence improving the performance of firms (Kasiva, 2012).

Risk-based audit planning helps the organization to produce audit plans, the extent to which the plans incorporate an understanding of risk dependencies and interdependencies, focusing on the business, business processes, risks, and controls (Pickett, 2006).

Corporate Governance

Corporate governance refers to the system in which firms are directed and controlled (Magiri, 2014). DT-SACCOs are under the ownership of members who at an annual general meeting (AGM) elect officials. These officials are mandated to run the organization through committees with each committee having a role to play in the management of the DT-SACCO. For an effective risk-based internal audit (RBIA) to be in place the corporate governance of the DT-SACCO must be embracing it and welcome it to become part of their processes in the firm. Poor governance results in SACCO failure which might lead to the misappropriation and mismanagement of the members' funds. According to Odera, (2012), problems arise in SACCOs due to lack of clear and proper segregation of duties, unqualified personnel in management, and inadequate managerial competitiveness. It's because of this reason that this study sought to establish the moderating effect of corporate governance on the relationship between RBIA and the financial performance of DT-SACCOs.

Conceptual Framework

The conceptual framework represented a diagrammatic view of how: risk maturity, audit assignment, and audit planning affect the performance of firms under the moderating effect of corporate governance.

Risk maturity involved the study of some sub-variables of risk determination, risk assessment, risk management, and risk monitoring.The audit assignment featured group risks and how individual auditors set up the audituniverse. Audit planning established the intervals of audits and strategic plans on audits and their effect on performance. Since the ultimate driver in a firm is the management this study sought to determine if corporate governance affected the relationship between RBIA and the financial performance of DT-SACCOs because all the factors are influenced by the management of the firms.

