

Investment Decisions And Financial Performance Of Deposit Taking Saccos In Kenya

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Abstract:

SACCOS play an essential role in economic development as part of the financial system. There has been a substantial growth in the loans distribution. Financial managers have therefore embarked on utilizing different financial options to help in reducing the risk in their financial investments. As available studies analyse financial structure variables separately, it is difficult to ascertain the combined effect of the various forms of investment decision on financial performance, yet no single Sacco uses just one of the investment decision available. The main objective of this research study and which forms the research topic is to find out the effect of Investment decisions and financial performance of Deposit taking Societies Saccos in Kenya. Specifically, the study aimed at establishing the effect of asset renewal decision, earning replacement decision, capital expansion decision and research and development decision on financial performance of Deposit taking Societies Saccos. The study relied on secondary data available for the findings. The observations to be used dated from the year 2017 to 2021 and the population comprised 11 Deposit taking Societies Saccos. Descriptive and inferential statistics was conducted to analyze the data collected. Correlation and regressions analysis was conducted as the analytical tools to enable interpretation of the relationship of the study selected variables. The analysis was conducted using STATA 15. The results indicated that capital expansion decision ($\beta=0.1019$, $P=0.018$), asset renewal investment decision ($\beta=0.304$, $P=0.005$) and earnings replacement ($\beta=0.628$, $P=0.020$) had positive and significant effect while research and development decision ($\beta=0.3385$, $P=0.586$) had insignificant positive effect on financial performance of Deposit taking Societies Saccos in Kenya. This implied that improvement in capital expansion decision, asset renewal decision and earning replacement investment decisions would results to increase in financial performance. Investment decisions significantly accounted for 52.77% variance in financial performance of Deposit taking Societies Saccos in Kenya. The study concluded that investment decisions have positive effect on financial performance of Deposit taking Societies Saccos in Kenya. The study recommended that management of Deposit taking Societies Saccos should keep the capital expansion decision at maximum in order to enhance their working capital position hence increase their financial performance. Moreover, the study recommended that management of Deposit taking Societies Saccos should undertake asset renewal decisions with intent to re-energize their organization financial capabilities in terms of asset operations and asset returns.

KeyWord: Investment Decisions, Financial Performance, Deposit Taking Saccos, Expansion Decision, Asset Renewal Decision, Earnings Replacement Decision, Research and Development Decision

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I. Introduction

Financial performance of deposit taking Saccos has elicited mixed reactions from potential investors because while some banks record stable financial performance, others record downward performance. Investment decision involves a possibility of variation or deviation in the actual return from the expected return. The return of an investment is a major determinant of whether the investors will sacrifice their present resources or not. The investors are more interested in investments or securities that promise higher returns than those that promise lower returns Estrada (2019).

During the previous two decades, the global deposit taking sector has seen significant transformation. The acceptance of technological innovation, global market competitiveness, among other internal and external environmental changes, is ascribed to the transformational nature of the developments (Adelino & Robinson, 2017). Saccos all around the globe have begun to rethink and reorganize their investment strategy in order to spur economic development and boost productivity. The difficulty that managers have when arranging a

company's finances is determining the impact of such structuring on the entity's performance, which is critical to the value and survival of the company (Machuki, 2014).

Investment decisions are composed of Capital expansion decision, earning replacement decision, asset renewal decision and research and replacement decisions. The expansion decisions entail addition of new product or line of operation, and addition of capacity or diversification of operations (Efimova, 2018). Asset replacement decisions on the other hand focus on improving operating efficiency and cost reduction by replacing obsolete products with new ones in respect to environmental changes (Makarim & Noveria, 2020). Renewal decisions are aimed at a change in operations in terms of products offered, methods of delivery and efficiency of operations. Finally, Research and development (R&D) investment comprise inventive work undertaken on a analytical basis in order to increase the quantity of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to create new applications (Organization for Economic Cooperation and Development, OECD, 2018).

In Kenya, investment in every organization is a challenge of portfolios in its operational activities at well controlled cost systems. The rate of return is demanded high because every organization wants to generate more funds than today and reduce opportunity cost of capital invested. Jagongo and Mutswenje (2014) also observed some key features that trigger individual investment decision-making Deposit taking Societies Saccos in SASRA, which are as follows: the firm history and reputation over time, what the sacco amounts to in that industry, the amount the sacco is expected to earn, incomes and situations of statement, previous performance of companies' stock, quoted price per share, the condition of the economy, and the anticipated amount in the form of dividends.

