

Comparative Study of Operational Performance Analysis of District Central Cooperative Bank through CAMEL Model (Haryana, Punjab and Himachal Pradesh)

Dr. Ramandeep Kaur¹

Abstract

The DCCBs focus on rural credit and upliftment of rural people by making them self employed and through other means. Their function can be considered as money pooling for the PACS. They get refinance from State Cooperative Banks. These banks provide money to member societies within the limits of the borrowing capacity of societies. They additionally lead all the matter of a joint stock bank. The present study is an attempt to Comparative analysis of financial and operational performance of DCCBs in Haryana, Punjab and Himachal Pradesh. The main objectives of the study are to examine financial performance and operational performance of the banks. For this purpose CAMEL model have been used besides other statistical techniques to analyse financial and operational performance of this bank. Through CAMEL model capital adequacy, asset quality, management efficiency, earning quality and liquidity level are evaluated. After identifying the weaknesses through study, significant suggestions have been given.

(Key Words: Financial Performance, Operational Performance, Capital Adequacy, Asset Quality, Earning Quality, Liquidity Position and Bankruptcy)

1. Introduction:

A. District Central Cooperative Banks in Haryana: In Haryana DCCBs go about as middle institutions for short and medium-term cooperative credit structure. These banks are functioning as a connection between PACSs in Haryana and HARCO Bank. There were 19 Central Coop. Banks at District head quarters with their 607 branches and 718 PACS/CS working over the state. **District Central Cooperative Banks in Punjab:** In Punjab, DCCBs go about as mediator institutions for cooperative credit structure. These banks are functioning as a connection between PACSs in Punjab and PSCB. There were 20 Central Coop. Banks at District level working across the state. **District Central Cooperative Banks in Himachal Pradesh:** Himachal Pradesh, DCCBs go about as delegate foundations for cooperative credit structure. These banks are filling in as a connection between PACSs in Himachal and HPSCB. There were 2 Central Coop. Banks at District level Jogindra and Kangra working across the state. (NAFSCOB)

2. REVIEW OF LITERATURE

Veni (2004) studied the capital adequacy requirement of banks and the measures adopted by them to strengthen their capital ratios. The author highlighted that the rating agencies give prominence to Capital Adequacy Ratios of banks while rating the bank's certificate of deposits, fixed deposits and bonds. They normally adopt CAMEL Model for rating banks. Thus, Capital Adequate is considered as the key element of bank rating.

Narayanasamy and Ramachandran (1987) suggested that the profits and profitability can be increased if proper attention is paid on areas like recovery, deposit mobilization, branch expansion, reduction in expenses and building of more owned funds and scientific management of the funds. **Pathania and Singh (1998)** Studied performance of HP State cooperative bank has improved in term of membership drive, share capital, deposit mobilization, working capital and advances. But recovery performance was unsatisfactory and over dues had increased sharply. They suggested that in the context of globalization and liberalization of economy, cooperative banks should ensure their business on healthy lines by having professional manpower, training and a sense of competition. **Singh (2006)** Studied the NPA status and found that on March 31, 2003, DCCB Jalandhar had managed to bring the ratio of overdues to total loans to 0.80 per cent whereas DCCB Ferozpur and DCCB Gurdaspur stood at a distressingly high ratio of 21 per cent and 20 per cent respectively. As far as arresting overdues was concerned, the position of an average DCCB in Punjab was far better than the position of an average DCCB at the national level, witnessing a better recovery performance than its

peers at all India level. **Shah (2007)** conducted a case study of Sangli and Buldana District Central Co-operative Banks regarding the financial health of credit cooperatives in Maharashtra and found NPAs or overdues as the main factors for deterioration in health of these Banks. The study revealed that both these banks showed a decline in their financial health and economic viability during the late nineties as against the early nineties period. **Natarajan (2007)** Found that poor funds management put many of the service co-operative banks in Kerala to incur loss and many of them fail to generate profit in carrying on their non-banking business. **Narayanrao (2017)** Evaluated the data of 5 years are analyzed by CAMEL Model of Saraswat Co-operative Bank Ltd. It can be concluded that financial soundness & overall performance of Saraswat Co-operative Bank Ltd. was satisfactory during the study period. **Bhatia (2013)** evaluated the non performing advances of DCCBs of Punjab for the period 2001-2009. It concluded that the position of DCCBs in terms of nonperforming assets was better than the DCCBs on all India level but position was not good when compared with all India NPAs level of commercial banks. The researcher further suggested that DCCBs should establish separate cell for NPA recovery.

