

## **INFLUENCE OF CASH FLOW MANAGEMENT ON FINANCIAL PERFORMANCE OF SACCOS IN NAIROBI CITY COUNTY: A CASE OF JAVA SACCO**

**<sup>1\*</sup>Chivuyi M. Joseph & <sup>2</sup>Dr. Isaac Mokono Abuga**

**<sup>1</sup>Master's Student, Mount Kenya University**

**<sup>2</sup>Post Graduate Co-coordinator, Mount Kenya University**

**\*Email of corresponding author: [joseph.chivuyi@gmail.com](mailto:joseph.chivuyi@gmail.com)**

**Publication Date: June 2023**

### **ABSTRACT**

**Purpose of Study:** This study aimed at examining the influence of cash flow management on financial performance of Savings and Credit Cooperatives in Nairobi City County: A case of Java SACCO.

**Statement of Problem:** A significant portion of SACCOS in Kenya are presently struggling to settle their debts due to cash flow complications. This situation has prompted some of them to issue profit warnings in compliance with the regulations set by the Sacco Societies Regulatory Authority (SASRA).

**Literature Review:** This study was informed by three theories: Free Cash Flow Theory, Financial Stewardship Theory and Agency theory. Free Cash Flow Theory provided support for the cash flow management variables used in this study by describing how cash flow should be managed. Financial Stewardship Theory explains how financial stewardship are to be able to work to improve SACCOS' financial performance, while Agency theory was pertinent to the study because it explained the extent to which financing cash flow influences the financial performance of the SACCO. Empirical review was performed where pertinent research related to the study variables was reviewed and summarized.

**Methodology:** This study used a causal research methodology, and secondary data was included in the secondary data. The yearly financial reports of Java SACCO during a ten-year period, from 2013 to 2022, was the primary source of secondary data for all the study's variables. Data was

analyzed using descriptive statistics, correlation analysis, and multiple linear regression analysis using SPSS software.

**Result:** The findings revealed a coefficient of determination (R squared) of 0.629 and adjusted R squared of 0.615 at 95% significance level, implying that the independent variables used in the study namely; investing cash flow management, operating cash flow management and financing cash flow management jointly explains 62.9 % of the variation in the financial performance of Java SACCO.

**Conclusion:** The study concludes that cash flow management activities have significant influence on financial performance of Java SACCO and are crucial for the financial performance of Java SACCO.

**Recommendation:** The study thus recommends that the management of Java SACCO should focus on improving their investment activities, such as investing in profitable ventures, disposing of non-performing assets, and diversifying their investment portfolio.

**Keywords:** *Cash Flow Management, investing cash flow, operating cash flow, financing cash flow, SASRA regulations, Financial Performance*

---

## INTRODUCTION

Any organization's ultimate goal is to increase financial performance, and it is crucial to evaluate management in terms of how well individuals and groups within the organization contribute to the business's financial goals (Musah, Abdulai & Baffour, 2020). According to Baba and Ashogbon (2019), poor financial performance can lead to runs in an institution, crises and result in a major financial crisis. Financial performance therefore is a measure of how a firm's management can generate profit by efficiently utilizing assets from its main business activities (Towo, Ishengoma & Mori, 2022). Financial success of an organization can be used to compare the performance of various companies within a given market or across industries. SACCOs' financial performance reveals how effectively they are producing value for the deposits and share capital of their members (Yitayaw, 2021). Sacco's financial success may be assessed using a variety of financial metrics, including ROA, ROE, earnings per share, and profit after taxes (Alam et al. 2021). Additionally, increased financial performance raises demands for things like staff wages, increased dividend payments, prospective buyout plans for the company, mergers, and business expansion or diversification (Agyabeng-Mensah, Afum & Ahenkorah, 2020).

Savings and credit cooperatives, which make up more than half of Kenya's cooperatives, are financial entities that are essential to financial intermediation in the nation's financial system, primarily focusing on personal development (Society Regulation authority, 2020). Agricultural and livestock cooperatives in rural regions and savings and credit cooperatives (SACCOS) in urban areas are just a few of the outstanding and comprehensive roles that cooperative organizations have played in Kenya (Bowen & Makokha, 2021). SACCOs serve as an active organization to

provide financial services, particularly to the unbanked, according to Aduda and Obondy's (2021) explanation. Most people, especially in rural regions, connect with SACCOS to receive financial services, but as the financial sector changes, user needs are also constantly changing, which forces SACCOS to adapt to the changing needs of the market (Bowen & Makokha, 2021).

Cash must be readily available for firms to be able to meet their obligations in a timely manner and avoid any contractual roadblocks that could result in noncompliance. Cash is a medium of trade and the basis for measuring accounting for all financial statement components (Afrifa & Tingbani, 2018). Cash flow refers to the amount of money spent and collected from various daily activities, excluding cash on hand, unpaid receivables from clients, and assets that are either owed to or owned by the business (Xie, Liu, Najam, Abbas, Comite & Miculescu, 2022). Lack of cash flow has proven to be one of the problems SACCOs in Kenya are dealing with. SACCOs that experience cash flow issues frequently struggle to pay off their credit obligations when they are past due. According to Xie *et al.* (2022), the impact of cash flow deficit has occasionally led to extreme losses, low earnings, difficulties running businesses, and high financial costs as a result of excessive borrowing.

Several firms now prioritize cash flow management in their operational strategy and planning (Vazov, 2019). This is due to the fact that the cash flow of an organization has a significant impact on both its operational and financial health, and managers of many businesses view effective cash flow management as essential to its ability to continue operating while placing a strong emphasis on its financial goals. Thus, for a company to boost its financial performance, it must use methods to better manage its cash flow and its working capital. Debts from inventory, customer accounts, and delayed payments to vendors should all be targets for these approaches. Receipts from cash sales must also be accounted for (Dzingirai & Ndava, 2022).

Cash flow, from an accounting and financial standpoint, compares the amount of money in the firm at the beginning of the financial period to the cash balances at the end of the company's financial period (Hovakimian & Zhu, 2022). Cash flow, according to Frank and James (2014), is the sum of an organization's net liquid assets plus its inflow and outflow of cash equivalents. Moreover, firms employ cash flow management operations to determine and assess how to best monitor, summarize, and use net cash payments receipts in order to reduce cash disbursements and expenditures (Dzingirai & Ndava, 2022).