Independent variables **Dependent variable**

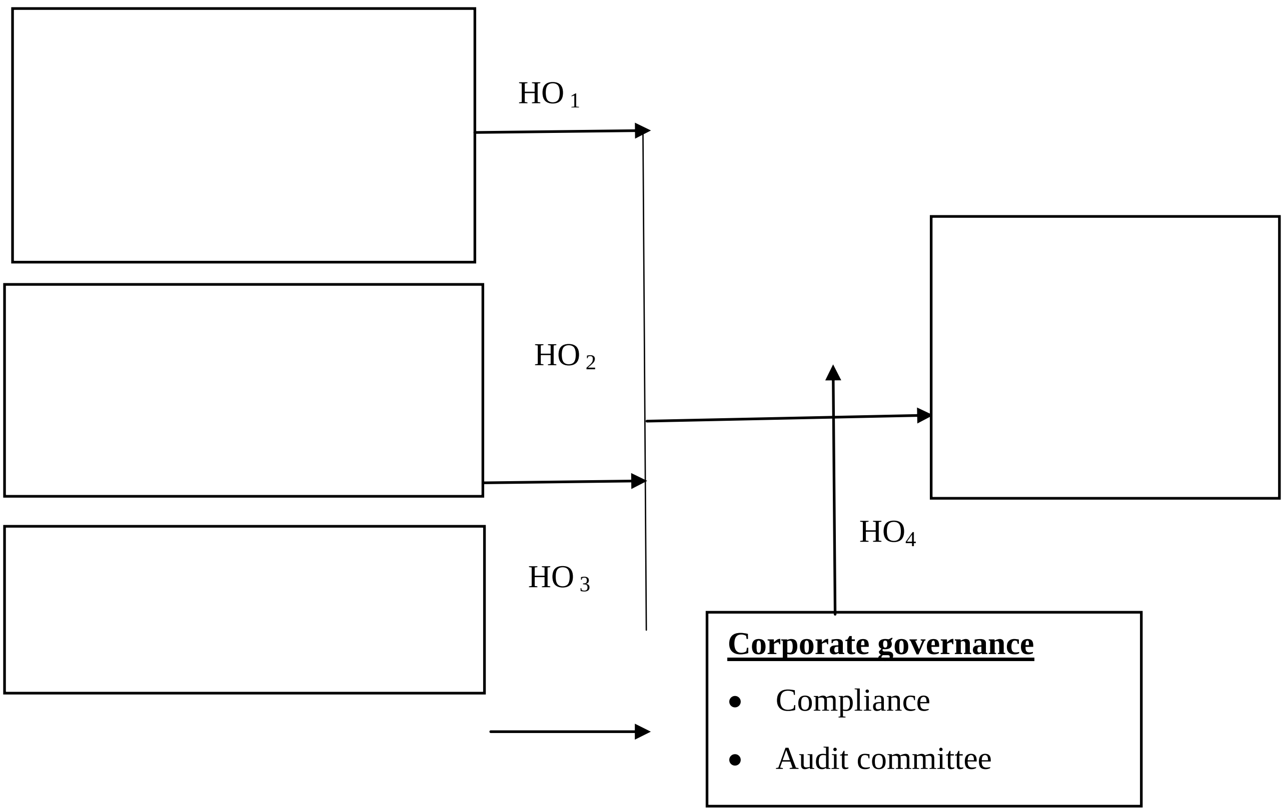

Figure 1 Conceptual Framework

Research Methodology

The study used a census approach of 43 DT-SACCOs in the Nairobi Metropolis, Kenya so there was no sampling.There is no single perfect design hence the study used descriptive survey research design to achieve optimal results (Sekaran & Bougie, 2009). Descriptive research design is a scientific method that involves observing and describing the behavior of a subject or several subjects without influencing it in any way (Cooper & Schindler, 2014) and was therefore consistent with the objectives of this study as the researcher had no control over the study variables (independent, moderating and dependent variables).

Data Collection Instrument

The study employed primary data which was collected by the use of structured self-administered questionnaires. A questionnaire is convenient and the most suitable for the collection of data in a survey according to Gall, Borg, and Gall (1996).The questionnaire involved the use of closed-ended questions whereby a Likert scale was used to indicate the extent to how the variables affected the financial performance in the SACCOs. The Likert scale had a 5-point scale of measurement: a very great extent, a great extent, a moderate extent, a little extent, and no extent. The respondents were asked to indicate to what extent the independent variables affected the dependent variable. The study respondents involved all the audit managers of the DT-SACCOs who were purposively sampled as they were deemed competent on RBIA and could therefore provide adequate, quality, and credible information needed for this study.

RESULTS AND DISCUSSION

Risk Maturity

The study sought to establish the extent to which risk maturity had been implemented in the Deposit-Taking SACCOs. The descriptive statistics on risk maturity were captured as follows:

Table 1: Extent of Implementation of Risk Maturity

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent is the DT-SACCO concerned with risk determination?	41	1.00	4.00	2.6585	.72835
To what extent is the DT-SACCO concerned with risk assessment?	41	1.00	4.00	2.7073	.74980
To what extent is the DT-SACCO concerned with risk management?	41	1.00	4.00	2.7317	.70797
To what extent is the DT-SACCO concerned with risk monitoring?	41	1.00	4.00	2.7805	.75869

Source: Survey Data (2021)

According to the Table above, most respondents agreed to a moderate extent (mean = 2.6585, standard deviation = 0.72835) that DT-SACCOs were concerned with risk determination. Further, most respondents agreed to a moderate extent that the DT-SACCOs were concerned with risk assessment (mean = 2.7073, standard deviation = 0.74980) while the majority agreed to a large extent that DT-SACCOs were concerned with risk management (mean=2.7317, standard deviation = 0.70797). Lastly, when asked the extent of risk monitoring, the majority of the respondents agreed to a moderate extent (mean = 2.7805, standard deviation = 0.75869). Comparing the three aspects of risk maturity, it is clear that DT-SACCOs were doing slightly better in risk monitoring compared to risk determination and risk assessment.

Audit Assignment

The study sought to establish the extent of implementation of an audit assignment and its effect on the financial performance of the DT-SACCO. Table 2 shows the extent of implementation of audit assignment in the SACCOs.

Table 2: Extent of Implementation of Audit Assignment

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does the DT-SACCO group risk?	41	1.00	5.00	3.5366	1.07465
To what extent does the DT-SACCO concerned with setting up an audit universe?	41	2.00	5.00	3.5122	.89783

Source: Survey Data (2021)

From the Table above, the majority of the respondents agreed to a great extent (mean = 3.5366, standard deviation= 1.07465) that grouping of risks was being undertaken in their DT-SACCOs. Further, the majority of the respondents agreed to a great extent (mean = 3.5122, standard deviation= 0.89783) that DT-SACCOs were concerned with setting up an audit universe. Based on the two aspects investigated concerning audit assignment, the majority of the respondents observed that grouping of risks was implemented to a larger extent compared with the setting up of an audit universe.

