

Examining the Financial Efficiency of Urban Co-Operative Banks in Kerala - A CAMEL Model Analysis

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Abstract:

Urban cooperative banks play an essential role in the economic liberation of millions of people in our nation. It has emerged as a social and healthy banking institution providing need-based and quality banking services to the middle class and the marginalised sections of the urban population. Sound financial health is a guarantee to the depositor's shareholders, employees and the economic system as a whole. In this study, an attempt is made to evaluate the financial performance of UCB using the CAMEL Model. This model mainly measures the bank's performance from the five parameters: Capital Adequacy, Asset Quality, Management Efficiency, Earning Capacity, and Liquidity. The study is based on secondary data drawn from the annual report. For analysis, data over ten years are used. Statistical tools like average and standard deviation are used. It is found that the bank's overall performance is satisfied with its asset quality being good. It was in a decent recovery position, but its financial condition in terms of capital adequacy, liquidity, earning rate, and management efficiency metrics was shabby, needing quick intervention.

Keywords: Cooperative Banking, CAMEL Model, Financial Efficiency, Capital Adequacy

Introduction

The integration of the Indian Financial sector with the rest of the world during the era of the LPG Financial sector in general and the banking sector, notably, underwent a paradigm shift. RBI took strong measures based on the recommendations of the Narasimham Committee and issued directions to all the banks to follow the norms of capital adequacy, asset quality, provision for NPA, prudential norms, disclosure requirements, acceleration of the

reach of the latest technology, streamlining the procedures and complying with accounting standards and making financial statements transparent. In terms of supply, product diversity, and space, banking in India is mature, even in rural India, thanks to rural and remote banking. Indian banks have cleaned, robust, and transparent balance sheets in terms of asset quality and capital sufficiency (Gupta & Verma, 2008). Long-term cooperatives provide term finance for capital formation and rural non-farm projects.

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High capital buffers have strengthened the balance sheets of Urban cooperative banks following the implementation of Basel III norms which may help banks to manage stress and emerge stronger¹. Especially UCB is taking many initiatives for granting of credit during the Covid period. The Urban Cooperative banks are in alignment with the policy framework of RBI².

The current policy of lowering non-performing assets and rationalising personnel and branches may be maintained to proficiency advantages and make Indian banks internationally competitive, which is a stated goal of the Indian government (Sathye, 2003). Economic development is primarily determined by actual variables such as industrial growth and development, agricultural modernisation, and the ex-patdomestic and international commerce expansion loan-loss provision as a percentage of total loans) and efficiency has a positive and substantial association in the banking business (Tan & Floros, 2013).

The importance of the banking sector and the monetary system in developing a country cannot be overstated. As a result, banks and financial institutions play a substantial and critical role in economic planning, such as setting precise goals and assigning specific amounts of money, which form the government's monetary policy. A stable financial system is required to grow a healthy and thriving economy. The strong banking industry is an integral part of the financial services industry. It is critical to assess banks' overall performance by establishing a regulatory banking oversight structure.

The CAMEL rating system, which was initially used in the United States in 1979 and has since been proven to be a helpful and effective instrument in the United States' response to the financial crisis of 2008, is one such measure of supervisory information (Prasad & Ravinder, 2012) The CAMEL framework was designed to identify when a

bank's on-site examination should be scheduled. When any of the five cardinal variables, capital adequacy, asset quality, management soundness, profits and profitability, and liquidity, are insufficient, bank collapse increases. The five camel factors were chosen because each represents a significant feature in a bank's financial accounts (Kouser & Saba, 2012). In India, the Reserve Bank of India (RBI) adopted this strategy in 1996, based on the suggestions of the Padmanabham Working Group committee in the year 1995.

Background

The cooperative sector in India had come a long way since its humble beginnings in 1912, when the Cooperative Societies Act was enacted, being organised based on 'one member, one vote,' with a focus on dispensing credit at the micro-level, especially to small and marginal farmers and other underserved segments of the population. The soundness of the financial system participants is a key element of the financial stability framework. In India, the banking system plays a dominant role in the overall financial system. Therefore, one of the core objectives of the banking regulations is to ensure the safety of the banks from financial distress and to protect the interests of depositors. However, the regulatory and supervisory structure has to remain alive to the existing weaknesses, unresolved issues and emerging challenges in order to stay on the curve. As a small though important part of the banking system, the urban cooperative banks (UCBs) perform important functions through their superior customer service and local reach.

