Financial Performance of Cuddalore District Central Cooperative Bank Limited

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Abstract
This study utilizes both primary and secondary data to assess and analyze the financial performance of the Cuddalore District Central Cooperative Bank Limited. The secondary data was gathered from various sources such as profiles, books, magazines, and websites, while the primary data was collected through the annual report of the bank. The collected data underwent editing, coding, classification, and tabulation, and was further analyzed using various financial tools. Assessing a bank's performance is crucial in today's competitive banking landscape, as it enables them to develop their business strategies.
Despite the ongoing use of financial ratio analysis by regulators for evaluating bank performance, opposition to this method persists, with opponents introducing new tools that aim to provide a comprehensive assessment of a bank's overall efficiency. This research paper aims to determine the effectiveness of the CAMEL (Capital adequacy, Asset quality, Management quality, Earnings, and Liquidity) framework in capturing a bank's overall performance. Additionally, it seeks to identify the relative importance weights of the factors within the CAMEL framework and recommend the most suitable ratios for bank regulators to use in evaluating efficiency.
The data for this research is secondary and was collected from the annual reports of the Cuddalore District Central Cooperative Bank over a five-year period (2017-2022). Based on the findings, several suggestions were made to the bank, including providing financial advice to borrowers to enhance their performance and ensuring thorough scrutiny of members' proposals before loan sanctioning.
Keywords: Financial Performance, CDCCB Financial Performance, Return on Assets, Cuddalore District Central Cooperative Bank, Camel Rating System of Financial Performance, Financial Worthiness of CDCCB, Cooperative Banking, Governance.

Introduction

The financial performance of Cuddalore District Central Co-operative Bank serves as a vital indicator of its overall well-being and achievement in fulfilling its objectives. As a prominent financial institution, the bank plays a pivotal role in delivering essential banking services, extending credit facilities, and providing financial support to the residents and businesses within Cuddalore district.

Evaluating the bank's financial performance involves assessing various parameters such as profitability, liquidity, asset quality, and capital adequacy. These key indicators offer valuable insights into the bank's ability to generate earnings, manage risks, and maintain a robust financial position.

Profitability measures, such as net income, Return On Assets (ROA), and Return On Equity (ROE), provide valuable insights into the bank's capacity to generate profits from its operations and effectively utilize its assets and shareholders' equity.

Liquidity is of utmost importance, reflecting the bank's ability to meet short-term obligations and fund its operations without exposing itself to excessive risks. Evaluating indicators like the loan-to-deposit ratio and cash reserve ratio helps gauge the bank's liquidity position.

The management of the bank's loan portfolio is crucial, and assessing asset quality becomes imperative. Metrics like the Non-Performing Loans (NPLs) ratio and provisions for bad debts provide a glimpse into the bank's efficacy in managing its loan portfolio and implementing sound risk management practices.

Capital adequacy is a measure of the bank's resilience to absorb losses and maintain a solid financial foundation. The capital adequacy ratio, which compares the bank's capital to its risk-weighted assets, serves as a crucial metric to assess the bank's stability and its ability to withstand adverse economic conditions.

Analyzing these financial performance indicators over a specific time frame allows for the identification of trends and informed assessments of the bank's financial health. Furthermore, benchmarking the bank's performance against industry standards and peer institutions provides valuable insights into its relative standing.

In summary, conducting a comprehensive evaluation of Cuddalore District Central Co-operative Bank's financial performance necessitates a thorough examination of its profitability, liquidity, asset quality, and capital adequacy. By analyzing these factors, stakeholders can develop a comprehensive understanding of the bank's financial strength and its ability to effectively serve its customers and the local community.

'CAMEL' Rating System

The CAMEL rating system is a widely recognized framework used for assessing the financial performance and soundness of banks and financial institutions. CAMEL is an acronym that stands for Capital adequacy, Asset quality, Management capability, Earnings strength, and Liquidity position.

This rating system is commonly employed by regulatory bodies, such as central banks and financial supervisory authorities, to evaluate the financial health and risk profile of banks. It provides a structured approach to analyze various aspects of a bank's operations and helps identify potential areas of weakness or vulnerability.

Let's explore each component of the CAMEL rating system:

Capital adequacy: This assesses the bank's ability to absorb losses and maintain a strong capital base. It involves evaluating the bank's capital-to-risk-weighted-assets ratio, tier 1 capital ratio, and other capital adequacy metrics.

Asset quality: This focuses on the quality of the bank's loan portfolio and other assets. It involves analyzing the level of non-performing loans, provisioning practices, credit risk management, and the overall asset risk profile.

Management capability: This evaluates the bank's governance structure, management expertise, and strategic decision-making processes. It considers factors such as board composition, management experience, risk management practices, and adherence to regulatory guidelines.

Earnings strength: This assesses the bank's ability to generate sustainable and profitable earnings. It examines factors such as net interest margin, return on assets, return on equity, and overall profitability trends.

Liquidity position: This evaluates the bank's ability to meet its short-term obligations and maintain an adequate level of liquidity. It involves analyzing liquidity ratios, cash flow management, and the availability of liquid assets to cover funding requirements.

Each component of the CAMEL rating system is assessed independently, assigning a rating (typically on a scale of 1 to 5 or 1 to 10) to each factor. These ratings are then combined to provide an overall rating that reflects the bank's financial strength and risk profile. Higher ratings indicate better financial performance and a lower level of risk.

