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Cash Management Practices and Financial Performance of Livestock Marketing Cooperative Societies in Marsabit County, Kenya

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ABSTRACT

An objective evaluation of the performance of livestock cooperative societies is imperative in order to ascertain whether they fully reward members for the use of their equity fund. The evaluation of agricultural cooperatives using the conventional measures of financial performance like return on asset, return on equity, return on operating equity net margins on sales etc do no yield unequivocal results. Livestock marketing cooperatives societies in Marsabit County have continuously used these conventional measures giving mixed results but failing to indicate whether they create value for member producers. The objective of this study therefore sought to establish the effect of cash management practices on the performance of livestock marketing cooperative societies in Marsabit County. The key theories anchoring the study are; Keynesian theory of money, free cash flow theory and stakeholder theory. The current study adopted quantitative research design. The target population was twelve livestock marketing cooperative societies in Marsabit County that have been operational in the period 2019-2023. The unit of observation was the 110 employees in the finance departments. The study used stratified random sampling technique to arrive at a sample size of 86.. The study utilized both primary and secondary data where primary data was obtained from questionnaires that was presented to respondents and secondary data collection tool was used to obtain secondary data from audited financial reports accessible from society's offices and ministry of cooperatives and micro-small and medium enterprises development. Diagnostic tests including multicollinearity test, normality test and reliability were conducted to confirm the model fitness. Data was analyzed using descriptive and regression analysis. The regression results showed that periodic cash plan ($p=0.003$, <0.05), investing of surplus cash ($p=0.19$, <0.05), managing cash flows ($p=0.00$, <0.05) had positive statistically significant effect on financial performance. Bank credit line had positive effect on financial performance even though the change was not significant. The study therefore recommends that managers of Marsabit county livestock marketing cooperative societies should enhance effective use and preparation of cash budgets and consistent investment of surplus cash. Further, there should be more decentralization of receipts and application of accounting packages. For policy, the study recommends that policy makers and regulators should concentrate on creating regulations that will allow marketing societies to thrive through provision of appropriate infrastructure for wider market.

Key Words: *Cash Management Practices, Financial Performance, Livestock Marketing, Cooperative Societies*

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1.0 Introduction

1.1.Background

Livestock marketing cooperatives are created to provide greater competition, bargaining power, and market access for producers. Increased direct marketing of livestock, from the farm straight to the buyer, bypasses the assembly points, auctions, or terminal markets that are the focus of the cooperatives' operations thereby denying farmers their full optimal financial benefits (Hogeland, 2020). Cooperatives are producer owned and operated. Shared perspectives and ideals magnify their opportunities for improving the bargaining power of livestock producers and thereby having a positive impact on industry structure and performance (Bloom & Paul, 2024). In Kenya, cooperative societies are formed to provide and promote a sustainable and competitive cooperative sector for social economic development in a devolved system of governance (Cooperative Act,2024)

Cooperative sectors have significantly contributed to global economic progress, playing a crucial role in development. These cooperatives drive economic growth, particularly in developing countries, by empowering marginalized groups and promoting sustainable development. In the agricultural sector, cooperatives have substantially improved food security and reduced poverty by supporting smallholder farmers and livestock caretakers. (Enright *et al.*, 2015). A total of 120 million people worldwide, out of which 50 million reside in Sub- Saharan Africa (SSA) are pastoralist. It is also estimated that more than 60 percent of the total surface area are found in the ASALs of the Horn of Africa and pastoralists range from 12 million to 22 million people (Hunter, 2015). According to the recent statistics, the number of pastoralists in the world stands between 200 and 500 million, and this include nomadic communities and trans-human herders as well as agro-pastoralists (Girei, Haruna & Adamu, 2017).

Globally, Cooperative movements bring together various classes of people regardless of their socio-economic status. According to United Nations estimates, the cooperative movement has brought 800 million people together globally. In United State of America, dairy cooperatives were among the first type of agricultural societies beginning in the early 1800s, (Girei, Haruna & Adamu, 2017) and played a very significant role in the procurement, processing and marketing of milk and dairy products and in representing farmers politically at both the state and national level. In India, livestock production is a key economy activity. The dairy industry in India is spread over the entire country in innumerable small units in a much disorganized form. Its contribution to Gross Domestic Product (GDP) decreased from 5.22% in 1999-00 to 4.36% in 2004-05 at current prices. According to India's Central Statistical Organization (CSO) estimates, this rose to Rs 1239 billion during 2004-05 with 24.72% share in agriculture and allied GDP. In recent years, the Indian dairy industry is on its peak that has totally transformed the dairy scene and give the needed thrust to its rapid growth to meet the challenges (CSO, 2020)

