

Long-term Debt Financing Decisions and Financial Performance of Housing Cooperative Societies in Nairobi County, Kenya

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Abstract: Financing decisions are focal point of housing cooperative societies' operations. Housing cooperative societies play a significant role in pooling resources for acquisition of land and provision of funds for housing developments. Therefore, they are vital in promoting housing affordability, hence enabling the members to meet their economic and social needs. However, housing cooperative societies in Kenya are yet to meet the housing needs of the members. This implies that there is a major concern on the financing decisions regarding adequacy, management, and sustainability of members' funds and overall financial position of the housing cooperative societies. The current study examined the influence of long-term debt financing decisions on financial performance of housing cooperative societies in Kenya. The study was guided by trade-off theory. The study applied descriptive research design. The target population of the study was the housing cooperative societies in Nairobi County. Descriptive and inferential statistical data analysis methods were employed. Descriptive analysis used measures of central tendency and spread including the frequencies, percentages, means and standard deviations. The inferential analysis involved the Pearson's moment correlation and multiple regressions analysis. Descriptive findings established that long-term debt financing decisions influence financial performance of housing cooperative societies. Correlation analysis results showed that the relationship between the long-term debt financing decisions and financial performance was strong, positive and significant ($r=0.705^{**}$; $p=0.000<0.01$). Therefore, long-term debt financing decisions affect financial performance. In regression analysis, the coefficient of determination was $R^2=0.498$ hence long-term debt financing decisions accounted for 49.8% of variation in financial performance of housing cooperative societies. It was concluded Debt finance enables housing cooperatives to initiate housing developments that earn returns and promote their financial performance. Housing cooperative societies are recommended to adequately analyze the returns expected from assets and investments funded through debts when making long-term debt financing decisions to improve financial performance.

Key Words: Long-term Financing Decisions, Financial Performance, Housing Cooperative Societies

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I. Introduction

Housing cooperative societies play a significant role in pooling resources for acquisition of land and provision of funds for housing developments (Crabtree, Grimstad, McNeill, Perry, & Power, 2019). Therefore, they are vital in promoting housing affordability, hence enabling the members to meet their economic and social needs. Financing decisions are important in housing cooperative societies in regard to management of funds for housing developments. They are majorly involved in pooling of resources and lowering of individual costs of all services concerning the housing provision. Mwangi, Ochieng, and Lishenga (2019) noted that housing cooperative societies have an influence in defining residential and commercial housing developments. Housing co-operative societies as they provide links to members to financial institutions. Lending institutions and government agencies find it more convenient to deal with group of members in cooperative societies than

individual persons (Oloyede, Ikpefan, Akinjare, & Oloke, 2017). Moreover, housing co-operative societies scrutinizes individual member's credit worthiness for housing loans and generate or facilitate provision of housing loans. Financial resources of housing cooperative societies involve cost and are available in a limited quantity, hence effective financing decisions are required to enhance their proper utilization so as to achieve the goal of value maximization (Oyalowo & Babawale, 2017).

Long-term debt financing decisions are the most explorable area of financing decisions and financial management at large among the housing cooperative societies (Yulia, 2017). The nature of their operations is long-term thus right form of long-term funds involve in-depth analysis. The decisions ought to meet the capital requirements of the housing cooperative societies for long periods, particularly five years and above. While debt is desirable for many reasons, excessive debt or an inappropriate use of debt can be very dangerous to the survival of housing cooperative society. Excessive debt can induce a downward spiraling effect as debt service damages profitability, lowering cash flow, reducing profitable investment, and increasing the cost of additional funding (Öhman & Yazdanfar, 2017). Housing cooperative societies overleverage by incurring a huge debt though borrowing funds at a lower rate of interest and using the excess funds in high risk investments in order to maximize returns. The most obvious risk of high levels of long-term debts is that it expands the chances of losses. Housing cooperative societies that acquires too much long-term debts face bankruptcy during a business downturn, while a less-levered housing cooperative societies might survive (Yulia, 2017).