The CAMEL rating system helps regulators, investors, and stakeholders in making informed decisions regarding the stability and viability of banks. It provides a standardized framework for assessing financial performance and acts as a tool for early identification of potential issues that could impact the institution's operations and the overall financial system.

The CAMEL rating system is used by the rating agencies also, for evaluating performance of banks when banks opt for public issue, issue of bonds etc. Such a rating made by the rating agencies helps investors make an assessment of the current financial position of banks.

Cuddalore District Central Co Operative Bank

Cuddalore District Central Co-operative Bank (CDC Bank) is a co-operative financial institution that operates in the Cuddalore district of Tamil Nadu, India. Established to serve the financial needs of the local community, CDC Bank operates under the co-operative banking model, which emphasizes the principles of mutual assistance and community development.

Brief profile of Cuddalore District Central Co-operative Bank:

CDC Bank was established on [1918] and has been serving the Cuddalore district for several decades. It was formed with the objective of providing banking services and credit facilities to the residents, farmers, and businesses in the region.

Ownership and Governance: CDC Bank follows the co-operative ownership structure, where its members are the primary shareholders. The bank operates under the guidance of a board of directors elected by the members. The board is responsible for strategic decision-making, policy formulation, and ensuring compliance with regulatory requirements.

Products and Services: CDC Bank offers a range of financial products and services to meet the diverse needs of its customers. These include savings accounts, fixed deposits, recurring deposits, loans for various purposes such as agriculture, housing, and small businesses, as well as remittance and payment services.

Community Development: As a co-operative institution, CDC Bank plays a vital role in promoting community development and economic growth in the Cuddalore district. It aims to support local farmers, entrepreneurs, and individuals by providing accessible and affordable financial services. The bank also participates in initiatives and programs aimed at the welfare and development of the community.

Technology and Infrastructure: CDC Bank strives to adopt modern technologies and infrastructure to enhance operational efficiency and improve customer experience. It may have implemented core banking solutions, internet banking facilities, and mobile banking applications to provide convenient banking services to its customers.

Regulatory Compliance: CDC Bank operates under the regulatory framework set by the Reserve Bank of India (RBI) and complies with the regulations and guidelines issued by the RBI and other relevant regulatory authorities. It maintains transparency, financial prudence, and ethical practices in its operations to ensure the trust and confidence of its customers and stakeholders.

As a prominent co-operative bank in the Cuddalore district, CDC Bank aims to serve as a catalyst for economic development, financial inclusion, and community empowerment. Through its products, services, and commitment to the well-being of its members and customers, CDC Bank strives to contribute to the growth and prosperity of the local community.

Functions of Cuddalore District Central Cooperative Bank

They perform number of functions they are,

- The main function of the CUDDALORE District central Cooperative Bank is to lend to the primary credit societies. They provide short term and medium term loan to the primary credit societies. They finance the primary credit societies and thereby enable them to extend credit to farmers. Thus, they play a vital role in rural finance.
- The function as the balancing central and assist in transferring the excess primary society to another society which is in need of the funds.
- They raise loans and advance from the state cooperative banks and lend the same to the primary credit societies. Thus, they act as a link between the state Cooperative bank and the primary credit societies.
- They raise deposit from the members as well as non members for the purpose of meeting the credit requirements of the primary credit societies.
- They supervise and guide to the affiliated primary credit societies.

- They also carry on commercial banking operation, such as acceptance of a type of deposits from the general public granting of loans and advance to the needy against proper securities, discounting of bill, and collecting cheque and bills on behalf of their customer, receiving of valuable of safe custody etc.

Review of Literature

Understanding of any subject depends on a good knowledge of related literature. Many studies have been undertaken in the field of housing finance companies, many of them are directly or indirectly related to the present study on financial performance evaluation of Cuddalore District Central Co-operative Bank. A good knowledge of literature helps not only to find out the scope of the subject, but also helps to design the study inan improved manner. The knowledge of the researcher on the topic is dependent on the collection of the good review.

In 1914, the Mclagan Committee was appointed to examine the co-operative movement and to make recommendations regarding the progress of the movement. It recommended the establishment of a State Co-operative Apex Bank. On the basis of the recommendation, a Central Co-operative Bank was established in Bombay.

It may be made clear, at the very outset, that under the Banking Regulation Act,1949, only Urban Co-operative Banks, State Co-operative Banks (StCBs) and District Central Co-operative Banks (CCBs) are qualified to be called as Banks in the co-operative sector. Other credit co-operatives, namely, Primary Agricultural Credit Societies (PACS), State Co-operative Agriculture and Rural Development Banks (SCARDBS) and Primary Co-operative Agriculture and Rural Development Banks (PCARDNBS) are said to be commercial banking sector.

The Co-operative Banking System in India is characterized by a relatively comprehensive network extending to the grassroots level. What distinguishes the co-operative banking sector from the commercial banking sector is the focus of the former on the local population and micro-banking among middle and low income strata of the society.

As compared to nearly 300 scheduled commercial banks, inclusive of regional rural banks, there were more than 2000 primary co-operative banks in the urban co-operative sector and more than 90,000 Primary agricultural credit societies in the rural sector as at the end of 2002.

A. Ramachandran [September, 2012] in their article "A study on the progress of the scheduled urban cooperative banks in India with respect to major indicators of financial performance" published in RADIX international journal of banking, finance and accounting, Volume 1, Issue No. 9, (Page No. 1-21) concluded that the future of urban cooperative banks is challenging because of the competition from public sector banks and private sector banks. Public sector banks and private sector banks are concentrating on their major expansion activities both vertically and horizontally.