On the global stage, Kozarevic, Jukan, and Softic (2019) provides evidence from Bosnia and Herzegovina, asserting that efficient cash flow management has been linked to the performance and stability of financial institutions. They observe that proper cash flow management is vital in the banking sector in Bosnia and Herzegovina. They underscore the role that robust cash management plays in the performance and stability of financial institutions, an understanding that is essential for both bank managers and policymakers. Concurrently, a study by Madueno, Moreno, and Puente (2019) in Spain indicate that cash flow management is a crucial determinant of financial performance in banks. Similarly, in America, it has been shown that banks' profitability

is directly tied to cash flow management, implying that efficient management practices and leads to improved performance (Dang, 2019).

The massive effect that handling cash has on the availability of money for usage in society has made it a top priority for Nigeria's deposit money banking institutions (Major & Azali, 2022). The problem of inefficient cash management by financial institutions in Nigeria came to light during the liquidation and distress phase of the late 1980s and early 1990s. The banking system's liquidity problem had a negative snowball effect until the recapitalization phase of 2005, when deposit money banks were mandated to raise their capital base from N2 billion to N25 billion.

Majority of Kenyans, in particular, benefit locally from SACCOs' facilitation of financial intermediation, financial deepening, and financial inclusion (Kiai, Kyalo & Maina, 2020). It is regrettable to learn that just 14% of SACCOs in Kenya adhere to good financial management standards (SASRA, 2020). They are distinguished by a low liquidity ratio that is below the required 15 percent, inadequate cash management, ineffective cash strategies, and the use of models that are vulnerable to liquidity hazards (Matianyi & Ndirangu, 2019). This makes it impossible for the 4.97 million DT-SACCO members to realize their economic, social, and cultural potential through a cooperatively owned and democratically administered firm (SASRA, 2020). There is still some mystery because SACCOs continue to confront liquidity concerns, even though the SACCOs' supervisory authority gives guidelines and supervision to the firms that would help them retain financial viability.

## **STATEMENT OF THE PROBLEM**

SACCOs around the world struggle to manage their business operations because they lack the funds to cover their responsibilities, especially in Sub-Saharan Africa (World Bank, 2020). According to a study by SASRA (2020), the majority of SACCOs in Kenya are currently having trouble paying their debts as a result of cash flow problems, which has led to some of them issuing profit warnings in accordance with SASRA regulations. Poor financial performance of SACCOs in Nairobi is a problem that can be linked to a number of things, including ineffective governance, a lack of member confidence, mismanagement, and bad investment choices (Kyenze & Aluoch, 2022). Lack of appropriate investment decisions, a lack of investment options, a delay in member cash flow, and dubious investments with minimal or no return on the capital of members are some of the main issues preventing SACCOs in Nairobi from doing well financially (Sheikh & Jagongo, 2022).

SACCOs in Kenya have been working to meet members' needs over time by raising money and extending credit, but they have not been successful in building up their wealth in a way that allows them to fund assets, achieve a reasonable level of non-withdrawable capital, and provide a cushion to absorb losses and the depreciation of members' savings (Njenga & Jagongo, 2019). The relationship between cash flow management and financial performance in various circumstances has been the subject of numerous research. For instance, Harris and Roark (2019); Günay and Fatih (2020); Improvements in cash flow management have been linked to enhanced financial performance, as shown by studies such as those conducted by Rahman and Sharma (2020),

Kinyanjui *et al.* (2017), Liman and Aminatu (2018), Sulaiman *et al.* (2019), Abdullahi *et al.* (2020), and Appah *et al.* (2021), and Ando *et al.* (2019). Both Marus *et al.* (2019) and Abdullahi *et al.* (2019), among others, have conducted studies showing a negative correlation (2020). Given these issues and contradictory findings, the literature is missing a crucial piece. This study thus sought to fill the identified gaps examining the influence of cash flow management on financial performance of Savings and Credit Cooperatives in Nairobi City County: A case of Java SACCO.

## **RESEARCH OBJECTIVES**

- i. To determine the influence of investing cash flow management on financial performance of Java SACCO.
- ii. To examine the influence of operating cash flow management on financial performance of Java SACCO.
- iii. To assess the influence of financing cash flow management on financial performance of Java SACCO.
- iv. To establish the moderating role of SASRA regulations on the relationship between cash flow management and financial performance of Java SACCO.

## **EMPIRICAL REVIEW**

### **Investing Cash Flow Management and Financial Performance**

In their study of the effect that cash flow management has on the financial performance of the pharmaceutical business in Nigeria, Ugo and Egbuhuzor (2022) found that investing activities have a favorable effect on liquidity. Despite the fact that this effect is statistically negligible, the authors found that investing activities have a favorable effect on liquidity. This study used an ex post facto research approach, and the population comprised of the 10 pharmaceutical companies that were listed on the Nigerian Exchange Group in 2021. The country of Nigeria served as the location for the study. The data for the years 2011 through 2020 were extracted from the annual reports of a large number of publicly traded pharmaceutical companies, which were investigated. The results also showed that the cash flow management techniques of pharmaceutical companies regarding investing activities had not significantly improved financial performance as judged by liquidity. This was shown by the fact that the cash flow had not grown excessively. Even while cash management did not affect financial performance, Alslehat and Al-Nimer (2017) found that net cash from investing activities did. These results, however, were found in separate research. According to research by Eton *et al.* (2019), cash management does not significantly affect business results.

Soet conducted studies to quantify the impact that cash flow management has on the profitability of mutual funds (2020). This research set out to answer several questions about the relationship between effective cash management and financial performance. Investment cash flow management was found to have a little beneficial effect on return on assets and return on equity using secondary panel data derived from the audited financial statements of 22 mutual funds for the years 2011-2016 in a causal research or explanatory approach. This was the conclusion of the study that used

secondary panel data to investigate. The study made clear that positive web revenue from investing activities may suggest effective investment expenditure and investment spending policies. It was discovered that the web revenue from investments had a negligible beneficial impact on ROA and ROE, respectively, which was explained by the relationship between those flows and the terms of investments, which led to the purchase of equipment and property.

### **Operating Cash Flow Management and Financial Performance**

Alslehat and Al-Nimer (2017) investigated the connection between Jordanian insurance businesses' financial success and cash flow management. A population of 23 Jordanian insurance businesses was used during the years 2009 to 2013. The study found that the return on assets is influenced by the net cash flows from operating operations. While it was discovered that the financial performance was significantly impacted by net cash from investing activities. Yeko (2019) investigated the connection between Tororo cement's cash flow management and financial success in eastern Uganda. The study used a survey and case study approach, with a sample population of 50 respondents selected from the enterprises that make Tororo cement. According to the study, Tororo Cement's management of its accounts payables has an impact on organizational performance, and the company's operational cash shortfalls have a negative financial impact.

