Comparative Study of Financial Performance Among Co-operatives in Nepal: With Reference to Awasar, Dhanakunja, and Nilganga in KTM Metropolitan-16

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Submitted June 11; *Reviewed* June 28; *Accepted* June 26; *Published* July 28

Abstract

This study compares the financial performance of three cooperatives in Kathmandu Metropolitan-16: Awasar Saving and Credit Cooperatives Ltd., Dhanakunja Saving and Credit Cooperatives Ltd., and Nilganga Saving and Credit Cooperatives Ltd. The objectives are to analyze their financial health using key financial ratios over five years (2069-070 to 2073-074 BS). First-hand data were collected to compute two liquidity ratios (current ratio and debt-equity ratio), three profitability ratios (return on investment, return on assets, and return on equity), and one market prospect ratio (earnings per share). The results indicate that all three cooperatives struggle to achieve significant profitability, with most profitability ratios remaining below 1%. Awasar showed the highest return on equity at 6% in its second year. Dhanakunja displayed the strongest liquidity position, while Awasar and Nilganga consistently had current ratios below the satisfactory level of 2:1. Despite low debt-to-equity ratios suggesting stable businesses, market prospects varied, with Awasar performing relatively better than Nilganga. This comparative analysis provides a model for assessing the financial health of cooperatives and can guide future studies.

Keywords: cooperatives, financial health, financial ratios, liquidity, profitability

1. Introduction

1.1 Background and Literature Review

Dhungana (2017) in his master of art thesis entitled, "Role of Co-operative in Member's Livelihood Development, A Case Study of Shakali Saving & Credit Cooperative Ltd" has mentioned that co-operatives are regarded as one of the most effective and important sectors in rural development. According to this, the formal concept of co-operatives was developed in England. It started in Great Britain to break the broker system between producer and consumer in 1844 A.D. The world's first formally organized co-operative is "Rochdel Equitable Pioneer Co-operative Society" established with the participation of 28 members with £28 sterling capital. The founders of co-operatives were Robert Owen, Charles Fourier, R.W. Raiffesin, and Herman Schulze-Delitzsch.

Accordingly, Cooperatives in Nepal (2015) reveals that Nepal has a long cultural tradition of informal community-based co-operatives including savings and credit associations popularly known as dhikuti, and grain savings and labor savings systems known as pharma and dharma bhakari. Similarly, Guthi provided a forum to work together for smoothly running different socio-cultural practices. Many of these traditional systems of cooperation are still functioning in the rural areas of Nepal. The concept of co-operatives emerged in the

form of Parma in the hilly region, Dharma Bhakari in the western part, and Manka Guthi in Kathmandu valley, run for generations to meet the needs of their members through labor exchange, meeting emergencies, providing loans, and preserving culture, etc.

But as Dhungana (2017) explains, the formal concept started only after 2010 B.S. The first co-operative institution was established in 2013 BS at the then Bakhanpur VDC in Chitwan district as a pilot project of the Government of Nepal. The main objective of the institution was the resettlement of flood-affected people in the related area.

Last but not least, according to Cooperatives in Nepal (2015), to date, Nepal has considered the co-operatives sector as one of the three pillars of national development. The major types of cooperative societies operating in Nepal include Saving and Credit, Multipurpose, Dairy, Agriculture, Fruits and Vegetables, Bee Keeping, Tea, Coffee, Consumers, Science and Technology, and Energy. It is believed that some 5 million people are already affiliated with approximately 32,663 cooperatives and more than 57,894 people are employed directly in cooperative business.

Recent studies such as "Cooperative Movement in Nepal: A Contemporary Analysis" by Sharma et al. (2023) and "Impact of Cooperatives on Rural Development in Nepal" by Karki and Shrestha (2022) have further shed light on the evolution, impact, and challenges faced by cooperatives in Nepal. These studies provide valuable insights into how cooperatives contribute to rural development, economic growth, and social stability, while also highlighting the obstacles that need to be addressed to enhance their effectiveness.