A. Ramachandran, D. Siva Shanmugam [May, 2012] in their article "An Empirical study onthe financial performance of selected scheduled urban co operative banks in India" published in Asian journal of research in banking and finance, Volume 2, Issue No. 5, (Page No. 1-24) concluded that the future of urban cooperative banks is challenging because of the competition from public sector banks and private sector banks. Public sector banks and private sector banks are concentrating on their major expansion activities both vertically and horizontally.

Adhir Ambavane [May, 2011] in their article "A study of efficacy of staff training programme in urban co operative banks in Raigad district - Maharashtra" published in International referred research journal, Volume II, Issue No. 20, (Page No. 35-36) concluded that Training is an important tool for increasing the overall productivity of an organization. The emergence of new sectors, where human elements play a pivotal role, has exponentially increased the need for training.

Anil Matkar [2012] in their article "A Glance in financial performance and retail banking products of Maharashtra state co-op. Bank" published in ABHINAV, Volume 1, Issue No. 3, (Page No. 142-156) concluded that the increase in the net non-interest income, profit per employee, business per employee, capital adequacy ratio and decrease in the operating expenses, staff cost level of non-performing assets by the last few years indicates that the financial performance of the MSC Bank in retail banking products has been good and retail banking has also contributed well to overall progress of the MSC Bank.

Research Methodology

The research methodology employed in this study follows a systematic approach to problem-solving. It encompasses the overall research design, sampling procedure, data collection method, and analysis procedure.

The nature and subject matter of this study involve a single unit, making a general methodology approach suitable. The study primarily relies on secondary data. Accepted statistical tools and techniques have been employed to analyze the data, including graphical representations to identify trends in each year and examine the relationships between variables.

Research Design

The research design encompasses the arrangement of conditions for data collection and analysis in a manner that ensures efficiency. It involves advanced planning for relevant data collection and analysis techniques while considering the research objectives and available time. Given that the researcher analyzes past data and predicts future trends, this study falls under analytical research design.

Objectives of the Study

The objectives of this study are as follows:
- To examine the overall operations of the Cuddalore District Central Co-operative Bank, Ltd.
- To analyze the deposit mobilization aspect of the Cuddalore District Central Co-operative Bank in terms of mobilizing deposits.
- To analyze the loan and advances activities of the Cuddalore District Central Co-operative Bank.
- To summarize the findings and provide suitable suggestions based on the study's results.

Scope of the Study

This study primarily focuses on analyzing the financial performance of the Cuddalore District Central Cooperative Bank in Cuddalore district. The analysis includes financial data from five consecutive financial years.

Data Collection

The data for this study are collected from both primary and secondary sources. Primary data is obtained from the financial records of the Cuddalore District Central Cooperative Bank in Cuddalore district. The study covers a period of five years, from 2017-2018 to 2021-2022, aligning with the accounting year from April 1st to March 31st.

Tools or Techniques of Financial Analysis

1. **Ratio Analysis:** Ratio analysis involves computing ratios to analyze financial statements. It aids in understanding the financial health and trends of a business, assisting in decision-making and conclusions about the financial position and performance of an enterprise.
2. **Principles of Ratio Selection:** Ratios should have logical inter-relationships, measure material factors of the business, consider the cost of obtaining information, be kept to a minimum number, and be comparable to facilitate analysis.
3. **Trend Analysis:** Trend analysis is used to analyze and interpret financial statements. It involves selecting a period of several years and comparing the percentage relationship of various items in the financial statement to a base year. This analysis helps in policy formulation and future forecasting.

Limitations

1. The discussed methods primarily apply to banks but can be adapted for performance evaluation of other financial institutions.
2. The study relies solely on ratios calculated from balance sheets.
3. Personal interviews with top management employees of the bank under study were not possible.

Data Analysis and Interpretation
Capital Adequacy Ratio

A capital adequacy ratio is a measurement of Bank's capital. It expressed a percentage of Bank's risk weighted credit exposures. A sound capital base strengthen confidence of depositors.

$$\text{Capital Adequacy Ratio} = \frac{\text{Capital Fund}}{\text{Risk Weighted Assets and Off Balance Sheets}} \times 100$$

Capital Fund

Capital fund in the formula are divided into two parts on the basis of capital which is core capital and supplement capital.

- TIER 1 (also known as core capital) provides the most permanent and readily available support to bank against unexpected losses. In this bank Tier 1 comprises the aggregate of paid up capital, statutory reserves and other disclosed free reserves including share premium and capital reserves arising out of surplus on sale of assets, as reduced by, Equity investments, Intangible Assets, Current and Brought forward losses. Core Capital Adequacy ratio which is calculated by dividing the bank's risk-based capital by the bank's total risk-weighted assets, then multiply by 100.

- TIER 2 capital comprises elements that are less permanent in nature or are less readily available than those comprising Tier 1 capital. Supplement capital which is calculated by capital fund divided by total average asset multiplied by hundred.

$$Ratio = \frac{Capital\ Fund}{Total\ Average\ Asset} \times 100$$

Table No. 4.1.1 Capital Adequacy Ratio

Year	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Tier1	0.23	0.07	6.92	1.53	13.41
Tier2	1.23	0.08	40.38	10.67	37.87
Ratio	1.46	1.15	47.30	12.20	51.28

Interpretation

Tier 1 ratio shows the fluctuating trend, it was high in the year 2021-2022. The tier 2 ratio shows fluctuating trend, it was high in the year 2019-2020. The total capital adequacy ratio shows fluctuating trend. It was high in 2021-2022, it measures the bank have strengthen capital.