Cash flow and the financial performance of listed banks in Nigeria was the focus of a separate study by Amah, Michael, and Ihendinihu (2016). The primary objective of the research was to assess how operating cash flow is related to net income for financial institutions. The study used an ex post facto research design and a sample of four banks trading on the Nigeria Stock Exchange during a nine-year period (2005–2013). The data was analyzed statistically by looking for correlations. Operating cash flow was found to have a significant and positive relationship with the performance of the sampled financial institutions. One metric used to measure success was the company's bottom line. According to the study, mutual funds in Kenya benefited from proper operating cash flow management. Managing operating cash flow had a significant and positive effect on return on assets and return on equity, and it contributed to net income, which is directly tied to return on assets and return on equity. The study found that operating cash flow management outperformed other operations, suggesting that mutual funds generate revenue from their core competencies and are not facing a liquidity crisis.

### **Financing Cash Flow Management and Financial Performance**

The impact of company financing on the financial performance of unit trust companies listed on the Nairobi Stock Exchange in Kenya was assessed by Cheruiyot and Jagongo in 2022. The study used desktop technique and was literature-based. Secondary data was gathered from pre-existing data sources, such as libraries, authorized websites, and online journals. The study found that the studies conducted had conceptual framework gaps, geographic gaps due to the fact that they were not conducted in Kenya, and periodic scope gaps. According to the study, the results will be utilized to help Unit Trust firms track important financial indicators and comprehend how much

firm funding can influence performance. Investors and customers would benefit from the study's information by better understanding the major factors that influence financial performance.

Appah, Awuji and Anuogwu (2021) studied the effects of cash flow accounting on the financial results of publicly traded Nigerian companies producing consumer goods between 2015 and 2019. Methods employed in the study included ex-post facto analysis and correlation. From a population of 26, the researchers selected a random sample of 23 businesses using the Taro Yamene formula. Study data was analyzed using descriptive statistics, bivariate analysis, and multivariate techniques. This information was gathered from the annual reports of a selection of companies trading on the Nigerian Stock Exchange. The data analysis demonstrated a huge negative relationship between investment activities and financial leverage, but a strong positive relationship between financing cash flow and firm size to profit after tax of listed consumer goods manufacturing enterprises. The findings of the research indicated that cash flow accounting has an effect on the financial health of Nigerian enterprises. For this reason, the research argued that, when deciding on capital expenditures, organizations should strike a balance between liquidity and profitability.

### **SASRA Regulations and Financial Performance**

By using a descriptive research approach, Nanzala (2021) evaluated the impact of capital sufficiency laws on the performance of savings and credit cooperative societies in Kakamega County. The Front Office Savings Activity, or FOSA, running SACCOs in Kakamega County were the study's target demographic, and a census of these SACCOs operating in the County was conducted. Respondents were chosen at random from inside the SACCOs for questionnaires and interviews, which were used to collect data. The study's findings demonstrated a substantial association between ownership, public confidence, corporate governance, and performance at a significance level of 0.05.

Wamalwa (2020) looked at SACCOs in Kenya that provide front office service activities (FOSAs) to see how government oversight affects their profitability. 122 of these SACCOs were selected at random from the population of Kenya for this descriptive research study. From this pool, a representative sample was drawn, and questionnaires with both closed- and open-ended questions were used to compile information for analysis. According to the results, SACCOs' bottom lines improved once they started following accepted governance practices. The research found that specific prudential standards had an effect on financial performance. These included regulations on capital adequacy, the amount of external borrowing, asset categorization and provisioning, maximum loan size, insider lending, and risk classification. Following the implementation of reporting standards, the examination found that SACCOs' financial performance had improved.

### **THEORETICAL FRAMEWORK**

This study was informed by three theories namely: Free Cash Flow Theory, Financial Stewardship Theory and Agency theory.

### **Free Cash Flow Theory**

The Free Cash Flow Theory was developed by Jensen (1986). Managers who have access to free cash flow will, the theory goes, invest it in projects with negative net present values rather than return it to shareholders. By Jensen's definition, free cash flow is what's left after a corporation invests in all of its initiatives with a positive net present value. According to Jensen (1986), businesses that generate excess cash that is needed to finance projects with favorable returns experience worse agency issues since the free cash flow exacerbates the disparity in benefit between stakeholders and managers. According to Jensen's (1987) free cash flow hypothesis, businesses with large amounts of free cash flow are also likely to start making value-declining acquisitions and investments.

Even though the company has a sizeable investment program and a market-to-book ratio that is quite low, the value of the company's shareholders would nonetheless decrease as a result of this. Because it has been demonstrated to be significant and because it motivates managers and stakeholders to minimize conflicts of interest in order to manage cash flows in a manner that maximizes wealth, this theory served as the basis for the investigation that was carried out. In addition, the theory provided support for the cash flow management variables used in this study by describing how cash flow should be managed to ensure that shareholders receive value for their investments in a SACCO through improved financial performance.

### **Financial Stewardship Theory**

Stewardship theory was developed by Donaldson and Davis (1989) to provide as a normative alternative to agency theory. By contrast to an opportunistic shirker, a manager who embraces the concept of stewardship has the best interests of the company at heart. The financial stewardship idea established value maximization as the financial institution's goals, which are reinforced by the firms' vision (Donaldson & Davis, 1991). The stakeholder theory, which contends that business decisions should take shareholders' interests into account, is important among these theories (Sundaram & Inkpen, 2004). The agent, however, measures the performance of the investment once revenue has been realized by generating a statement of comprehensive income that displays the surplus, a statement of financial position that summarizes the financial situation at that time, and cash flow statements (Donaldson & Davis, 1991).

The SACCO's regular financial decision-making process, known as financial stewardship, should adhere to ethical business principles (Meressa, 2017). This should also focus on the SACCOs' financial discipline, which has a significant impact on the achievement of all SACCO-run firms (Mudibo, 2005). For instance, hiring financial employees, managing loans, managing assets, and deciding on new product development are some of the key financial decisions that go into financial stewardship (Horne, 2003 & Mudibo, 2005). Because it explains how financial stewardship should be able to work to improve SACCOs' financial performance, maintain the SACCOs' value, and satisfy shareholders' demands, this theory is thought to be pertinent to the current study. Also, the financial stewardship component is in charge of maintaining accounts, guaranteeing their accuracy, planning in ahead, and reporting to members.