3. Objectives of the Study:

The study under consideration proposes to achieve the following objectives:

1. To scan and analyse the comparative operational performance of DCCBs in Haryana, Punjab and Himachal Pradesh.
2. To provide suggestions to overcome and operational weaknesses in these banks.

4. Research Methodology:

A. Type of Research and Data Collection: The present study is analytical and descriptive in nature. The data has been collected from secondary sources, i.e. Annual Financial Statements of the Bank, Research Journals, Financial Reports, Reports published by Government, e-newspapers etc. The data has been taken for five years i.e. from 2012-2013 to 2016-2017.

B. Hypothesis of the study:

H₀₁: There is no significant difference in the operational efficiency of DCCBs in Haryana, Punjab and Himachal Pradesh during the study period.

C. Statistical Tools and Techniques:

The CAMEL Model and Z-Score model have been applied besides ratio analysis and statistical techniques like- t-test and Anova.

a) CAMEL Model:

The composite ratings are assigned in the model in terms of 1-5 numerics. The number 1 indicates the highest rating, strongest performance, least degree of supervision concern, and sound health, while 5 indicates lowest rating, inadequate performance and weak health of bank and so receiving highest degree of supervisory concern.

CAMEL Model – Efficiency Parameters

Sr. No.	Efficiency Parameters	Measurement Ratios	Rating (on a five point scale)
1	Capital Adequacy	Risk weighted capital to Assets	5 = 1-5, 4 = 6-10, 3 = 11-15, 2 = 16-20, 1 = more than 20
2	Asset Quality	NPA to Advances	5 = more than 11, 4 = 8-10, 3 = 5-7, 2 = 2 - 4, 1 = less than 1
3	Management	Net Profit per Employee	5 = less than 1, 4 = 1 - 2, 3 = 2 - 3, 2 = 3 - 4, 1 = more than 4

4	Earning Quality	Return on Assets	5 = 0-0.5, 4 = 0.6-1.0, 3 = 1.1-1.5, 2 = 1.6-2.0, 1 = more than 2.0
5	Liquidity Position	Cash to Deposit	5 = less than 5, 4 = 7 - 9, 3 = 10-12, 2 = 13-15, 1 = more than 15

5.1 Operational Performance of DCCBs (District Central Cooperative Banks)

In three tier structure of cooperative credit institutions, the states have district central cooperative banks at the district level. The DCCBs focus on rural credit and upliftment of rural people by making them self employed and through other means.