Olweny and Kimani (2011) studied the influence of the market on the Kenyan economic growth established that rise in the dividend signaled a better market, expecting of better dividends, better profits and in turn a rise in economic growth. Although such a scenario would mean more investments in the stock market, it does not always happen; meaning that there are other factors at play (cognitive biases) in making such investment decisions at the Nairobi Securities Exchange

An entity's investment decision and policies set for diversification of income generations would include strategies for expansion of business operations, acquisition of new assets such as plant and machineries to aid on generation of more revenue, embracing of innovation and technology to facilitate modernization of the firm and replacement of the long term asset. Disposal of the business by either a sale or leasing is also a form investment decision aimed at generating more fund. Sacco decisions such as change in marketing strategies, or increase in publicity and promotion have long term impact on financial performance of the Sacco and therefore, may be factored in as one of the investment decisions to undertake. Investment in the long term assets also requires huge capital to be tied up in the current assets hence investment in long-term and current assets run concurrently. A Sacco may opt to expand its activities in order to increase its value and market position. Saccos expansion requires investment in new products, new market and new kind of production activities. Sometimes a company acquires existing firms to expand its business through forms of mergers and acquisition strategy (Machuki, 2014)

Investment decision making is a major role of any manager for the successful entities. This is because the activity involves investment decisions of a projects essentially affecting future economic performance and which can strongly contribute to the growth or collapse firm depending on the end results of that particular investment decision. The standard strategic investment decision is affected by a number of factors emanating from both the internal and external environment of the business entity (Hana, 2010). Mantrala and Naik (2007) asserts that when deciding on an investment option, there is need to conduct an intensive analysis to find out the exact financial performance of the firm. Failure to conduct an overview if the firms' background check may lead to making the wrong investment decision which may end up ruining the whole company (Thorson, 2007). According to Seibel and Parhusip (1998) internal resource mobilization and merged with sound financial management practices are fundamental basis for sustainable investment decision.

Statement of the Problem

Loan is one of the major product/asset provided by the bank but it is also the riskiest product because of the credit risk. Non-performing Loans (NPLs) create an adverse impact on the bank's balance sheet and income statement, overall financial institutions profitability and economic growth of a country. The Central Bank of Kenya has issued a directive which strictly requires all banks to maintain ratio of their non-performing assets below five percent as it is the case, where the Basel standard of NPL ratio is also 5 percent.

However, according to the latest data from the Central Bank of Kenya (CBK), non-performing asset reduced from 2006 in 18.9% to 4.4% in 2011. From 2011 to 2015, it increased to 6.0%, then it increased to 9.9% in 2017, 12.0% in 2018 and 2019 before increasing to 14.0% in 2020. Majority of banks (41 per cent) loan defaults to fell in the quarter ending December 2021 (CBK, 2022). With the projection in the rise of non-performing loan, the effect relays a negative impact on the loan portfolio for the commercial banks. This in the long run affects banks' lending to various economic sectors which would affect the economy growth (Timsina,

2014). In addition, examining commercial bank loans and their relationship with asset quality is important because business cycles affect the banking sector, and hence, bank lending (Beck, Jakubik & Piloju, 2018).

Studies conducted in these area present research gaps. Ngondo (2018) study on the effect of lending rate on asset quality of commercial banks in Kenya presents a research gap as it focused on liquidity and capital adequacy while the current study focused on the loan portfolio. The study by Njeri (2016) on loan portfolio of commercial banks in Kenya focused on the operational structures and used a questionnaire while the current study focused on asset quality while measuring using secondary data. Tmava, Avdullahi and Sadikaj (2018) analyzed and compare the loan portfolio and NPLs in the Western Balkan countries for the period 2008-2015. The results show that the NPL have had a growing trend in the post-global financial crisis, with different variations. However, the study was conducted in developed countries making it difficult to be applied in developing countries like Kenya. This study is imperative because commercial banks in Kenya need to enhance their asset quality through their loan portfolio.

Objectives of the Study

- i) To examine the effect of capital expansion decision on financial performance of Deposit taking Societies Saccos in Kenya.
- ii) To evaluate the effect of asset renewal decision on financial performance of Deposit taking Societies Saccos in Kenya.
- iii) To examine the effect of earnings replacement decision on financial performance of Deposit taking Societies Saccos in Kenya.
- iv) To determine the effect of research and development decision on financial performance of Deposit taking Societies Saccos in Kenya.

II. Literature Review

Theoretical Framework

The Accelerator Model of Investment

This theory is based on the concept that investment is positively related to the expected levels of production output, thus if demand increases there shall be an increase in investment commitment, this indicates that demand conditions have the capacity to influence investment decisions. The simplest form of this theory is the concept of investment demand or the rigid Accelerator Theory, was formally elaborated by (J. M. Clark, 1917) who stated that investment is simply directly proportional to changes in output. The form of investment behavior advocated by the rigid acceleration theory did not come necessarily from a profit maximization objective. It could be argued that this model only recognized demand or changes in demand as determinant of investment behavior, though output is not a very good proxy of demand because it is restricted by the potential existing capacity of production. The rigid accelerator theory assumes that firms are always in equilibrium that is that there no excess capacity (Anotonakis, 2001). A more elaborate approach from the original rigid accelerator theory of investment behavior is given by the flexible accelerator theory, this theory originated from (Chenery, 1952) and (Koyck, 1954). It overcomes one of the major shortcomings of the rigid accelerator, namely that capital stock is always optimally adjusted. Capital is adjusted towards its desired level by a certain proportion of the discrepancy between desired and actual capital in each period. Thus, the simplest accelerator model predicts that investment is proportional to the increase in output in the coming period. In conclusion, this theory indicates a direct proportional relationship between investment capital and output (Parker, 2009). Therefore, this theory has been applied in regards to the effect of asset renewal decision on financial performance of Deposit taking Societies Saccos in Kenya.