Urban Co-operative banks come under Primary cooperative societies at the base level of three tier pyramidal structures. The urban cooperative banks play a dominant role in helping the small farmers and small-scale industrial concerns, as UCBs are formed on the principle of cooperation. Right from their establishment, UCBs are solving the economic problems of a lower-middle-income group of

¹https://rbidocs.rbi.org.in/rdocs/Publications/PDFs_0RTP2020CF9C9E7D1DE44B1686906D7E3EF36F13.PDF

²https://rbidocs.rbi.org.in/rdocs/PublicationReport/PdfsSRJULY20210595CD3BEDFA466EBE9169_BCE426E32C.PDF

people and thereby contributing to the socio-economic development of the poor people in the country.

In today's scenario, a complete turnaround of the performance of urban Co-operative is not expected without CAMEL Model. This framework enhances capital adequacy, strengthens asset quality, improves management, increases earnings, and reduces sensitivity to various financial risks. CAMEL framework has its contributions to contributions to the way of modern banking. These banks face several hardships from administrators and regulators and severe competition from public and private sector banks. In this context, it is essential to examine the performance of this bank with the CAMEL Model. Therefore, this paper examines the performance of Urban Co-operative Banks using the CAMELS framework as a measuring tool. The scope of the study is limited to the Urban Co-operative bank. The banks are purposively selected for the study considering their role and involvement in Advances, Deposits, Manpower Employment and Branch network in the Palakkad district. The data over ten years from 2011- to 2021 are considered for this study.

Review of Literature

The banking industry is one of the fastest-growing industries globally, with a large amount invested in it. The banking system is increasingly complicated, necessitating a significant requirement to assess bank performance. This research is one of the few that has connected the financial performance of cooperative banks in a CAMELS model framework. Thus, it is expected that this research will make a significant contribution to the literature.

Financial performance analysis of banks

Weber(2017)examined the relationship between Chinese banks' sustainability performance and financial metrics to see if sustainability laws can be implemented without harming the banking sector's economic performance. Barra & Zotti (2019) investigated the link between bank performance and banking

system financial stability, considering market concentration. The z-score is employed as a measure of financial stability, whereas the performance of financial intermediaries is tested using a recently created parametric technique.

Maqbool & Zameer (2018) investigated the link between corporate social responsibility and financial success in the Indian context by collecting data for 28 Indian commercial banks listed on the Bombay stock exchange (BSE) for ten years (2007–16). The findings showed that CSR has a favourable influence on Indian banks' financial performance. Mondal & Ghosh (2012) examined the link between intellectual capital and the financial performance of 65 Indian banks for ten years, from 1999 to 2008 experimentally.

Cooperative Credit Institutions have played a critical role in rural India's financing of many activities. In recent years, these institutions have faced a difficult environment that has caused them to reconsider their business strategy and raise worries about their long-term viability. Chander& Chandel, (2010) investigated the financial feasibility of an apex-level cooperative credit organization-HARCO Bank. Asher, (2007) advocated governance and regulatory systems must be aligned with India's current and future economic structure, and appropriate laws must be updated. A paradigm shift in the role of UCBs is required to enhance such a change. Ramu, (2009) attempted to assess asset quality in a small number of UCBs in Tamil Nadu. The report also looked at financial cooperatives' non-performing assets in other countries. A comparison of UCBs with international financial cooperatives was also made. (Chipalkatti et al., 2007) demonstrated that a financial crisis is linked to a decrease in deposits across the UCBs. During election years, however, depositors appear to discipline weak institutions. They also found little support for the claim that banks curtailed loans in the aftermath of a crisis due to increased regulatory monitoring. CAMEL technique was used to assess the performance and financial soundness of Women Urban Cooperative Banks in Bangalore District by Acharya, (2013)

Though several UCBs have delivered solid results in recent years, a considerable number of institutions have shown signs of vulnerability. Low profitability, ever-growing non-performing assets (NPA), and a relatively low capital base characterise the operating efficiency. Due to heavy late and non-collection of loans made by them, their status rapidly deteriorated. The widespread illness in UCBs has shattered public trust in cooperative banks. This prompted CHAO & LIN, (2007) to investigate the working and financial performance of urban cooperative banks. Identified and analysed the sector's trend, performance, and vulnerabilities, as well as to shed light on the issues of rising NPAs and make some practical ideas for improving the efficiency and effectiveness of these banks' operations.