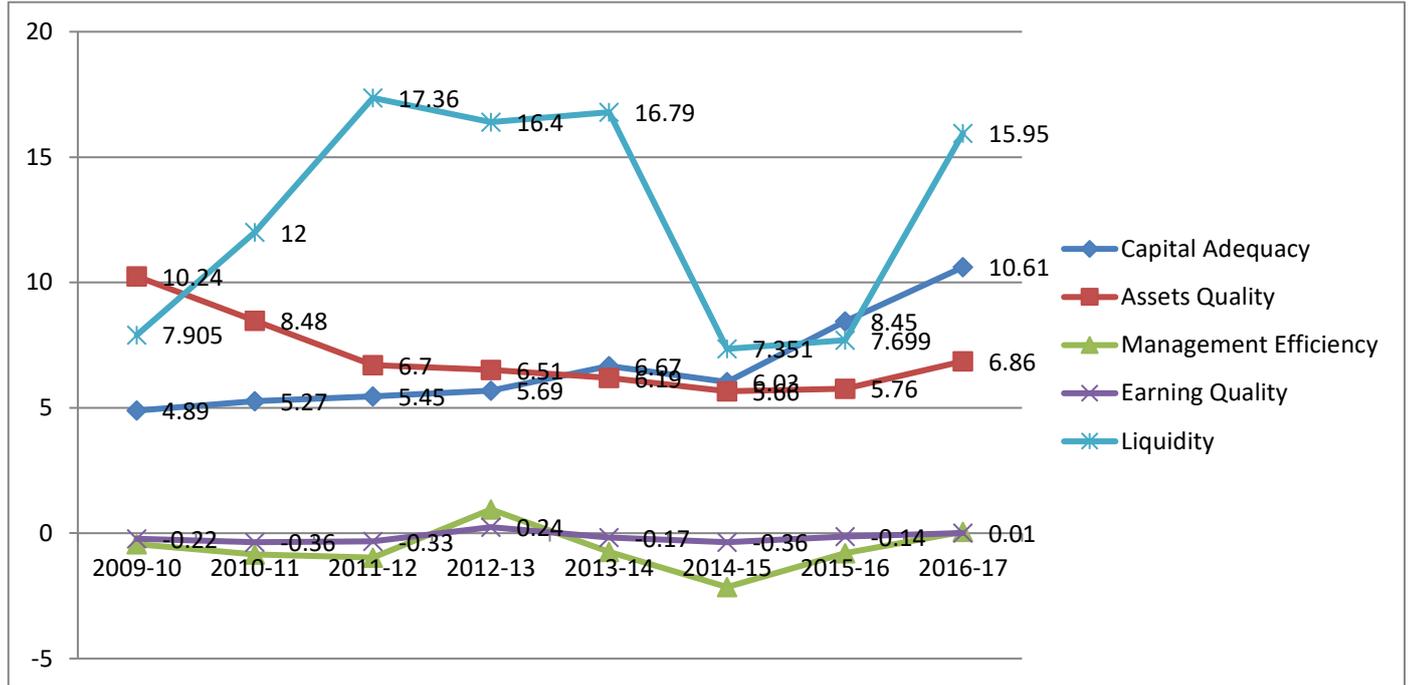
5.1. A. Operational Performance Analysis of DCCBs Haryana Bank: “In Haryana, DCCBs act as mediator institutions for short & medium-term cooperative credit structure. These banks are working as a link between PACSs in Haryana and HARCO Bank. There were 19 Central Coop. Banks at District head quarters with their 607 branches and 718 PACS/CS working across the state as on 31st March 2017. The data provided in table 5.3. A. highlight the operational performance analysis of the DCCB Haryana is made through CAMEL Model”. (Annual Report of DCCBs Haryana)

Table: 5.1. A. Operational Performance Analysis through CAMEL Model of DCCBs Haryana (Year (2009-17))

Year	Capital Adequacy	Assets Quality	Management Efficiency	Earning Quality	Liquidity
2009-10	4.89(5)	10.24(4)	-0.43(5)	-0.22(5)	7.9(4)
2010-11	5.27(5)	8.48(4)	-0.84(5)	-0.36(5)	12.0(3)
2011-12	5.45(5)	6.7(3)	-0.96(5)	-0.332(5)	17.36(1)
2012-13	5.69(5)	6.51(3)	0.95(5)	0.24(5)	16.40(1)
2013-14	6.67(4)	6.19(3)	-0.75(5)	-0.17(5)	16.78(1)
2014-15	6.03(4)	5.66(3)	-2.14(5)	-0.36(5)	7.35(4)
2015-16	8.45(4)	5.76(3)	-0.80(5)	-0.14(5)	7.69(4)
2016-17	10.61(3)	6.86(3)	0.057(5)	0.01(5)	15.95(1)
Mean	6.63	7.05	-0.61	-0.16	12.68
S.D	1.95	1.55	0.88	0.20	4.46
t-value	0.004(0.997)	0.000 (1)	-0.030 (0.977)	-0.069 (0.94)	0.006 (0.99)

