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Evaluating Performance of The District Central Co-Operative Bank
- An Application of Camel Model

Introduction:

Developed in the 1970s by the three federal banking supervisors of the U.S (the federal Reserve, the FADIC and the OCC) as part of the regulators, "Uniform Financial Institutions Rating System", to In India the economic growth of India economy flourished with the introduction of the era of LPG (generally known as liberation, privatization and globalization). "Financial sector in general and banking sector in particular is one of the vital ingredients for the economic development of the country. A resilient and vibrant banking system is very crucial for sound and accelerated economic growth." For this reason it can be said that the growth of economy depend on financial soundness of banking sector. Supervision of banking unit can help to make them financial sound.

Co-operatives account for a relatively small share in the bank-dominated Indian financial; however, given their geographic and demographic outreach, they hold a key position in the system. Geographically, co-operatives have been instrumental in extending formal financial services to villages and small towns in India. Demographically, these institutions have enabled access to financial services to low and middle income groups in both rural and urban areas. Notwithstanding their role in enhancing the inclusiveness of the financial system, these institutions have been marred by weak financial health, partly on account of operational and governance-related concerns. Hence, there has been an ongoing effort to revitalize these institutions by means of various development and regulatory initiatives. In the case of urban co-operatives, the reserve bank of India has moved towards a more unified regulatory framework consequent to its vision document of 2005 aimed at creating a consolidated and stronger urban co-operative banking sector. As regards the short-term arm of rural cooperatives, the application of prudential regulations followed by recapitalization has paved the way towards improving the financial health of these institutions.

Significance of the study:

CAMEL Model of rating was first proved a convenient summery of bank condition at the time of its on-site examination. The bank were judged on five different components under the acronym C-A-M-E-L = Capital adequacy, Asset quality, Management efficiency, Earning quality and Liquidity.

A resilient and vibrant banking system is very crucial for sound and accelerated economic growth. The present research aims to familiarize the readers with basic knowledge about banking supervision. Of which the

CAMEL framework is the main measure to evaluate the overall safety and soundness of a bank. It also provides the significance of the CAMEL rating system in banking examination. the first objective helps frame the research questions as follows :

(1) Why does the CAMEL rating system play a crucial role in banking supervision?
(2) What are the benefits for co-operatives applying the CAMEL framework in evaluating the banks' performance?

Objectives of the study:

The main objectives of the research study are as follows :

- To analyze the financial position and performance of the Sabarkantha District Central Co-operative Bank, Himatnagar using the CAMEL Model.
- To give recommendation and suggestion for improvement of performance and financial position of Sabarkantha District Central Co-operative Bank, Himatnagar.

Profile of the bank:

The Sabarakantha District Central Co-operative bank Ltd. Is located in Himatanagar taluka in Sabarkantha, Gujarat. The bank was initially formed by the nair –vellalla communities of the area, which was later established as co-operative bank in the year 1959, registered under the Co-operative societies act ,1904. The area of operation of the bank is certified to the revenue taluka of Himatnagar.

Research Methodology:

The study is descriptive in nature and it based on secondary data drawn from the annual report of the SDCCB. For the purpose of analysis, the evaluation is done by using is done by using CAMEL parameters, the latest model for financial analysis of bank. For applying this model, five main dimensions of the performance (Capital adequacy, Assets quality, Management capability, Earning capacity and Liquidity) are assessed using ratio analysis. For that purpose the financial ratios are divided into five main categories.

C	Capital Adequacy Ratios:	(i) Capital Adequacy Ratios, (ii) Dept – Equity ratio, (iii) Proprietary ratio, (iv) Interest Coverage Ratio, (v) Government Securities To Total Investment Ratio.
A	Assets Quality Ratios:	(i) Net NPA to Net Advances, (ii) Gross NPA to Net Advances, (iii) Provision Coverage (iv) Total Advances to Total Assets Ratio, (v) Total Investment to Total Assets Ratio.

M	Management Capability Ratios:	(i) Expenditure to Income Ratio, (ii) Total Advances to Total Deposits ratio, (iii) Assets Turnover ratio, (iv) Diversification Ratio, (v) Earning Per Employee, (vi) Business per Employee.
E	Earnings Ratios:	(i) Return on Assets, (ii) Return on Equity, (iii) Spread Ratio, (iv) Net Interest Margin, (v) Operating Profit to Working Found Ratio, (vi) Interest Income to total Assets Ratio.
L	Liquidity Ratios :	(i) Current Ratio, (ii) Quick Ratio, (iii) Liquid Assets to total Assets Ratio, (iv) Liquid Assets to total Deposits Ratio, (v) Government Securities to Total Assets Ratio, (vi) Investment to Deposits.