Asset Quality

The quality of loans is one of the most crucial aspects that decide the health of the banks. The following important ratios are used to measure the asset quality of DCCB.

Net Non-Performing Assets to Total Advances

This ratio shows the percentage of non performing assets with regard to total asset. Increase in such percentage indicates decrease in asset quality.

$$Ratio = \frac{Net\ Non\text{-}performing\ asset}{Total\ Advances} \times 100$$

Table No. 4.2.1 Net Non Performing Asset To Total Advances (Rs In Lakh)

Year	Net NPA	Total Advances	Percentage
2017-2018	11014.17	55166.18	19.97
2018-2019	37023.53	55479.91	66.73
2019-2020	12479.44	40863.15	30.54
2020-2021	12648.00	49590.39	25.50
2021-2022	12713.30	64201.31	19.80
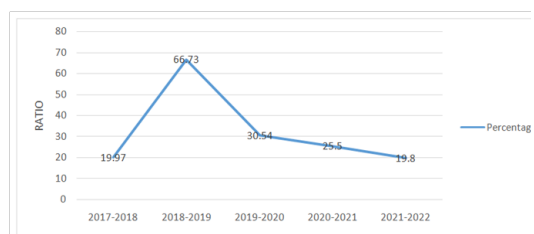
Interpretation

The percentage of NPA to total asset was highest in the year 2018-2019 after that the percentage decline. This shows the bank has achieved a significant reduction in NPA in percentage terms during the year of 2019-2020 to 2021-2022. The asset of the bank was properly utilized.

Percentage Change in Net Non-Performing Asset

This measure gives the movement in Net NPAs on year-on-year basis. It means how the NPAs moving in the past five years.

Table No 4.2.2 Percentage Change in Net Non-Performing Asset (Rs in Lakh)

Year	Net NPA	Total Advances	Percentage
2017-2018	11014.17	55166.18	19.97
2018-2019	37023.53	55479.91	66.73
2019-2020	12479.44	40863.15	30.54
2020-2021	12648.00	49590.39	25.50
2021-2022	12713.30	64201.31	19.80

Interpretation

This table shows the NPA movement first it was decreasing from 2017-2018 to 2018-2019 after that it was increasing a certain range from 2005- 2006 to 2019-2020. The Non-performing assets are reduced as possible but it is not enough. When the NPA is decreasing the bank automatically earned more.

Return on Asset

Return on asset ratio is the net income (profits) generated by bank on its Average assets (including fixed assets) the higher the proportion of average earning assets, the better would be the resulting returns on total assets.

$$\text{Return on Asset} = \frac{\text{Net Profit}}{\text{Average Asset}}$$

Table No 4.2.3 Return on Asset (Rs.Lakhs)

Year	Net Profit	Average Asset	Ratio in percentage
2017-2018	6496.82	86867.08	7.48
2018-2019	-12681.98	86847.35	-14.60
2019-2020	496.66	81362.70	0.61
2020-2021	11636.67	73335.37	15.87
2021-2022	2389.98	88340.99	2.71
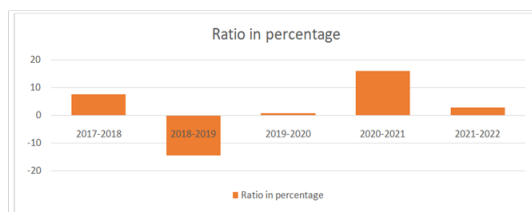
Interpretation

The return was highest in the year of 2020-2021. Compare to asset the profit are not that much. It was high in the year of 2020-2021. There is no profit in the year of 2018-2019. Because of their unexpected expenses loss on sales, overdue loans, changing the interest on depositors. Therefore here the assets not utilized properly in each year except 2020-2021.

Advances Yield Ratio

Yield on advance, is another important ratio, which helps us to measure the quality of advances. Here yield means interest income received on the advances of the bank. Increase in advance yield ratio is an indicator of a sound asset quality.

$$\text{Advance yield Ratio} = \frac{\text{Interest on Advances}}{\text{Total Advances}}$$

Table No 3.2.4 Advance Yield Ratio (Rs in lakh)

Year	Interest on advances	Advances	Ratio
2017-2018	3858.60	55166.18	6.99
2018-2019	6310.12	55479.91	11.37
2019-2020	2025.50	40863.15	4.96
2020-2021	198.28	49590.39	0.40
2021-2022	2779.07	64201.31	4.33
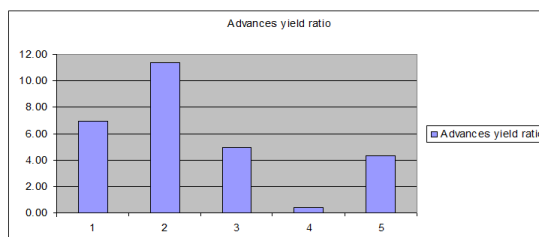
Interpretation

This ratio shows the fluctuating trend during the period of 2017-2018 to 2021-2022. This is due to decrease in business of the bank. It shows loans are issued low. Here the loans are issued but the income of the bank was low. Because we know the interest on advances is the main income of the bank. When the interest income was low the whole bank will affect. In 2018-2019 it was high but the bank have unexpected expenses loss on sales, more interest paid to depositors.