(Source: Calculated from secondary data in Financial Reports of NAFSCOB and DCCB Haryana)

Figure: 5.3. A. Graphical Presentation of CAMEL Values of DCCBs Haryana



It is observable from the above table and figure 5.1. A. that DCCBs Haryana bank has been performing well on liquidity position in the year 2012 to 2014 and 2017 with ratings 1. The rating (3 and 4) Assets quality gave red signal to the bank in term of disobedience to the NPA policy. Middle rating (3, 4 and 5) of Capital Adequacy indicates lesser amount of capital available with the bank which is insufficient to deter risk of the bank and urgent need for external capital to sustain the operations. The highest rating (5) of DCCBs Haryana in term of earning quality of red signal for the bank which pose fire of diminishing of the capital available to the bank, similarly the data shows very poor condition of management in the bank with rating 5 indicates critically deficient management efficiency of bank. This may be due to idealism of the bank to deploy its work force inefficiently. The t-value mention in the table proves that there is no significant difference in all parameter during the study period.

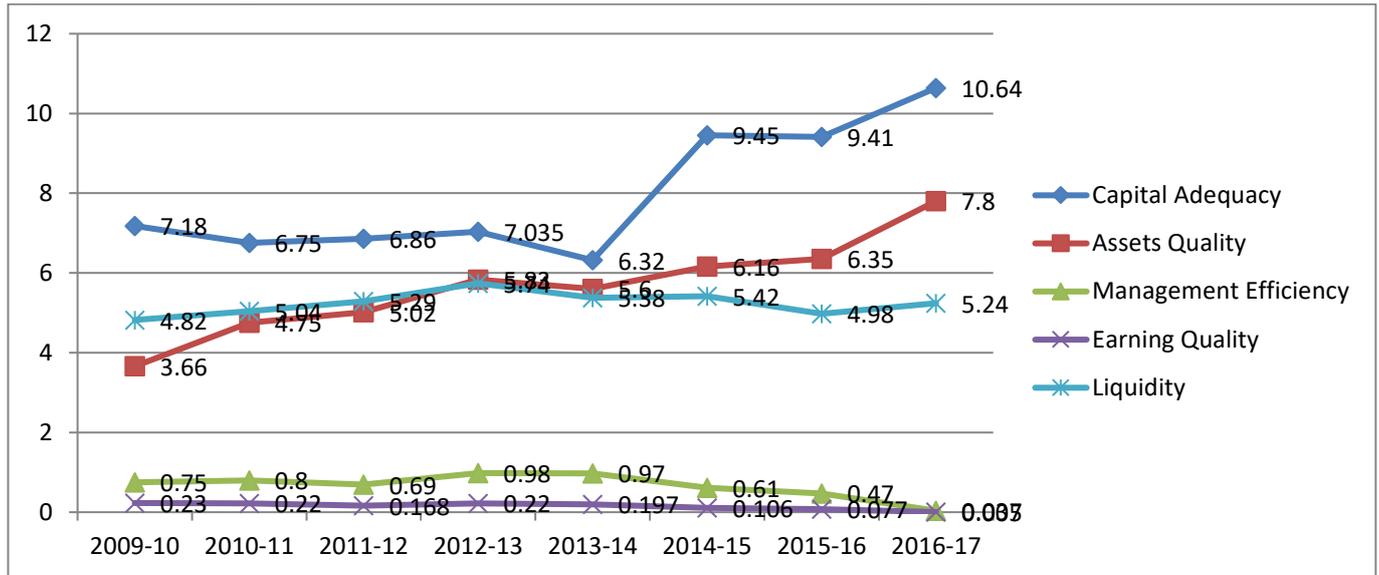
5.2. B. Operational Performance Analysis of DCCBs Punjab Bank: “In Punjab, DCCBs act as intermediary institutions for cooperative credit structure. These banks are working as a link between PACSs in Punjab and PSCB. There were 20 Central Coop. Banks at District level working across the state as on 31st March 2017”. (Annual Report of DCCBs Punjab)