Risk-Based Audit Planning

The study sought to establish the extent of implementation of risk-based audit planning and its effect on the financial performance of the DT-SACCO. The table below shows the extent of implementation of risk-based audit planning in the sampled SACCOs.

Table 3: Extent of Implementation of Risk-Based Audit Planning

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does the DT-SACCO have the intervals of its audits?	41	1.00	5.00	3.5610	.94997
To what extent does the firm plan for strategic audits for the firm?	41	2.00	5.00	3.5610	1.00122
To what extent does the management encourage the conducting of risk-based audits?	41	2.00	5.00	3.5610	1.00122

To what extent is the activeness of the audit committee concerning the issue of risk-based planning?	41	2.00	5.00	3.7073	1.05461

Source: Survey Data (2021)

According to Table 3, the majority of the respondents agreed to a great extent (mean = 3.5610, standard deviation = 0.94997) that their DT-SACCOs had intervals in their audits. Additionally, the majority of the respondents agreed to a great extent (mean=3.5610, standard deviation = 1.00122) that strategic audits were planned. Concerning management encouragement of risk-based audits, the majority of respondents agreed to a great extent (mean = 3.5610, standard deviation = 1.00122) indicated that the management of DT-SACCOs encouraged conducting of risk-based audits. Finally, the majority of the respondents agreed to a great extent (mean = 3.7073, standard deviation = 1.05461) that the audit committee was active on the issue of risk-based planning.

Summary of Risk-Based Internal Audit Indicators

The study also investigated the three components of risk-based internal audits to establish their levels of incorporation with DT-SACCOs. Table 4, provides a summary of the findings:

Table 4: Summary for risk maturity, audit assignment, and risk-based audit planning

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Risk Maturity	41	1.00	4.00	2.7154	.62165
Audit Assignment	41	1.50	5.00	3.5244	.92838
Risk-based audit planning	41	1.75	5.00	3.5976	.92005

Source: Survey Data (2021)

Summarizing the three aspects, i.e. risk maturity, audit assignment, and risk-based audit planning, it is clear as depicted by the tables above that audit assignment and risk-based audit planning were implemented to a larger extent compared to risk maturity. Table 4 best represents the average score for each of the three aspects based on composite indexes generate using the arithmetic means.

Corporate Governance

The study sought to establish the moderating effect of corporate governance on the relationship between risk maturity, audit assignment, and risk-based audit planning of DT-SACCOs and the performance of DT-SACCOs. Table 5 shows the descriptive statistics concerning corporate governance.

Table 5: Corporate Governance

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does information transparency issued by the DT-SACCO ensure compliance by the management?	41	1.00	5.00	3.6098	.99695
To what extent are the rights of related parties protected by the DT-SACCO management?	41	2.00	5.00	3.7317	1.02529
To what extent does the management ensure that employee rights and care are a priority?	41	1.00	5.00	3.5122	.97780
To what extent does the management take into consideration the rights and advice from the board of directors?	41	1.00	5.00	3.6098	.99695

Source: Survey Data (2021)

Table 5, indicates that the majority of the respondents agreed to a great extent (mean=3.6098, standard deviation = 0.99695) that information transparency issued by the DT-SACCO ensured compliance by the management. Additionally, the majority of the respondents agreed to a great extent (mean=3.7317, standard deviation = 1.02529) that the rights of related parties are protected by the DT-SACCO management. Further, the majority of the respondents agreed to a great extent (mean=3.5122, standard deviation = 0.99695) that the management took into consideration the rights and advice from the board of directors.

Performance of Deposit-Taking SACCOs

The study sought to investigate how SACCOs were performing concerning return on assets, return on equity and return on investments as affected by the three independent variables namely risk maturity, risk assignment, and risk-based audit planning. The data was validated through the collection of secondary data. Table6 depicts the descriptive statistics concerningthe performance of sampled DT-SACCOs.