Three statistical techniques i.e. Mean, Standard Deviation and Co- efficient of variation have also been used as supportive techniques.

Scope of the Study:

The scope of the study is limited to only one DCCB named Sabarkantha District Central Co-operative Bank Ltd., Himatnagar. To check the financial position of this bank, the data of 5 years from the Co-operative Bank year 2010-11 to 2014-15 are considered.

Data Analysis and Interpretation:

Capital Adequacy:

In the volatile economic environment the capital is the only protection that any of the banks can have with them. By using their capital, bank can honor their obligations even in a case of financial crises of breakdown. Therefore depositors are keen to know the risk perception of the institute. Capital adequacy decided to great extent that how well a bank can cope with the unexpected losses. Following ratios has been taken into consideration to judge the capital adequacy of SDCCB in Gujarat state.

Table :1 Capital Adequacy of SDCCB

	10-11	11-12	12-13	13-14	14-15	Mean	S.D.	C.V.
1. CAR (%)	7.80	9.00	7.82	8.14	7.96	8.144	0.497	6.11
2. D/E (Times)	14.16	13.08	13.42	13.76	16.55	14.194	1.377	9.70
3. Proprietary (%)	3.68	4.63	7.03	8.35	8.95	6.528	2.299	35.23
4. OP/Int. (Times)	1.57	1.52	1.48	1.45	1.50	1.504	0.045	2.99
5. G-sec/Inv. (%)	65.03	73.79	88.66	89.32	62.98	75.956	12.574	16.55

(Data Source: Annual Report of SDCCB Ltd. From 2010-11 to 2014-15)

Table 1 clearly reveals that average CAR was far above the standard norms of 9.00% which is appreciable. Apart from that the CAR remained above 8.14% all through the study period. The average Dept – Equity ratio was too above the ideal of 100 times which reveals that long term dept of the bank was 14.19 time the shareholder's equity. The average Proprietary ratio was 8.95% which is also worth appreciable. Interest Coverage Ratio registered very fluctuating trend during the entire study period. It decreased from 1.18 times in 2010-11 to 1.13 times in 2014-15. The average ICR of 1.18 times disclose that the bank was not be considered as good proportion of operating income to beat its obligations and to the extent the bank may not be considered as solvent. Government Securities to Total Investments Ratio measures the amount of risk free assets invested by a bank in government securities as a percentage of the total investments held by the bank. It the beginning of the study, the ratio increased from 65.03% in 2010-11 to 88.66% in 2012-13 in spite of the increased considerably. In the year 2014-15 the ratio decreased to 62.98% from 89.32% in 2013-14 in spite of the increment in the amount of government because the amount of total investment. The average government to total ratio of 75.96% indicates that the banks have shown concern on investing much amount of government securities.

Assets Quality:

The term 'Assets Quality' and its management determines to a great extent the growth and profitability of a firm. This is because, the deteriorating value of assets directly also affects other areas because the loan losses are generally written off against capital. Apart from this it also hampers profitability as the provision has to be made on Gross NPAs. So at the end of the day quality of assets jeopardizes the earning capacity of the bank. The following ratios were calculated to judge the assets quality of the SDCCBs of Gujarat state.

Table :2 Assets quality of SDCCB

	10-11	11-12	12-13	13-14	14-15	Mean	S.D.	C.V.
1. N.NPA/N.Adv. (%)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
2. G.NPA/N.Adv. (%)	5.39	3.63	2.47	2.11	1.74	3.068	1.479	48.198
3. Provision coverage (%)	1.02	1.24	1.52	1.76	1.79	1.466	0.333	22.734
4. T.Adv./T.Asst.(%)	49.53	51.33	55.97	60.96	62.50	56.058	5.712	10.189
5. T.Invst/T.Asst. (%)	19.07	14.62	8.63	8.15	10.85	12.264	4.583	37.367

(Data Source: Annual Report of SDCCB Ltd. From 2010-11 to 2014-15)