### **Agency Theory**

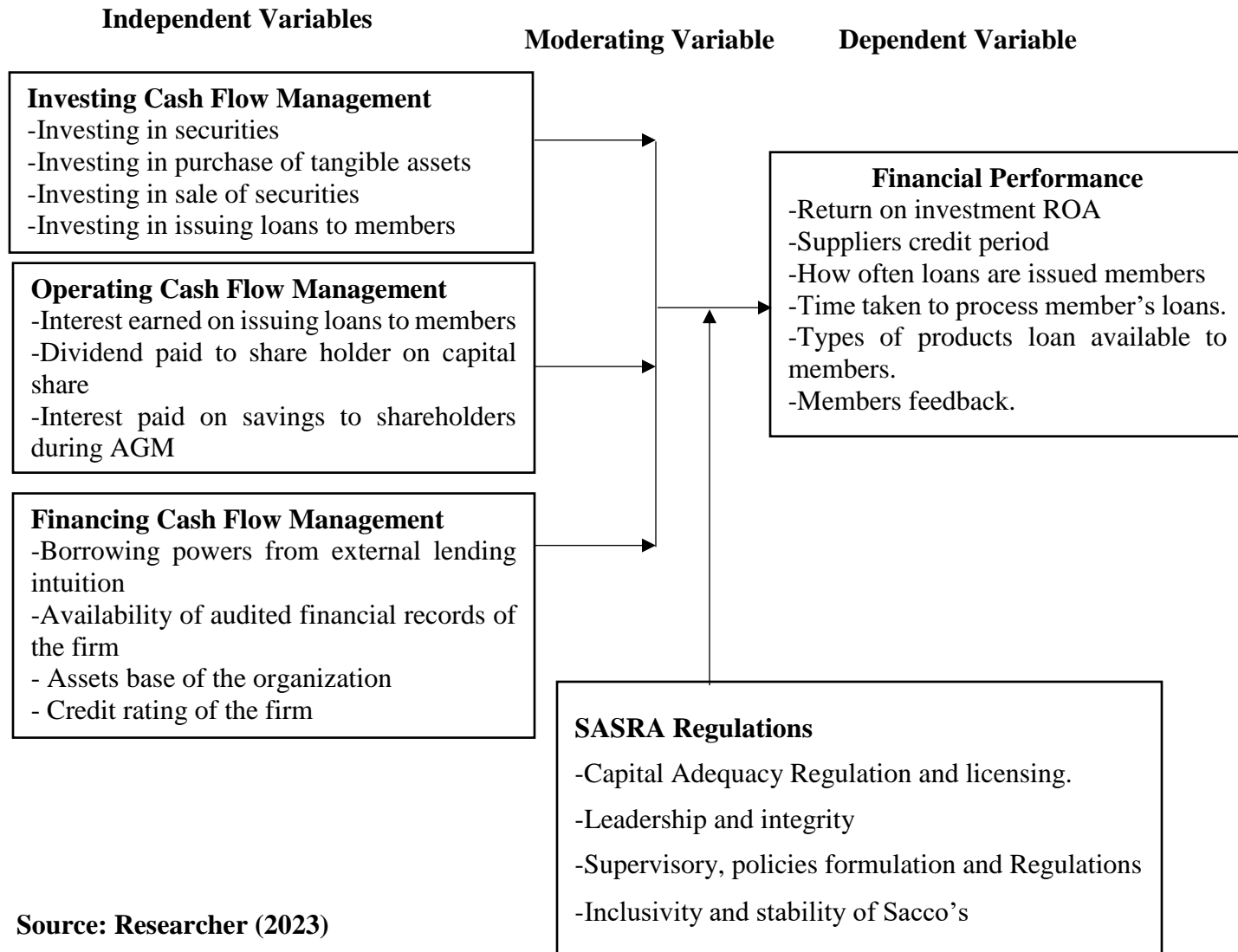
Jensen created and advanced agency theory (Jensen & Meckling, 1976). According to Jensen (1986), managers often have interests that are not the same as those of shareholders, and if they have a lot of money at their disposal, they will utilize it for their own profit rather than increasing the value of the company. As a consequence of this, the managers of the model's objective is to collect wealth so that they can exercise independent judgment regarding their investment choices (Jensen & Meckling, 1976). In this case, the management of the company decides whether or not the cash should be kept by the corporation or dispersed to the shareholders of the company. Cash is the most ideal method of funding for managers to pursue their own goals, as the need to raise external funds typically requires that the company offer the lender with insights into how the money will be utilized. Cash is therefore the most ideal method of funding for managers to pursue their own goals.

According to agency theory, businesses with higher levels of financing cash flow should experience an increase in the level of cash holdings held by the business. The explanations of agency are, for the most part, incompatible with the alterations or modifications that have been made to the cash holdings of the company. The findings of Harford (1999) imply that companies that hoard excessive funds are more likely to attempt to buy other companies. According to the findings of Harford, Jarrad, Mansi, and Maxwell (2008), companies that have extra capital on hand and inadequate governance are more likely to make investments that are not productive. Hence, when companies raise funds from financing sources such as debt issuance, the likelihood that they will make value-destroying purchases due to excess cash is greatly reduced. This study was pertinent to the study because it explains the extent to which financing cash flow can influence the financial performance of Java SACCO.

**CONCEPTUAL FRAMEWORK**

Figure 1 shows the conceptual framework.

**Figure 1: Conceptual Framework**



**Source: Researcher (2023)**

**METHODOLOGY**

This study adopted a causal research design. Causal research design is a type of research design that aims to establish a cause-and-effect relationship between variables (Scriven, 2008). It is used when the researcher wants to determine whether a change in one variable causes a change in another variable. The study targeted Java SACCO in Nairobi City County, Kenya for a period of 10 years (2013-2022). Purposive sampling was carried out in this study. The study purposively selected Java SACCO among the many SACCOs in Nairobi City County. Purposive sampling has been described as subjective sampling which relies on the individual judgment of the researcher (Sharma, 2017). The researcher used secondary data because it is more reliable and valid than primary data, especially when it comes to financial information; financial data is often collected

and reported in a standardized way, which reduces the potential for bias or errors that comes with primary data. The yearly financial reports of Java SACCO for a ten-year period, from 2013 to 2022, was the source of the data for all the study's variables. The financial documents were used to collect and analyze data. These included cash flow statements, statement of financial position, profit and loss statements, tax returns statements, accounts receivable and accounts payables statements.