Modern Portfolio Theory

Harry Markowitz invented Modern Portfolio Theory (MPT) in 1952, and it has been in use ever since. Specifically, the theory explains how investors might evaluate risk in relation to their projected return. MPT states that a business that focuses on portfolio maximization would maximize anticipated return for a given amount of portfolio risk, or, in the alternative, reduce risk for a given level of expected return, according to the theory. When pursuing a particular portfolio investment, the MPT theory recommends diversification of assets investment in order to mitigate market risk and losses as well as risks associated with a certain business (Ambrose & Vincent, 2014). Investors gained information about portfolio management via the use of the MPT theory, which is a sophisticated investment choice technique. The measurement of the link between risk and return, as well as the notion that investors must be paid for taking on risk, are both essential components of portfolio theory. In contrast to conventional security analysis, portfolio theory places less focus on evaluating the characteristics of individual assets and more attention on discovering the statistical linkages of the whole portfolio of investments (Amalendu et al, 2011). The MPT mathematically formulates the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower

risk than any individual asset. The possibility of this can be seen intuitively because different types of assets often change in value in opposite ways. But diversification lowers risk even if assets' returns are not negatively correlated—indeed, even if they are positively correlated. (Taleb, 2007). The MPT theory is relevant to this study as it support diversification of investments which may be equated to the expansion decision study variable.

Behavioral Finance Theory

Lintner (1998) developed a behavioural finance theory that describes how individuals evaluate and act on information in order to make investment decisions. Investors' decision-making processes in a highly dynamic and uncertain corporate environment have been improved as a result of the theory's development of new techniques of analysis. The theory also gives fresh reasons for calling into question standard approaches of modeling determinants of investor behavior, which are aFPeady in use. According to Brabazon (2000), the limited components of behavioural finance may be divided into two categories: risk and return. The first is that of heuristic decision processes, in which an individual investor would make judgments based on his or her common sense and the information available to him or her. However, this may result in judgments that are not logical in the sense that the normal finance model dictates they should be. According to Brabazon (2000), these choice processes are ones in which investors seek to use mental 'shortcuts' to make better decisions. In the survival race, these shortcuts have proved critical, particularly when decision-making time is limited.

In this case, decision makers are more likely to make judgments based on patterns that are not necessarily relevant or even accurate depictions of the situation (Brabazon, 2000). These individuals may believe that a current pattern in price movements will undoubtedly continue in the future, hence providing rationale for more investments. Individual investors may as a consequence devote an excessive amount of time and attention to popular investing activities that have been doing well in recent months. Statman (1999) explained that being duped into making investment decisions based upon this imperfect theory of small numbers is something that the standard finance investor would never do; that an investors regarding past performances of stocks as evidence of future returns is a realistic possibility contrary to the standard finance model of an investor. This explains why some investors opt for renewal or expansion decision in an investment. The theory supports renewal decision and replacement decision.

The Transaction Cost Theory

Ronald Coase created the Transaction Cost Theory (TCT) in 1937, and it is still in use today. The theory relates to the analysis of the costs associated with the purchase and resale of premade products or services, as opposed to the costs associated with having similar goods and services created internally inside the organization. Without taking into consideration the cost of transactions, the theory explains, it would be impossible for economists to comprehend the workings of the economic system and to get the essential knowledge necessary for developing economic policy. According to transaction cost theory, businesses strategy to develop and extend operations, but in a cost-effective way in order to ensure improved profitability and long-term viability of the business. Uncertainty about the future business environment is one of the most significant barriers to transaction effectiveness, and it has the potential to raise a firm's operating expenses, particularly in the areas of research, information processing, and adaptability, among other things (Inge et al, 2006). Despite the fact that prior research has shown a favorable association between a firm's creative activities and its success, businesses with higher research costs are likely to gain more rewards than those with lower research costs (Zhao and Li, 1997). This is due to the fact that research and development improves understanding and forecasting of market trends, hence offering clear information for investment decision-making. As a result, research and development (R&D) is a dependent investment from which financial returns or revenues are derived through other expenditures made by businesses. This theory supports research and development decision variable.

Conceptual Review

According to Waiganjo (2013) conceptual framework refers to a diagrammatic presentation of variables showing the relationship between the independent variables of a study, moderating or intervening variables and the dependent variables. The independent variable for this study are renewal decisions, replacement decisions, expansion decisions and research and development decisions whereas the dependent variable will be financial performance as represented in figure 1.0 below.