Table 6: Performance of Deposit-Taking SACCOs

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent has the above factors improved the return on asset (ROA) of the DT-SACCO?	41	1.00	5.00	3.6341	1.06668

To what extent has the above factors improved the return on equity (ROE) of the DT-SACCO?	41	2.00	5.00	3.7561	.99450
To what extent has the above factors improved the return on investment (ROI) of the DT-SACCO?	41	1.00	5.00	3.7561	1.13535

Source: Survey Data (2021)

From Table 6, the majority of the respondents agreed to a great extent (mean = 3.6341, standard deviation = 1.06668) that as a result of the implementation of risk maturity, audit assignment, and risk-based audit planning the return of assets had been improved. Concerning return on equity, the majority of the respondents agreed to a great extent (mean = 3.7561, standard deviation = 0.99450) that implementation of risk maturity, audit assignment, and risk-based audit planning had improved return on equity. Finally, the majority of the respondents agreed that as a result of the implementation of risk maturity, audit assignment, and risk-based audit planning the return on investment of the DT-SACCO had improved to a great extent (mean= 3.7561, standard deviation = 1.13535). Based on findings of the three indicators of performance, it implies that the DT-SACCOs did better in terms of return on equity and return on investment as a result of the implementation of risk maturity, audit assignment, and risk-based audit planning compared to return on assets.

REGRESSION ANALYSIS

Direct Model Regression Model

To test the first three hypotheses (Audit maturity does not significantly affect the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya; Risk assignment does not have a significant effect on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya; A risk-based audit planning does not significantly affect the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya) the linear regression model below was run:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon} \quad \textbf{……………………………………………………………Equation 1}$$

Where: Y = Performance (ROI, ROA and ROE), X_1= Risk maturity, X_2 = Audit assignment, X_3= Risk-based audit planning, e = Error term, α = Constant term.

Tables 7, 8, And 9 Summarize The Regression Analysis Results.

Table 7: Summary Results of Regression Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922[a]	.850	.837	.41284

a. Predictors: (Constant), Risk Maturity, Audit Assignment, Risk-based audit planning

Source: Survey Data (2021)

As shown in Table 7, R^2 was 0.850 and adjusted R^2 was 0.837. This indicated that the three independent variables (risk maturity, risk assignment, and risk-based audit planning) explained 83.7 percent of variations in the performance of DT-SACCOs in Nairobi Metropolis in Kenya. Additionally, it can be concluded that 16.3 percent of variations in the performance of DT-SACCOs were explained by other factors outside the model.

Table 8: Anova Results for Model Significance

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.596	3	11.865	69.617	.000[b]
	Residual	6.306	37	.170		
	Total	41.902	40			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Risk Maturity, Audit Assignment, Risk-based audit planning						

Source: Survey Data (2021)

ANOVA test was used to check the statistical significance of the overall regression model, to ascertain whether it was adequate for hypotheses testing. Mokaya (2013) pointed out that the Anova test which is inbuilt within the multiple regression analysis is a tool that can determine whether the model works in predicting the effect of the independent variables on the dependent variable. ANOVA is based on F-statistic and its corresponding p-value. If the p-value is greater than 0.05, it implies that none of the independent variables predicts the dependent variable implying that the model does not work. However, if the p-value is less than 0.05 (significance level), it implies that the model works in establishing significant relationships among the variables under study. According to Table 8, the overall model was statistically significant ($F_{(3,37)}$ =69.617, p=0.000) implying that the study's independent variables (Risk Maturity, Audit Assignment, Risk-based audit planning) worked in explaining the variations in the dependent variable which was the performance of Deposit-Taking SACCOs. The conclusion is that the model can be relied on for testing the three hypotheses associated with the three independent variables.

Table 9: Regression Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.370	.331		1.117	.271
	Risk Maturity	.229	.116	.139	1.975	.056

	Audit Assignment	.356	.167	.323	2.136	.039
	Risk-based audit planning	.615	.167	.552	3.688	.001
a. Dependent Variable: Performance						

Source: Survey Data (2021)

Using regression coefficients shown in Table9, audit assignment (p-value =0.039) and risk-based audit planning (p-value =0.001) were statistically significant in improving the performance of DT-SACCOs as evidenced by the fact that their p-values are less than 0.05 used in this study. On the other hand, risk maturity (p-value=0.056) was found to be statistically insignificant as its p-value was higher than 0.05 used in this study. Considering only the two significant variables, the above table of regression coefficients can be summarized using the empirical model shown below:

Performance =0.370 + 0.356(audit assignment) + 0.615 (risk-based audit planning) ………2

The above model implies that for each unit increase in audit assignment in the Deposit-Taking SACCOs, their financial performance increases by 0.356 units, while for each unit increase in risk-based audit planning, financial performance increases by 0.615 units.