In Africa, Ethiopia and Liberia, cooperatives have similar history. Livestock based cooperatives in Africa have a bearing on the traditional systems economically and socially and still in the

informal state. The modern cooperatives in Africa were introduced by the colonial governments and were supported as a priority in the economic growth. There is also evidence of increased and sustained cooperative movements and membership in Africa. (Schwettmann, 2021)

In Kenya, these cooperative societies control about 43 percent of the country's gross domestic product (GDP). There are more than 14,000 registered cooperative societies spread across the country. The co-operative membership is over 10 million with mobilized savings of over Kshs. 250 billion creating employment in the sector for over 555,000 persons (CAK, 2021). Effective financial management is essential for the success of cooperative societies, enabling efficient resource allocation and performance maximization (Njagi et al., 2019). This management encompasses cash management, investment decision-making, and predictive financial planning, ensuring economic sustainability and resilience in dynamic environments. Studies have highlighted the importance of detailed financial reporting for cooperatives. Hamza and Antwi (2019) emphasized the value of comprehensive cash flow statements in Ghanaian cooperatives, while research in Sunyani underscored the significance of economic data reports for gaining insights into financial flows.

Livestock cooperative societies in Marsabit County, Kenya, face unique challenges including limited access to financial services, unpredictable weather patterns, and market volatility. These factors necessitate a thorough examination of cash management strategies and their impact on financial performance. This study aimed to investigate the financial standing and liquidity management strategies of livestock cooperative societies in Marsabit County. It was focused on key aspects of financial management, including cash flow statements, risk assessment, and financial forecasting. Gillian (2019) notes that effective cash management practices significantly contribute to financial stability and growth. The research examined cash management techniques, their impact on financial outcomes, and areas requiring improvement. By providing practical recommendations, this study sought to enhance the resilience and sustainability of the cooperative community in Marsabit County. The task of measuring the financial performance of cooperatives is made problematic by the nature of the cooperative form of business. In particular, many of the commonly used financial measures (return on equity (ROE), return on assets (ROA), net margins on sales, and net margins per hundred weight of milk) do not account for the cost of using members' equity in financing a cooperative's operations. Furthermore, cooperatives do not have a stock market valuation to offer a timely reflection of the value of the cooperative as a proxy for its performance (Ling 2006). As a result, members' ability to judge their cooperative's performance is incomplete. However, members need to be able to fully evaluate their cooperative's performance. The more complete the measure of cooperative performance, the better equipped the board is to guide the cooperative and to evaluate and reward cooperative managers (Abey, 2018).

For an organization to bring improvement in performance, it needs to clearly understand cash management (Longenecker, 2006). Business cash budgeting is an elementary and crucial undertaking that permits the business to accomplish a lot of goals in the course of action. Periodic cash plan being a financial planning tool involves budgeting for those less frequent costs that come every once in a while and have the potential of wrecking a business entity if not planned for. These expenses repeat less regularly for instance quarterly or annually. They also include periodic costs which are also incurred irregularly and hence easy to forget when creating the budget. Due to the significant effect cash management has on the financial performance of an entity, cash planning becomes a primary role of livestock cooperative societies (Abey, 2018). Financial planning and forecasting is a comprehensive and a well-organized structure that identify sources of finance and

the activities to spend the sort finance in a firm. Through this process the firm is able to communicate its financial goals and objectives and any deviation noted and controlled hence establishing a mechanism to curb wastage and enhance the firm sustainability (Denzel,2018). Marsabit County is one of Kenya's 47 new counties, created in 2010 after the new constitution was ratified and pastoralism accounts for 81 percent of the livelihood in the County. According to 2019 national census, livestock keeping was the main economic activity in the county, with the main livestock bred being cattle approximated at 218,755, goats at 1,186,482, sheep at 2,029,490, camels at 217,368, donkeys at 63,861. (GoK, 2019). The Marsabit County has 10 registered cooperatives that deal with the livestock and livestock products such as Kinna Livestock Marketing Cooperative and Marsabit camel milk cooperative society which trades in camel milk among others (CAK, 2023). The intensive livestock marketing has increased competition along the livestock and livestock products value chain that demand coming together for pastoralist to respond to dynamics of markets. Hence, this competitiveness is endearing large number of people to cooperative societies (World Council of Credit Unions, 2018). Despite the increasing growth in registered livestock registered cooperatives, over the years there has been significant variation of commonly used measures of financial performance in terms of return on equity and return on asset. To determine the true value for money, the study used the extra value measure developed by United States development agency rural development cooperative programs (2016)

1.2.Statement of the Problem

The livestock cooperative societies in Marsabit County, Kenya, play an important role in the region's economic fabric, yet their financial performance often falls short of expectations of optimal use of owners' equity. Whereas these livestock cooperatives vary in size and scope, and hence different levels of capital usage, the general expectation is that extra value index of these cooperative would reflect an increasing trend. However, over the last five years (2019-2023) this index has consistently shown a negative value raising the concern of whether the owners are getting the desired returns on their equity investment. Past studies have shown that where there are prudent cash management practices, the performance of a business entity is improved.