Table: 5.2. B. Operational Performance Analysis through CAMEL Ratings/Model (Year (2009-17))

Year	Capital Adequacy	Assets Quality	Management Efficiency	Earning Quality	Liquidity
2009-10	7.18(4)	3.66(2)	0.75(5)	0.23(5)	4.82(5)
2010-11	6.75(4)	4.75(2)	0.807(5)	0.22(5)	5.039(5)
2011-12	6.86(4)	5.02(3)	0.69(5)	0.168(5)	5.29(5)
2012-13	7.035(4)	5.83(3)	0.98(5)	0.21(5)	5.74(5)
2013-14	6.32(4)	5.6(3)	0.97(5)	0.19(5)	5.38(5)
2014-15	9.45(4)	6.16(3)	0.61(5)	0.106(5)	5.42(5)
2015-16	9.41(4)	6.35(3)	0.47(5)	0.07(5)	4.98(5)
2016-17	10.64(3)	7.8(3)	0.037(5)	0.005(5)	5.24(5)
Mean	7.95	5.64	0.66	0.15	5.23
S.D	1.61	1.22	0.30	0.081	0.28
t-value	-0.002(0.99)	0.014(0.98)	-0.023(0.98)	0.030(0.97)	0.084(0.935)

(Source: Calculated from secondary data in Financial Reports of NAFSCOB and DCCB Punjab)

Figure: 5.2. B. Graphical Presentation of CAMEL Values of DCCBs Punjab



The CAMEL Model rating of DCCBs Punjab bank has been poor performance in all parameter and very poor performance in management efficiency, earning quality and liquidity position with rating 5 throughout the study period. The highest rating (5) of DCCBs Punjab in term of earning quality of red signal for the bank which pose fire of diminishing of the capital available to the bank, similarly the data shows very poor condition of management and liquidity in the bank with rating 5 indicates critically deficient management efficiency of bank. This may be due to idealism of the bank to deploy its work force inefficiently and possibility it would difficult for the bank to performance its routine function with lesser cash availability. In case of sudden huge withdrawals the bank face total liquidity crunch. The middle rating (2 and 3) Assets quality of is little fine in adherence to NPA policy. The rating (4) of Capital Adequacy indicates that inadequate capital suggesting an urgent need for exterior capital to maintain the operations. The t-value mention in the table proves that no significant difference in all parameter of CAMEL model.

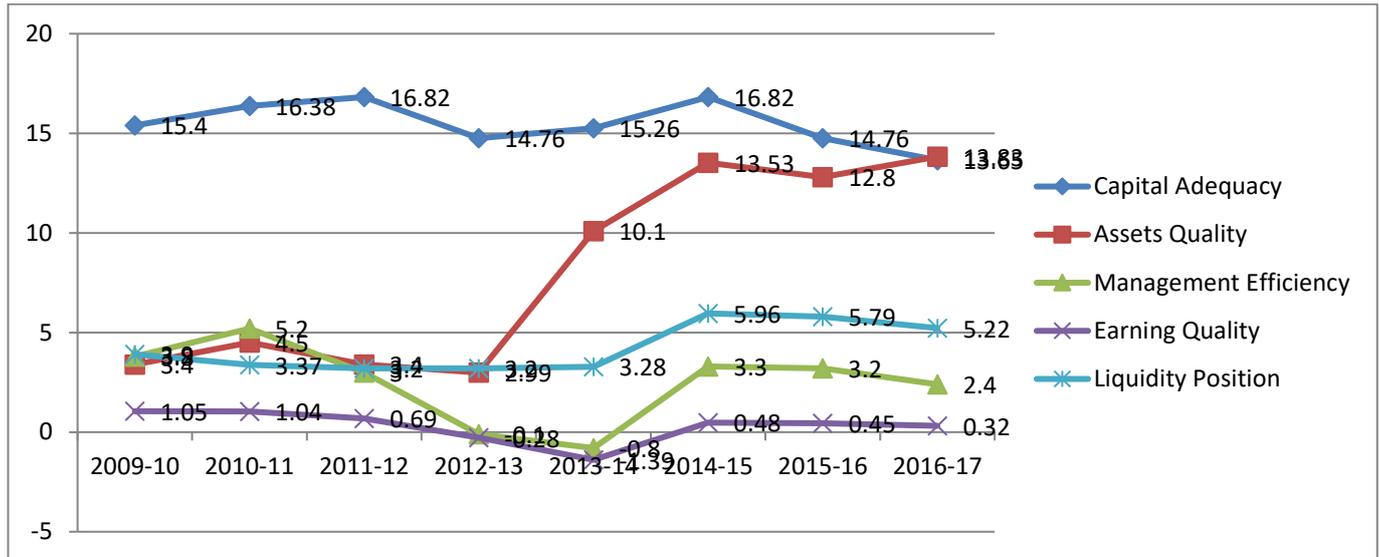
5.3. C. Operational Performance Analysis of DCCBs Himachal Pradesh: In Himachal Pradesh, the DCCBs act as intermediary institutions for cooperative credit structure. These banks are working as a link between PACSs in Himachal and HPSCB. There were 2 Central Coop. Banks at District level Jogindra and Kangra working across the state as on 31st March 2017.

