

CHAPTER 7

EARNING CAPABILITY

7.1 INTRODUCTION

The survival of every business organisation depends upon its earning capacity. Earning capacity is ability to earn profits. Profits are required in business organisation to pay a good return to providers of the capital. Profits are essential ingredient for both survival as well as long term growth of a business. Like oxygen, profits are needed for the life of every business. “According to Peter Drucker as quoted by (Brigham, 1979; Kumar and Sharma, 1998), profit in business serves three purposes

- (i) It measures the net effectiveness and soundness of business effort;
- (ii) It is the premium that covers the cost of staying in the business, replacements, obsolescence, market and technical risk and uncertainty; and
- (iii) It ensures the supply of future capital, either by providing means for ploughing back of profit or by attracting new outside capital”.

Efficiency of an organisation is reflected through its ability to earn profits. “The ability of a given investment to earn return from its use is known as profitability (Raul & Ahmed, 2005)”. “It is the earning power of the investment and is a tool to measure the efficiency of the organization. Profit is difference between total revenue generated and total cost paid to generate that revenue over a period of time” (Gupta, 1997). In accounting terminology, profit is defined as ‘excess of income over expenditure’ for the particular period of time.

“Profitability in banking terminology denotes the efficiency with which a bank deploys its total resources to optimize its profits and thus serves as an indicator of assets utilization and managerial effectiveness (Debashish, 2003; Singh and Singh, 2006)”. For successful survival and sustained growth, a bank has to be efficient and effective in utilisation of resources and provide excellent services to the customers. Efficiency of a bank is reflected in its profitability (Srivastav and Nigam, 2010). Profitability is the index of operational efficiency of a bank and infuses confidence among the customers and public at large which is essential for its survival and growth. “If bank’s profits are reinvested, then this will lead to safety of bank and consequently, high profits could promote financial stability” (Kumar and Singh, 2013). A profit making bank is one that enjoys effective resource management, adopts

well planned systems and procedures, and one that is cost-conscious, productivity-conscious and profitability conscious.

In cooperative banks, profit was considered a forbidden word for a long time. These cooperative banks were established as a tool of government policy to meet some social obligations. Therefore, their performance was measured in terms of task achievement i.e. loan advanced to targeted borrowers and recovery thereof. It is usually argued that profit earning should not be of prime consideration for socio-economic institutions like cooperative banks. These should contribute to development by providing credit at low cost and fulfilling social obligations. But this is not true any more. “The social obligations increase cost of operation and affect the profitability of banks adversely. These banks are also supposed to generate sufficient profit for survival and perform their socio-economic obligations. A weak organization cannot carry the weight of social commitments” (Sukhmani, 2012).

The assets portfolio of a bank significantly affects the profit earning capacity of a bank. Assets portfolio of a bank consists of fixed assets and revenue generating assets. “The main source of bank income is from revenue generating assets. These assets bring interest income for the bank” (Bobáková, 2003). The other sources of income are non fund income. Whereas the main expenditure of banking organisation is interest expanded. As banks performs the role of financial intermediaries, they have to accept deposits, borrow money and have to pay interest to customers on deposit and loans. Banks have to manage their funds (sources and applications thereof) judiciously to cut costs and increase returns.

7.2 STUDY OF EARNING CAPABILITY RATIOS IN DCCBs OF PUNJAB

In this chapter, an attempt has been made to study earning capability of the district central cooperative banks of Punjab during the period of study with the help of following ratios:

1. “Net Profit to Owned Funds Ratio
2. Net Profit to Average Working Funds Ratio
3. Interest Income to Total Income Ratio
4. Net Profit to Total Assets Ratio
5. Provisions for NPA to Total Income Ratio
6. Non Interest Income to Working Capital Ratio
7. Cost of Management to Total Income Ratio
8. Average Yield on Investment Ratio

9. Average Yield on Loans Ratio
10. Cost of Management to Total Expenditure Ratio
11. Interest Expanded to Total Expenditure Ratio”

7.2.1 TRENDS IN NET PROFIT TO OWNED FUNDS RATIO OF DCCBs IN PUNJAB

Net profit to owned funds ratio depicts the proportion of net profit earned in relation to total funds employed by a bank. ‘Net profit to own funds ratio’ of various DCCBs during the period of study have been depicted in table 7.1. It is clear from study of table 7.1 that only three DCCBs had positive and increasing trend in the ratio while other seventeen DCCBs had declining trend in the net profit.

Among DCCBs of Punjab, Kapurthala DCCB was at first rank and had mean net profit to owned funds ratio of 5.91 percent. A significant and declining trend at the rate of 2.23 percent was observed during the period of study with ups and downs in the ratio. In the initial year of study i.e. 2005-06, the net profit to owned funds ratio was 10.39 percent but decreased abruptly to 4.05 in 2006-07. It increased for three continuous years and reached at 6.54 percent in 2009-10. Thereafter, the ratio recorded a decline and reached at 4.96 in 2010-11 but in next two years, the ratio again increased and was 5.84 percent in 2012-13. Keeping in view the trend shown during the period of study, it may be foreseen that the net profit to owned funds ratio would decrease to 4.02 percent and 3.26 percent in 2016-17 and 2019-20 respectively.

