

Impact of Capital Structure on Profitability at the Kalkulam Co-Operative Credit Society

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Abstract

This study examines the impact of capital structure on profitability at the Kalkulam Co-operative Credit Society, Thuckalay for the period of five years (2020-21 to 2024-25). The main objective of the study is to analyze how the society's financial structure, including share capital, reserves, deposits, and borrowings, influences its profitability performance. The study is based on secondary data collected from the audited financial statements of the society. Various financial tools such as Debt-Equity Ratio, Equity Ratio, Proprietary Ratio, Leverage Ratio, and Profitability Ratios were used for analysis. The society maintained zero external borrowings during the study period, indicating strong financial independence and low financial risk. Profitability indicators such as net profit showed an improving trend, suggesting effective utilization of available funds and efficient financial management.

Keywords: Capital Structure, Co-operative Credit Society, Equity-Equity Ratio, Equity Ratio, Financial Performance, Leverage Ratio, Member Deposits

Introduction

Capital structure refers to a mix of equity and debt whereby the company employs funding for growth and operations. Capital structure is an important decision because it directly impacts a firm's profitability, risk level of finances, and a firm's value. Companies want equilibrium in a capital structure with an optimal ratio of return and risk. This article is about the impact of capital structure to profitability and the most significant parameters which need to be looked into by companies. Capital structure refers to the way a company finances its operations and growth through a combination of debt and equity. The choice between borrowing funds and issuing equity is a crucial financial decision, as it affects the firm's risk, cost of capital, and overall financial stability.

Review of Literature

1. Zarah Puspitaningtyas (2026) Profitability is an important indicator used to measure the success of a company in generating profit from its operations. According to a study published in the Accounting and Finance Studies Journal, profitability not only shows positive financial results but also represents the company's ability to manage its resources effectively to achieve sustainable growth and long-term stability. Profitable firms are better able to invest in innovation, expand their market share, and distribute dividends to shareholders, while companies with continuous losses may face financial difficulties and risk bankruptcy.
2. Isik Akin & Mahak Jhamb (2025) published in the Journal of Corporate Accounting & Finance examined the influence of growth, capital structure, profitability, and firm size on the enterprise value of FTSE 100 companies. The research highlights that financial decisions related to debt–equity mix and company size play an important role in determining a firm's overall value. The results showed that capital structure and firm size significantly affect enterprise value, meaning that companies with higher levels of debt financing and larger asset bases tend to have greater market value.
3. Gusti Agung Ari Saputra & Putu Sri Arta Jaya Kusuma (2025) The study by published in the American Journal of Economic and Management Business (2025) examines how internal financial factors influence the value of companies in the financial sector listed on the Indonesia Stock Exchange. The research uses variables such as liquidity (measured by the current ratio), profitability (measured by return on assets), and capital structure (measured by the debt-to-equity ratio), while firm value is measured using the price-to-book value ratio.
4. Leviticus Mensah, Murad Abdurahman Bein, and Richard Arhinful (2025) The study by published in SAGE Open (2025) examines how capital structure influences business growth under IFRS adoption using firms listed on the Frankfurt Stock Exchange. It finds that capital structure measured through ratios such as debt-to-equity, debt-to capital, and debt-to-total assets plays a significant role in determining a firm's growth in terms of sales, assets, and profits.
5. Mohamad Anas Ktit & Bashar Abu Khalaf (2025) The study by published in the Journal of Risk and Financial Management, examines how digital transformation influences the way firms adjust their capital structure. The research is based on 514 non-financial companies across Europe from 2010–2023 using panel GMM regression analysis. The findings show that digital transformation has a positive and significant impact on capital structure adjustment.

Research Gap

All the literature mentioned here are about one or few specific industries. This research is targeting majority of the industries in India viz., automobile, pharma, cement and construction, consumer goods etc. This is the crucial contribution this study is doing to further research. The relationship between capital structure and firm performance is complex and varies significantly across industries, firm sizes, and economic conditions, making it difficult to generalize findings. While debt and equity decisions play a crucial role in determining profitability, limited studies have examined how firm size acts as a moderating variable in this relationship.