The study used SPSS software to aid data analysis and performed a descriptive statistical analysis, a correlation analysis, and a linear multiple regression analysis on the data. The data are preferable because they indicate the time sequence of variables and show how linkages form, in addition to revealing changes that have occurred at the SACCO (Frees, 2004). The findings were presented using tables.

The following was the multiple linear regression model used:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e$$

Where;

$Y_{it}$  = Financial Performance

$X_{1it}$  = Investing Cash Flow Management

$X_{2it}$  = Operating Cash Flow Management

$X_{3it}$  = Financing Cash Flow Management

### **Moderating Effect Model**

This research employed a hierarchical regression approach, first proposed by Cohen, Cohen, West, and Aiken (2003) and then implemented by Razi, Karim, and Mohamed (2012), to analyze the impact of SASRA rules on the relationship between cash flow management and financial performance in Java SACCO.

$$\text{Step 3: } FP_{it} = \beta_0 + \beta_1 CFM_{1it} + \beta_2 SR_{2it} + \beta_3 CFM * SR_{3it} + \varepsilon_{it}$$

Where:

$FP$  = Financial Performance

$CFM$  = Cash Flow Management

$SR$  = SASRA Regulation (Moderating Variable)

$B_i$  = Coefficients of the explanatory variables

$\varepsilon_{it}$  = Error term

## FINDINGS AND DISCUSSION

Table 1 shows the descriptive statistics for all the study variables investing cash flow management, operating cash flow management, financing cash flow management, SASRA regulations and financial performance for the period between 2013 and 2022.

**Table 1: Descriptive Statistics**

Variable	Minimum	Maximum	Mean	Std. Deviation
ROA	-0.2224	0.34847	0.172773	0.177691
Investing Cash Flow	5.896	7.044	3.41092	4.368066
Operating Cash Flow	1.4528	15.82537	5.62033	3.43142
Financing Cash Flow	-5.65696	24.53229	11.96322	10.47914

**Source: Researcher (2023)**

Based on the results in Table 1, financial performance, measured using return on asset had a mean of 0.172773 with a minimum of -0.2224 and a maximum of 0.34847. A standard deviation of 0.177691 meant that the spread in terms of performance of Java SACCO was stable, which means the SACCO had stable ROA over the study period of between 2013 and 2022. The findings also show that the mean cash flow management from investing activities at Java SACCO was 3.41092 with a minimum of 5.896 and a maximum of 7.044. A standard deviation of 4.368066 was medium, and indication that there was a moderate dispersion in terms of cash flow management from investing activities at Java SACCO between 2013b and 2022.

Regarding operating cash flow management, the results show that cash flow management from operating activities at Java SACCO was 5.62033 with a minimum of 1.4528 and a maximum of 15.82537. A standard deviation of 3.43142 was medium, and indication that there was a moderate dispersion in operating cash flow management at Java SACCO for the study period (2013-2022). Finally, the study findings show that the cash flow management from financing activities was high throughout the study period with a mean of 11.96322, a minimum of -5.65696 and a maximum of 24.53229. A standard deviation of 10.47914 was very high, an indication that Java SACCO had very high cash flow management from financing activities for the study period.

### Correlation Analysis

This study conducted correlation analysis to show how the independent variables are associated with financial performance of Java SACCO measured using return on assets. The study assessed the association between cash flow management and financial performance of Java SACCO in Nairobi City County. Table 2 shows the correlation matrix of all the variables and how they are influencing financial performance.

**Table 2: Correlation Matrix**

		<b>ROA</b>	<b>ICFM</b>	<b>OCFM</b>	<b>FCFM</b>
ROA	Pearson Correlation	1.000			
	Sig. (2-tailed)				
ICFM	Pearson Correlation	.655**	1.000		
	Sig. (2-tailed)	0.002			
OCFM	Pearson Correlation	.553*	0.457	1.000	
	Sig. (2-tailed)	0.012	0.184		
FCFM	Pearson Correlation	.537**	.403*	.490**	1.000
	Sig. (2-tailed)	0.000	0.023	0.007	

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

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

**Source: Researcher (2023)**

The results in Table 2 depicts positive and significant association between cash flow management from investing activities and financial performance of Java SACCO between 2013 and 2022 (0.655\*). The results also show that there was positive and significant association between cash flow management from operating activities and financial performance of Java SACCO (0.553\*). Moreover, there was positive and significant association between cash flow management from financing activities and financial performance of Java SACCO between 2013 and 2022 (0.537\*). The results imply that cash flow management activities have significant influence on financial performance of Java SACCO. This means that effective cash flow management ensures that the SACCO has enough liquidity to meet its short-term obligations and invest in growth opportunities. By managing cash flow effectively, Java SACCO can reduce its reliance on external sources of funding, such as loans or lines of credit. This reduces the organization's borrowing costs and improves its profitability.

The findings are consistent with the conclusions by Nwakaego, Ikechukwu, and Ifunanya that, operating cash flows and financing cash flows have a positive and significant impact on the success of the Food and Beverages Industries in Nigeria. There was also a significant association between the negative impact investing cash flow had on company performance and the amount of cash flow invested. Soet, Muturi, and Oluoch (2018) also found that the management of operational cash flow had a moderate influence on return on equity, which was positive, but had a significant impact, which was also positive, on return on assets. Based on the findings of the research, the authors of the study came to the conclusion that effective management of operational cash flow had a significant and positive impact on return on assets, while having a minimal but positive impact on return on equity.

**Regression Analysis**

Regression analysis is a set of statistical methods used for the estimation of relationships between a dependent variable and one or more independent variables. In this study, regression analysis was conducted to establish the statistical significance and relationship between cash flow

management activities on financial performance of Java SACCO. Tables 3, 4 and 5 present the model summary, ANOVA, and regression of coefficient results respectively.

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793a	0.629	0.614	0.48657

a Predictors: (Constant), FCFM, ICFM, OCFM

**Source: Researcher (2023)**

The results in Table 3 shows a coefficient of determination (R squared) of 0.629 and adjusted R squared of 0.615 at 95% significance level. The R squared of 0.629 implies that the independent variables used in the study namely; investing cash flow management, operating cash flow management and financing cash flow management jointly explains 62.9 % of the variation in the financial performance of Java SACCO. The adjusted R squared of 0.614 depicts that activities relating to operating cash flow management, investing cash flow management and financing cash flow management in exclusion of the constant variable explains the variation in the financial performance of Java SACCO by 61.4 %.