Table 2 indicates that Net NPA to Net Advances ratio remained at 0.00% throughout study period as the amount of net NPAs was 0.00 lac all through the study period which is quite appreciable as it clearly indicates that the management of above SDCCBs is very effective in providing loans to the customers. Gross NPAs to net advance ratio is a measure of the quality of assets in a situation, where the management has not provided for loss on NPAs. This ratio reveals decreasing trend throughout the study period. Provision coverage ratio is the measure that indicates the extent to which the bank has provided against the troubled part of its loan portfolio. The worst condition was found regarding provision coverage ratio as it remained far below the generally accepted standards as well as the consolidated average. The ratio depicted fluctuating trend during the entire study period. The Total Advances to Total Assets Ratio is a measure of a bank's aggressiveness in lending. The average total advances to total assets ratio revels that the management of SDCCB had been effective to convert its deposits into loans and advances which is quite appreciable. Total Investment to Total assets ratio is a standard measure to know the percentage of total assets locked up in investment. The average total investment to total advances ratio was 45.47% which clearly reveals that the bank invested approximately half of its assets in investment.

Management Efficiency:

Sound management is one of the most important factors behind Performance of any Bank. Management efficiency of bank includes its administrative ability to react in diverse circumstances. The term management efficiency involves the capabilities of management in generating business and in maximizing profits. To analyses the possible dynamics of management efficiency affecting the financial performance of the banks, the following six ratios are calculated in the present study.

Table : 3 Management Efficiency of SDCCB

	10-11	11-12	12-13	13-14	14-15	Mean	S.D.	C.V.
1. Exp./Inc (%)	90.85	86.37	88.46	89.79	89.37	88.968	1.687	1.896
2. T.Adv./T.Depo. (%)	55.56	58.55	65.77	71.54	74.08	65.1	8.007	12.300
3. Asst. turn Over	1.56	1.50	1.72	1.75	1.74	1.654	0.116	6.993
4. Diversification(%)	2.32	2.39	2.18	2.79	2.93	2.522	0.321	12.748
5. EPE (Rs.)	1.27	2.36	2.42	2.48	2.53	2.212	0.530	23.980
6. BPE (Rs.)	187.66	212.88	230.82	281.96	325.34	247.732	55.461	22.388

(Data Source: Annual Report of SDCCB Ltd. From 2010-11 to 2014-15)

Table 3 clearly states that the average operating expenditure to operating income ratio was 89.37% which indicates that out of 100 Rs of operating income bank's operating expenses is 89.37 Rs. Total advances to total deposits ratio is a measure of bank's competence to convert the deposits available with the bank into high earning advances. This ratio registered decreasing trend for the first four years of the study period while afterwards it reveals fluctuating trend. The average total advances to total deposits ratio was 74.08%. Assets turnover ratio indicates the total revenue earned for every rupee of assets that bank owns. The ratio decreased from 1.5 times in 2011-12 to 1.56 times in 2010-11. In the year 2014-15 the ratio decreased from 1.74 times in 2013-14 to 1.75 times as the amount of total assets rose at the higher rate than that of net income. The average assets turnover ratio remained on 1.65 times. Diversification ratio is the measure of banks income other than the interest income in total income. This ratio reveals fluctuating trend for the entire study period. The ratio increased from 2.39% in 2011-12 to 2.32% in 2010-11. Subsequently the ratio decreased from 2.18% in 12-13 to 2.39% in 2011-12. The average diversification ratio was 2.52% Earning per employee ratio indicates the average profit generated per person employed by a bank. This ratio showed fluctuating trend throughout the study period. The ratio increased from Rs.2.36 lacs in 2011-12 to Rs. 1.27 lacs in 2010-11 as on one hand the amount of net profit increased from 2.53 lacs in 2014-15 to 2.48 lacs in

2013-14. The average earning per employee ratio was Rs. 2.21 lacs. Business per employee ratio indicates the efficiency of bank in terms of doing business with lesser number of employees. Total business per employee ratio reveals constant increasing trend for the entire study period except the year 2011-12 in which it increased from Rs.212.88 lacs in 2011-12 to Rs.187.66 lacs in 2010-11. In the year 2014-15 the ratio increased from Rs. 325.34 lacs in 2013-14 to Rs.281.96 lacs. The average business per employee ratio was Rs.247.732 lacs.

Earning Quality:

This parameter lays importance on how a bank earns its profits. The quality of earning is very important decisive factor that determines the ability of a bank to earn consistently. It basically determines the profitability of the bank. It also explains the sustainability and growth in earning in the future. Following six ratios were calculated for evaluating the earning quality of banks.