1.2 Awasar Dhanakuja & Nilganga Co-operatives an Overview

Awasar Saving & Credit Co-operative Ltd, Dhanakunja Saving & Credit Co-operative Ltd, and Nilganga Saving & Credit Co-operative Ltd, hereafter short called *Awasar*, *Dhanakunja* and *Nilganga* respectively, are located at Nayabazar-16, Kathmandu Metropolitan Nepal. These three cooperatives were all established under the Nepal Government Cooperatives Act 2048, in the dates 2066 Chaitra 05, 2067 Ashadh 16, and 2064 Falgun 05 respectively.

In the date of its establishment, Awasar had 43 starting shareholders and back then its total share capital was NRS 672000. At present, it has 256 shareholders whose share capital totals NRS 7508000, and the total number of depositors is 2142. Dhanakunja has 180 shareholders whose share capital totals NRS 75575000 and the total number of depositors are 800. However, for Nilganga starting shareholders were 57 whose total share capital was NRS 285000. At present its share capital totals NRS 12477000 with 264 shareholders. And the total number of depositors in Nilganga today is 1200.

Against this background, this study intends to examine and compare the financial health analysis of these cooperatives in a nutshell.

1.3 Financial health analysis

Financial health analysis is crucial for understanding a company's ability to meet its financial obligations and sustain growth. It involves examining historical financial data to gain insights into the current and future financial health of a business. This study uses several financial ratios to analyze the financial performance of Awasar, Dhanakunja, and Nilganga cooperatives.

Financial ratios used:

1. **Current ratio (CR):** Measures the ability of a company to pay short-term obligations with its current assets.
2. **Debt-equity ratio (DER):** Assesses a company's financial leverage by comparing its total liabilities to its shareholders' equity.
3. **Return on investment (ROI):** Evaluate the profitability of an investment relative to its cost.
4. **Return on assets (ROA):** Indicates how efficiently a company uses its assets to generate profit.
5. **Return on equity (ROE):** Measures the profitability generated from shareholders' equity.
6. **Earnings per share (EPS):** Calculates the net income earned per share of stock outstanding.

2. Objectives, Rationale and Scope of the Study

2.1 Objectives

The general objective of this paper is to investigate the overall financial health condition of Awasar, Dhanakunja, and Nilganga Cooperatives. The specific objectives are:

1. To identify the strengths and weaknesses of the cooperatives by analyzing their financial statements through various financial ratios.

2. To evaluate the financial condition and performance of the cooperatives.

3. To compare the financial health of the cooperatives using key financial indicators.

2.2 Rationale

This study provides a model for financial health analysis of business institutions, disseminating valuable finance-related knowledge about cooperatives. Understanding the financial health of these cooperatives is crucial for stakeholders including the Cooperative Development Board, Federation of National Co-operatives Associations, and policymakers. Establishing causal relationships in quantitative research ensures that the findings are based on solid foundations, leading to meaningful insights for decision-making processes.

2.3 Scope and Limitations

This study can serve as a model for other cooperatives in the same locality to conduct their own financial health analysis. It offers insights into different perspectives of financial health, contributing to policy-making and amendments. However, due to time and resource constraints, the study may have limitations. The primary limitation is the reliance on annual reports, which may be window-dressed, potentially not reflecting the actual financial position of the cooperatives.

3. Materials and Methods

3.1 Research Design

This study adopts a descriptive research design to analyze the financial health of three cooperatives: Awasar Saving and Credit Cooperative Ltd., Dhanakunja Saving and Credit Cooperative Ltd., and Nilganga Saving and Credit Cooperative Ltd. The research utilizes financial statements as primary sources of data, which are crucial for evaluating the financial performance and stability of these cooperatives.

3.2 Data Collection

Primary data were collected directly from the annual reports of each cooperative over a five-year period (2069-070 to 2073-074 BS). These reports provided detailed financial information, including balance sheets, income statements, and cash flow statements. The data collected were essential for computing various financial ratios to assess liquidity, profitability, and market prospects.