**Table 4: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.273	3	0.091	50.28	.000 <sup>b</sup>
	Residual	0.011	6	0.002		
	Total	0.284	9			

a. Dependent Variable: ROA

b. Predictors: (Constant), FCFM, ICFM, OCFM

**Source: Researcher (2023)**

In Table 4, ANOVA results are shown. The results show that the model was statistically significant in explaining the influence of investing cash flow management, operating cash flow management and financing cash flow management on financial performance of Java SACCO measured in terms of ROA and it is indicated by a p-value of 0.000<0.05.

**Table 4: Multiple Regression of Coefficients**

Model		Unstandardized Coefficients		Standardized T Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	.688	.254	2.707	.008
	ICFM	.184	.078	.208	.020
	OCFM	.442	.101	.465	.000
	FCFM	.155	.085	.164	.042

a. Dependent Variable: ROA

**Source: Researcher (2023)**

The regression model therefore became;

$$FP = 0.688 + 0.184ICFM + 0.442OCFM + 0.155FCFM$$

Where:

FP = Financial Performance (ROA)

ICFM = Investing Cash Flow Management

OCFM = Operating Cash Flow Management

FCFM = Financing Cash Flow Management

Regression coefficients in Table 4 show that there was positive and significant relationship between cash flow management from investing activities and financial performance of Java SACCO ( $\beta = .184$ ,  $p = .020 < .05$ ). This was supported by a calculated t-statistic of 2.368 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in cash flow management from investing activities of the SACCO leads to an improvement in financial performance (ROA) by 0.184 units. Therefore, the  $H_{01}$  which states that investing cash flow management has no statistically significant influence on financial performance of Java SACCO was rejected. The conclusion was that investing cash flow management has statistically significant influence on financial performance of Java SACCO.

The results also show that there existed a positive and significant relationship between cash flow management from operating activities and financial performance of Java SACCO ( $\beta = .442$ ,  $p = .000 < .05$ ). This was supported by a calculated t-statistic of 4.380 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in cash flow management from operating activities of Java SACCO leads to an improvement in financial performance (ROA) of the SACCO by 0.442 units. Therefore, the  $H_{02}$  which states that operating cash flow management has no statistically significant influence on financial performance of Java SACCO was rejected. The conclusion was that operating cash flow management has statistically significant influence on financial performance of Java SACCO.

Finally, there was a positive and significant relationship between cash flow management from financing activities and financial performance of Java SACCO ( $\beta = .155$ ,  $p = .042 < .05$ ). This was supported by a calculated t-statistic of 4.380 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in cash flow management from financing activities of Java SACCO leads to an improvement in financial performance (ROA) of the SACCO by 0.155 units. Therefore, the  $H_{03}$  which states that financing cash flow management has no statistically significant influence on financial performance of Java SACCO was rejected. The conclusion was that financing cash flow management has statistically significant influence on financial performance of Java SACCO.

These findings contradict the findings by Gravetter (2016) who evaluated the profitability and financing cash-flows of SMEs in California and found that changes in long-term obligations or debt, changes in owner's capital, and changes in dividends all influence the financial performance.

On the other hand it agrees with the findings by Bragg (2014) who investigated the correlation between financing cash-flows and corporate effectiveness in the London Stock Exchange-listed corporations and concluded that financing cash flows should be utilized in relation to funds arising from equity, debt issuance, dividend payment, debt repayment, and share repurchase.

**Model Summary of Moderating Effect of SASRA Regulations**

The results in Table 5 show the model summary for the moderating effect of SASRA Regulations. The R squared was used to check how well the model fitted the data after moderation.

**Table 5: Model Fitness for the Moderating Effect of SASRA Regulations**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892a	0.795	0.788	0.25841

a. Predictors: (Constant), FCFM\*SR, ICFM\*SR, OCFM\*SR

**Source: Researcher (2023)**

The results in Table 5 show that the R squared after moderation by SASRA regulations was 0.795 which was more than the non-moderated effect whose R square was 0.629. This implies that SASRA regulations moderates the relationship between cash flow management and financial performance of Java SACCO and explain 79.5% of the variations in financial performance of the SACCO.

The results presented in Table 6 show the analysis of variance (ANOVA) results on the moderating effect of SASRA Regulations.

**Table 6: ANOVA for the Moderating Effect of SASRA Regulations**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	30.13	3	7.532	112.803	.000 <sup>b</sup>
	Residual	7.746	6	0.067		
	Total	37.876	9			

a. Dependent Variable: ROA

a. Predictors: (Constant), FCFM\*SR, ICFM\*SR, OCFM\*SR

**Source: Researcher (2023)**

The results reveal that the regression model of moderating effect of SASRA regulations on the relationship between cash flow management and financial performance of Java SACCO was significant and supported by F=112.803, p=0.000<.05). The results implies that SASRA regulations influences the financial performance of Java SACCO.

The results in Table 7 show the regression coefficients after moderation using SASRA Regulations.



**Table 7: Moderating Effect of SASRA Regulations**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	
	B	Std. Error				
1	(Constant)	2.11	0.116	18.129	0.000	
	ICFM*SR	0.252	0.102	0.226	2.474	0.015
	OCFM*SR	0.163	0.060	0.166	2.711	0.001
	FCFM*SR	0.620	0.092	0.605	6.712	0.000

a. Dependent Variable: ROA

**Source: Researcher (2023)**

The Moderation model then became:

$$FP = 2.110 + 0.252ICFM*SR + 0.163OCFM*SR + 0.620FCFM*SR$$

Where: -

FP= Financial performance (ROA)

ICFM = Investing Cash Flow Management

OCFM= Operating Cash Flow Management

FCFM= Financing Cash Flow Management

SR=SASARA Regulations (Moderator)

The moderation results show that investing cash flow management activity was significant after moderation with p-value= 0.015<.05. This suggests that the relationship between investing cash flow management activity and financial performance of Java SACCO is moderated by SASRA regulations. Additionally, following moderation, the operating cash flow management had a p-value of 0.001<.05. This suggests that the relationship between operating cash flow management and financial performance of Java SACCO is moderated by SASRA regulations. Additionally, the financing cash flow management had a moderated p-value of 0.000<.05. This suggests that the relationship between the financing cash flow management and the financial success of Java SACCO is moderated by SASRA regulations. Therefore, the **H<sub>04</sub>** which states that SASRA regulations have no significant moderating influence on the relationship between cash flow management and financial performance of Java SACCO was rejected. The conclusion was that SASRA regulations have significant moderating influence on the relationship between cash flow management and financial performance of Java SACCO.