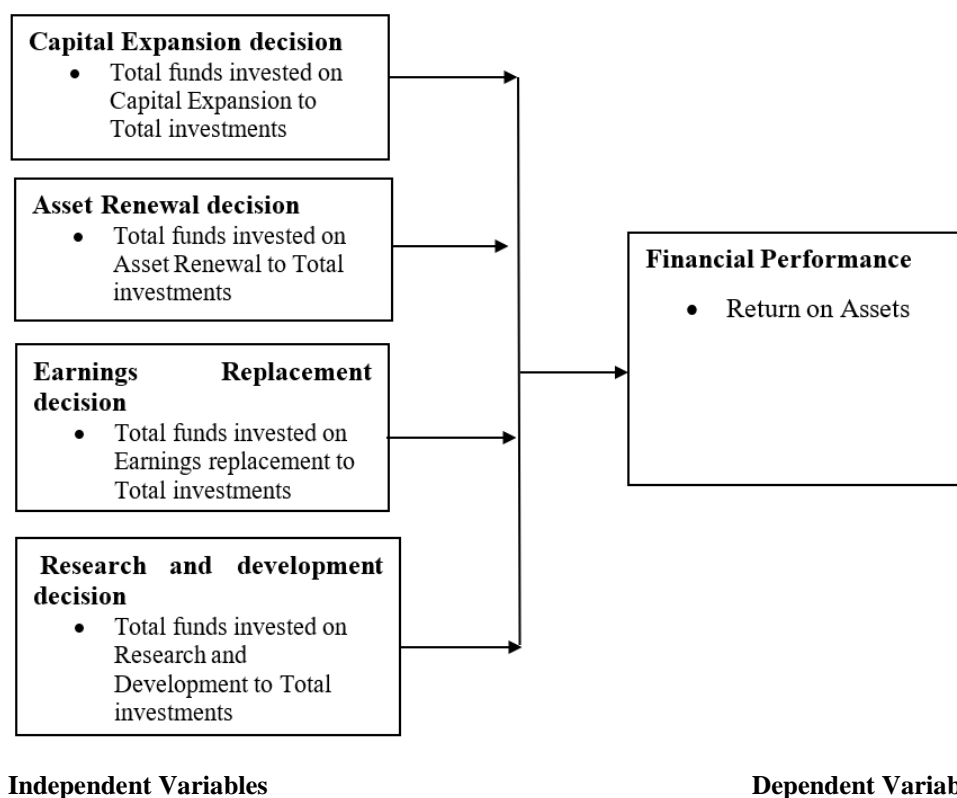


Figure 1.0: Conceptual Framework

Empirical Review

Capital Expansion Decision and Financial Performance

Balarabe (2020) investigated expansion decision and its implication on firm’s growth in Nigeria. The data generated from annual reports and accounts of the selected firms was analyzed through Eviews Version 8, and multiple regression analysis was used to analyze the data. The findings show that there is insignificant relationship between the independent variables (capital expansion) and dependent variable (return on asset). Literatures on previous studies were also reviewed and the study concluded that expansion decision has no implication on firm’s growth in Nigeria. Ogum and Jagongo (2022) examine the impact of investment decisions on the financial performance of DT-SACCOS in Nairobi City County. Adherence to the ethical considerations was also guaranteed at every stage. The study showed that expansion decision has insignificant inverse effect on the financial performance of DT-SACCOS in Nairobi City County. Otanga (2021) sought to establish the relationship between corporate risk management, investment decisions and financial performance of DT-SACCOS in Western Kenya. Expansion investment decisions had positive significant effect on financial performance indicating that unit increase in investment decision leads to 20.38% increase in financial performance. The study concludes that expansion investment decisions are important when considered alongside corporate risk management. Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by profitability. The results showed that capital expansion investment decisions have a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability. Toni and Sumarsan (2019) sought to get an understanding on the effect of the investment decision on financial performance and the implication on value of a company using structural equation model (SEM). The expansion investment decision has a direct and indirect positive effect on each other’s.

Asset Renewal decision and financial performance

Musa, Ogaro, Songoro and Euna (2017) assessed the effects of investment decision techniques on financial performance in ME in Kenya. The study focused on Medium Enterprises in Kisii Town. The finding shows that there were significant correlations between renewal decision and financial performance. Mweresa and Muturi (2018) assessed the effects of investment decisions on the performance of public sugar firms in western Kenya. The study found that renewal decision has a strong effect on the financial performance of sugar companies at 4.466 magnitude strength. Musa (2016) focused on determining the effect of investment decisions on financial performance of Savings and Credit Cooperatives in Kitui Central Sub County. The study findings

indicated renewal decisions positively contributed to SACCO performance as measured by dividends while expansion decisions had a negative contribution. Jeffrey and Jeffrey (2012) conducted a research study on Accounting for Lease Renewal Options. The study examined the informational effects of unit of accounts options and found that adoption of renewal options in lending has a negative effect on financial performance. Martin et al. (2013) conducted a study titled; A Behavioral Theory of Strategic Renewal: the study pointed the effect of performance feedback and organizational learning on the renewal decisions of an organization. The study findings revealed that such decisions moderately support for the impact of performance feedback on strategic renewal. In a study conducted by Yiming, Siqi, Thomas, and Thomas (2011) on whether banks adjust their loan interest rates and consider loan renewal decisions in reference to borrower's financial performance by conducting a multivariate regression analysis on Chinese public industrial companies between years 200-2005, they found a negative relation between loan renewal and the financial performance of borrowers.