While previous research has explored cash management in various contexts, there remains a significant gap in understanding its specific effect on livestock cooperatives in arid regions like Marsabit. Mwangi *et al*. (2018) demonstrated a positive correlation between cash management strategies and financial performance, measured in terms of return on asset, in agricultural cooperatives in Kiambu County. Though the study findings indicated a positive significant effect on return on asset, it does not establish the returns the shareholders would receive in alternative investment which the current study seeks to fiil this conceptual gap. However, their findings cannot be directly applied to the unique challenges faced by livestock cooperatives in Marsabit's arid climate. Similarly, Kamau's (2019) study on cash flow statement creation in Nairobi's savings and credit cooperatives, while valuable, fails to address the distinct needs of rural livestock cooperatives and hence a contextual gap that this study sought to fill. Given the critical role of livestock cooperative societies in Marsabit's economy and the potential for improved financial performance to drive economic growth, this research had far-reaching implications for the region's development. In light of these considerations, this study aimed to answer a fundamental question: How do cash management practices affect the financial performance of livestock cooperative societies in Marsabit County, Kenya?

1.3 Objective of the Study

The study assessed the effect of cash management practices on the financial performance of the livestock marketing cooperative societies in Marsabit County, Kenya.

2.0 Literature Review

2.1 Theoretical Review

2.2.1. Keynesian Theory of Money

The Keynesian theory, initiated by Keynes in 1936, outlines three main reasons for keeping cash on hand: the need to maintain liquidity, transactional motives, speculative motives, and precautionary motives. Speculative motives involve holding cash to take advantage of opportunities, such as making purchases or benefiting from favorable exchange rates. Precautionary motives involve retaining cash to cover unexpected expenses. Transactional motives relate to the necessity of having cash available for day-to-day expenses (Ali, 2013). However, this theory has limitations, as it only addresses motives for holding cash and does not provide a reliable method for improving a firm's financial performance. Having control over cash flows does not necessarily lead to enhanced financial efficiency. Hence, firms should also focus on managing their cash flow statements to assess productivity, which can significantly impact cash flows (Adelegan, 2017). According to Richardson (2016), the theory suggests that firms with excess cash may divert it to projects that boost their overall situation, and cash flow management depends on the manager's discretion in allocating capital. This theory anchors the periodic cash plan and investing of surplius cash variables

2.1.2. Free Cash Flow Theory

Jensen (1986) introduced the Free Cash Flow theory, which posits that companies with substantial excess cash flows are prone to making investments that could harm the firm's overall value. These excess cash flows, beyond what is necessary for infrastructure investments, can positively impact the net present value of what is referred to as free cash flows. Practicing control over cash flow helps in reducing unnecessary expenses within the company. Striving to maximize revenue at the expense of cash management often increases cost, which, under cash flow models, may lead to apparent growth. This theory highlights the influence of net capital expenditure income (CAPEX) on a firm's financial efficiency. Schoubben (2008) describes high free cash flow as the net income that includes depreciation and amortization minus capital expenditures, excluding non-cash flow changes and borrowing. Darek (2012) criticizes the theory by suggesting that the pursuit of wealth maximization for shareholders is not the sole motivation for managers aiming to expand their company. Expanding cash flows does not necessarily equate to increased wealth under a manager's supervision and may result in higher compensation, as compensation is often positively correlated with growth. The cash flow model focuses on investing wisely in the business rather than accumulating cash receipts at the expense of necessary costs. When applied to cash flows, this theory underscores the importance of managing cash flows for operational sustainability. It represents the cash balance as either a surplus or deficit in the cash budget.

2.1.3 Stakeholder Theory

Freeman (1984) proposed Stakeholders Theory a development from agency theory. It presents a perspective on capitalism emphasizing the interconnected nature of a business and its stakeholders (shareholders, customers, suppliers, investors and communities). The theory posits that the firm

ought to generate value for all stakeholders involved in the business, not solely the shareholders. The stakeholder theory is valuable in providing a holistic decision-making approach, upholding ethics, managing risks, promoting innovation and maintaining legitimacy (Mahajan *et al.,* 2023). Several scholars have adopted the theory into the business and economics research studies. The relevance of embracing stakeholder theory lies in its emphasis on need to maximize the value of investments belonging to shareholders. By prioritizing the well-being of its stakeholders, a company aligns itself with stakeholder theory. This theory elucidates the motivations behind embracing the need to enhance financial performance through extra value index as a proxy.