## CONCLUSION

Based on the findings and the study variables, the study concludes that cash flow management activities have significant influence on financial performance of Java SACCO and are crucial for the financial performance of Java SACCO. This study thus concludes that efficient cash flow management ensures the sustainability and growth of the SACCO by facilitating its ability to meet

its short-term and long-term financial obligations. Effective cash flow management is vital for the success and financial performance of Java SACCO. By implementing investing cash flow management, operating cash flow management and financing cash flow management, Java SACCO can maintain financial stability, meet its obligations, and achieve its growth objectives.

The study concludes that there is positive and significant relationship between cash flow management from investing activities and financial performance of Java SACCO. This suggests that effective management of investing activities can lead to improved financial performance for the organization. Investing activities involve acquiring or disposing of long-term assets, such as property, plant, equipment, and investments in securities; therefore, by effectively managing its investing activities, Java SACCO can create a more stable financial foundation and generate additional income streams that contribute to its overall financial performance. By carefully selecting investments that align with Java SACCO's risk tolerance and financial goals, the organization can generate higher returns on its investments, thereby improving its financial performance.

Regarding operating cash flow management, the study concludes that operating cash flow management activities positively and significantly influences financial performance of Java SACCO. Effective management of these activities can lead to improved financial outcomes for the SACCO. Streamlining loan processing, from application to disbursement, can increase the efficiency of Java SACCO's operations, resulting in reduced processing costs and improved financial performance. The study also concludes that ensuring timely collection of loan repayments is essential for maintaining healthy cash flow. Java SACCO can implement collection strategies, such as regular reminders, incentives for early repayments, and monitoring delinquent accounts to minimize defaults and improve cash flow from its lending activities.

The study further concludes that financing cash flow management positively and significantly influencing financial performance of Java SACCO. Therefore, effective cash flow management allows an organization to maintain a stable financial position, ensuring the availability of funds for daily operations, investments, and emergencies. This, in turn, leads to improved financial performance. Effective cash flow management can help Java SACCO identify and capitalize on profitable investment opportunities. By forecasting cash inflows and outflows, Java SACCO can determine the optimal time to invest in assets or provide loans to members, thus maximizing returns on investment and improving its financial performance. Moreover, efficient cash flow management can lead to cost savings and improved operational efficiency for Java SACCO. By closely monitoring cash flows, the organization can identify inefficiencies in its processes and take steps to streamline operations, reduce costs, and increase revenues, ultimately enhancing its financial performance.

Finally, the study concludes that SASRA regulations moderates the relationship between cash flow management and financial performance of Java SACCO. This means that SASRA enforces prudential standards and guidelines that govern various aspects of SACCO operations, such as capital adequacy, liquidity, loan portfolio management, and risk management. By adhering to these

standards, Java SACCO can improve its cash flow management practices and enhance its financial performance. Also, SASRA mandates regular financial reporting and disclosure requirements for SACCOs, including balance sheets, income statements, and cash flow statements. These requirements ensure that Java SACCO maintains accurate financial records, which can help identify areas for improvement in cash flow management and drive better financial performance.

## **RECOMMENDATIONS**

Based on the findings and conclusions above, this study recommends that the management of Java SACCO should focus on improving their investment activities, such as investing in profitable ventures, disposing of non-performing assets, and diversifying their investment portfolio. The management should also develop a robust investment policy that will guide their investment decisions, help in minimizing risks and maximize returns. Additionally, Java SACCO should improve its cash flow management practices to optimize its cash resources. This can be achieved by implementing efficient cash flow management strategies such as maintaining adequate cash reserves, managing payment cycles, and monitoring cash inflows and outflows. By managing its cash flow efficiently, the SACCO will be able to meet its financial obligations, invest in profitable ventures, and improve its financial performance.

Moreover, the management of Java SACCO should focus on improving its operational efficiency, such as reducing expenses, increasing revenue, and improving the collection of outstanding debtors. This will enable the SACCO to optimize its operational cash flow, improve its liquidity position, and enhance its financial performance. Java SACCO management should also implement a comprehensive cash flow management policy that guides its operating cash flow management activities. This policy should cover areas such as cash inflow and outflow forecasting, debt management, inventory management, and working capital management. The policy should be regularly reviewed and updated to ensure it aligns with the SACCO's strategic objectives, and it should be communicated to all relevant stakeholders, including staff, members, and regulatory authorities.

The management of Java SACCO should optimize its financing decisions to enhance its financial performance. This can be achieved by exploring different financing options, such as issuing bonds, taking loans, or issuing shares, to finance its operations, investments, and growth. The SACCO should carefully evaluate the costs and benefits of each financing option, considering factors such as interest rates, repayment terms, and the impact on the SACCO's financial position.

Finally, the study recommends that the management of Java SACCO should ensure full compliance with SASRA regulations to optimize its cash flow management and enhance its financial performance. The SACCO should regularly review its cash flow management practices to ensure they align with SASRA guidelines and regulations. This includes maintaining adequate reserves, complying with liquidity requirements, and adhering to loan-to-deposit ratios. The SACCO should also maintain accurate and transparent financial records to enable easy monitoring and compliance with SASRA regulations. By complying with SASRA regulations, Java SACCO

can improve its financial performance, enhance its credibility and reputation, and reduce the risk of regulatory sanctions.