Table: 5.3. C. Operational Performance Analysis through CAMEL Ratings/Model

Year	Capital Adequacy	Assets Quality	Management Efficiency	Earning Quality	Liquidity Position
2009-10	15.4(3)	3.4(2)	3.8(2)	1.05(3)	3.9(5)
2010-11	16.38(2)	4.5(2)	5.2(1)	1.04(3)	3.37(5)
2011-12	16.82(2)	3.4(2)	3(3)	0.69(4)	3.2(5)
2012-13	14.76(3)	2.99(2)	-0.1(5)	-0.28(5)	3.2(5)
2013-14	15.26(3)	10.1(4)	-0.8(5)	-1.39(5)	3.28(5)
2014-15	16.82(2)	13.53(5)	3.3(2)	0.48(5)	5.96(4)
2015-16	14.76(3)	12.8(5)	3.2(2)	0.45(5)	5.79(4)
2016-17	13.65(3)	13.83(5)	2.4(3)	0.32(5)	5.22(4)
Mean	15.48	8.068	2.5	0.29	4.24
S.D	1.12	4.95	2.0	0.80	1.211
t-value	0.079(0.94)	0.005(0.99)	0.000(1)	0.025(0.98)	0.002(0.99)

(Source: Calculated from secondary data in Financial Reports of NAFSCOB, DCCBs Himachal)

Figure: 5.3. C. Graphical Presentation of CAMEL Values of DCCBs Himachal



It is detectable in the above table and figure 5.3. C. that DCCBs Himachal Pradesh has been performing mixed performance in all parameter during the study period like in the starting year four parameter performing well but after that performing poor performance. In the case of earning quality and liquidity position very poor performance with rating 4 and 5 in last 4 years. The PSCB in term of earning quality of red signal for the bank which pose fire of diminishing of the capital available to the bank similarly the data shows very poor condition of liquidity in the bank with rating 5. Possibility it would difficult for the bank to performance its routine function with lesser cash availability. In case of sudden huge withdrawals the bank face total liquidity crunch. Assets quality rating is little good in starting year with rating 2 but last four year A.Q ratio is very poor with rating 4 and 5 it is hazard sign of bank. Middle rating (2 and 3) of Capital Adequacy indicates lesser amount of capital available with the bank which is insufficient to deter risk of the bank. In all parameters of CAMEL have been no significant differences in t- value during the study period.