Discussion of the direct regression model results

From the regression analysis results shown in Table 9, the coefficient of risk assignment was 0.356 with a p-value of 0.039. As the p-value of the coefficient was less than the significance value (0.05), the null hypothesis was rejected. It was therefore concluded that there exists a statistically significant positive effect of risk assignment on the financial performance of Deposit-Taking SACCOs in Nairobi Metropolis (β=0.356, t=2.136, ρ-value=0.039). This implies that a unit change in audit assignment in Deposit-Taking SACCOs causes a 0.356 increase in their financial performance. This finding of this study concurs with those of Riungu (2018) who established a positive influence of audit assignment on the operational efficiency of firms through increased profitability, business turnover, and volume of sales. The finding is also consistent with that of Makori (2015) who proved that the profitability of firms improved significantly as a result of risk-assignment, credit monitoring, debt collection practices, and credit appraisal activities.

From the regression analysis results shown in Table 9, the coefficient of risk-based audit planning was 0.615 with a p-value of 0.001. As the p-value of the coefficient was less than the significance value (0.05), the null hypothesis was rejected. It was therefore concluded that there exists a statistically significant positive effect of risk-based audit planning on the financial performance of Deposit-Taking SACCOs in Nairobi Metropolis (β=0.615, t=3.688, ρ-value=0.001). This implies that a unit change in risk-based audit planning in Deposit-Taking SACCOs causes a 0.615 increase in their financial performance. The findings of this study are corroborated by the study by Njeri (2013) who showed that risk-based audit planning enhanced the efficiency of organizations. Further, the findings are supported by Mutua (2012) who found that risk management, risk-based audit planning, internal auditing standards, and internal auditing enhanced the financial performance of organizations. The study findings are also consistent with those of Kasiva (2012) who noted that planning of regular audits enabled firms to detect risks on time and concentrate on high-risk areas leading to increased accountability and transparency, hence improving the financial performance of firms.

The study has found that risk maturity does not have a statistically significant effect on the financial performance of Deposit-Taking SACCOs (β=0.229, ρ-value=0.056) since the p-value was bigger than 0.05. However, this could be explained by the low level of implementation of risk maturity as was noted in the descriptive statistics obtained. However, Danescu and Sandru (2010) had noted that risk maturity enables the creation of an audit plan in an organization which could positively impact the financial performance of firms. Therefore, this study suggests the continuous assessment of risk maturity and further investigation into the effect of risk maturity to establish whether full implementation is likely to enhance financial performance in the DT-SACCOs sub-sector.

Hypotheses Testing

The study aimed at testing four hypotheses. Table 10provides a summary of the hypothesis tested.

Table 10: Summary of Hypotheses Testing

Objective	**Hypothesis**	**Results**	**Remarks on Hypothesis**
To determine the effect of risk maturity on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	**H_{01}**: There is no significant effect of risk maturity on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	β=0.0.229 t-value=1.975 p-value=0.056	Do Not Reject H_{01}
To determine the effect of audit assignment on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	**H_{02}**: Risk assignment does not have a significant effect on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	β=0.356 t-value=2.136 p-value=0.039	Reject H_{02}
To determine the effect of risk-based audit planning on the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	**H_{03}**: Risk-based audit planning does not significantly affect the financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	β=0.615 t-value=3.688 p-value=0.001	Reject H_{03}

To evaluate the moderating effect of corporate governance on the relationship between risk-based internal audit and financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	**H_{04}**: There is no moderating effect of corporate governance on the relationship between risk-based internal audit and financial performance of DT-SACCOs in Nairobi Metropolis, Kenya.	β=0.181 t-value=4.230 p-value=0.000	Reject H_{04}

Source: Survey Data (2021)

CONCLUSION

The significant role played by risk-based audit and corporate governance towards enhancing the financial performance of DT-SACCOs has come out clearly from the study. The study, therefore, concludes firstly that risk assignment is a very paramount component of risk-based audit that should be implemented. Secondly, risk-based audit planning has shown to statistically influence the financial performance of DT-SACCOs and as such should be encouraged.

Finally, the study concluded that corporate governance is key if a risk-based audit has to produce the desired result of enhancing financial performance for DT-SACCOs. The SACCO Boards of Management must therefore act deliberately to institute measures aimed at promoting good corporate governance to enhance the implementation of the risk-based audit with the ultimate goal of enhancing financial performance.

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