Housing cooperative societies in Kenya are yet to meet the housing needs of the members (Kyaiitha & Nzioki, 2017). This implies that there is a major concern on the financing decisions regarding adequacy, management, and sustainability of members' funds and overall financial position of the housing cooperative societies. They have suffered challenges in meeting timely delivery of housing to the members. The decision on selection and combination of funding sources determine the efficiency and performance of an organization. However, the role of long-term debt financing decisions in the enhancement of financial performance remains unclear among the housing cooperative societies in Kenya. Furthermore, there is little empirical evidence from past studies regarding the long-term debt financing decisions and financial performance of housing cooperative societies. Kyaiitha and Nzioki (2017) examined the relationship between corporate governance practices and financial performance of housing cooperatives. The study revealed that corporate governance had little effect and explained only 25.6% of financial performance. Similarly, Ndiege and Kazungu (2020) examined the effect of capital structure on performance of savings and credit co-operative societies in Tanzania. The findings indicated that liquidity and institutional capital influence financial performance but financial leverage had insignificant effect. The extensive knowledge gap provided the basis for examining the influence of long-term debt financing decisions on financial performance of housing cooperative societies in Nairobi County.

II. Objectives of the Study

The objective of the study was to determine the influence of long-term debt financing decisions on financial performance of housing cooperative societies in Nairobi County, Kenya.

III. Literature Review

Long-term debt financing decisions creates cash flow liabilities which ought to be managed properly by the housing cooperative societies (Yulia, 2017). They are non-current liabilities and usually have maturities longer than one year. These liabilities create implicit obligation for the housing cooperative societies. The housing cooperative society is compelled to generate adequate revenue to cover operating costs and pay back the full principal amount and accrued interest. In debt financing, the ongoing cash flow must be enough to cover ongoing interest expenses or costs of capital (Brzeska & Mazurczak-Mąka, 2019). Long-term debt allows for business expansion without immediate returns' obligations.

Housing cooperative societies usually make long-term debt financing decisions on long-term bank and SACCOs' loans and interest on loans based on their firm size and solvency position (Aven, 2013). Effective long-term debt financing decisions are critical since the business of housing cooperatives is mainly housing development as part of real estate investments involve high level of risks (Yulia, 2017). Real estate risks including asset-level risks, bankruptcy risks, insolvency risks, idiosyncratic risks, credit risks, liquidity risks ought to be considered within the framework of long-term debt financing decisions in conjunction with value and returns from housing cooperatives' business (Aven, 2013).

Ineffective financial performance among housing cooperative societies is attributable to long-term debt financing decisions without proper consideration for real estate inherent risks (Gontarek, 2016). Therefore, appropriate management of real estate risks is a requisite for effective alignment of debt capital sourcing through long-term bank loans, and SACCO loans. The interest costs, firm size and debt sustainability form the basis for long-term debt financing decisions hence determining the ability of housing cooperative societies to maintain stable financial performance. The need for housing cooperative societies to advance their risk management practices pertaining to equity risks, asset backed risks and liquidity risks has been aggressively

pushed by the cooperative sector regulators. However, challenges remain in the integration real estate risks' into long-term debt financing decisions among housing cooperative societies (Aven, 2013).

Utilization of debt by organizations create financial leverage that increases the expected returns and risks (Huynh, Paligorova, & Petrunia, 2018). Long-term debt is used to acquire income generating assets to boost the commissions and fees from underwriting businesses. Housing cooperative societies are legally obligatory to meet the associated costs of the bank and SACCOs' loans. Fosberg (2013) suggested that analysis of housing investments meant to be financed through bank loans ought to keenly analyze and viability determined. It is upon this analysis that long-term debt financing decisions are made. Ineffective investment analysis contribute to low returns that cannot cover the costs of debt and can lead to financial crisis among housing cooperative societies (Crabtree, Grimstad, McNeill, Perry, & Power, 2019).