2.2. Empirical Review

Meghan (2016) conducted a research study that delved into the connection between a company's operating cash flow and its profitability level within the Toronto Stock Exchange (TSE) context. The study had several objectives, including discerning how a firm's dividend policy influences its profitability, understanding the impact of liabilities on its profitability, and establishing the role of retained earnings in affecting profitability. The research employed correlation analysis to examine the relationship between these two variables. It scrutinized a total of 25 publicly traded companies in the United States, assessing various financial indicators and using three key performance metrics to evaluate the firms: profitability (measured as return on investment), market performance (quantified by changes in stock market value), and cash flow performance (evaluated as dividend per share). The study established that a positive operating cash flow indicates that the company generates enough cash to cover its day-to-day expenses. It also helps assess solvency, which deals with the company's long-term ability to meet its financial commitments. The study concluded that cash flow statements help evaluate a company's liquidity, which refers to its ability to meet short-term financial obligations.

La Shonda (2018) researched the correlation between operating cash flow activities and the performance of organizations within the hospitality sector in Nigeria. The study's primary objectives were to assess the connection between cash flows generated from day-to-day operations and the overall performance of organizations, to evaluate how the processing of loans impacted organizational performance, and to establish the influence of equity investments on the performance of these organizations. The research sample consisted of 67 companies operating in the hospitality and print media sectors. The study applied inferential statistics, particularly correlation analysis, to analyze the data. The study's findings indicated that by separating cash flows into operating, investing, and financing activities, the cash flow statement allows investors and analysts to assess how well the company performs in its core business operations. Positive operating cash flows suggest that a company effectively manages its operations and generates profits.

Waweru (2018) conducted a study that examined how the performance of companies listed on the Nairobi Stock Exchange (NSE) is influenced by their operating cash flow. The primary aim of this research was to investigate the impact of operating cash flow on the performance of these firms. The study had several objectives, including determining how a company's size affects its performance, exploring the relationship between sales growth and firm performance, and establishing the influence of the dividend payout ratio, Tobin's Q, on firm performance. To analyze the data, the study employed multiple regression analysis, considering variables such as cash flows, sales growth, and Tobin's Q. The dataset for the study consisted of financial information from 12 listed firms, drawn from publicly available financial statements published by the NSE

over the period spanning from 2003 to 2012. The study's findings indicated that the financing section of the cash flow statement reveals how a company is raising and repaying capital. It provides insights into how the company is managing its debt and equity. This information is crucial for assessing the company's financial strategy and overall performance.

Mu (2021) postulated that standardized management may increase development projects and their performance in the USA. The research started with a qualitative method using case study research to identify the major factors in standardized project management effects on the organizational project management level. The study developed hypotheses based on these factors and performed hypothesis testing to identify factors that impact performance. The study conducted follow-up interviews to enrich and refine findings. Three major findings came out of the study. First, management tools, investment of surplus cash, leadership skills, and process showed themselves to be of higher interest to standardization than the other independent variables because they may impact performance; second, these variables of higher interest are typically customized to fit the strategic purpose of the company; and third, companies tend to standardize project management practices only to a certain level. The current study was more specific and focused livestock marketing cooperatives.

Brilian (2018) conducted a research study that focused on the moderating role of various firm characteristics in shaping the relationship between the allocation of free cash flows into investments and the financial performance of firms listed on the Nairobi Securities Exchange. The primary aim of this study was to understand how these firm-specific characteristics impact the connection between investing cash flows and financial performance. The research had specific objectives, including assessing the influence of investing cash flows on the financial performance of firms listed on the NSE, determining how firm characteristics affect financial performance, and analyzing how the size of cash flow investments impacts financial performance. To conduct this analysis, the study utilized secondary panel data obtained from 55 firms listed on the NSE over the period spanning from 2008 to 2018. The data analysis was carried out using regression analysis. The study revealed that investment decisions involve allocating capital to various projects, assets, or initiatives. How a company allocates its financial resources can determine its ability to generate returns and drive financial performance. Effective capital allocation can lead to growth and profitability, while poor choices result in financial underperformance.

Suran (2019) conducted a study in Syria that focused on the impact of investment decisions on the profitability of local firms. The study's main goal was to investigate disparities between net cash flows from operations and the profitability of these firms. The objectives were to determine how cash flows from investments affect profitability, how current assets influence profitability, and how current liabilities relate to a firm's profitability. The study was based on a sample of 36 firms and used descriptive statistics for its analysis. The findings show that investment decisions also involve evaluating and managing risks. Companies must assess the potential risks associated with investments, and this risk management directly impacts financial performance. Prudent investment choices can lead to a lower risk of financial losses.

Forecasting financial needs involves gathering the necessary funds to initiate new activities, sustaining ongoing operations, and securing additional capital. It is the foundation for managing operational expenses and ensuring the harmonious coordination of various aspects within a functioning business (Gillian,2019). These functions are all underpinned by creating a clear policy, which offers both a sense of direction and a concrete plan for operations. The organization of these

financial planning functions is important for all types of business entities, particularly in the case of private enterprises with relatively substantial small and medium-scale investments. The key is to structure financial planning to support the business in accomplishing its fundamental goals while keeping costs to a minimum (Pandey, 1985).