Earnings Replacement decision and financial performance

Riyadi (2018) sought to determine the Influence of Investment Decisions, Risk of Strategy, To Efficency, Finance Performance, Value of Firm, Good Corporate Governance (GCG) as The Moderate Variable in the Mining Company Coal Sub Sector Go Public in Indonesia Stock Exchange. The results obtained show that replacement decisions don't effect significantly to efficiency, replacement decisions effect significantly to financial performance, replacement decision effect significantly to value of firm. Triani and Tarmidi (2019) examine the impact of investment decisions on the firm value in companies listed on the Indonesia Stock Exchange from 2013 to 2016 especially property and real estate sector. This research implies that in optimizing firm value can be achieved through the application of financial management functions as well as dividend policy, where one decision can attract investor interest and have an impact on the firm value. Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by profitability. The sample technique was purposive sampling by pooling data. Data were analyzed by Structural Equation Modeling. The results showed that replacement investment has a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability, while dividend policy has a negative and not significant effect on profitability and value of the firm directly and indirectly. Kemuma (2014) sought establish the Effect of Investment Decision on the performance of banks listed in the Nairobi Securities Exchange. The study employed a descriptive research design. The study utilized panel data which consisted of time series and cross-sections. Results revealed good, significant and positive correlations between ROA and replacement investment decision.

Research & development decision and financial performance

Bloemendaal (2020) investigated the effect research and development investments have on companies their financial performances. Special attention is paid to high-tech and non-hightech companies. The Return on Assets and Profit Margin show similar optimal percentage and curves, the Return on Equity does not. In the split samples Return on Equity and Profit Margin is larger in the high-tech sample than in the non-high-tech sample, but no statistical difference was found. A robustness check was performed with a 2-year lag that further confirms that findings in this study. Erdogan and Yamaltdinova (2019) investigated the effects of R&D expenditures on the financial performance of 62 production companies listed in Borsa Istanbul in the period of 2008-2017 by using panel data methods. The empirical findings of this study support the existence of a positive interaction between R&D expenditures and financial performance. Karunanithy, Dasanayaka,,Al Serhan and Ayed (2018) sought to identify the impact of expensed and capitalized R&D on the financial performance of a firm. The results revealed that expensed R&D positively associates with Dividend Cover Ratio (DCR), negatively associates with Earnings Per Share (EPS) with a substantial impact. The capitalized R&D has substantial negative association on Return On Assets Ratio (ROAR), Return On Capital Employed (ROCE) and EPS. The expensed and capitalized R&D showed insubstantial positive or negative impact on other financial indicators. Vanderpal (2015) investigated the R&D impact on the financial value of the company. The study assumed a positive impact of R&D on the corporate value, using a new variable that includes both decision and outcome features. Ayaydin and Karaaslan (2014) focused on the effect of research and development investment on firm's financial performance. Return on assets used as a measure of financial performance. Capital structure, liquidity, efficiency and firm size factors determining firm performance also are investigated. Our study evidences a positive effect of R&D intensity on the firm performance by using GMM system estimators for a sample of 145 banks registered BIST for the 2008–2013 periods.

III. Material and Methods

This study used a descriptive research design. Akonga (2014) defined descriptive research as one which involves collecting data so as a researcher can be able to study a given research topic. This study's

population comprised of the 11 tier one deposit taking Saccos in Nairobi County as at 31st December 2021. The sample frame for this study were tier one deposit taking Saccos in Nairobi County. The sample of this study was 55 observations as obtained from 11 tier deposit Taking Saccos in Nairobi for 5 years. The research used secondary data collection sheet as per the conceptualized study variables then used it to collect secondary data from audited financial statements. The data collection procedure involved getting the financial statements from the Sacco Societies Regulatory Authority (SASRA) and individual Sacco’s websites. Both descriptive and inferential statistics were computed using STATA 15. Descriptive statistics refer to methods of organizing and summarizing data, for this study frequencies and percentages as well as measures of central tendency (means) and dispersion (standard deviation) was used. Inferential statistics refer to methods of drawing conclusions from sample data about a population. For this study, regression and correlation analysis was used to determine both the nature and the strength of the relationship between study variables. Correlation analysis is usually used together with regression analysis to measure how well the regression line explains the variation of the dependent variable. The regression and correlation analyses were based on the association between two (or more) variables. Data was presented in form of tables and graphs.

$$Y = \beta_0 + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \beta_4 X_{it} + \varepsilon$$

Where:

Y = Financial performance

β_0 = Intercept term

$\beta_{1,2,3,4}$ = coefficients of the independent variables

X₁ = Capital Expansion decision

X₂ = Asset Renewal decision

X₃ = Earnings Replacement decision

X₄ = Research and development decision

i = Time in years

t = Individual Deposit Taking Saccos

ε = error term

IV. Result and Discussion

Descriptive Analysis

The study calculated standard deviation, mean, maximum and minimum values between 2017 and 2021 for all the variables both dependent variables, financial performance, and the independent variables, capital expansion decision, asset renewal decision, earnings replacement decision and research and development decision. The descriptive statistics for the variable are presented in Table 1.