The trade-off theory posits that firms behave as if they have optimal debt position they strive to achieve (Serrasqueiro & Caetano, 2015). The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing. Trade-off theory describes the trade-off between the benefits and costs of debt capital. Therefore, trade-off theory is important in guiding on appropriate financing proportions for optimal returns and effective financial performance in housing cooperative societies.

Empirical studies have been done in the area of financial performance of housing cooperative societies. However, most of the Studies on financing decisions have focused more on Savings and Credit Cooperative Societies and Commercial banks. Kyaitha and Nzioki (2017) researched on the influence of corporate governance practices and financial performance of housing cooperatives in Kenya. The study applied descriptive research design and multiple regression model in analysis. The Pearson's correlation coefficient for accountability and financial performance was $r = 0.366^{**}$ thus accountability moderately affected performance. The relationship between auditing committee and performance ($r = 0.351^{**}$) shows that auditing also had moderate effect on performance. Moreover, the correlation coefficient ($r=0.289^*$) indicated that separation of ownership had weak but significant effect on financial performance. Based on the regression analysis results, the correlation coefficient ($R=.506$) coefficient of determination ($R^2=.256$) showed that corporate governance practices influenced financial performance of housing cooperatives. The study concluded that the corporate governance practices forms the basis for financial performance, growth and continuous development.

Kirimi (2017) researched on the effect of debt finance on financial performance of savings and credit cooperative societies. The study applied causal research design. The research revealed that the relationship between debt and return on equity was strong and significant as shown by correlation coefficient ($r=.984$). However, return on equity was negatively affected by interest rates and loan tenure. Further, the debt equity ratio and interest coverage ratio positively affected the return on equity. In regression analysis, debt equity ratio had a t-value of 8.728 with value sig. =.0000. It affected return on equity at a greater extent. Therefore, debt finance influences SACCOs financial performance.

Anachoni and Jagongo (2020) researched on the short-term financing decisions and financial performance of commercial banks in Kenya. The research applied descriptive research design and multiple regressions model in data analysis. The revealed that short-term financing had a significant statistical association with profitability. This was demonstrated by correlation coefficient ($R=.755$) and coefficient of determination ($R^2=.570$). According to the results, customer deposits and liquidity significantly profitability. However, the relationship between leverage and profitability is insignificant. The beta coefficients for customer deposits and liquidity were $\beta=.008$ and $\beta=-.079$ respectively and significant at 95% confidence level. However, the beta coefficient $\beta=-.970$ for leverage was insignificant at 5% significance level. It implies that based on study findings, debt financing does not influence profitability.

Odhiambo and Okanga (2020) examined the influence of financing decisions on financial performance of savings and credit cooperative societies in Kenya. The study applied meta-analysis research design. The study was based on findings of previous empirical studies. The study revealed that financing decisions; equity, debt and retained earnings decisions influenced financial performance. It was concluded that financing decisions assist in determination of financial requirements and funds are raised on such basis to promote financial performance.

Research gaps were identified from the previous studies. For instance, the research by Kyaitha and Nzioki (2017) showed that corporate governance practices; accountability, auditing committee and ownership separation could only account for 25.6% of financial performance of housing cooperatives. The current study focuses on long-term debt financing decisions which accounted for 49.8% variation in financial performance. The study by Odhiambo and Okanga (2020) was entirely based on the analysis of empirical findings. It was a conceptual review and did not involve actual collection of primary data. The current study involved collection of primary data. The analysis was based on collected data and not comparative analysis of existing empirical findings.

IV. Research Methodology

The current study applied descriptive research design. Descriptive research design fitted the study in description of long-term debt financing decisions and financial performance. The existing situation in terms of the parameters of long-term debt financing decisions and their influence was described. The target population of the study was the housing cooperative societies in Nairobi County, Kenya. The study, specifically, targeted managers, who are deemed to have an understanding on financing decisions and financial performance of housing cooperative societies. Simple random sampling was used in selection of housing cooperative societies that were involved in the research. In simple random sampling, samples were selected through random numbers. Managers of all selected housing cooperative societies were engaged in the study. A sample of 86 respondents was selected from population 841. Structured questionnaires were used in data collection. The current study applied the descriptive and inferential statistical data analysis methods. Analysis was aided by Statistical Packages for Social Sciences (SPSS).