5.3. D. Comparison of Operational Performance in District Central Cooperative Banks (Haryana, Punjab and Himachal)

Table: 5.3. D. Comparison of Operational Performance Analysis of DCCBs through CAMEL Ratings/Model (Year 2009-17)

YEAR	Capital Adequacy			Assets Quality			Management Efficiency		
	Haryana	Punjab	Himachal	Haryana	Punjab	Himachal	Haryana	Punjab	Himachal
2009-10	4.89	7.186	15.4	10.24	3.66	3.4	-0.44	0.75	3.8
2010-11	5.27	6.756	16.38	8.48	4.75	4.5	-0.85	0.81	5.2
2011-12	5.45	6.864	16.82	6.7	5.02	3.4	-0.97	0.7	3
2012-13	5.69	7.0355	14.76	6.51	5.83	2.99	0.948	0.99	-0.1
2013-14	6.67	6.32	15.26	6.19	5.6	10.1	-0.75	0.97	-0.8
2014-15	6.03	9.45	16.82	5.66	6.16	13.53	-2.15	0.61	3.3
2015-16	8.45	9.41	14.76	5.76	6.35	12.8	-0.8	0.47	3.2
2016-17	10.61	10.64	13.65	6.86	7.8	13.83	0.057	0.04	2.4
MEAN	6.63	7.95	15.48	7.05	5.64	8.068	-0.61	0.67	2.5
F-value	70.96(0.00)			1.24(0.308)			12.073(0.000)		
RANK	3	2	1	2	1	3	3	2	1

(Source: Calculated from secondary data in Financial Reports of NAFSCOB and DCCBs Haryana Punjab Himachal)

It can be interpreted from table 5.3. D. that DCCBs Himachal has decreasing trend in capital adequacy ratio from 15.4 in 2009-10 (rating 3) to 13.65 in 2016-17 (rating 3) bank has performing well on Capital Adequacy ratio 1st rank with average value 15.48. But decreasing trend is not good sign of bank which signify that less than satisfactory level of capital that not fully supports the bank risk profile. DCCBS Punjab and Haryana bank has increasing trend in capital

adequacy ratio from 7.1 in 2009-10 (rating 4) to 10.64 in 2016-17 (rating 3) and 4.89 in 2009-10 (rating 5) to 10.61(rating 3) with 2nd, 3rd rank on the basis of average value (7.9) and (6.6) which reflects weak financial condition of the bank to meet additional requirement of funds and specifies the poor quality.

There has been little improving trend in NPA to advances ratio DCCBs Haryana and Punjab see table 5.3(d) for the DCCBs Punjab and DCCBs Haryana Banks as it decreased from 3.66 in 2010 (rating 2) to 7.8 in 2017 (rating 3) and 10.24 in 2010 (rating 4) to 6.86 in 2017 (rating 3), 1st and 2nd rank on the basis of average value (5.64) and (7.05) which signify that satisfactory asset quality and credit monitoring and administration. For the DCCBs Himachal Pradesh as it increased from 3.4 in 2010 (rating 2) to 13.83 in 2017 (rating 5) with rank 3rd which signify that critically asset quality and credit monitoring and administration.

The permeable situation of DCCBs Haryana and Punjab in respect to management efficiency due to lower rate profits incurring. DCCBs Haryana Bank has even incurred loss in throughout study period except two year which makes the situation more alarming. For the DCCBs Himachal and Punjab as it decreasing from 3.8 in 2010 (rating 2) to 2.4 in 2017 (rating 3) and 0.75 in 2010 (rating 5) to 0.04 in 2017 (rating 5) with mean value (2.5) and (0.67) getting 1st and 2nd rank. DCCB Haryana as it increasing from -0.44 in 2010 (rating 5) to 0.057 in 2017(rating 5) on the basic of average value (-0.61) getting 3rd rank. It indicates a critically deficient management efficiency of bank. This may be due to failure of the bank to deploy its work force effectively. There are significant differences in Capital Adequacy and Management Efficiency with F-value. There is no significant difference in Assets Quality.