Research Methodology

Research methodology refers to the systematic procedures and techniques employed by researchers to conduct studies, gather data, analyse information, and derive conclusions. It encompasses the structured approach utilized throughout the research process, from the formulation of research questions to the dissemination of findings. The study of tools used in Capital Structure Analysis and Financial Ratio Analysis.

Source of Data

Secondary data are those data which are collected by someone else, and which have already been passed through statistical processes. Those data are collected from the company’s official website, articles and their past five years annual report (2020-2021), (2021-2022), (2022-2023), (2023-2024), (2024-2025), balance sheet, profit and loss account, cash flow statement and other financial statements.

Objectives

- To study the existing capital structure practices of listed company the co-operative credit society
- To identify the relationship between capital structure and profitability.
- To evaluate the impact of capital structure on profitability of listed.

Data Analysis and Interpretation

Capital structure refers to the combination of different sources of funds used by an organization to finance its business activities and assets.

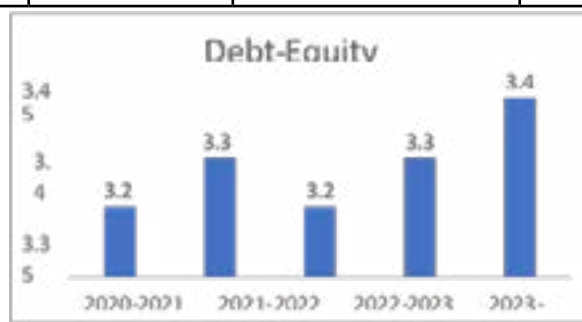
Debt-Equity Ratio

Debt-Equity Ratio is a financial ratio that measures the relationship between a firm’s total debt and its shareholders’ funds.

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Share Capital} + \text{Reserves}}$$

Table 1 Debt-Equity Ratio

Year	Total Debt	Shareholders’ funds	Debt-Equity Ratio
2020-2021	45,36,82,150	14,03,55,263	3.23
2021-2022	49,38,21,138	14,87,40,279	3.32
2022-2023	51,64,31,445	15,97,98,661	3.23
2023-2024	54,25,63,910	16,29,85,904	3.32
2024-2025	56,76,50,837	16,52,09,289	3.43



Debt-Equity Ratio Chart

It consistently maintained a high level of financial leverage over the five-year period from 2020–2021 to 2024–2025, with the ratio remaining above 3.0 throughout. It increased from 3.23 in 2020–2021 to 3.32 in 2021–2022, then slightly declined to 3.23 in 2022–2023, indicating a brief improvement in the balance between debt and equity.

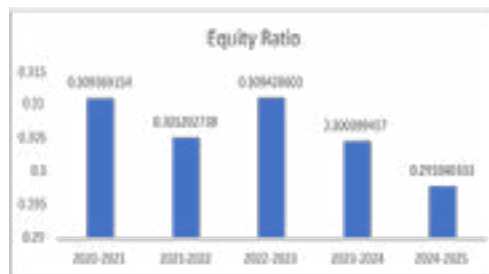
Equity Ratio

Equity Ratio is a financial ratio that measures the proportion of a firm’s total assets financed by shareholders’ funds.

$$\text{Equity Ratio} = \frac{\text{Share Capital} + \text{Reserves}}{\text{Total Assets}}$$

Table 2 Equity Ratio Table

Year	Shareholders’ Funds	Total Assets	Equity Ratio
2020-2021	14,03,55,263	45,36,82,150	0.309369154
2021-2022	14,87,40,279	49,38,21,138	0.301202738
2022-2023	15,97,98,661	51,64,31,445	0.309428603
2023-2024	16,29,85,904	54,25,63,910	0.300399457
2024-2025	16,52,09,289	56,76,50,837	0.291040333



Equity Ratio Chart

It generally stable but slightly declining trend, indicating gradual changes in the company’s financial structure. It begins at around 0.309 in 2020–2021, dips to approximately 0.301 in 2021–2022, then recovers to nearly the same level as the starting point in 2022–2023. After this brief improvement, the ratio declines again to about 0.300 in 2023–2024 and further to roughly 0.291 in 2024–2025, which is the lowest point in the period.