Table 1: Descriptive Statistics

	CED	ARD	ERD	RDD	FP
Mean	0.495685	0.30156	0.144812	0.057943	0.121682
Maximum	0.687915	0.572293	0.244367	0.134526	0.169156
Minimum	0.297347	0.164464	0.038403	0.0111	0.009321
Standard Deviation	0.092596	0.083504	0.066203	0.023619	0.027825
Skewness	0.046634	1.268221	-0.23293	1.299314	-1.69474
Kurtosis	2.756798	4.793557	1.611963	5.573703	5.628825
Jarque Bera	.8476	1.474	.7006	1.08	.8488
Probability	.6546	.4786	.6986	.5826	.6542

CED=Capital expansion decision, **ARD**=Asset renewal decision, **ERD**=Earnings replacement decision, **RDD**=Research and development decision, **FP**=Financial performance

From Table 1, capital expansion decision was calculated by taking Total funds invested on Capital Expansion to Total investments. From 2017 to 2021, capital expansion decision ranged from 0.297 to 0.688 with a mean of 0.495685 and standard deviation of 0.092596. Asset renewal decision was calculated by taking Total funds invested on asset renewal to Total investments. Between 2017 and 2021, asset renewal decision ranged from 0.164464 to 0.572293 with a mean of 0.30156 and standard deviation of 0.083504. Earnings replacement decision was calculated as by taking Total funds invested on earning replacement to Total investments. Between 2017 and 2021, earnings replacement decision ranged from 0.038403 to 0.244367 with a mean of 0.144812 and standard deviation of 0.066203. Research and development decision was calculated by taking Total funds invested on research and development to Total investments. Research and development decision ranged from 0.0111 to 0.134526 with a mean of 0.057943 and standard deviation of 0.023619. Financial performance which is the dependent variable was determined using returns on Assets. From Table 4.1, observing overall statistics as obtained from panel data, between 2017 and 2021, financial performance ranged from 0.009321 0.169156 with a mean of 0.121682 and standard deviation of 0.027825.

Inferential Analysis

Correlation Analysis

The study conducted Pearson moment correlation analysis. Using the correlation coefficient, the study tested whether interdependency existed between the predictor variables and whether there was any relationship between response variable financial performance and predictor variables Capital expansion decision, Asset renewal decision, Research and development decision and Earnings replacement decision. The pertinent results are summarized in Table 2.

Table 2: Pearson Correlation Analysis

		FP	CED	ARD	ERD
Capital expansion decision	Pearson Correlation	0.6261	1		
	Sig. (2-tailed)	0.000**			
	N	55	55		
Asset renewal decision	Pearson Correlation	0.5397	0.6872	1	
	Sig. (2-tailed)	0.000**	0.000**		
	N	55	55	55	
Earnings replacement decision	Pearson Correlation	0.6427	0.1338	0.0801	1
	Sig. (2-tailed)	0.000**	0.3301	0.5609	
	N	55	55	55	55
Research and development decision	Pearson Correlation	0.2714	0.6066	0.7557	-0.1367
	Sig. (2-tailed)	0.045*	0.000**	0.000**	0.3195
	N	55	55	55	55

*. Correlation is significant at the 0.05 level (2-tailed).

***. Correlation is significant at the 0.01 level (2-tailed).

CED=Capital expansion decision, **ARD**=Asset renewal decision, **ERD**=Earnings replacement decision, **RDD**=Research and development decision, **FP**=Financial performance

The results indicated that the capital expansion decision has a significant positive effect on the financial performance of Deposit taking Societies Saccos in Kenya ($r = 0.6261$, $P=0.000$). The findings are in agreement with Otanga (2021) showed that expansion investment decisions had positive significant effect on financial performance indicating that unit increase in investment decision leads to 20.38% increase in financial performance. The study concludes that expansion investment decisions are important when considered alongside corporate risk management. However, Balarabe (2020) investigated expansion decision and its implication on firm's growth in Nigeria. The findings show that there is insignificant relationship between the independent variables (capital expansion) and dependent variable (return on asset).

Asset renewal decision has a positive and significant on the financial performance of Deposit taking Societies Saccos in Kenya ($r =0.5397$, $P=0.000$). These results are in agreement with Musa, Ogaro, Songoro and Euna (2017) assessed the effects of investment decision techniques on financial performance in ME in Kenya. The finding shows that there were significant correlations between renewal decision and financial performance. The above results contradicted results by Yiming et al. (2011) who found out that asset renewal decisions had a negative contribution to financial performance of borrowers, and also Jeffrey and Jeffrey (2012) who stated that asset renewal decisions do not influence firm performance. The study also found that modernization decisions were not significant to SACCO financial performance

Earnings replacement decision has a negative and significant effect on the financial performance of Deposit taking Societies Saccos in Kenya ($r =0.6427$, $P=0.000$). The findings are in tandem with Triani and Tarmidi (2019) found that replacement decisions and dividend policies have a significant impact on firm value. This research implies that in optimizing firm value can be achieved through the application of financial management functions as well as dividend policy, where one decision can attract investor interest and have an impact on the firm value. However, Riyadi (2018) showed that replacement decisions don't effect significantly to efficiency, replacement decisions effect significantly to financial performance, replacement decision effect significantly to value of firm.