Table: 5.3.D.I Operational Performance Analysis through CAMEL Ratings/Model (Year 2009-17)

YEAR	Earning Quality			Liquidity Position		
	Haryana	Punjab	Himachal	Haryana	Punjab	Himachal
2009-10	-0.22	0.24	1.05	7.905	4.82	3.9
2010-11	-0.36	0.23	1.04	12	5.03	3.37
2011-12	-0.33	0.17	0.69	17.36	5.29	3.2
2012-13	0.24	0.22	-0.28	16.4	5.74	3.2
2013-14	-0.17	0.2	-1.39	16.79	5.38	3.28
2014-15	-0.36	0.11	0.48	7.351	5.42	5.96
2015-16	-0.14	0.08	0.45	7.699	4.98	5.79
2016-17	0.01	0.01	0.32	15.95	5.24	5.22
MEAN	-0.16625	0.15	0.295	12.68188	5.244851	4.24
F-value	1.93(0.169)			23.72(0.000)		
RANK	3	2	1	1	2	3

(Source: Calculated from secondary data in Financial Reports of NAFSCOB and DCCBs Haryana Punjab Himachal)

The earning quality of a bank is measured in terms of return on assets. Higher ratio means assets are being used effectively in generating income. The earning quality as shown in table 5.2.D.I for the DCCBs Himachal and Punjab as it decreasing from 1.05 in 2010 (rating 3) to 0.32 in 2017 (rating 5), 0.24 in 2010 (rating 5) 0.01 in 2017 (rating 5) and DCCBs Haryana bank as it increasing -0.22 in 2010 (rating 5) to 0.01in 2017(rating 5), on the basic of average value these bank getting 1st, 2nd and 3rd rank. Ratio values are increased but rating value is not changed. There are susceptible situation of all District central cooperative banks in respect to earning quality due to lesser rate of profit as compared to assets.

Liquidity position depicts in table 5.2.D.I for the DCCBs Haryana has been performing better with rating 1 in the year 2017, DCCBs Punjab and Himachal banks are very poor performance with rating between 4 and 5 with average value (12.68), (5.24) and (4.24). On the basis of average value these banks are getting 1st, 2nd and 3rd rank .The rating proves the inability of the DCCBs Himachal in the liquidity position. Possibility it would difficult for the bank to performance its routine function with lesser cash availability. In case of sudden huge withdrawals the bank face total liquidity crunch. In the Earning Quality has no significant difference according to F value and significant difference in Liquidity position.

6. General Suggestions

1. In case of Management Quality in terms of profit per Employee seems better in SCBs and RRBs but DCCBs Haryana Punjab Himachal profit per employee are lower main reason behind this may prompt poor administration to clients and eventually low quality and unsavoury reputation of Banks.
2. There is effective control on the functioning of DCCBs by SCBs after their restructuring. State Govt. may consider restoring the earlier structure of Primary Agriculture Credit & Service Societies.
3. Keeping in view the requirement of capital adequacy of CCBs and lowering of interest rates on Crop Loans, share linkage on Crop Loan be raised to 10% irrespective of their land holdings and share linkage of PACS to CCBs be enhanced from 5% to 7.50% and share linkage of CCBs to Apex Bank be retained 2.50%.
4. Core Banking Solution (CBS) has been implemented in all SCBs and DCCBs are providing RTGS/NEFT, SMS Alert, DBT Services etc. to their customers. If customers are satisfied deposit has been increase and interest income are increase for this reason profit proportion should be increase.
5. Blockage of funds in the form of NPAs and its provisioning have opportunity cost as the funds would have been utilized future in generating profits.

7. Conclusion

In brief it can be stated that overall performance in CAMEL model DCCBs Punjab and Himachal was better than DCCBs Haryana in this study period. In the capital adequacy ratio DCCBs Himachal has been performing well. In the assets quality DCCBs Punjab was better. DCCBs Haryana has critically deficient management efficiency of bank. This may be due to failure of the bank to deploy its work force effectively. DCCBs Haryana has been performing better with rating 1 in the year 2017, DCCBs Punjab and Himachal banks are very poor performance with rating between 4 and 5 in the liquidity position. In the earning quality parameter all three DCCBs have been poor performance.

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