The CAMEL Model

The CAMEL Model was used to analyse the performance of five banks chosen based on market capitalisation, according to research by Bansal Rohit & Mohanty Anoop (2013) (i.e. SBI, HDFC Bank, ICICI Bank, Axis Bank and Kotak Mahindra Bank.). This model evaluated a bank's performance in terms of capital adequacy, asset quality, management, earnings, and liquidity, among other factors. Moreover, P. Kaur (2015) attempted to examine the financial performance of the Indian banking industry using the CAMEL model and identify the elements that most affect the banks' financial performance.

Based on total assets and a consolidated basis, J. Kaur et al. (2015) measured and compared the financial performance of India's leading five public sector banks, including Bank of Baroda, State Bank of India, Punjab National Bank, Bank of India, and Canara Bank, for five years from 2009 to 2014. Furthermore, Sayed & Sayed (2013) conducted a thorough analysis, and the result showed that, on average, Kotak Mahindra Bank stands at the top position among the commercial banks in India.

The Regional Rural Banks undertook an amalgamation process across the entire organisation in 2005-06 to ensure effective and

efficient performance. Using the CAMEL model, (Reddy & Prasad, 2011) investigated the financial performance of selected RRBs throughout the post-reorganization era. From 2007-to 2017, (Kumar & Malhotra, 2017) used the CAMEL model to measure selected private banks' performance and financial soundness in India. State Bank of India and its five associate banks, namely State Bank of Bikaner & Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala, State Bank of Travancore, and Bharatiya Mahila Bank, have used the CAMEL Model to evaluate and rank the selected banks on target performance indicators.

Sharma & Patel, (2019), through their study, indicates that all banks have various competitive advantages and that the merger has allowed them to use each other's competitiveness to benefit the overall performance of the banks. Salem & Zaidanin, (2020) employs the CAMEL model variables to rank banks based on their overall performance and measure their impact on banks' profitability measures of Return on Assets and Return on Equity separately, using a fixed effect regression model. Majumder & Rahman, (2017) assess the financial performance of fifteen Bangladeshi banks and determine whether there is a substantial difference in performance across the banks during the from 013. The financial strength of the selected banks was assessed using the CAMEL Model.

Methodology

The study is descriptive based on secondary data drawn from the annual reports of the UCBs. The research instrument CAMEL Model is used as incorporated by H. V. Kaur, (2010) in ranking the various commercial banks operating in India. For applying this model, five principal dimensions of the performances are assessed using ratio analysis. The financial ratios are divided into five main categories illustrated below. This methodology is a proportion-based model to assess the performance of the banks to offer a unique point of view in setting the element's important productivity of banks. The CAMEL approach rates the performance of the banks utilising five

key measurements: capital sufficiency (C), Asset quality (A), Management (M), Earnings (E), and Liquidity (L).

Capital Adequacy

Capital adequacy is the level of capital required by the banks to enable them to withstand the risks such as credit, market and the operational risk they are exposed to in order to absorb the potential losses and protect the bank's debtors (Vincent Okoth & Gemechu Berhanu 2013). The capital adequacy ratio reveals the internal strength of the bank to bear losses. The banks are required to maintain the capital adequacy ratio (CAR) of 9% as per the latest RBI Norms. The higher the CAR ratio stronger the bank will be and more will be the protection of investors, (Parvesh Kumar & Afroze Nazneen 2014). The following parameters are used for evaluating the capital adequacy of UCBs.

1. Capital Adequacy ratio
2. Debt Equity Ratio
3. Proprietary Ratio
4. Interest Coverage Ratio
5. Total Advance to Total Asset Ratio
6. Govt. securities to Total investment Ratio

Asset quality

The asset quality ratio helps to ascertain the component of non-performing assets as a percentage of the total assets (D. Maheswara Reddy & KVN Prasad, 2011). Asset quality problems can diminish the liquidity inherent in the loan portfolio and hurt bank capital adequacy. Poor asset quality also reflects upon management's competence. I have compared the asset quality based on the following parameters:

1. Net NPA to Net Advance Ratio
2. Gross NPA to Net Advance Ratio
3. Loan Loss Cover
4. Total Investment to Total Asset Ratio

Management Quality

Management efficiency is a qualitative factor for measuring the efficiency of the management.

It determines the soundness of the management. The lower the ratio better will be the bank. It shows the management has a good ability to handle the banks' operation, (A. Khaled & Ghassan Daas, 2017). To calculate the efficiency, the following parameters are used.