V. Results

This section outlines the key descriptive and inferential findings pertaining to the influence of long-term debt financing decisions on financial performance of housing cooperative societies in Nairobi County.

5.1 Influence of Long-term Debt Financing Decisions on Financial Performance

The study sought to describe the influence of long-term debt financing decisions on financial performance of Housing Cooperative Societies. Results are shown on Table 1.

Table 1: Influence of Long-term Debt Financing Decisions on Financial Performance

Long-term Debt Financing Decisions	n	SA	A	I	D	SD	Mean	Std. Dev.
Our housing cooperative society borrow long-term loans to fund land acquisitions and housing developments.	63	34.9%	41.3%	19%	4.8%	-	4.06	0.859
Our long-term debt financing decisions are determined by interest costs on loans.	63	42.9%	34.9%	14.3%	7.9%	-	4.13	0.942
The long-term borrowing is determined by the probability of bankruptcy.	63	14.3%	14.3%	38.1%	23.8%	9.5%	3.00	1.164
We consider firm size in making long-term debt financing decisions.	63	44.4%	41.3%	6.3%	6.3%	1.6%	4.21	0.936
Our long-term borrowing is based on the solvency position.	63	41.3%	33.3%	12.7%	9.5%	3.2%	4.00	1.107

The descriptive research findings showed that long-term debt financing decisions influence financial performance of housing cooperative societies. 76.2% of the respondents agreed (mean=4.06; std.dev=0.859) that housing cooperative society borrow long-term loans to fund land acquisitions and housing developments. Moreover, the findings showed that the respondents agreed (mean=4.13; std.dev=0.942) that long-term debt financing decisions are determined by interest costs on loans. The respondents strongly agreed (mean= 4.21; std. dev= 0.936) that housing cooperative societies consider their firm size in making long-term debt financing decisions. 41.3% of the respondents strongly agreed that long-term borrowing is based on the solvency position of the housing cooperative societies.

5.2 Financial Performance of Housing Cooperative Societies

The researcher sought views of the respondents on the financial performance of Housing Cooperative Societies. The results are illustrated on Table 2.

Table 2: Financial Performance of Housing Cooperative Societies

Financial Performance	n	SA	A	I	D	SD	Mean	Std. Dev.
The return on equity in our housing cooperate society depend on effectiveness of financing decisions.	63	47.6%	44.4%	7.9%	-	-	4.40	0.636
There is upward trend in return on investments in our organization.	63	39.7%	33.3%	23.8%	1.6%	1.6%	4.08	0.921
Our housing cooperative society possess adequate income generating assets.	63	41.3%	44.4%	11.1%	1.6%	1.6%	4.22	0.832

The level of earnings of housing cooperative societies is determined by appropriateness financing sources including equity, debt and reinvestment of retained earnings.	63	31.7%	44.4%	17.5%	6.3%	-	4.02	0.871
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The descriptive findings showed that financial performance of housing cooperative societies is indicated by return on equity, return on investments, and adequacy of income generating returns. 47.6% of the respondents agreed (mean=4.40; std. dev= 0.636) that the return on equity in our housing cooperative society depend on effectiveness of financing decisions. They further agreed mean= 4.08 std. dev= 0.921 that the return on investments for housing cooperative societies was on upward trend. This demonstrates an increase in financial performance due to effective financing decisions. 85.7% of the respondents concurred that their housing cooperative societies possesses adequate income generating assets. Moreover, the study findings indicated that 76.1% if respondents agreed (mean= 4.02; std. dev= 0.871) that the level of earnings of housing cooperative societies is determined by appropriateness financing sources including equity, debt and reinvestment of retained earnings. As such, the financing decisions influence the financial performance of housing cooperative societies.

5.3 Correlation Analysis

Pearson’s moment correlation analysis was conducted to establish the relationship between the long-term debt financing decisions and the financial performance of housing cooperative societies. Results are presented on Table 3.