Table :4 Earning Capacity of SDCCB

	10-11	11-12	12-13	13-14	14-15	Mean	S.D.	C.V.
1. ROA (%)	10.55	11.44	11.75	11.18	9.67	10.918	0.825	7.562
2. ROE (%)	3.68	4.63	7.03	8.34	8.95	6.526	2.297	35.206
3. Spread (%)	3.48	3.36	3.59	3.40	3.06	3.378	0.198	5.870
4. NIM (%)	9.88	10.18	11.35	11.17	9.38	10.392	0.845	8.129
5. OP/WF (%)	0.91	1.44	1.38	1.14	0.99	1.172	0.233	19.914
6. II/TI (%)	97.68	97.63	97.82	97.21	97.71	97.61	0.234	0.240

(Data Source: Annual Report of SDCCB Ltd. From 2010-11 to 2014-15)

Table 4 clearly reveals that Return on Assets Ratio is a key profitability ratio which measure bank's efficiency is using its assets to generate net income. Return on assets ratio shows fluctuating trend throughout the study period. In the beginning of the study, the ratio increased form 11.44% in 2011-12 to 10.55% in 2010-11. In the year 2012-13 the ratio again increased from 11.75%. In the year 2014-15 the ratio decreased from 9.67% to 11.18% in 2013-14. Average return on assets ratio of SDCCB was 10.92%. Return on Equity Ratio is a key profitability ratio for investors which measure the profitability of shareholder's investments. Return on equity ratio showed fluctuating trend throughout the study period. The ratio increased from 4.63% in 2011-12 to 3.68% in 2010-11. Afterwards the ratio suddenly increased from 8.95% in 2014-15 to 8.34% in 2013-14. The average return on equity ratio was 6.53%. Spread is the difference between the interest earned and interest paid. Spread ratio is expressed as a percentage of total assets. This is a key profitability ratio especially in banking unit which measures bank's core income. Spread ratio registered fluctuating trend during the entire study period. The ratio decreased from 3.36% in 2011-12 to 3.48% in 2010-11. In the year 2012-13 the ratio increased from 3.59% to 3.36% in 2011-12. The average spread ratio was 3.38%. Net interest Margin Ratio is calculated as a percentage of interest bearing assets. In the year 2011-12 the ratio increased from 10.18 in 2010-11 to 9.88%. In the year 2014-15 the ratio decreased from 9.38% to 11.17 in 2013-14. Operating Profit to Working Fund Ratio indicates that how much a bank can from its operations for every rupee spent on working fund. Operating profit to working fund ratio registered fluctuating trend throughout the study period. In the beginning of the study period the ratio increased from 1.44% in 2011-12 to 0.91% in 2010-11. The ratio decreased from 0.99% in 2014-15 to 1.14% in 2013-14. The average operating profit to working fund ratio was 1.17%. Interest Income to total ratio indicates the ability of the bank in generating income from its lending. The ratio decreased from 97.63% in 2011-12 to 97.68% in 2010-11. In the year 10-11 the ratio increased from 97.82% in 2012-13 to 97.63% in 2011-12. The ratio again increased from 97.71% in 2014-15 to 97.21% in 2013-14. The average interest income ratio of SDCCB was 97.61%.

Liquidity:

Liquidity is the bank's capacity to meet its short term obligations as well as loan commitments. Liquidity is most important parameter especially in banking sector as banks are considered as liquidity creator in the market. Therefore, if the liquidity management of a bank is not proper, it can adversely affect the performance of the banks. Following liquidity ratios were taken for the study.

Table :5 Liquidity of SDCCB

	10-11	11-12	12-13	13-14	14-15	Mean	S.D.	C.V.
1. CR (Times)	0.88	1.01	2.11	1.95	0.53	1.296	0.695	53.624
2. QR (Times)	7.98	8.65	3.91	4.44	11.88	7.372	3.275	44.427
3. LA/TA (%)	29.97	32.37	33.10	28.17	24.12	29.546	3.610	12.217
4. LA/TD (%)	0.34	0.37	0.39	0.33	0.29	0.344	0.038	11.183
5. G-Sec/TA (%)	12.40	10.79	7.65	7.28	6.83	8.99	2.462	27.390
6. Inv./Depo. (%)	19.07	14.62	8.63	8.15	10.85	12.264	4.583	37.367