Loan Loss Reserves to Total Loans

This is a primary measurement for judging capital strength. Traditionally the amount is a minimum 1.0% but it is not sure if it is adequate unless it is compared to Provisions/Total loans: Intangibles and net unrealized holding gains (losses) on available-for-sale securities are excluded from Capital

$$Ratio = \frac{Loan\ Loss\ Reserves}{Total\ Loans}$$

Table No 3.2.5 Loan Loss Reserves to Total Loans

Year	Loan loss reserves	Total loans	Ratio
2017-2018	6806.89	28312.67	0.24
2018-2019	16836.37	28724.52	0.59
2019-2020	16836.37	9380.58	1.79
2020-2021	10782.41	6986.86	1.54
2021-2022	10660.87	9408.84	1.13

Interpretation

The minimum 1.0% ratio is adequate for strengthen capital. The DCCB have the ratio (>1) in the study period. Here there is no inadequate position for issuing loan. This bank don't have problem in capital requirements. Because the bank have strengthen capital.

Overdue Loan to Total Loan Ratio

Indicates that either credit underwriting standards are inappropriate or collection procedures are inadequate.

$$Ratio = \frac{Total\ Loans\ 30\text{-}89\ Days\ Past\ Due}{Total\ Loans}$$

Table No 3.2.6 Over Due Loan to Total Loan Ratio (Rs. In Lakh)

Year	Total Loans 30-89 days past due	Total loans	Ratio
2017-2018	4014.24	28312.67	14.18
2018-2019	3532.67	28724.52	12.30
2019-2020	2772.62	9380.58	29.56
2020-2021	1083.86	6986.86	15.51
2021-2022	1327.53	9408.84	14.11
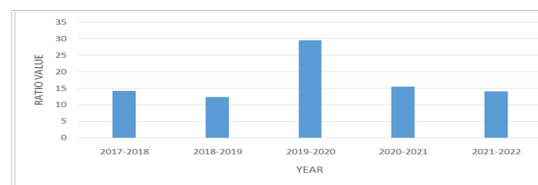
Interpretation

This ratio indicates that credit collection capacity of the bank. It was high in the year of 2019-2020, in this year debts are collected properly. The bank followed positive collection procedure. It was low in the year of 2021-2022, credits are not collected properly the credits collection procedures are inadequate.

The ratio was very high in the year of 2019-2020 in this period the collection procedures are adequate. The credits not collected but compare to 2019-2020 it was low.

Management

Management is the most important ingredients that ensure sound functioning of banks. With increased competition in the Indian banking sector, efficiency and effectiveness have become the rule as banks constantly strive to improve the productivity of their employees. The ratio in this segment measures the efficiency and effectiveness of management.

Credit Deposit Ratio

Credit deposit is a tool used to study the liquidity position of the bank. A high ratio indicates that there is more amount of liquid cash with the bank to meet its clients cash withdraw.

$$Ratio = \frac{Total\ Advances}{Total\ Deposits} \times 100$$

Table No 3.3.1 Credit Deposit Ratio

Year	Total Advances	Total Deposit	Ratio
2017-2018	55166.18	25984.46	212.3045
2018-2019	55479.91	26323.19	210.7644
2019-2020	40863.15	28809.66	141.8384
2020-2021	49590.39	34445.80	143.9664
2021-2022	64201.31	40529.48	158.4064

Interpretation

The credit deposit ratio is high during the year 2017-2018 to 2018-2019 after that it was decreasing from 2019-2020 to 2020-2021. It was slightly increases in the year 2021-2022. Here at first it was high it means the bank have more liquid cash. Here the advances are increasing trend and the same way deposits are also increased.

Profit Per Employee

This ratio is another indicator, of the efficiency of the management. It is arrived at by dividing the Profit After Tax earned by the bank by total number of employees. Higher the ratio, higher will be the efficiency of management.

Profit per employee = Profit After Tax / Employee

Table No 3.3.2 Profit Per Employee

Year	Profit after tax	Employees	Profit/ Employee
2017-2018	6496.82	238	2729.756
2018-2019	-12681.98	215	-5898.6
2019-2020	496.66	212	234.2736
2020-2021	11636.67	202	5760.728
2021-2022	2389.98	188	1271.266

Interpretation

The profit per employee ratio is fluctuating year by year. There is a loss in the year of 2018-2019 due to increasing value of NPAs. From 2019-2020 to 2021-2022 the NPA was increasing for that the profit was low.

Business per Employee

This ratio also shows the efficiency of management. It is arrived at by dividing total business by total number of employees. Business includes the sum of total advances and deposit in a particular year. Increase in business per employee is an indicator of efficient management.

$$Business\ per\ Employee = \frac{Business}{Number\ of\ Employees} \times 100$$

Business per Employee = Business X 100
Number of Employees

Table No 4.3.3 Business Per Employee

Year	Business (in lakh)	Number of employees	Ratio
2017-2018	81150.64	238	34096.91
2018-2019	81803.1	215	38047.95
2019-2020	69672.81	212	32864.53
2020-2021	84036.16	202	41602.06
2021-2022	104730.79	188	55707.87
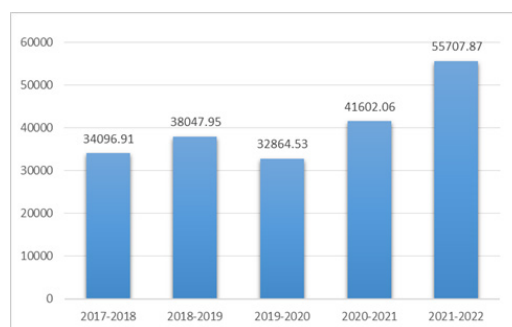
Interpretation