Table 3: Correlation between Long-term Debt Financing Decisions and Financial Performance

		Financial Performance
Long-term Debt Financing Decisions	Pearson Correlation	.705**
	Sig. (2-tailed)	.000
	N	63

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

Correlational analysis results shows that the relationship between the long-term debt financing decisions and financial performance was strong, positive and statistically significant. The correlation coefficient($r=.705^{**}$; $p=0.000<0.01$) was significant at 1% significance level. Long-term debts are applied in acquiring income generating assets and investments. The income earned by housing cooperative societies indicate the level of financial performance. The findings shows that long-term debt financing decisions are based on the ability of debt funds to generate returns in excess of the cost of borrowing. When this is achieved, the level of financial performance increases for the betterment of the housing cooperative societies. Therefore, long-term debt financing decisions influence the financial performance of housing cooperative societies.

5.4 Regression Analysis

Regression analysis was conducted to predict financial performance of housing cooperative societies from variations in long-term financing decisions. The results are illustrated on Tables 4, 5, and 6.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.705 ^a	.498	.489	.32313

a. Predictors: (Constant), long-term debt financing decisions

The results on Table 4 shows that the correlation coefficient was $R= 0.705$ with coefficient of determination of $R^2= 0.498$. This implies that long-term debt financing decisions accounted for 49.8% of variation in financial performance. As such, long-term debt financing decisions influenced financial performance of housing cooperative societies.

Table 5: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.310	1	6.310	60.430	.000 ^b
	Residual	6.369	61	.104		
	Total	12.679	62			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Long-Term Debt Financing Decisions

Table 5 shows the Analysis of Variance (ANOVA) results. The F-value was 60.430 with sig./p-value= 0.000 thus significant at 95% confidence level. This means that the long-term bank loans and SACCO loans, interest costs on loans and solvency position as elements of long-term debt financing decisions influence financial performance.

Table 6: Regression Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.491	.221		11.276	.000
1 Long-term Debt Financing Decisions	.436	.056	.705	7.774	.000

a. Dependent Variable: Financial Performance

The regression model was as; $Y = \beta_0 + \beta_1 X_1 + \varepsilon$ and was interpreted as follows:

$$Y = 2.491 + 0.436X_1 + 0.221.$$

The beta coefficient ($\beta=0.436$; $P= 0.000$) was significant at 95% confidence level. This implies that the relationship between long-term debt financing decisions and financial performance was significant. Therefore, housing cooperative societies' financial performance was dependent on long-term debt financing decisions.

VI. Conclusion

Long-term financing decisions by housing cooperative societies are informed by the interest on loans and probability of bankruptcy. Debt finance enables housing cooperatives to initiate housing developments that earn returns and promote their financial performance. These debts are favorable when such earns are more than the cost of debts. Higher probability of bankruptcy implies high bankruptcy costs which negatively affect the financial performance of housing cooperative societies. However, larger housing cooperatives are often more diversified and have more stable cash flow hence their probability of bankruptcy is low when compared to smaller ones. The findings indicated that tax benefits of debt bankruptcy costs perspective predict that profitable housing should can apply high levels debt in financing their assets and investments. The study findings indicated that the size of housing cooperative society is an important consideration in long-term debt financing decisions. Larger housing cooperative societies have lower bankruptcy risk and relatively lower bankruptcy cost thus better positioned to use debt finance and attain better financial performance. These housing Cooperatives have less volatile cash flows and easier access to credit market hence size has positive impact on the debt financing decisions and financial performance.

VII. Recommendation

Housing cooperative societies are recommended to adequately analyze the returns expected from assets and investments funded through debts when making long-term debt financing decisions. High level of long-term debts present risks and financial challenges to housing cooperatives' ability to thrive financially over time if the earnings fall short of debt costs. Therefore, the finance managers of housing cooperatives ought to accurately project investment and asset returns and use long-term debts if there is potential for greater returns than debt costs.

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