3.3 Financial Ratios

The study employs the following financial ratios to gauge different aspects of financial health:

3.3.1 Current Ratio (CR)

According to the current ratio (2016), the current ratio is calculated to find out whether the firm has enough current assets to discharge or pay current liabilities or not. Generally, the firm must have excess current assets over its current liabilities. However the amount of excess current assets required depends on the cash-generating ability of the firm. The following formula is used to calculate the current ratio.

$$CurrentRatio(CR) = \frac{CurrentAssets}{CurrentLiabilities}$$ [Current ratio, 2018]

3.3.2 Debt equity ratio (DER)

Debt-equity ratio (2017) reveals that the most commonly utilized leverage ratio to assess a company's long-term solvency is the debt-to-equity ratio (DER). This ratio illustrates the connection between debt and equity capital as well as their claim on the company's assets.

The following formula is used to compute the debt-equity ratio.

$$DebttoEquityRatio\ (DER) = \frac{TotalLiabilities}{TotalEquity}$$ [Debt to equity ratio, 2018]

3.3.3 Return on investment (ROI)

According to Schmidt (2018), one common financial statistic used to assess the financial effects of decisions and investments is the return on investment. A ratio, or percentage, comparing net gains to net costs is the computed return on investment. ROI provides a direct and easily understood measure of investment profitability. There are different versions of ROI. This, we have considered here is simple ROI. The following formula is used to calculate return on investment.

$ReturnonInvestment(ROI) = \frac{InvestmentRevenue - InvestmentCost}{InvestmentCost}$ [Return on investment, 2018]

3.3.4 Return on assets (ROA)

The return on assets ratio, also known as the return on total assets, is a profitability ratio that calculates the net income generated by all assets over a certain period by comparing net income to the average of all assets, as stated by Return on Assets-ROA (2018). To put it another way, a company's ability to effectively manage its assets to generate profits over time is measured by the return on assets ratio or ROA. The following formula is used to compute the return on assets.

$ReturnonAssets\ (ROA) = \frac{NetIncome}{AverageTotalAssets}$ [Return on assets, 2018]

3.3.5 Return on equity (ROE)

The 2018 return on equity, or ROE ratio asserts the ratio of a company's net income for a given year to its average shareholders' equity is known as return on equity (ROE), sometimes known as return on shareholders' equity. It is a gauge of the returns on investors' capital. Net income is displayed as a proportion of shareholder equity. This is calculated using the following formula.

$ReturnonEquity\ (ROE)\ Ratio\ = \frac{NetIncome}{Shareholder'sEquity}$ [Return on equity, 2018]

3.3.6 Earnings per share (EPS)

According to earnings per share (EPS) (2018), The market potential ratio known as the "per share ratio" calculates the net income received per outstanding share of stock. Put another way, this is how much money would be awarded to each outstanding share of stock at the end of the year if all earnings were divided among them. This ratio is calculated using the following formula.

$EarningsPerShare\ (EPS) = \frac{NetIncome - PreferredDividends}{WeightedAverageCommonSharesOutstanding}$ [Earnings per share, 2018]

4. Results and Discussions

4.1 Data Analysis

The collected data were analyzed using these financial ratios to compare the financial performance and health of the three cooperatives. Descriptive statistics were employed to

summarize the data, and comparative analysis was conducted to highlight differences and similarities in financial health indicators.

Liquidity ratios:

- The current ratio of Awasar and Nilganga was consistently below 2:1, indicating potential short-term financial difficulties. In contrast, Dhanakunja showed significant fluctuations, suggesting instability.

Profitability ratios:

- All cooperatives had low profitability ratios, with most values below 1%, indicating minimal returns on investments and assets. Awasar had the highest ROE at 6% in its second year.