(Data Source: Annual Report of SDCCB Ltd. From 2010-11 to 2014-15)

Table 5 indicates that the Current Ratio registered fluctuating trend during the entire study. The highest current ratio was recorded in 2012-13 being 2.11 times as the amount of current assets increased at faster rate than the currents liabilities. The average current was 1.3 times. Quick ratio registered fluctuating trend for the entire study period. The lowest ratio was found in the year 2012-13 being 3.91 times. The highest quick ratio was found in the year 2014-15 being 11.88 times. Liquid Assets to total Assets Ratio also indicates the overall liquidity of the unit by indicating the proportion of liquid assets to total assets. The lowest ratio was found in the year 2014-15 being 24.12% as on one hand amount of liquid assets decreased whereas on the other hand the amount of the total assets increased. The highest liquid assets to total assets ratio was found in the year 2012-13 being 33.1% as in this was the only year in which the amount of liquid assets increased considerably. Liquid Assets to total Deposits Ratio measures the liquidity available to the depositors of the bank. This ratio remained 0.34%. Government Securities to total Assets Ratio measures the amount of risk free liquid assets invested by a bank in government a bank in government securities as a percentage of the total assets held by the bank. Government Securities to total assets ratio showed fluctuating trend for the entire study period. This highest growth rate was registered in the year 2010-11 being 12.40%. The lowest ratio was found in the year 2014-15 being 6.83%. The average government securities to total assets ratios remained on 8.99%. Short Term Investments to short Term Deposits Ratio designates the effectiveness of management of SDCCBs to convert their deposits in to investments. The highest ratio was found in 2010-11 being only 19.07 because in the amount of short term investment was highest through the study period. The average short term investment to short term deposits ratio remained on 12.26%.

Conclusions:

The overall state of capital adequacy of SDCCB was satisfactory in term of capital adequacy ratio and dept equity ratio but the average interest coverage ratio of 1.5 times disclosed that the bank was not able to generate good proportion of operating income to beat its obligations and to that extent the bank may not be considered as solvent.

Overall it can be said that the assets quality of SDCCB was satisfactory in term of Net NPA to Net Advances Ratio, Gross NPA to Net Advances Ratio and total investment to total assets ratio as not only the amount of gross NPA was low but also the amount of net NPA was nil. This indicates the active performance of the recovery departments of SDCCB. Moreover bank invested half of its assets in investments which guard against loan loss. On the other hand provision coverage ratio was unsatisfactory being as average of 1.47% only.

From the average operating expending to operating income ratio of 88.97%, it can be said that the depositors as well as lenders of these three banks can have clear view that these banks are being run efficiently. The average 65.10% of total advances to total deposits ratio reveals that the bank is not much active to convert their deposits into profitable advances. The average assets turnover ratio remained on 1.65 times indicating that bank is using its assets efficiently. The average diversification ratio of 2.52% indicates that the bank is not depended on non interest income like free based income and the large portion of income is made up of income from lending activities which is appreciable. The average earning per employee ratio of Rs.2.21 lacs indicates that the bank is earning 2.21 lacs per employee. Generally this ratio is useful when compared with other banks. Thus the overall state of management efficiency was also good.

The average ROA of 10.92% was not satisfactory and form the reason the bank needs to increase the earning. The ROA and ROE are useful when compare with other bank. The average spread of 6.53% Indicates that the earning capacity of SDCCB is quite good. NIM a key profitability ratio for bank indicates that the bank's earning are good. The average operating profit to total income ratio of 97.61% indicates that in the SDCCB interest income to total income ratio is appreciable but on the other hand the higher ratio also indicates the greater dependence of the bank on the bank on interest income. Thus, conclude it can be said that the overall earning capacity of SDCCB was not bad.

The average current of 1.3 times and average quick ratio of 7.37 times clearly indicates that the bank has failed to preserve short term liquidity as the both the ratio remained far upper below the standard norm of 2:1 and 1:1 respectively. The liquid assets to total assets ratio was totally insufficient for the bank to meet its short term obligations. It denotes that the bank failed to preserve its short term solvency which is hazardous to the financial health and survival. The average liquid assets to total deposits ratio 0.34 indicates that the bank has failed to preserve its short term solvency which may be hazardous for the bank to repay the deposit of depositors. Ultimately it can be conclude that the overall state of liquidity was satisfactory.

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