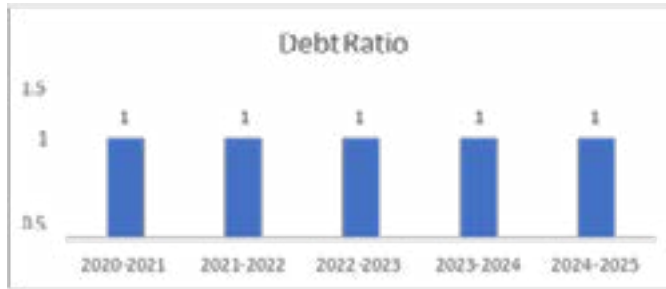
Debt Ratio

Debt Ratio is a financial ratio that shows the proportion of a firm’s total assets financed through total debt.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Table 3 Debt Ratio Table

Year	Total Debt	Total Assets	Debt Ratio
2020-2021	45,36,82,150	45,36,82,150	1
2021-2022	49,38,21,138	49,38,21,138	1
2022-2023	51,64,31,445	51,64,31,445	1
2023-2024	54,25,63,910	54,25,63,910	1
2024-2025	56,76,50,837	56,76,50,837	1



Debt Ratio Chart

In five years, balance sheet is generally 2020–2021 to 2024–2025, the equity ratio stayed fairly stable but trended slightly downward overall. It started at 0.309 in 2020–2021, slipped to 0.301 the next year, recovered to about 0.309 in 2022–2023, then dropped to 0.300 and hit a five-year low of 0.291 in 2024–2025.

Proprietary Ratio

Proprietary Ratio is a financial ratio that measures the proportion of shareholders’ funds to the total assets of an organization.

$$\text{Proprietary Ratio} = \text{Shareholders Funds} / \text{Total Assets}$$

Table 4 Proprietary Ratio Table

Year	Shareholders’ Funds	Total Assets	Proprietary Ratio
2020-2021	14,03,55,263	45,36,82,150	0.309369154
2021-2022	14,87,40,279	49,38,21,138	0.301202738
2022-2023	15,97,98,661	51,64,31,445	0.309428603
2023-2024	16,29,85,904	54,25,63,910	0.300399457
2024-2025	16,52,09,289	56,76,50,837	0.291040333



Proprietary Ratio Chart

It generally stable but slightly declining trend, indicating gradual changes in the company’s financial structure. It begins at around 0.309 in 2020–2021, dips to approximately 0.301 in 2021–2022, then recovers to nearly the same level as the starting point in 2022–2023. After this brief improvement, the ratio declines again to about 0.300 in 2023–2024 and further to roughly 0.291 in 2024–2025, which is the lowest point in the period.

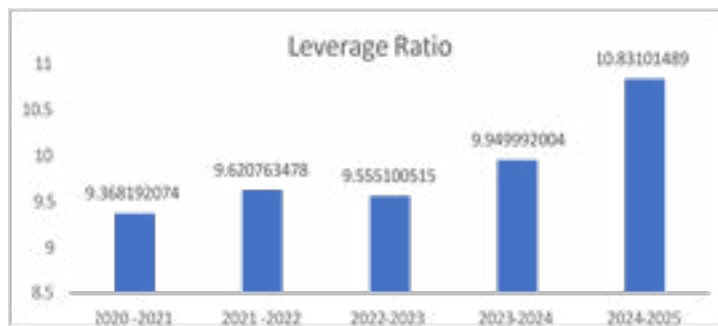
Leverage Ratio

Leverage Ratio is a financial ratio that measures the extent to which an organization uses borrowed funds to finance its assets and operations.

$$\text{Leverage Ratio} = \text{Total Assets} / \text{Share Capital}$$

Table 5 Leverage Ratio Table

Year	Total Assets	Share Capital	Leverage Ratio
2020-2021	45,36,82,150	4,84,27,930	9.368192074
2021-2022	49,38,21,138	5,13,28,685	9.620763478
2022-2023	51,64,31,445	5,40,47,725	9.555100515
2023-2024	54,25,63,910	5,45,29,080	9.949992004
2024-2025	56,76,50,837	5,24,09,755	10.83101489