1. Expenditure to Income Ratios
2. Total Advance to Total Deposit Ratios
3. Asset Turnover Ratios
4. Diversification Ratios
5. Earnings Per Employee Ratios
6. Business per Employee Ratio

Earnings quality

Earning quality ratios basically determine the profitability of banks and explain its sustainability and growth in earnings in future. It assesses income quality based on income generated by core banking activity,

1. Return on Assets
2. Return on Equity
3. Spread ratio
4. Net Interest margin
5. Operating Profit to Working Fund Ratio
6. Interest income to Total Income Ratio

Liquidity

The main objective behind this parameter is to assess the ability of a bank to meet the demand from the deposit holders at a particular time. Generally, the performance of the bank is assessed through liquidity ratios. The ratio will be higher for banks with higher liquidity (Sumeet Gupta & Reenu Varma, 2008). Liquidity has been compared based on the following parameters, namely,

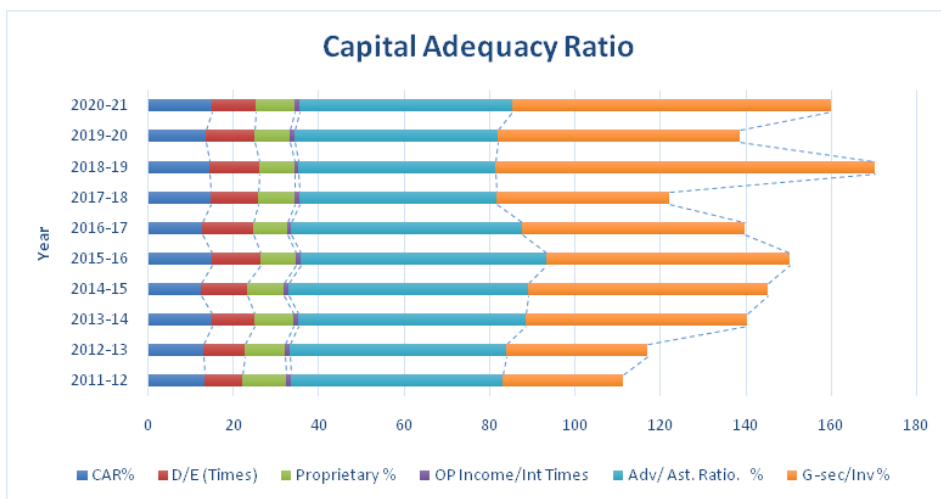
1. Current Ratio
2. Quick Ratio
3. Liquid asset to total Asset Ratio
4. Liquid asset to Total Deposit ratio
5. Govt. Securities to Total Asset Ratio
6. Investment to Deposit Ratio

Results and Discussion

Capital Adequacy

The capital adequacy ratio ensures the efficiency and stability of a bank. The standard ratio is 9%. As per the Basel committee norms, all banks in India, including UCBs, are trying to adhere to this norm. The following ratios have been taken into consideration to understand the capital adequacy ratio of UCB. Figure 1 shows that the average CAR is 13.8%, above the standard norm of 9%. The average debt-equity ratio is 10.7 times, revealing that the bank’s long-term debt was more than ten times the share holder’s equity.

Figure 1
Capital Adequacy Ratio



Source: Authors Calculation

The average proprietary ratio was 8.73, which is also appreciable. The interest coverage ratio is more or less stable at 1.13% during the entire study period. The average 1.13 times disclose that the bank has a good proportion of operating income to meet its obligation, and to that extent, the bank is considered solvent. The total advance to total asset ratio measures banks’ aggressiveness in lending. It is quite palpable. Govt. securities to total investment ratio count the number of risk-free assets invested by a bank in government. Securities as a percentage of total investment held by the bank. The ratio was 28.12, % which increased to 74.48% in 2018-19, showing that the investment in Govt. securities has increased considerably. The average balance is 53.09.

Asset Quality

Asset quality is the loan portfolio quality and the credit administration programme. Loans and advances comprise the majority of banks’ assets and carry a large amount of risk to their capital. Deteriorating the value of Assets directly affects profitability. As the provision on Gross NPA increases, it affects the bank’s earning capacity. The following ratios were calculated to judge the asset quality of UCB.