Research and development decision has a positive moderate and significant effect on the financial performance of Deposit taking Societies Saccos in Kenya ($r =0.2714$, $P=0.045$). This implied that the investment decisions used in this study were all having a significant effect on the financial performance of Deposit taking Societies Saccos in Kenya. The results are in agreement with Bloemendaal (2020) who investigated the effect research and development investments have on companies their financial performances who found financial performance is insignificantly influenced by research and development investments. However, it contradicted Erdogan and Yamaltdinova (2019) who investigated the effects of R&D expenditures on the financial performance of 62 production companies listed in Borsa Istanbul in the period of 2008-2017 by using panel data methods. The empirical findings of this study support the existence of a positive interaction between R&D expenditures and financial performance.

Regression Analysis

The main aim of regression analysis is to show how and extent of which each variable separately effects the dependent variables. Regression analysis is used in estimating the weight of the effects of the independent variables on the dependent variable. Model summary is used to show the percentage of dependent variable that can be explained by changes in the independent variable. The model summary was used to show the amount of changes in financial performance that can attributes to changes in capital expansion decision, Asset renewal decision, Research and development decision and Earnings replacement decision. In this regression, the four independent variables were entered as a block. Both fixed and random effect model were fitted and the Table 3 below shows the model summary of the adopted fixed effect model.

Table 3: Model Summary Fixed Effect of Investment decisions on Financial performance

Fixed-effects (within) regression	Number of obs =	55
Group variable: DT-Sacco	Number of groups =	11
R-sq:	Obs per group:	
within = 0.342	min =	5
between = 0.693	avg =	5
overall = 0.5277	max =	5
	F(4,40)=	5.20
	Prob > F=	0.0018

The analysis shows that the panels were strongly balanced for this multivariate analysis as shown by the number of observations per group. They were a total of 55 observations used in this analysis considering 11 groups of entities implying strongly balance panels. The minimum, maximum and average numbers of observations per groups were all equal to 5. The result obtained from fixed effect model indicated that the determinants accounted for 52.77% (Overall R square=0.5277) of the variation in financial performance of Deposit taking Societies Saccos in Kenya. The F-statistic to the model shows is 5.20 which is greater than 0 implying that the estimated parameters in the model are at least not equal to zero. This implies that four investment decisions have an effect on financial performance of Deposit taking Societies Saccos in Kenya. This effect is significant (P=0.0018).

Regression coefficients are estimates of the unknown population parameters and describe the relationship between a predictor variable and the response. In linear regression, coefficients are the values that multiply the predictor values. P-values and coefficients in regression analysis work together to tell which relationships in the model are statistically significant and the nature of those relationships. The coefficients describe the mathematical relationship between each independent variable (investment decision) and the dependent variable (Financial performance). The p-values for the coefficients indicate whether these relationships are statistically significant. The results are presented in Table 4.

Table 4: Regression Coefficient

FP	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
CED	0.1019	0.0414	-2.46	0.018	0.0182	0.1855
ARD	0.304	0.1017	2.99	0.005	0.0984	0.5096
ERD	0.628	0.2695	2.33	0.020	0.3209	1.5768
RDD	0.3385	0.6172	0.55	0.586	-0.9089	1.5859
_cons	2.0350	0.4663	4.36	0.000	1.0925	2.9774

The study regression model as obtained from table above is as shown below.

Financial performance = 2.0350 + 0.1019CED + 0.304ARD + 0.628CC + 0.3385RDD

From the findings, capital expansion decision had a regression co-efficient (β_1) of 0.1019, $p=0.018$ implying that when asset renewal decision, earnings replacement decision and research and development decision are controlled, a unit increase in capital expansion decision across time and among Deposit taking Societies Saccos in Kenya would result in a significant increase of 0.1019 units in financial performance. Since the t value is greater than 1.96 and P value is less than 0, the first null hypothesis was rejected as capital expansion decision does significantly effect financial performance of Deposit taking Societies Saccos in Kenya. The results confirm with Murniati, Mus, Semmaila and Nur (2019) who showed that capital expansion investment decisions have a positive and significant effect on financial performance and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the

firm through increased financial performance. Further, Toni and Sumarsan (2019) showed that expansion investment decision has a direct and indirect positive effect on each other's regards to 315 public companies in Indonesian Stock Exchange. However, Ogum and Jagongo (2022) examine the impact of investment decisions on the financial performance of DT-SACCOS in Nairobi City County. The study showed that expansion decision has insignificant

The study established that Asset renewal decision had a regression co-efficient (β_2) of 0.304, $p=0.005$ implying that when earnings replacement decision, capital expansion decision and research and development decision are controlled, a unit increase in asset renewal decision across time and among Deposit taking Societies Saccos in Kenya would result to significant increase of 0.304 units in financial performance. The t value is greater than 1.96 and P value is less than 0, the second null hypothesis was rejected as asset renewal decision does significantly effect financial performance of Deposit taking Societies Saccos in Kenya. The results are not in agreement with Mweresa and Muturi (2018) assessed the effects of investment decisions on the performance of public sugar firms in western Kenya. The study found that renewal decision has a strong effect on the financial performance of sugar companies at 4.466 magnitude strength. Musa (2016) focused on determining the effect of investment decisions on financial performance of Savings and Credit Cooperatives in Kitui Central Sub County. The study findings indicated renewal decisions positively contributed to SACCO performance as measured by dividends while expansion decisions had a negative contribution. However, Yiming, Siqi, Thomas, and Thomas (2011) on whether banks adjust their loan interest rates and consider loan renewal decisions in reference to borrower's financial performance by conducting a multivariate regression analysis on Chinese public industrial companies between years 200-2005, they found a negative relation between loan renewal and the financial performance of borrowers.