Sari (2021) carried out this study in Tanzania and Kenya to understand why cooperative societies were not actively incorporating financial planning into their financial resource management practices. During the research, it became evident that many cooperative societies in East Africa were mishandling their finances to the extent that some were either disbanded or ceased operations entirely. Data was gathered from cooperative societies in Kenya and Tanzania, revealing that these organizations utilized limited financial planning to manage their financial resources. Consequently, it was deduced that this weak application of financial forecasting and planning had led to suboptimal financial management and poor financial performance within the cooperative sector.

Mohammed (2018) conducted a study to evaluate the significance of financial planning within microfinance firms. This research addressed the necessity for such firms to implement financial planning strategies in their resource management to improve efficiency and reduce costs, particularly in the microfinance sector in Kenya. Mohammed's research focused on microfinance firms, including the Kenya Women Finance Trust, known for its rapid growth and specialization in providing financial support to women seeking to initiate or expand their business endeavors. The objective was to identify the specific financial planning techniques these firms used to manage and allocate their financial resources effectively, improving efficiency, expansion, and cost reduction. Data collected from microfinance firms revealed that firms that had embraced financial planning techniques in resource management achieved higher levels of efficiency, experienced more significant growth, and successfully minimized operational costs. Conversely, firms with limited or no financial planning techniques exhibited lower efficiency and slower financial growth.

Sufi (2007) did an empirical study on bank credit lines in corporate finance and the findings suggested that bank credit lines gave some flexibility as far as financing is concerned. The unused credit line value and cash was much greater for firms in the lower deciles of profitability as they hold more cash. Firms with no access credit lines must hold very high cash balances in lieu of the credit line facility. Unused credit lines were more efficient than cash in the protection or cover against future shocks in income (Sufi 2007). In other studies, Acharya *et al* (2014) showed that bank health shocks were more important especially if they go together with liquidity shortage, such as the recent financial crisis, which complicates the banks and firms' fund-raising capacity. Credit lines access restriction decisions resulting from financial wellness had key implications on firm's capital structure, hiring, investment, and overall performance. Aragon *et al* (2020), in their study on credit lines in microcredit in India found that a line of credit facility led to a 7% increase in profits as compared to any standard microcredit. They found that there was a rise in profitability mainly caused by the line of credit line leading to more flexible borrowing and repayments that allow sellers to invest more in goods that are profitable. Firms with higher debt and unutilized credit line showed far better operating performance in the year prior to the issue (Aragon et al., 2020).

3.0 Methods

This study used the descriptive design which according to Creswell and Creswell (2017), a descriptive research technique is appropriate in creating a profile of the variables. This design for a research study is ideal for establishing the cash management practices and financial performance of livestock cooperative societies in Marsabit County, Kenya. The study adopted multiple linear regression analysis as advocated by Awino (2014), Mamun & Rana (2020) and Chen & Ma (2021). The research study population comprised a combination of all the elements, making it easy to obtain information of interest to the study sample (Mugenda, 2013). Marsabit County has ten registered livestock marketing cooperative societies as units of analysis from where units of observation were the 110 staff members working in finance departments comprising of chief finance officer, internal audit managers, accountants, financial planning and analysis staff and cahiers. These were officers and employees serving at the ten Livestock Cooperative Societies in the four sub-counties: Moyale sub-county, Laisamis, Loiyangalani, and North-horr County. Total number of staff in the ten cooperative societies was 110 workers across Marsabit county offices.

Using a formula used by Orodho & Kombo, 2002, a sample size of 86 respondents. After deciding the sample of 86 respondents, the sample in each society was selected using stratified random sampling method. Thereafter, a systematic random sampling technique was used to obtain proportional samples from each society. The researcher used structured research questionnaires to aid the collection of primary data from the study respondents. The questionnaires were preferred since the research tool is cost-effective and can be used to get to a wider population compared to interviews since it reduces bias among the interviewers. Its limitations are clarity issues, low response rates, and literacy issues. The questionnaires were both open and closed-ended. (Appendix II). There were two segments: the first and the second in the questionnaire. Questionnaire sections A contained the background demographic characteristics of the respondents. In contrast, section B provided questions regarding the relationship between cash management practices and the financial performance of livestock cooperative societies in Marsabit County. The researcher used the data attained from questionnaires to attain a conclusion for this research. Secondary data was collected using data files from auditing that enabled computation of extra value index.

4.0 Results

4.1 Descriptive Statistics

Table 1 shows the summary of descriptive statistics of cash management practices and their influence on financial performance among livestock marketing cooperative societies. Examples of the variables used in the creation of the table were; Financial performance, Periodic cash plan, Investing of surplus cash and Management of credit lines. The measures of central tendency, variability, and distribution of these variables can conveniently be seen from the mentioned statistics.