## **REFERENCES**

- Aduda, J., & Obondy, S. (2021). Credit Risk Management and Efficiency of Savings and Credit Cooperative Societies: A Review of Literature. *Journal of Applied Finance and Banking*, 11(1), 99-120.
- Afrifa, G., & Tingbani, I. (2018). Working capital management, cash flow and SMEs' performance. *International Journal of Banking, Accounting and Finance*, 9(1).
- Agyabeng-Mensah, Y., Afum, E., & Ahenkorah, E. (2020). Exploring financial performance and green logistics management practices: examining the mediating influences of market, environmental and social performances. *Journal of cleaner production*, 258, 120613.
- Alslehat, N., & Al-Nimer, M. (2017). Empirical study of the relationship between cash flow management and financial performance of the Jordanian insurance companies. *International Business Management*, 11(3), 776-782.
- Amah, K. O., Michael, C. E., & Ihendinihu, J. U. (2016). Relationship of cash flow and financial performance of listed Banks in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 4(4), 89-87.
- Baba, S., & Ashogbon, S. O. Pro-Activeness and the Performance of Small and Medium Enterprises (SMEs) in Nigeria.
- Bowen, N. J., & Makokha, E. N. (2021). Effects of Credit Information Sharing on Performance of Savings and Credit Cooperative Societies in Kenya. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 8(1), 109-120.
- Cheruiyot, D., & Jagongo, A. (2022). Firm Financing On Financial Performance of Unit Trust Firms Listed in Nairobi Securities Exchange, Kenya. *International Journal of Finance and Accounting*, 7(1), 76-89.
- Choi, I. (2001). Unit root tests for panel data. *Journal of international money and Finance*, 20(2), 249-272.
- Cohen, C., & Cohen, P. (2005). West, & Aiken (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*.
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business research methods* (Vol. 9, pp. 1-744). New York: McGraw-Hill.
- Dang, V. (2019). The impact of cash flow management on the profitability of banks in the USA. *Journal of Banking and Finance*, 102, 90-105.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of management*, 16(1), 49-64.
- Dzingirai, M., & Ndava, R. (2022). Cash Flow Management Challenges Faced by Small Family-Owned Businesses in Zimbabwe. *Binus Business Review*, 13(3), 293-302.

- Frees, E. W. (2004). *Longitudinal and panel data: analysis and applications in the social sciences*. Cambridge University Press.
- Günay, F., & Fatih, E. C. E. R. (2020). Cash flow based financial performance of Borsa İstanbul tourism companies by Entropy-MAIRCA integrated model. *Journal of multidisciplinary academic tourism*, 5(1), 29-37.
- Harford, J. (1999). Corporate cash reserves and acquisitions. *The Journal of Finance*, 54(6), 1969-1997.
- Harford, J., Mansi, S. A., & Maxwell, W. F. (2008). Corporate governance and firm cash holdings in the US. *Journal of financial economics*, 87(3), 535-555.
- Harris, C., & Roark, S. (2019). Cash flow risk and capital structure decisions. *Finance Research Letters*, 29, 393-397.
- Hovakimian, A., & Zhu, X. R. (2022). Corporate Deleveraging: The Impact of Debt Maturity Structure and Callable Debt. Available at SSRN 4244252.
- Jensen, M. C. (1987, October). The free cash flow theory of takeovers: A financial perspective on mergers and acquisitions and the economy. In *Proceedings of a conference sponsored by Federal Reserve Bank of Boston* (pp. 102-143).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate Governance* (pp. 77-132). Gower.
- Kiai, R. M., Kyalo, T. N., & Maina, J. N. (2020). Cash management practice, SACCO size and Kenya's deposit taking saving and credit co-operatives financial sustainability.
- Kozarevic, E., Jukan, N., & Softic, S. (2019). Cash Flow Management and Bank Performance: Case of Bosnia and Herzegovina. *International Journal of Innovation and Economic Development*, 5(1), 68-77.
- Kyenze, A. K., & Aluoch, M. O. (2022). Financial Management Practices and Financial Performance of Deposit Taking Saccos in Nairobi City County, Kenya. *American Journal of Finance*, 7(3), 51-73.
- Madueno, R., Moreno, P., & Puente, E. (2019). The Impact of Cash Flow Management on Financial Performance: A Study from Spain. *Journal of Financial Management*, 45(3), 12-25.
- Major, I., & Azali, S. (2022). Cash Management Practices and Financial Performance of Listed Deposit Money Banks in Nigeria. *BW Academic Journal*, 1(1), 19-19.
- Mudibo, E. K. (2005). Report on Corporate Governance in Co-operatives the East African Experience. *KUSCO Ltd-Kenya. Nairobi*.
- Musah, A., Abdulai, M., & Baffour, H. (2020). The Effect of Mergers and Acquisitions on Bank Performance in Ghana. *Asian Journal of Economics and Empirical Research*, 7(1), 36-45.
- Nanzala, L. I. (2021). The Effect of Capital Adequacy Regulations on Performance of Savings and Credit Cooperative Societies in Kakamega County. *International Research Journal of Business and Strategic Management*, 2(2).

- Razi, M. J. M., Karim, N. S. A., Dahlan, A. R. A., & Ali, N. A. M. (2017). A holistic approach to measure organizational readiness for knowledge management. *Advanced Science Letters*, 23(4), 2829-2832.
- SASRA. (2020). Regulatory Framework. Sacco Societies Regulatory Authority.
- Scriven, M. (2008). A summative evaluation of RCT methodology: An alternative approach to causal research. *Journal of multidisciplinary evaluation*, 5(9), 11-24.
- Sheikh, A. M., & Jagongo, A. (2022). Sharia-Compliant Sacco Services and Financial Performance of Small and Medium-Sized Enterprises in Nairobi City County, Kenya. *The International Journal of Business & Management*, 10(1).
- Sim, J., & Wright, C. (2000). *Research in health care: concepts, designs and methods*. Nelson Thornes.
- Soet, M. A., Muturi, W., & Oluoch, O. (2018). Effect of operating cash flow management on financial performance of Mutual Funds in Kenya. *European Journal of Business, Economics and Accountancy*, 6 (5), 37, 46.
- Triantis, G. G. (1994). A free-cash-flow theory of secured debt and creditor priorities. *Virginia Law Review*, 2155-2168.
- Ugo, C. C., & Egbuhuzor, C. A. (2022). Effect of Cashflow Management on Financial Performance: Evidence from the Pharmaceutical Industry in Nigeria. *African Journal of Accounting and Financial Research*, 5(1), 1-13.
- Vazov, R. A. D. O. S. T. I. N. (2019). Inovative Approaches to Insurance Company Cash-Flow Management.
- Wamalwa, I. S. (2020). *The effect of regulation on financial performance of savings and credit cooperative societies (Sacco's) offering front office service activity (fosa) in Kenya* (Doctoral dissertation).
- World Council of Credit Unions. (2019). Effective Financial Structure and Performance Monitoring. World Council of Credit Unions Report.
- World Council of Credit Unions. (2019). Performance Monitoring and Financial Structure. World Council of Credit Unions Report.
- Xie, Z., Liu, X., Najam, H., Fu, Q., Abbas, J., Comite, U., & Miculescu, A. (2022). Achieving Financial Sustainability through Revenue Diversification: A Green Pathway for Financial Institutions in Asia. *Sustainability*, 14(6), 3512.
- Yeko, M. (2019). Cash flow management and financial performance of Tororo cement, eastern Uganda.