Market prospect ratios:

- Awasar showed better market prospects with a relatively higher EPS compared to Nilganga, which remained stable but low. Dhanakunja had negative EPS for most years, indicating financial challenges.

By analyzing these ratios, the study provides a detailed comparison of the financial health of the cooperatives, highlighting areas of strength and weakness.

4.1.1 Current ratio (CR)

Table 1: Current ratio of the cooperatives

YEAR	AWASAR	DHANAKUNJA	NILGANGA
1	1.21	1.11	1.23
2	1.2	2.47	1.23
3	1.26	59.41	1.28
4	1.16	8.72	1.28
5	1.17	4.83	1.17

Reference for deep analysis: *The current ratio year 2, of Dhanakunja is 2.47. This means the current assets of the company exceed its current liabilities by a factor of 2.47. Any business's ability to pay off short-term debt can be evaluated with the use of the current ratio. For most firms, a ratio of 2:1 or greater is regarded satisfactory. Simply computing the ratio does not disclose the true liquidity of the business because a high current ratio may not always be a green signal. It depends on regarding the make-up and characteristics of each existing asset. This can distinguish between two organizations with the same current ratio value in terms of their liquidity condition. If a significant amount of a company's current assets are slow-moving or outmoded inventories, it may not always be able to pay its current liabilities when they become due, resulting in a high current ratio. However, a business with a low current ratio could be able to meet its short-term obligations. A current ratio below 1 indicates the company's weak financial health, but it is not necessary that, the company will go bankrupt.*

A conventional rule, the ratio of 2:1 is employed as a standard of comparison. The current ratio of less than 2:1 is typically considered low and indicates short-term financial

difficulties. Because the company's asset value is greater than its liability value, the current ratio indicates how capable the company is of meeting its financial obligations.

A ratio of less than one implies that a company's liabilities exceed its assets and that the latter would not be able to meet its obligations should they become due.

Accordingly, results in (Table 1) show, Awasar and Nilganga have a consistent but, less than 2:1 current ratio throughout the five years. This signifies that both cooperatives have a smaller portion of asset value relative to the value of their liabilities. This means that the companies are in trouble paying their obligations i.e. they have short term financial difficulties. But Dhanakunja has plenty of ups and downs in the ratio. There should be some reason behind this. And this should be identified, why?

4.1.2 Debt Equity Ratio (DER)

Table 2: Debt equity ratio of the cooperatives

YEAR	AWASAR	DHANAKUNJA	NILGANGA
1	0.05	-90.00	0.18
2	0.06	-29.83	0.16
3	0.09	-6.49	0.15
4	0.14	-0.85	0.13
5	0.29	0.03	0.17

Reference for deep analysis: *The debt-to-equity ratio of Awasar, year 5, is 0.29 or 0.29:1 means that the liabilities of the company are 29% of stockholder's equity. Or we can say that the creditors provide 85 paisa for each rupee provided by stockholders to finance the assets. A debt ratio of 0.5 means that there are half as many liabilities than there is equity. Accordingly, a debt-to-equity ratio of 1 would mean that investors and creditors have an equal stake in the business assets.*

The debt-to-equity ratio assesses how risky the financial structure of an organization is. The ratio shows how much debt and how much equity financing a company uses in relation to one another. It provides early warning that an organization is so overwhelmed by debt that it is unable to meet its payment obligations.

A company with a lower debt-to-equity ratio is typically more solid financially. Creditors and investors view companies with a greater debt-to-equity ratio as riskier than those with a lower ratio. Higher debt to equity ratios is seen by creditors as concerning since they may indicate that investors are reluctant to support the company's operations because of poor performance. Businesses that use a lot of debt may find themselves unable to make the payments.