For financial performance the mean value was 30.43 with a standard deviation of 6.164 thus this shows moderate dispersion within the sampled cooperative societies. The negative skewness of -0.514 showing that the distribution was slightly skewed to the left, means that most of the societies got high financial performance mean scores but there existed few societies with less mean scores. The kurtosis of 0.739 means that it was slightly more than the standard normal curve, which means

that the scores for the financial performances was more concentrated than the normal curve; that is, it suggests more peak at the middle than the normal distribution curve (Lohana S 2021).

Table 1: Descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
financial performance	86	12	44	30.43	6.164	-.514	.260	.739	.514
periodic cash plan	86	2	4	3.08	.477	-.242	.260	-.101	.514
Investing of surplus cash	86	1	4	3.12	.672	-.218	.260	-.092	.514
managing cash flows	86	2	4	3.01	.585	.022	.260	-.243	.514
bank credit lines	86	1	5	3.02	.649	-.100	.260	.336	.514
Valid N (listwise)	86								

For periodic cash plans, the mean score was 3.08, and the standard deviation was 0.477 for responses. The skewness was negative in value, -0.242 implying that most of the societies had higher scores of the periodic cash planning while the distribution was near normal. The kurtosis value of -0.101 shows the distribution was slightly platykurtic because it was lower than a normal distribution, and less peaking, less outgrowing of extreme value (Masavi, Kiweu, & Kinyili, 2017). With regard to investing surplus cash, the mean score was 3.12, and the variance was 0.672. The skewness estimate of -0.218 means that most of the societies report a higher level of investing surplus cash; however, the distribution is almost symmetric. The table also showed a kurtosis value of -0.092 indicating that the distribution was slightly less peaked than the standard normal distribution (Opondo et al., 2023).

For the management of cash flows, the mean value was estimated at 3.01 and it was determined that variability was relatively low with the standard deviation of 0.585. The skewness test value was 0.022, which means that there was no sign of extreme positive or negative skewness, hence the distribution of this variable was seemingly normal. The kurtosis value of -0.243 was slightly less than 0, meaning the distribution had less kurtosis than the normal distribution with less prevalence of extreme scores (Masavi et al., 2017). For bank credit lines the variables: Mean = 3.02 and sd= 0.649. The skewness of -0.100 was negative indicating the fact that lower scores were highly rare in the data, and most societies use bank credit lines moderately. The value of kurtosis was 0.336 which shows that data was more concentrated as compared to normal distribution but not so much as mesokurtic distribution, which means that distribution was moderately peaked.

The means of the variables concerning the cash management show moderate mean scores and these findings imply that the livestock marketing cooperative societies have reasonably good control over their cash management practices. The skewness and kurtosis testify to the fact that there was a reasonable distribution of these variables with reasonable standard deviation particularly when it comes to the application of financial performance and or surplus cash investment.

4.2 Regression analysis.

Table 2 Model summary.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929[a]	.864	.857	2.333

a. Predictors: (Constant), bank credit lines, managing cash flows, Investing of surplus cash, periodic cash plan

From the model summary (table 2) regression it was evident that there was a high correlation between the four independent variables including bank credit lines, managing cash flows, investing surplus cash, and the periodic cash plan, and the dependent variable was financial performance. The positive coefficient of determination value indicating 0.929 as the value of R proves the strong direct relationship between the factors. Also, the R Square value of 0.864 showed that 86.4% of the total variance in the financial performance was caused by the independent variables which demonstrates the good fitness of the proposed model. This was confirmed by an Adjusted R Square of 0.857, which takes into account the actual number of independent variables used in the model and prevents over-estimation of variance. Further, the standard error of estimate, which equals 2.333, showed the average deviations between the observed values and the fitted values of the model, the measure of precision. In conclusion, these findings strengthen the credibility and validity of the derived regression analysis model.

Table 3 Anova summary.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2788.325	4	697.081	128.106	.000[b]
	Residual	440.756	81	5.441		
	Total	3229.081	85			

a. Dependent Variable: financial performance

b. Predictors: (Constant), bank credit lines, managing cash flows, Investing of surplus cash, periodic cash plan

In the analysis of variance (ANOVA) for the regression model, the results showed significant findings. The total sum of squares was 3229.081, with 85 degrees of freedom. The regression model explained 2788.325 of the total variance, with 4 degrees of freedom for the predictors. The

mean square for the regression was 697.081, and for the residual, it was 5.441. F-statistic was 128.106 indicating a highly significant level since the p-value was 0.000. This further confirmed that the regression model showing the predictors as bank credit lines, managing cash flows, investing surplus cash, and periodic cash planning was statistically significant in explaining the variation in financial performance.