Table 2: Asset Quality

YEAR	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Mean	S.D	C.V
NET NPA/NET Adv	.045	.039	.023	0.005	0.003	0.004	0.038	0.05	0.033	0.003	0.024	0.019	77.42
Gross NPA/Net Adv.	11.19	10.0	7.82	4.01	4.3	4.13	8.38	9.24	7.38	4.13	7.05	2.73	38.66
Provision coverage ratio	117.07	140.8	163.6	277.69	240.52	261.07	165.38	145.59	169.98	319.43	200.13	68.69	34.32
Total investment to Total Advance	26.18	729.4	542.2	40.17	37.84	40.34	42.61	47.66	57.32	68.21	44.73	12.05	26.94

Source: Authors Calculation

Table 2 indicate that Net NPA to Net advance shows the fluctuating trend over the study period. The ratio was high in 2011-12 and low in 2015-16, and in 2020-21, the average ratio stood at 0.024. Gross NPA to net advance ratio measures the quality of assets in a situation where the management has not provided provision for NPA. The provision coverage ratio is the measure that indicates the extent to which the bank has maintained conditions against the loan portfolio. The ratio shows the fluctuating trend and is satisfactory over the period. The total investment to Total asset ratio is a standard measure of the percentage of total assets locked up in investment. The average total investment to total advance ratio reveals that the bank invested around 40% of its assets on acquisition. However, in 2019-20 and 2020-21, they invested more than half of their holdings in investment.

Management Efficiency

The performance of Management capacity is qualitative and can be understood through the subjective evaluation of Management systems, organisation culture, control mechanisms etc. However, the power of the management of a bank can be measured through specific ratios of off-site evaluation of a bank. The capability of the administration to deploy its resources aggressively to maximise the income, utilise the facilities in the bank productively and reduce cost etc. This can be evaluated with the help of the following ratios.

Table 3: Management Efficiency.

YEAR	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Mean	S.D	C.V
EXp/Incom	81.92	80.95	85.7	85.67	86.09	89.91	88.56	87.44	85.07	79.47	84.97	3.54	4.16
TA/TD	60.74	61.98	63.66	65.46	65.7	61.61	52.93	52.72	54.74	57.56	56.71	4.93	8.25
Asst turnover %	0.107	0.105	0.102	0.109	0.112	0.113	0.114	0.11	0.104	.112	.1082	.052	4.7

Diversification %	4.92	4.21	5.78	4.27	3.06	3.54	3.14	3.37	3.39	4	3.968	0.87	21.9
EPE (Rs.)	27.0	32	36.91	45.04	61.4	59.5	68.2	75.5	78.29	80.42	56.45	19.89	35.2
BPE (Rs.)	355.	439.	504.8	635.7	806.2	1	3	7	958.	1061.	1121.	674.2	335.0
	8	9	9	5	6	790	74	1	26	49	99	9	9

Source: Authors Calculation

The total advances to total deposit ratio measures a bank’s competence to convert the deposit available with the bank into high earning advances. This ratio registered an increasing trend over the study period and reached its maximum of 89.91 during 2013-14 and declined to 80.95 in 2012-13. The average total advance to total deposit was 79.47. The asset turnover ratio indicates the total revenue earned for every rupee of the bank’s assets. The ratio shows an increasing trend in the initial years and declined at the end of the study period. The average asset turnover ratio was 10.92.

The diversification ratio measures banks’ income other than the interest income in total revenue. This ratio reveals fluctuating trend for the entire study period. The percentage decreased from 4.92 in 2011-12 to 4.21 in 2012-13. Subsequently, the ratio increased to 5.78 in 2013-14 and showed a decreasing trend in the study period. The average diversification ratio was 3.97%. Earning per employee ratio indicates the average profit generated per person employed by the bank. The ratio showed an increasing trend throughout the study period. The percentage increased from 27.08 in 2011-12 to 80.42 in 2020-21. The average earning per employee ratio was 674.299.

Earnings Quality

The earnings or profits are conventional parameters used for measuring financial performance. Higher-income reflects a lack of financial difficulties. The quality of earning is the very decisive factor that determines the ability of a bank to earn. It demonstrates the profitability, sustainability and growth in earnings. The accounting ratios used for measuring quality are as follows.