Leverage Ratio Chart

The company’s leverage ratio shows a consistent upward trend from 2020–2021 to 2024–2025, signalling increasing reliance on debt relative to equity. It started at 9.37 in 2020–2021, rose to 9.62 in 2021–2022, dipped slightly to 9.56 in 2022–2023, then climbed to 9.95 in 2023–2024 before jumping sharply to 10.83 in 2024–2025, the highest point in the period.

Key Financial Ratio Analysis

Financial Ratio Analysis is the process of evaluating a company financial performance and position by comparing different figures from the income statement, balance sheet, and cash flow statement.

Debt-to-Equity Ratio

Debt-to-Equity Ratio is a solvency ratio that shows the relationship between a company total debt and shareholders’ equity.

$$\text{Debt-to-Equity Ratio} = \text{Total Debt} / \text{Shareholders Equity}$$

Table 6 Debt-to-Equity Table

Year	Total Deposits (Rs.)	Share Capital (Rs.)	Debt-to-Equity Ratio
2020-2021	19,80,34,291	4,84,27,930	4.089257811
2021-2022	20,44,21,701	5,13,28,685	3.982601561
2022-2023	19,54,32,987	5,40,47,725	3.61598864

2023-2024	18,81,54,437	5,45,29,080	3.450533862
2024-2025	19,08,22,421	5,24,09,755	3.640971437



Debt-to- Equity

The Debt-to-Equity ratio ranged from 3.81x to 4.09x over the study period, indicating that the society maintains moderate-to-high leverage. A higher D/E ratio signifies that the society is actively utilising members deposit funds to generate lending income. The ratio declined slightly in 2024-25, suggesting a relative increase in equity base or reduction in deposit base.

Return on Equity

Return on Equity is a profitability ratio that measures how efficiently a company uses shareholders' funds to generate net profit.

$$ROE = (\text{Net Profit After Tax} / \text{Shareholders Equity}) \times 100$$

Table 7 Return on Equity Table

Year	Net Profit (Rs.)	Share Capital (Rs.)	ROE (%)
2020-2021	1,83,02,369	4,84,27,930	37.79%
2021-2022	2,06,78,539	5,13,28,685	40.29%
2022-2023	2,55,90,165	5,40,47,725	47.35%
2023-2024	2,96,81,527	5,45,29,080	54.43%
2024-2025	3,32,71,598	5,24,09,755	63.48%

ROE improved significantly from 37.88% in 2020-21 to 63.46% in 2024-25. This dramatic improvement reflects the society's growing net profit relative to its equity base. The high ROE indicates excellent returns being generated on members invested share capital.



Return on Equity

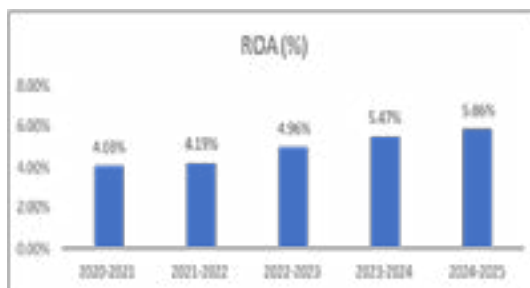
Return on Assets

Return on Assets is a profitability ratio that shows how efficiently a company uses its total assets to generate profit.

$$\text{Return on Assets} = (\text{Net Profit After Tax} / \text{Total Assets}) \times 100$$

Table 8 Return- on- Assets Table

Year	Net Profit (Rs.)	Total Assets (Rs.)	ROA (%)
2020-2021	1,83,02,369	45,43,22,860	4.03%
2021-2022	2,06,78,539	49,38,21,137	4.19%
2022-2023	2,55,90,165	51,64,31,445	4.96%
2023-2024	2,96,81,528	54,25,63,909	5.47%
2024-2025	3,32,71,599	56,76,50,837	5.86%



Return-on-Assets

Return-on-Assets improved from 4.03% in 2020-2021 to 5.86% on 2024-2025, indicating enhanced efficiency in deploying assets to generate profit. A rising ROA suggests the management is effectively converting the society's asset base into net income. Driven by growing loan disbursements and interest receipts.