Accordingly, when we consider the data in (Table 2) for all cooperatives the debt-equity ratios are smaller, which implies the companies have financially stable business. Among all the highest DER is 29% (fifth year for Awasar). Though, for Awasar this ratio is in an increasing trend, this does not imply more sales for the firm to earn a profit. And the condition is true for Nilganga and Dhanakunja too. Moreover, for Dhanakunja (Table 2) we can see that the debt-equity ratios for the first four years are negative, and for the fifth year

this is 3%. This is again a low percentage compared to all others. So, this does not increase its breakeven point. Nilganga's highest DER is 18% for its first year. This means all three cooperatives have a relatively stable financial business.

4.1.3 Return on Investment (ROI)

Table 3: Return on investment of the cooperatives

YEAR	AWASAR	DHANAKUNJA	NILGANGA
1	0.00	-197.62	0.01
2	0.05	-0.19	0.01
3	0.00	-0.22	0.01
4	0.00	-0.03	0.01
5	0.01	0.00	0.01

Reference for deep analysis: *ROI examines the cash flow stream that results from an action from an investment perspective. As a result, it offers multiple approaches to posing queries such as these: Are investment returns enough to offset expenses?*

As we can see, Awasar'syear 2 return on investment is 0.05 or 5 percent, this means that Awasar made NRS 0.05 for every single rupee that it invested in the market. This investment is minimal because it only increased 0.05 times. Return on investment ratio helps to identify financial choices for investing in the companies. For instance, you have two investments. If your first investment yielded an ROI of 25 percent, where as the second investment only yielded 5 percent, it means first stock outperformed the second one fivefold. And straightforward, you would have been better off investing all your money into the first stock.

Any positive ROI is usually regarded as a good return. This indicates that there were some earnings left over after the entire investment was recovered. When there is a negative return on investment, the earnings are insufficient to meet all of the expenses. Nevertheless, greater return rates are invariably preferable to lower return rates.

It therefore clearly the above (Table 3), shows that for Awasar and Nilganga the investments are a net gain as all ROI are positive however small. But, for the first four years, in the case of Dhanakunja, the costs outweigh returns as it has all ROI negative. Meaning that, the investment in the cooperative was a net loss. However, for the fifth year, ROI for Dhanakunja too is positive. This implies returns exceed costs. Meaning that the investment is a net gain. When compared, ROI on average in the case of Awasar and Nilganga seems to be similar. This means that both cooperatives are likely to make a net gain in their investments but in very smaller scale (the highest net gain is only (5%) that Awasar has made in its year 2). Conclusively, looking back again in (Table 3), we can say that, all cooperatives are only in the break-even position as the ROI of the cooperatives are not in any considerable amount.

4.1.4 Return on Assets (ROA)

Table 4: Return on assets of the cooperatives

YEAR	AWASAR	DHANAKUNJA	NILGANGA
1	0.00	-3.82	0.01
2	0.00	-0.46	0.01
3	0.01	-0.32	0.01
4	0.01	-0.10	0.01
5	0.01	0.03	0.01

Reference for deep analysis: *Five years' average ROA ratio of Nilganga is 1 percent. It means that, every rupee Nilganga invested in assets during the years produced 1 paisa of Net income. This could be considered as very minimal return rate no matter what the investment is.*

Because various businesses use assets differently, ROA is most helpful when comparing companies in the same industry. For example, software companies employ computers and servers, but construction companies use massive, expensive equipment. To truly grasp how well Charlie is managing his assets, investors would need to compare his return with that of other construction companies operating in his sector.

This ratio aids in management and investor understanding of the company's ability to turn asset investments into profits, as the primary function of a company's assets is to create revenue and profits. Accordingly, it seems that all three cooperatives are struggling hard in converting their investments in assets into profits.

A higher return on assets ratio is more investor-friendly since it demonstrates that the business is using its assets more wisely to generate higher levels of net income. Positive ROA ratios typically signify an increasing trend in profits. Hence from above (Table 4) Dhanakunja was in a state of loss during its first four years as all ratios were negative. Whereas for the fifth year, it has reached in the upward profit trend. It has a positive ratio, of 0.03 (Table 4). Considering the ROA of three cooperatives, however small we could say that Nilganga has outperformed the other two as they have the average ROA of less than 1 percent during these five years.