Table 4 Beta coefficients.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-3.583	1.671		-2.145	.035
	periodic cash plan	2.762	.898	.214	3.076	.003
	Investing of surplus cash	1.362	.571	.149	2.387	.019
	managing cash flows	6.100	.643	.579	9.492	.000
	bank credit lines	.951	.608	.100	1.564	.122

a. Dependent Variable: financial performance

Table 4 shows the coefficient results, indicating that almost all the research independent variables had a significant, positive relationship with financial performance. While reviewing the results it was found that the values of variables that were selected were important by impacting the firm's financial performance as set by the initial threshold of 0.05(p-value). Nevertheless, bank credit lines did not cross this mark, indicating that, it did not statistically influence the dependent variable. The outcomes pinpoint the role of cash elements and planning tactics in determining the financial outcome.

The coefficients presented in Table 3 showed that the results on the "periodic cash plan" had a positive and significant relationship in the context of financial performance with the unstandardized coefficient of 2.762, and the p-value of 0.003. This result shows that the periodic cash plan was relevant and had a positive relation with the cooperative financial performance. In particular, controlling for other variables, it was shown that as the value of the periodic cash plan increases, the financial performance will likely improve as well. This result was also significant since $p < 0.05$ means that the association found was not by chance. Other researchers concur with this view admitting that structured financial planning, for instance, can improve business performance. For instance, Sande et al. (2023) concluded that organizations with proper financial planning received better financial outcomes because of efficiencies enhanced through appropriate management of cash flows and resources. In addition to that, Moneke et al. (2024) explained that frequent financial planning will create financial stability and growth within the organization. Such results are concurrent with the present ones, pointing out that cash planning at certain time intervals is a crucial condition for enhancing business performance in different spheres.

Further, the positive association of periodic cash plans with financial performance supports the idea of planning advancements enabling companies to have an improved expectation of the short-term financial requirements, the eventual absence of liquidity issues, and an enhancement of operations. This accords with the existing literature which posits that proper management of cash is capable of offsetting the various financial risks and thereby enhancing the prospects of organizational profits based on proper preparation to meet the various obligations and grasp emerging opportunities (Mbogo et al., 2021).

Therefore, it was again concluded from the value given in the coefficient table that the periodic cash plans ought to be implemented to improve the financial performance. These findings demonstrated the substantial positive impact of this variable reminding us of the importance of better management of funds in line with the literature review which suggests that planning is critical for organizational advancement. From the coefficient results in Table 3, it was observed that there was a positive relationship between investing surplus cash and financial performance with a coefficient of 1.362 and a p-value of 0.019. These results indicate that proper utilization of excess cash improves the financial performance of livestock cooperatives. The proposed link was meaningful because the significance level ($p < 0.05$) suggests that this connection was not random and shows the relevance of the careful distribution of the excess money. Similar studies have drawn before this research back these findings as they establish the consequences of surplus cash investment to companies. For example, Al-Najjar & Belghitar (2011) established that the overall cash reserves in firms and strategic investment had a positive impact on efficiency and performance with ROA/ROE as indicators. Many of their investigations focused on efficient policies for managing the liquidity of a firm so as to maximize firm value.

Likewise, while investigating factors of corporate cash holdings as well as its consequences Opler et al., (1999) found that the companies with excess cash that invested in value-enhancing projects experienced better financial performance than other companies which simply hoarded excess cash without specific investment plans. This evidence supports the concepts of pecuniary costs incurred from excess cash balances and the advantages of reinvesting those funds in productive uses.In Table 3 the coefficients showed a positive and significant association between managing cash flows and financial performance, the unstandardized coefficient was 6.100, and $p = 0.000$. Overall, these findings support the premise that accurate forecasts of and attention to cash flows are instrumental in improving the overall financial performances of livestock cooperatives. The above statistical results also show that the observed correlation is significant at the 0.05 level of significance to assert that the hypothesis that better cash flow management has a significant positive effect on financial performance is true.

It is the act of managing an organization’s cash inflows and outflows to avoid a liquidity crisis while exploiting available opportunities for growth in an organization. Previous research has supported this assertion. For instance, García-Teruel and Martínez-Solano (2007) showed that working capital management which entails managing cash flows has a positive relationship with SME profitability. From their studies, they deduced that appropriate cash flows make firms to make the right investments, remove high working capital pressures to enhance efficient operations.

Results shown in Table 4.6.3 mean that coefficients that link bank credit lines with financial performance were insignificant since the unstandardized coefficient is 0.951, the t-value = 1.564, and the p-value = 0.122. With regard to the carriage of hypothesis 3, since p—the value is greater than 0.05, this indicates that the direct relationship between bank credit lines and the financial performance of livestock cooperatives was statistically insignificant. This finding implies that, although the availability of credit lines may be helpful in theory, such line's effectiveness may in fact hinge on one or another contextual or operational factor.