Table 4: Earning Quality Ratios

YEAR	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Mean	S.D	C.V
ROA %	0.71	0.67	0.67	0.61	0.63	0.63	0.45	0.46	0.58	0.7	0.61	0.91	14.8
ROE %	7.58	7.85	8.13	7.81	8.38	8.59	5.81	6.03	7.72	8.27	7.62	0.95	12.4
NIM	3.04	3.05	3.12	2.75	2.97	2.56	2.38	2.65	2.57	3.23	2.83	0.2	10.1
II/TI %	95.0	95.7	94.2	95.7	96.9	84.0	96.8	96.6	96.5	96.0	94.7	9	9
	8	9	2	3	4	7	6	1	9	1	9	3.86	4.5

Source: Authors Calculation

Table 4 states that the return on asset ratio is a profitability ratio which measures the bank’s efficiency in using its assets to generate net income. Shows fluctuating trends throughout the study period. The average ratio 0.611. The return on equity ratio measures the profitability of shareholders’ investment. It showed fluctuating trend throughout the study period.

Figure 2: Earnings Quality Ratios



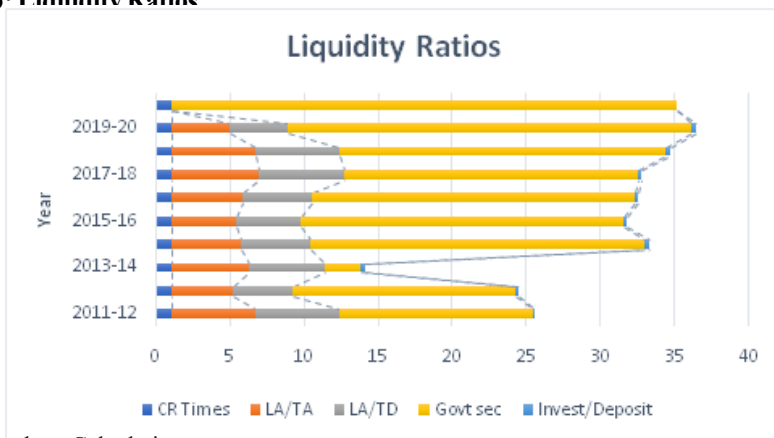
Source: Authors Calculation

The average return on equity ratio was 7.62% Net interest margin ratio is calculated as a percentage of interest-bearing assets. In the year 2012-13, the ratio was 3.04%. It became 3.05 during 2013-14 and decreased to 2.75 in 2015-16 and continued the trend over the period and increased to 3.27% during 2020-21. The average interest Income Total Income ratio was 96.01, above the average throughout the study period. Figure 2 depicts a pictorial depiction of all parameters in earnings quality throughout the years of study.

Liquidity Ratios

The liquidity ratio measures the ability of a bank to provide short-term obligations and loan commitments. Liquidity is the critical parameter in the banking sector as banks are considered liquidity creators in the market. If the liquidity management of a bank is not proper, it can adversely affect its performance of the banks. Figure 3 indicates that the current ratio registered a satisfactory trend. The highest current balance is 1.092 times recorded during 2013-14 and 2020-21 as the existing assets increased faster than current liabilities.

Figure 3: Liquidity Ratios



Source: Authors Calculation

The average current asset is 1.086. The liquid asset to total deposit ratio measures the liquidity available to the bank's depositors. The ratio registered a satisfactory trend during the entire study. The average liquid asset to total deposit ratio remains 4.18%. Govt. securities to Total asset ratio measures the amount of risk-free purchase invested in govt securities as a percentage of total support held by the bank. Govt securities to Total asset record a fluctuating trend for the entire study period. The highest growth rate is recorded in 2019-20, being 34.012, and the lowest ratio was found in 2016-17, being 2.34. The average Govt. securities to total asset ratio was 19.92. The short-term investment to deposit ratio designates the effectiveness of the management of UCB in converting their deposit to investment. The highest ratio is found in 2020-21, being 0.39%. The average short-term investment to short-term deposit ratio remains 0.254. Figure 3 depicts a pictorial depiction of all parameters in liquidity ratios throughout the years of study.

Policy & Research Implications

It is visible from the financial analysis of March 2020 that 357 urban cooperative banks (UCBs) had failed in the country, leading to a payment of Rs 4,903 crore in claims, including Rs 70.8 crore paid during FY20 and Rs 9.8 crore under the settlement policy³. Thus, liquidity of money is a primary concern; however, this particular study registered satisfactory liquidity parameters. The critical problem in these banks was their dual regulation by the state registrar of societies along with RBI⁴. So, a proper standard operating procedure shall be enacted to promulgate the smooth functioning of the UCBs.