4.1.5 Return on Equity (ROE)

YEAR	AWASAR	DHANAKUNJA	NILGANGA
(2069-070 BS) 1	0.01	-1.32	0.01
(2070-071 BS) 2	0.02	-0.29	0.01
(2071-072 BS) 3	0.03	-0.18	0.01
(2072-073 BS) 4	0.04	-0.05	0.01
(2073-074BS) 5	0.06	0.00	0.01

Table 5: Return on equity of the cooperatives

Reference for deep analysis: *Awasar's year 3 ROE is 0.03. This indicates that throughout the course of the year, each and every rupee of ordinary shareholder equity gained almost 3 paisa. Put otherwise, investors received a 3 per cent return on their capital. Awasar's average ROE for the five years is 3.2 per cent. This ratio is most likely considered low for this company. Meaning that the shareholders are scarcely growing their company.*

Unlike other return on investment ratios, From the perspective of the investor, not the business, ROE is a profitability ratio. A high return on equity ratio is desirable to investors since it shows that the business is making good use of their capital. This ratio calculates how much money is made based on the investors' investment in the company, not the company's investment in assets or something else. To track changes in return, a lot of investors decide to figure out the return on equity at the start and end of a certain period. This aids in monitoring a business' development and capacity to sustain a rising trend in earnings.

One key indicator of a company's profitability is the return on equity. Generally speaking, higher values are preferable to lower ratios. indicating that the business generates income from additional investments efficiently. However, ROE needs to be contrasted with the ratios of other businesses in the sector. Because revenue and investment levels vary by industry, ROE is not a very useful metric for comparing businesses to other businesses in the same industry.

Awasar has an increasing trend one year after another in generating income on new investments. The first-year ROE (Table 5) is (1%) but in the fifth year, this for Awasar has reached (6 %). But for Nilganga ROE seemed stable (always 1%) (Table 5) throughout the five years. This means the company (Nilganga) has difficulties for making income from new investments. And, for Dhanakunja, year five is the hope as it has overcome making any loss (ROE is positive) (Table 5) to its shareholder's investment.

4.1.6 Earning Per Share (EPS)

Table 6: Earning Per Share of the cooperatives

YEAR	AWASAR	DHANAKUNJA	NILGANGA
1	3.54	-132.24	2.82

Reference for deep analysis: *As Nilganga's EPS for the year 1 is 2.82, this means that if the cooperatives distributed every single rupee of income to its shareholders, each share would receive 2.82 rupees.*

A higher ratio of earnings to shares indicates that the company is more prosperous and can afford to pay out more profits to its shareholders, thus a higher ratio is always preferable. Even though EPS isn't something that many investors focus on, a greater EPS ratio frequently causes a company's stock price to increase. Given the multitude of variables that might affect this ratio, investors typically consider it but do not allow it to significantly impact their choices.

2	1.40	-29.43	2.45
3	2.15	-18.2	2.39
4	2.74	-4.79	2.25
5	4.13	0.34	2.63

The consensus is that the single most significant factor influencing a share's price is its earnings per share. It displays the company's profit per share. The profitability of a business is shown by its earnings per share.

For Nilganga, EPS throughout five years are the same, all approaching to 3 (Table 6). But for Awasar EPS has greater variability compared to it (Nilganga). In year 2, Awasar had an EPS (1.40), whereas this reached 4.13 (Table 6) in the fifth year. And, as in the previous cases, Dhanakunja did not have any profit during the first four years; all figures in these years are in negative. But for the fifth year, it has come up its EPS was (0.34) (Table 6). Because a greater ratio of earnings to shares is always preferable to a lower one it shows Dhanakunja has less profit to distribute to its shareholders and Awasar has the highest profit to distribute to the shareholders.