From the findings, earnings replacement decision had a regression co-efficient (β_3) of 0.628, $p=0.020$ implying that when capital expansion decision, Asset renewal decision and research and development decision are controlled, a unit increase in earnings replacement decision across time and among Deposit taking Societies Saccos in Kenya would result in a significant increase of 0.628 units in financial performance. The t value is greater than 1.96 and P value is less than 0, therefore the third null hypothesis was rejected as earnings replacement decision does significantly effect financial performance of Deposit taking Societies Saccos in Kenya.

Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by financial performance. The results showed that replacement investment has a positive and significant effect on financial performance and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased financial performance. Kemuma (2014) sought establish the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange. Results revealed good, significant and positive correlations between ROA and replacement investment decision. This supports Mark and Robert (2008) study which compared managerial replacement decisions and firm performance and concluded that managerial replacement has a positive impact on firm performance. However, this is not in support of Trevor (2015) study on firm financial performance following system replacement which stated that firm replacement decision was not financially significant to firm performance

Lastly, the results revealed that research and development decision had a regression co-efficient (β_4) of 0.3385, $p=0.586$ implying that when capital expansion decision, Asset renewal decision and earnings replacement decision are controlled, a unit increase in research and development decision across time and among Deposit taking Societies Saccos in Kenya would result in insignificant increase of 0.31876 units in financial performance. The t value is less than 1.96 and P value is greater than 0, therefore the fourth null hypothesis was not rejected as research and development decision does not significantly effect financial performance of Deposit taking Societies Saccos in Kenya.

The findings are supported by Shrihari et al., (2013) who stated that increasing a firm's research and development does not increase a firm performance. The study found research and development to have an insignificant effect to Deposit taking Societies Saccos financial performance. Karunanithy, Dasanayaka, Al Serhan and Ayed (2018) sought to identify the impact of expensed and capitalized R&D on the financial performance of a firm. The expensed and capitalized R&D showed insubstantial positive or negative impact on other financial indicators. It however contradicts a study conducted by Hassan et al. (2014) and Boem et al., (2013) who stated that research and development have a positive effect to performance. Ayaydin and Karaaslan (2014) analyzed the variables influencing firms' financial performance: The study evidences a positive effect of R&D intensity on the firm performance by using GMM system estimators for a sample of 145 manufacturing firms registered BIST for the 2008–2013 periods. Vanderpal (2015) found a positive impact of R&D on the corporate value, using a new variable that includes both decision and outcome features. Hassan, and Ibrahim (2014), did a study on The Effects of Research and Development Investment on Firm's Financial Performance

on Manufacturing Firms in Turkey. The research found out that investment in R&D has a positive impact on firm's financial performance.

V. Conclusion and Recommendation

The study concluded that Deposit taking Societies Saccos are able to increase their financial performance when they improve their capital expansion decision. Asset renewal decision has significant positive effect on financial performance. An increase in asset renewal decision would results to significant increase in financial performance. Therefore, asset renewal decision has a significant positive effect of financial performance of Deposit taking Societies Saccos in Nairobi County. From the linear and multiple regression results, the study concluded that earnings replacement decision has significant positive effect on financial performance. An increase in earnings replacement decision would results to significant increase in financial performance. Therefore, earnings replacement decision is a significant predictor of financial performance of Deposit taking Societies Saccos in Kenya. The study concluded that Research and development decision has insignificant positive effect on financial performance as indicated by multiple linear regressions. An increase in Research and development decision would results to insignificant increase in financial performance. Hence, Research and development decision is an insignificant predictor of financial performance of Deposit taking Societies Saccos in Kenya.

The study recommended that management of Deposit taking Societies Saccos should keep the capital expansion decision at maximum in order to enhance their working capital position hence increase their financial performance. To achieve this, during capital investment decision, management of Deposit taking Societies Saccos should focus on increased expenses, increased working capital levels, increased marketing costs, business acquisition capital, and transaction costs. Moreover, the study recommended that management of Deposit taking Societies Saccos should undertake asset renewal decisions with intent to re-energize their organization financial capabilities in terms of asset operations and asset returns. In this case, they would adapt their operations in order to maintain market share and stay up with their rivals in today's volatile business climate. The study also recommended that during earning replacement decision, management of Deposit taking Societies Saccos should base their decision on the net present value and internal rate of return of the incremental cash flows, i.e., the difference between periodic net cash flows if the existing earnings stream is kept and the periodic net cash flows if the existing earnings stream is replaced. Lastly, the study observed that research and development have insignificant effect on financial performance of Deposit taking Societies Saccos, therefor, the study recommends that management of the Deposit taking Societies Saccos should appropriately invest adequate resources in research and development and their decision should be based on areas which have positive impact on their financial performance.

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