The average loan loss cover maintained by the bank is more than two times its Gross NPA. The average operating expenditure to operating income ratio of 84.97 shows that the bank operates efficiently. The formation of committees like the Audit Committee and

Remuneration committee should be encouraged to be constituted to promote the corporatisation of the UCBs to streamline operations. Disclosures/ financial statement templates applicable to UCBs should be applicable. This will improve the transparency in the financial disclosures and help attract non-member investments from institutional investors to the banks.

Conclusion

Indian banks were more resilient during the pandemic, aided by the extraordinary policy initiatives by the RBI and Central and State Governments. The analysis shows that UCBs are financially viable and have adopted prudent financial management policies. The banks have managed this capital adequacy ratio well above the minimum standard of 100% fixed by RBI. The average leverage ratio is 10.77, above the standard set by RBI, i.e., 4.5%. As far as asset quality is concerned, the bank has shown significant performance. The average Net NPA to Net Advance Ratio is .024, and Gross NPA to net Advance ratio is 7.05%, at par with the proportions of commercial banks. The average 4.93 total advance to total deposit ratio shows that the bank is much more active in converting its deposit into promising advances. The average asset turnover ratio of 0.108 times indicates that the bank efficiently uses its assets to generate revenue. The average diversification ratio of 3.99 times suggests that the bank depends more on the interest income from lending operations than non-interest income. The average earning per employee is Rs. 56.45 lakhs per employee. The overall performance of the management was good. The overall earning capacity of the bank shows a good position.

Furthermore, the UCBs' corresponding share in bank deposits and advances is in the low single digits. But UCBs have much potential to provide inclusive banking services and credit access to the unbanked. This banking vacuum

³https://www.business-standard.com/article/economy-policy/deposit-insurance-urban-cooperative-banks-major-beneficiaries-shows-data-121073000036_1.html

⁴<https://www.thehindu.com/business/Industry/need-for-stricter-regulations-for-urban-cooperative-banks/article37955581.ece>

can be filled by the proper enhancement of UCBs. However, there are manifold trials and tribulations faced by smaller UCBs, which can be addressed by forming an umbrella organisation under the RBI as a self-regulatory body for the upliftment of the sub segment.

References

- Acharya, S. P. (2013). Evaluation of Performance of Women Urban Co-Operative Banks in Bangalore District: An Application of CAMEL Approach. SSRN Electronic Journal. <https://doi.org/10.2139/SSRN.2307262>
- Asher, M. G. (2007). Reforming governance and regulation of urban cooperative banks in India. *Journal of Financial Regulation and Compliance*, 15(1), 20–29. <https://doi.org/10.1108/13581980710726769/FULL/PDF>
- Aspal, P. K., & Nazneen, A. (2014). An empirical analysis of capital adequacy in the Indian private sector banks. *American Journal of Research Communication*, 2(11), 28-42.
- Bansal Rohit, & Mohanty Anoop. (2013). A Study on Financial Performance of Commercial Banks in India: Application of Camel Model. *Al-Barkaat Journal of Finance and Management*, 5(2), 18–35.
- Barra, C., & Zotti, R. (2019). Bank performance, Financial stability and market concentration: evidence from Cooperative and non-co-operative banks. *Annals of Public and Cooperative Economics*, 90(1), 103–139. <https://doi.org/10.1111/apce.12217>
- Chander, R., & Chandel, J. K. (2010). Financial Viability of an Apex Cooperative Credit Institution — A Case Study of the HARCO Bank: <http://Dx.Doi.Org/10.1177/097324701000600206>, 6(2), 61–70. <https://doi.org/10.1177/097324701000600206>
- CHAO, C.-M., & LIN, H.-C. (2007). Problem loans and bank efficiencies: Information Sciences 2007, 376–382. https://doi.org/10.1142/9789812709677_0053
- Chipalkatti, N., Ramesha, K., & Rishi, M. (2007). Depositor Discipline, Regulatory Control, And A Banking Crisis: A Study Of Indian Urban Cooperative Banks. *Annals of Public and Cooperative Economics*, 78(4), 567–594. <https://doi.org/10.1111/J.1467-8292.2007.00344.X>
- Gupta, S., & Verma, R. (2008). Comparative Analysis of Financial Performance of Private Sector Banks in India: Application of CAMEL Model. *Journal of Global Economy*, 4(2), 160–180. <https://doi.org/10.1956/jge.v4i2.124>
- Gupta, S., & Verma, R. (2008). Comparative Analysis of Financial Performance of Private Sector Banks in India: Application of CAMEL Model. *Journal of Global Economy*, 4(2), 160–180.
- Kaur, H. V. (2010). Analysis of Banks in India— A CAMEL Approach: <http://Dx.Doi.Org/10.1177/097215091001100209>, 11(2), 257–280. <https://doi.org/10.1177/097215091001100209>
- Kaur, J., Kaur, M., & Singh, S. (2015). Financial performance analysis of selected public sector banks: A CAMEL Model approach. *International Journal of Applied Business and Economic Research*, 13(6), 4327–4348.
- Kaur, P. (2015). A Financial Performance Analysis of the Indian Banking Sector Using CAMEL Model.
- Kouser, R., & Saba, I. (2012). Gauging the financial performance of banking sector using CAMEL model: Comparison of conventional, mixed and pure Islamic banks in Pakistan. *International Research Journal of Finance and Economics*, 82(December 2018), 67–88.
- Kumar, V., & Malhotra, B. (2017). A Camel Model Analysis of of Private Banks in India. *EPRA International Journal of Economic and Business Review*, 5(7), 87–93.
- Maheshwara. R & K.V.N. Prasad. (2010). Evaluating the performance of Regional Rural Bank: an application of Camel