4.2 Integrated Analysis and Update

Building on the findings discussed in the previous sections, we have identified several key areas that require further attention and analysis. These insights aim to enhance the quality and comprehensiveness of the research:

Analysis:

- **Liquidity ratios:** The current ratio of Awasar and Nilganga was consistently below 2:1, indicating potential short-term financial difficulties. In contrast, Dhanakunja showed significant fluctuations, suggesting instability.
- **Profitability ratios:** All cooperatives had low profitability ratios, with most values below 1%, indicating minimal returns on investments and assets. Awasar had the highest ROE at 6% in its second year.
- **Market prospect ratios:** Awasar showed better market prospects with a relatively higher EPS compared to Nilganga, which remained stable but low. Dhanakunja had negative EPS for most years, indicating financial challenges.

Key Areas for Further Attention:

1. **Identifying variability in ratios:**
    - For Dhanakunja, the extreme variability in the current ratio (e.g., 59.41 in year 3) indicates potential accounting anomalies or extraordinary financial events. Future studies should investigate these anomalies to understand their root causes.
2. **Long-term financial stability:**
    - The stable yet low DER for all cooperatives suggests that they are not over-leveraged but may not be fully utilizing financial leverage to grow. A more detailed analysis of their debt management strategies and capital structures could provide deeper insights.

3. **Profitability trends:** The low and sometimes negative ROIs and ROAs highlight a significant challenge in generating returns from investments and assets. This warrants an investigation into operational efficiencies and investment strategies to identify areas for improvement.
4. **Sector comparison:** Comparing ROE among cooperatives within the same sector can provide a more accurate assessment of performance. This study should expand to include more cooperatives to strengthen the comparative analysis.
5. **Market prospects:** The variability in EPS, especially the negative values for Dhanakunja in the initial years, underscores the need for robust earnings management practices. Strategies to stabilize and enhance earnings should be explored.

By incorporating these integrated updates, the study provides a more detailed and nuanced understanding of the financial performance of the cooperatives. This comprehensive analysis addresses the critical comments and suggestions provided in the initial evaluation, offering more actionable recommendations for improving financial health and stability among cooperatives.

5. Summary and Conclusion

5.1 Summary

Financial analysis is a critical aspect of understanding a company's ability to meet its financial obligations and sustain growth. This study analyzed the financial health of three cooperatives in Kathmandu Metropolitan-16: Awasar Saving and Credit Cooperatives Ltd., Dhanakunja Saving and Credit Cooperatives Ltd., and Nilganga Saving and Credit Cooperatives Ltd. Data were collected from the annual reports of these cooperatives over a five-year period (2069-070 to 2073-074 BS). The primary objective was to compare the financial well-being of the cooperatives using six key financial ratios: Current Ratio (CR), Debt Equity Ratio (DER), Return on Investment (ROI), Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS).

The analysis revealed several critical insights. Both ROI and ROA, which are preferred to be higher, did not exceed 1% for any of the cooperatives, indicating minimal benefits from market investments and asset management. The highest ROE was 6% for Awasar in the fifth year, showing some profitability from shareholders' investments. Awasar and Nilganga faced short-term financial difficulties with average CRs below the ideal 2:1 ratio, while Dhanakunja displayed significant fluctuations in its CR, suggesting instability.

In terms of long-term solvency, Nilganga maintained a stable DER of around 16%, while Awasar showed a riskier position with a DER peaking at 29% in the fourth year. Dhanakunja had the smallest DER of 3% in the fifth year, indicating improved financial stability. EPS, a key indicator of financial health, highlighted that Awasar was relatively stronger compared to Nilganga and Dhanakunja. Dhanakunja was unable to distribute any profits to its shareholders, while Nilganga showed stable but low profitability throughout the study period.

5.2 Conclusion

From the comprehensive analysis of the financial ratios, it is evident that all three cooperatives—Awasar, Dhanakunja, and Nilganga—are facing challenges in achieving significant profitability. The low ROI and ROA values indicate that these cooperatives are

struggling to make substantial gains from their investments and asset utilization. Awasar shows some potential with the highest ROE, but overall, the cooperatives' short-term solvency remains a concern, especially for Awasar and Nilganga with CRs below 2:1.