This ratio is increasing trend in during the period 2019-2020 to 2020-2021. It increased from Rs. 32864.53 to Rs. 55707.87 in the period of 2019-2020 to 2021-2022. This ratio shows the sufficient business transactions which is transfer of Demand Draft, Cheques transfer these are all carried by the bank.
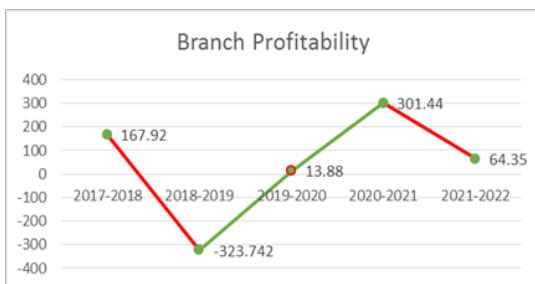
Branch Profitability

This ratio shows the overall profitable position of the bank. This ratio is high the profitability is efficient. Conversely it shows the bank should improve their performance.

$$\text{Ratio} = \frac{\text{Gross Profit}}{\text{Number of Branches}}$$

Table No. 4.3.4 Branch Profitability

Year	Gross profit	Number of branches	Branch Profitability
2017-2018	6548.93	39	167.92
2018-2019	-12681.98	39	-323.742
2019-2020	541.22	39	13.88
2020-2021	11756.2	39	301.44
2021-2022	2509.48	39	64.35

Interpretation

This ratio indicates efficiency of the bank. There is no changes in number of branches in last five years. This ratio is high in the year of 2020-2021, the bank have more profitability when compare to other four years. The expanding of the business is not done by the last five years. This ratio shows branch profitability was fluctuating year by year. So the bank has try to improve their performance. In 2018-2019 no profit it was loss.

Return on Net worth

This ratio is one of the most important ratios used for the measuring the overall efficiency of a firm. This ratio is of great importance to the present and prospective shareholders as well as the resources of a firm are being used, higher the ratio, better are the reserves. This is calculated using the formula

$$\text{Return on Net worth} = \frac{\text{Profit after tax}}{\text{Net worth share/shareholders fund}} \times 100$$

Table No. 4.3.6 Return on Net Worth

Year	Net profit	Shareholders fund	Ratio
2017-2018	6496.82	6402.25	101.48
2018-2019	-12681.98	6418.88	-197.57
2019-2020	496.66	8413.89	5.90
2020-2021	11636.67	12994.00	89.55
2021-2022	2389.98	19429.89	12.30
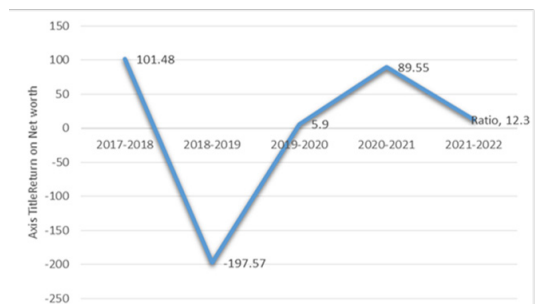
Interpretation

This ratio is measure of the profitability of a firm. As profitability is directly related with the efficiency of management, this ratio is a good indicator of the efficiency of management. The shareholders fund shows the increasing trend, it measures the bank have more shareholders fund. In the year of 2019-2020 the return was low. In 2021-2022 this ratio was decreasing. So the profitability of firm is low. There is no improvement in profitability in the year 2021-2022.

Earning Quality

In the recent past banks have been criticized for making most of their earnings from treasury operations and other investments rather than core lending operations. This section, assess the quality of income in terms of income generated by core activity i.e. income from lending operations.

Percentage Growth in the Net Profit of the Bank

Table No. 4.4.1 Change In Percentage of Net Profit

Year	Net profit	Change in percentage
2017-2018	6496.82	100.00
2018-2019	-12681.98	-195.20
2019-2020	496.66	7.64
2020-2021	11636.67	179.11
2021-2022	2389.98	36.79
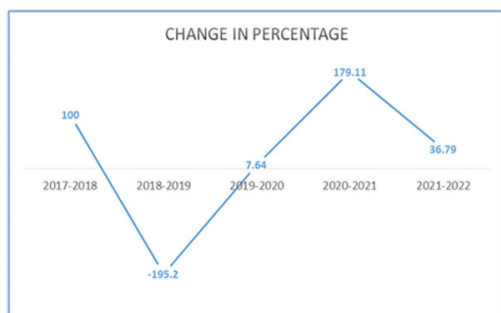
Interpretation

In 2018-2019 the profit was low. The Net profit is high in the year of 2020-2021. It was low in 2019-2020. The profit was changing year by year based on the operational efficiency. In 2021-2022 the most of the assets are placed in non performing assets. It was decrease the profit of the bank. This ratio shows the less percentage of profit earned by the bank in 2021-2022.