- Model. *Pakistan Journal of commerce and social science*, (4), 2309-8619.
- Majumder, Md. T. H., & Rahman, M. M. (2017). A CAMEL Model Analysis of Selected Banks in Bangladesh. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.3068004>
- Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks. *Future Business Journal*, 4(1), 84–93. <https://doi.org/10.1016/J.FBJ.2017.12.002>
- Mondal, A., & Ghosh, S. K. (2012). Intellectual capital and financial performance of Indian banks. *Journal of Intellectual Capital*, 13(4), 515–530. <https://doi.org/10.1108/14691931211276115/FULL/PDF>
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International journal of economics and financial issues*, 3(1), 237-252
- Prasad, K. V. N., & Ravinder, G. (2012). A camel model analysis of nationalized banks in India. *International Journal of Trade and Commerce*, 1(1), 23–33.
- Ramu, N. (2009). Dimensions of Non-performing Assets in Urban Cooperative Banks in Tamil Nadu: [Http://Dx.Doi.Org/10.1177/097215090901000209](http://Dx.Doi.Org/10.1177/097215090901000209), 10(2), 279–297. <https://doi.org/10.1177/097215090901000209>
- Reddy, M., & Prasad, K. (2011). Evaluating Performance of Regional Rural Banks: an Application of Camel Model. *Journal of Arts, Science and Commerce*, 6, 61–67.
- Salem, J., & Zaidanin, A. (2020). A Study on Financial Performance of the Jordanian Commercial Banks using the CAMEL Model and Panel Data Approach. *International Journal of Finance & Banking Studies* (2147-4486), 9(4), 111–130. <https://doi.org/10.20525/IJFBS.V9I4.978>
- Sathye, M. (2003). Efficiency of banks in a developing economy: The case of India. *European Journal of Operational Research*, 148(3), 662–671. [https://doi.org/10.1016/S0377-2217\(02\)00471X](https://doi.org/10.1016/S0377-2217(02)00471X)
- Sayed, G. J., & Sayed, N. S. (2013). Comparative Analysis of Four Private Sector Banks as per CAMEL Rating: [Http://Dx.Doi.Org/10.1177/2278533720130204](http://Dx.Doi.Org/10.1177/2278533720130204), 1(2), 31–46. <https://doi.org/10.1177/2278533720130204>
- Sharma, S., & Patel, A. K. (2019). A study on performance rating of SBI Group: Camel model analysis. *TRANS Asian Journal of Marketing & Management Research (TAJ MMR)*, 8(5), 36. <https://doi.org/10.5958/2279-0667.2019.00019.1>
- Tan, Y., & Floros, C. (2013). Risk, capital and efficiency in Chinese banking. *Journal of International Financial Markets, Institutions and Money*, 26(1), 378–393. <https://doi.org/10.1016/J.INTFIN.2013.07.009>
- Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal*, 8(3), 358–385. <https://doi.org/10.1108/SAMPJ-09-2016-0066/FULL/PDF>
- Zedan, K. A. & Daas, G. (2017). Palestinian Banks Analysis Using CAMEL Model. *International Journal of Economics and Financial Issues*, 7 (1) 351-357. <https://dergipark.org.tr/en/pub/ijefi/issue/32002/353201>