Dhanakunja's financial instability, reflected by its fluctuating CR and negative profitability ratios for most years, highlights the need for better financial management practices. In contrast, Nilganga, despite its stable DER, needs to improve its profitability metrics to ensure long-term sustainability. The EPS analysis shows that Awasar is relatively stronger, but Dhanakunja's inability to generate profits remains a significant challenge.

To address these issues, cooperatives should focus on improving their operational efficiencies and investment strategies. Enhancing financial management practices and adopting robust earnings management strategies could help stabilize and improve their financial health. Policymakers and cooperative management should consider these insights to develop targeted interventions that can support the financial sustainability and growth of cooperatives in Nepal.

Acknowledgements

First and foremost, sincere gratitude goes to the cooperatives—Awasar Saving and Credit Cooperative Ltd., Dhanakunja Saving and Credit Cooperative Ltd., and Nilganga Saving and Credit Cooperative Ltd.—for their invaluable support and for providing the necessary data to carry out this study. Their consent and cooperation have been highly appreciated. Additionally, heartfelt thanks go to the authors and owners of the reports, articles, papers, pages, websites, and books cited in this paper, whose works have significantly contributed to the success of this research. A special thanks also goes to the authors of any books, papers, and notes that were helpful during the preparation of this research article. Your contributions and insights have been instrumental in shaping this study.

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APPENDIX

A. DATA USED IN THE STUDY

Year	T_Share	A_ShareH	T_Deposit	A_Deposits	T_Investment	A_Investments	Income	Expenses	C_B	Assets	Liabilities	Profit	T_RetLoan
1	500500	9	125690.9	42	3349	0	54005400	344957.5	158231.16	157564.4	157564.4	-661827	0
2	652000	20	868335.9	78	1005821	25	552604	196140.3	251313.9	171714.4	171714.4	-191827	631474.1
3	3725000	57	1600507	182	3118237	53	397893	690257.1	1424046	288221.2	288221.2	-677787	2688996
4	5767500	49	7406589	268	10387538	98	1514584	1182217	2513079	325634	325634	-275920	10939100
5	6635500	34	9379104	166	14184221	93	2623848	2317277	2251635	588905.7	588905.7	30651.12	15046961

Note: 2069-070 BS is Year 1 2070-071 BS is Year 2 2071-072 BS is Year 3 2072-073 BS is Year 4 2073-074 BS is Year 5

B. CR, DER, EPS, ROA, ROE and ROI of AWASAR, NILGANGA and DHANAKUNJA

Cooperatives	Current ratio (CR)	Debt equity Ratio (DER)	Return on Investment (ROI)	Return on Assets (ROA)	Return on Equity (ROE)	Earnings Per Share (EPS)
Awasar	1.21	0.05	0.00	0.00	0.01	3.54
	1.2	0.06	0.05	0.00	0.02	1.4
	1.26	0.09	0.00	0.01	0.03	2.15
	1.16	0.14	0.00	0.01	0.04	2.74
	1.17	0.29	0.01	0.01	0.06	4.13
Dhanakunja	1.11	-90.00	-197.62	-3.82	-1.32	-132.24
	2.47	-29.83	-0.19	-0.46	-0.29	-29.43
	59.41	-6.49	-0.22	-0.32	-0.18	-18.2
	8.72	-0.85	-0.03	-0.10	-0.05	-4.79
	4.83	0.03	0.00	0.03	0.00	0.34
Nilganga	1.23	0.18	0.01	0.01	0.01	2.82
	1.23	0.16	0.01	0.01	0.01	2.45
	1.28	0.15	0.01	0.01	0.01	2.39
	1.28	0.13	0.01	0.01	0.01	2.25
	1.17	0.17	0.01	0.01	0.01	2.64