**Percent of Interest in Income to Total Income**

This ratio measures the income from lending operations as a percentage of total income generated by the bank in a year. Interest income includes

- Income on advances
- Interest on deposits with RBI
- Income on investments

$$Ratio = \frac{Interest\ Income}{Total\ Income} \times 100$$

Table No. 4.4.2 Percent of Interest Income to Total Income

Year	Interest income	Total income	Percentage
2017-2018	3858.60	19009.25	20.30
2018-2019	6310.12	18708.07	33.73
2019-2020	2025.50	4215.38	48.05
2020-2021	198.29	16155.41	1.23
2021-2022	2779.07	7175.06	38.73
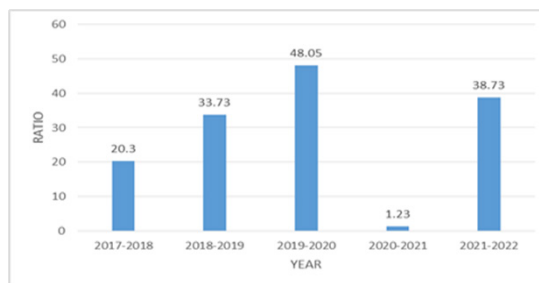
Interpretation

This ratio shows a fluctuating trend, first it increases from 2017-2018 to 2019-2020 after that it was decreasing in the year of 2020-2021. In 2021-2022 the interest income was high but the profit was low due to unexpected expenses loss on sales, overdue loans. Interest income was the main income of bank. Because of when the interest income was less the total income of the bank was affected.

Return on Average Assets

Actual net income should be examined for the inclusion of extraordinary earnings (which may be excluded). This measures how the assets are utilized by indicating the profitability of the assets base or asset mix.

$$Return\ on\ Average\ Asset = \frac{Net\ operating\ income\ (annualized)\ after\ taxes}{Total\ Average\ Assets}$$

Table No. 4.4.5 Return on Average Asset

Year	Net operating income	Total Average Assets	Ratio
2017-2018	3858.91	11545.22	0.33
2018-2019	6310.44	11656.40	0.54
2019-2020	2025.82	9232.28	0.22
2020-2021	198.60	10869.59	0.02
2021-2022	2779.39	13597.21	0.20
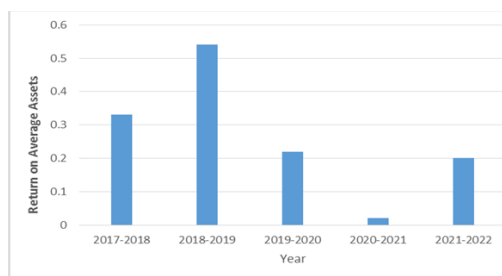
Interpretation

This measures how the assets are utilized by indicating the profitability of the assets base or asset mix. The bank has got highest ratio was 0.54 in the year of 2018-2019. In 2021-2022 the ratio was 0.20. Here the assets are increasing trend but the return was low. There is no proper utilization of assets, because of the operating income was less when compared to 2018-2019, this year the assets are low but the operating income was high compared to 2021-2022.

Liquidity

The business of banking is all about borrowing and lending money. Timely repayment of deposits is of crucial importance to avoid a run on a bank. Investors are extremely sensitive and they rush in to the bank to withdraw money at the slightest hint of trouble. Hence banks have to ensure that they always maintain enough liquidity. Through mandatory SLR and CRR, RBI ensure that banks maintain ample liquidity.
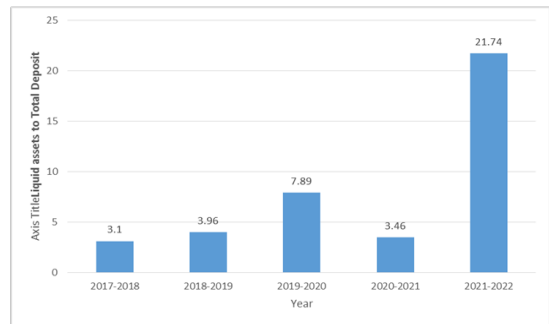
Liquid Assets to Total Deposit

Here liquid assets are measured as a percentage of total deposits. Total deposits include demand deposit, saving deposit, term deposits and deposits of other financial institutions. As deposits are the major liability of any bank, it is significant to relate liquid asset to total deposit.

$$Ratio = \frac{Liquid\ Assets}{Total\ Deposits}$$

Table No. 4.5.1 Liquid Assets to Total Deposit

Year	Liquid assets	Total deposit	Percentage
2017-2018	806.02	25984.46	3.10
2018-2019	1043.55	26323.19	3.96
2019-2020	2272.21	28809.66	7.89
2020-2021	1190.29	34445.80	3.46
2021-2022	1518.91	6986.86	21.74

Interpretation

The percentage of liquid assets to total deposit is increasing from 3.10 to 21.74. It shows the liquidity is available for sufficient. The liquidity of the bank was sufficient for meet it clients withdrawals during the year of 2021-2022.
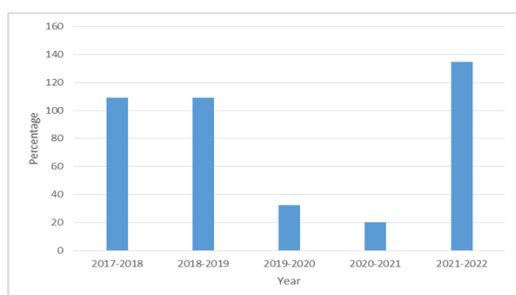
Loan as Percentage of Deposit