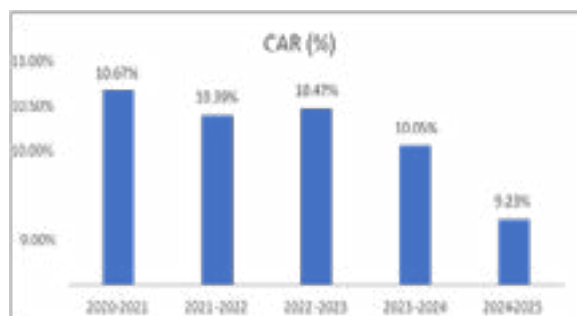
Capital Adequacy Ratio

Capital Adequacy Ratio is a financial ratio that measures a bank's capital strength in relation to its risk-weighted assets.

$$\text{CAR} = \text{Share Capital} / \text{Total Assets} \times 100$$

Table 9 Capital Adequacy Ratio Table

Year	Share Capital (Rs.)	Total Assets (Rs.)	CAR (%)
2020-2021	4,84,27,930	45,36,82,150	10.67%
2021-2022	5,13,28,685	49,38,21,138	10.39%
2022-2023	5,40,47,725	51,64,31,445	10.47%
2023-2024	5,45,29,080	54,25,63,910	10.05%
2024-2025	5,24,09,755	56,76,50,837	9.23%



Capital Adequacy Ratio

The CAR remained relatively stable between 9.24% and 10.68%. This indicates the society maintains a sufficient equity cushion relative to its assets. A consistently maintained CAR provides stability and regulatory comfort.

Findings

- The study reveals that member deposits contributed more than 97% of total deposits throughout the five-year period. This indicates a high level of trust and confidence among members towards the society.
- The Debt–Equity Ratio remained consistently above 3.0 during the study period, showing that the society largely depends on liabilities compared to shareholders’ funds, indicating high leverage.
- The Debt–Equity Ratio increased from 3.23 (2020-21) to 3.43 (2024-25), which reflects a gradual rise in financial leverage and dependence on deposit funds.
- The total assets of the society increased steadily over the five-year period, showing overall growth and expansion in operations.
- The society showed strong financial discipline by maintaining steady reserves and profitability growth without depending on external borrowing sources.
- Return on Assets (ROA) improved continuously from 4.03% in 2020-21 to 5.86% in 2024-25, showing improved efficiency in using assets to generate profit.

Suggestions

- The society should take steps to strengthen its share capital base by conducting regular share mobilisation campaigns, which will help reduce leverage and improve long-term stability. Introducing attractive deposit schemes, such as long-term fixed deposits and recurring deposit plans, can help increase deposit growth and improve liquidity.
- The society should also diversify deposit sources to reduce dependence on limited deposit types and avoid fluctuations.
- Loan recovery must be improved through strict follow-up mechanisms to reduce doubtful loans. Special attention should be given to controlling and minimizing Non-Performing Assets, as it will directly enhance profitability.
- It is also suggested that the society should adopt a stable and planned investment strategy for KDCC bank investments to ensure consistent interest income.

Conclusion

The study concludes that the Kalkulam Co-operative Credit Society No. 949, Thuckalay maintained a strong and stable financial position during the period 2020-21 to 2024-25. The society's capital structure is highly member-driven, with nearly 95–97% of total funds mobilised through member deposits, supported by share capital and steadily increasing Non-Statutory Reserves. The most notable feature is that the society maintained zero external borrowings throughout the five years, proving its strong financial self-reliance. Profitability performance was also excellent, showing consistent growth. Net profit increased by 81.7%, and both ROE and ROA improved significantly, indicating effective utilization of funds and assets. The increase in Net Interest Margin also reflects efficient lending and interest income management.

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