Like short-term funding, bank credit lines give businesses the ability to tap into sources of liquidity when they are needed to meet operational expenses, invest in a venture, or endure times of low cash flow. These theoretical assets are substantiated by several studies. For instance, Demiroglu, James, and Kizilaslan (2012) pointed out that credit lines improve the mobility of cash as well as the exploitation of growth options by firms. According to their arguments, those firms with structured credit facilities hedged off cash flow problems leading to better operations efficiency and profitability. In the same regard, DeAngelo, DeAngelo, and Whited further stressed that credit lines act as a hedge against funding risk through which firms carry out normal operations even during phases of economic constraints. Their study also found that when firms embrace the use of credit lines then the level of financial constraints can be lowered, long-term projects can be begun, and therefore the performance can be boosted. However, the efficiency of these credit facilities can only be achieved provided borrowed funds are well managed by the firm.

Moreover, Gao, Harford, and Li (2013) pointed out credit lines offer firms the financial maneuverability to better react to market signals. They also observed that excessive credit facilities could have conduit losses, an increase in interest burden, and excessive reliance on external funds. This bears with the current findings, which indicate that the livestock cooperatives could not be optimizing available possibilities within the bank credit line frontier to improve this financial performance. The findings of this study may show no statistically significant relationship because of any or all of the following reasons. Challenges that the livestock cooperatives might experience may include; high interest rates which the cooperatives might not be in a position to afford, lack of readily accessible and cheap sources of credit or poor financial management among others. Further, they may depend on intra-such an organization funding sources that may minimizes the dependence on credit. Despite promising the provision of flexibility and advantageous positions in adjusting liquidity management and cut-cost organizational efficiency, changes in financial performance tend to experience potential context and financial management contingencies. The conclusions derived from this research reveal the necessity for adequate financing and suitable credit management for credit assets that want to optimize their efficiency for the creation of livestock co-operatives.

5.0 Conclusions and Recommendations

5.2 Conclusions

Therefore, this research showed that appropriate financial management practices are critical in improving the earnings of livestock cooperatives. The study shows that methods such as cash planning every once in a while, proper use of excess funds, and proper cash flow management play a key role in increased operational efficiency, and overall reduction of risk, funding deficiencies, and actual loss of profit. These practices help to ensure the usability of resources by cooperatives,

coverage of their needs, and successful investments in new opportunities, which is a condition for financial sustainability.

However, the findings of the study also showed that the total bank credit line had no direct effect on the financial performance. This implies that other factors such as high expense of credit, restricted access to cheap credit, or poor financial planning may hamper cooperatives from capturing credit facilities most efficiently. By increasing members' financial literacy, fixing the bad credit habits of cooperatives, and improving access to low-cost funds, it is possible to fully benefit from external financing. Therefore, the study concluded the need to embrace sound and appropriate strategies for dealing with financial problems and issues to enhance improvement and sustainability. That way, by applying knowledge derived from this research, the cooperative livestock operations had effective financial planning and deployment in relation to its operation environment and objective. Further studies may examine other factors that affect the financial performance of cooperatives such as technological and stakeholder factors, as well as other economic factors for better appreciation of the financial environment of the cooperatives.

5.3 Recommendations

Given the analysis of the result findings of this study, the following recommendations are made with the aim of boosting the desired financial performance of the livestock cooperatives. First, it is needed for cooperatives to enhance and popularize periodic cash planning. Further, constant checks and balances on the flow of cash, and having well laid down planning times will help in improving cash flow forecasts, minimize cash shortages or surpluses, and also ensure proper utilization of scarce resources. In that regard, the management teams should be trained in effective strategic cash planning to enhance their financial skills. Also, it pointed out that cooperatives should capitalize on surplus cash to improve financial performance. This involves establishing authority to prevent tasty funds from being squandered on non-value addition areas such as recurrent expenditure but instead be spent on value-addition areas such as infrastructure development or member service improvement. As with any investment, cooperatives should be very specific in their feasibility studies and consult professionals when it comes to receiving the best returns while avoiding or minimizing risks associated with the investments.

Better management of working capital is also important so as to achieve long-term solvency. The measurement and management of cash receipts and disbursement needs to be effectively implemented by the livestock cooperatives. Integrated computerized systems together with the respective instruments of cash flow management can offer actual data and exclude mistakes linked to manual work. This will not only give liquidity but will also help to make working capital more efficient to maintain operational efficiency. In the last place, bank credit lines cannot have clear positive direct influences on financial performance, though their usefulness cannot be ignored. The various livestock cooperatives should always evaluate the available credit resources and policies, access quality and cheap credit, and ensure the borrowed money is channeled in the right manner. This responsibility should involve the management engaging in a quest to secure cheap credit facilities from the financial institutions because this will help in establishing the flexibility that comes with credit for the purpose of attacking new financial prospects for the business or defending itself against new instances of financial risks. If all these areas are tackled, then the livestock cooperatives will have structures in place for better financial management that will lead to better performance and thus form the ground for more development.

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