Indicates the percentage of a bank's loans funded through deposits (measures funding by borrowing as opposed to equity). Maximum 80% to 90% (the higher the ratio the more the institution is relying on borrowed funds). However, cannot also be too low as loans are considered the highest and best use of bank funds (indicates excess liquidity). Between 70% to 80% indicates that the bank still has capacity to write new loans. A high loan-to-deposit ratio indicates that a bank has fewer funds invested in readily marketable assets, which provide a greater margin of liquidity to the bank.

$$Loan\ as\ percentage\ of\ deposit = \frac{Total\ Loans}{Total\ Deposits}$$

Table No. 3.5.2 Loan as Percentage of Deposit

Year	Total Loan	Total Deposits	Ratio
2017-2018	28312.67	25984.46	108.96
2018-2019	28724.52	26323.19	109.12
2019-2020	9380.58	28809.66	32.56
2020-2021	6986.86	34445.80	20.28
2021-2022	9408.84	6986.86	134.66

Interpretation

This ratio indicates the percentage of a bank's loans funded through deposits (measures funding by borrowing as opposed to equity). During the period 2017-2018 to 2018-2019 it was high, the bank was relayed mostly on borrowed fund. In 2019-2020 the ratio was low, the bank have low liquidity. In 2021-2022 loan-to-deposit ratio indicates that a bank has fewer funds invested in readily marketable assets, which provide a greater margin of liquidity to the bank.

Findings of the Study

1. The capital adequacy of the bank reflects its overall financial condition and management's ability to meet clients' requirements. The bank has strengthened its capital to ensure sufficient resources for its clients.
2. Non-performing assets, which are accounts that do not generate income for the bank, show fluctuations in percentage relative to advances. This indicates the asset quality of the DCCB. The bank needs to address its low asset utilization to improve asset quality.
3. The return on total assets fluctuates, with total assets exceeding net profit. This suggests inadequate management and underutilization of assets. The bank should focus on effectively managing its non-performing assets to increase profitability.
4. The yield on advances exhibits a mixed trend, with fluctuations over the years. While there was an initial increase, it later decreased. The bank faces unexpected expenses, losses on sales, overdue loans, and differences in depositors' interest rates, which impact earnings.
5. Advances, as the main source of income for the bank, show a decreasing trend, indicating lower

earnings for the bank.
6. The credit deposit ratio is a tool to assess the bank's liquidity position. The bank has sufficient liquidity to meet clients' needs.
7. Labour productivity, measured in terms of business per employee and profit per employee, is an indicator of long-term viability. The profit per employee fluctuates, suggesting management inefficiency. While it was high in 2020-2021, it significantly decreased in 2021-2022, highlighting management inefficiency.
8. This ratio reflects the overall profitability of the bank. Higher values, such as 167.92 and 301.44 in 2020-2021, indicate efficient management.
9. Interest income serves as the main source of income, accounting for around 90% of the total. It exhibits a mixed trend, initially increasing from 20% to 48% but later decreasing to 38% in 2021-2022.
10. The net interest margin, with margins above 3%, may be the result of a favorable interest rate environment or the bank moving towards higher-risk, higher-yielding loans or investment securities. The bank should focus on short-term loans to improve its liquidity position.

Suggestion

1. Focus on Sustaining Strengthened Capital: The bank has successfully achieved strengthened capital in the year 2021-2022. It is crucial to maintain this capital adequacy in the upcoming financial years to ensure the bank's ability to meet clients' requirements effectively.
2. Reduce Non-Performing Assets (NPAs): The bank should prioritize efforts to reduce NPAs by allocating sufficient resources for their maintenance. This may involve additional expenses, but it is essential for improving the overall asset quality of the bank.
3. Increase Loan Offerings: The bank should concentrate on providing loans to its customers to boost income from interest receivables. By expanding the loan portfolio, the bank can enhance its income generation and contribute to its financial performance.
4. Efficient Utilization of Non-Performing Assets: Proper and efficient utilization of non-performing

assets can contribute to profitability and increase the bank's overall income. Implementing strategies to optimize the use of these assets can have a positive impact on the bank's financial performance.

5. Address Efficiency of Management: The bank experienced lower efficiency in management during the year 2021-2022, which was evident from the decreasing trend in liquid cash transactions. It is imperative to address and improve management efficiency to meet client requirements effectively.

6. Improve Labour Productivity: Labour productivity has shown a decline compared to the previous year, indicating inefficiency in management. The bank should focus on controlling and improving labour productivity through measures such as increasing deposit schemes and optimizing staff allocation.

7. Ensure Strict Compliance with Interest Income: Since interest income is a primary source of revenue for banks, it is crucial to collect interest payments promptly and strictly adhere to rules and regulations to maintain a consistent flow of interest income.

By implementing these suggestions, the Cuddalore District Central Co-operative Bank can work towards improving its financial performance and overall operational efficiency.

Conclusion

Over the past five years, the gross profit value and percentage of the bank have shown fluctuations. Similarly, the total income of the bank has exhibited a fluctuating trend, primarily attributed to inefficient management practices. To improve the bank's performance, it is crucial to focus on providing short-term (ST) and medium-term (MT) loans, which can contribute to increased profitability. Additionally, efforts should be made to reduce bad debts and non-performing assets (NPAs). By implementing these measures, the bank has the potential to enhance its

profitability and achieve greater financial success.

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