SAS Nagar DCCB had mean net profit to owned funds ratio of 5.71 percent and was at second rank. The net profits to owned funds ratio was 4.76 percent in 2006-07 which swiftly swelled up to 11.12 percent in 2007-08. Thereafter, the net profit to owned funds ratio followed a declining path and reached at merely 1.40 percent in 2011-12 but ultimately in the last year of study, it was 5.21 percent. The trend was negative but significant indicating decline in the ratio at the compounded annual rate of 17.17 percent. If the same pattern of trend follows, it may be estimated that the net profit to owned funds ratio would further come down to -0.34 percent and -2.93 percent in 2016-17 and 2019-20 respectively.

Fatehgarh Sahib DCCB was at third rank and had average value of net profit to owned funds ratio of 5.43 percent. The ratio in this bank fluctuated considerably. The net profit to owned funds ratio decreased drastically to 0.91 percent in 2006-07 from 16.70 percent in the initial year of study i.e. 2005-06. Then in 2007-08, the ratio increased swiftly and came to be 6.67 percent which again declined to mere 0.46 percent in 2008-09. Thereafter, the ratio recorded an increasing trend for the

Table 7.1 Trends in Net Profit/Owned Funds Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	2.60	-0.04	-0.31	-0.03	0.04	0.01	0.02	0.01	0.29	-54.81	-1.49*	-1.21	-1.81	18.00
Bathinda	13.26	4.78	1.44	1.57	1.36	1.37	1.41	0.94	3.27	-25.65	-2.51*	-5.97	-9.67	10.00
Faridkot	1.05	-2.91	-6.75	0.64	6.64	-4.95	-9.06	1.54	-1.72	5.64	-0.22*	-3.15	-3.71	19.00
Fatehgarh Sahib	16.70	0.91	6.67	0.46	3.77	4.14	4.37	6.41	5.43	2.16	-0.88*	0.16	-1.95	3.00
Fazilka	10.42	0.24	0.35	0.70	1.08	0.96	1.55	1.88	2.15	1.01	-1.20*	-2.41	-4.23	14.00
Ferozepur	5.20	6.74	0.31	0.46	0.68	0.95	13.04	1.11	3.56	-4.44	0.08*	4.00	4.18	9.00
Gurdaspur	8.50	0.51	-1.42	0.28	1.12	0.44	0.23	0.40	1.26	-35.27	-1.41*	-3.35	-5.20	17.00
Hoshiarpur	12.32	4.44	4.74	4.55	3.46	2.46	0.12	2.94	4.38	-30.17	-3.08*	-4.11	-7.51	7.00
Jalandhar	8.85	8.21	8.38	5.78	1.92	1.98	2.39	2.72	5.03	-21.04	-4.80*	-3.45	-6.85	6.00
Kapurthala	10.39	4.05	4.83	4.93	6.54	4.96	5.77	5.84	5.91	-2.23	-0.81*	4.02	3.26	1.00
Ludhiana	5.98	2.00	2.18	2.22	2.37	2.57	2.70	2.97	2.87	-3.30	-0.96*	1.43	0.85	11.00
Mansa	8.65	1.67	0.83	0.38	-48.78	-8.47	0.63	5.26	-4.98	-6.85	-0.42*	-14.44	-18.22	20.00
Moga	9.04	0.80	0.96	1.25	1.56	1.88	1.11	0.93	2.19	-13.31	-1.59*	-2.46	-4.32	13.00
Muktsar	8.98	1.15	1.25	0.49	1.17	2.46	2.72	2.73	2.62	-1.33	-0.89*	-0.20	-1.33	12.00
Nawanshahar	7.14	6.24	5.22	8.68	5.99	2.75	3.31	3.54	5.36	-11.63	-2.45*	0.89	-0.89	4.00
Patiala	17.34	1.71	1.98	0.74	2.01	2.16	2.90	2.53	3.92	-10.76	-1.46*	-4.64	-8.07	8.00
Ropar	14.44	3.11	4.23	4.98	3.02	3.19	4.01	5.03	5.25	-8.50	-1.45*	-0.68	-3.06	5.00
Sangrur	8.88	1.16	1.67	0.28	0.67	3.37	0.62	0.47	2.14	-21.83	-1.67*	-2.87	-4.87	15.00
SAS Nagar	NA	4.76	11.12	8.15	7.37	2.01	1.40	5.21	5.71	-17.17	-1.44*	-0.34	-2.93	2.00
Tarn Taran	2.22	0.71	1.36	0.50	0.55	4.01	0.70	1.21	1.41	-1.16	0.05*	1.49	1.52	16.00

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

remaining period of study and reached at 6.41 percent in 2012-13. The significant increasing trend was found with compounded growth rate of 2.16 percent. As per trend coefficients, the ratio would come to be 0.16 percent in 2016-17 and -1.95 percent in 2019-20.

Amritsar DCCB had mean net profit to owned funds ratio of merely 0.29 percent and was at eighteenth rank among DCCBs. A declining trend of 54.81 percent compounded annually was found to be significant. The net profit to owned funds ratio declined to -0.04 percent in 2006-07 from 2.60 percent in 2005-06 and further declined to 0.01 percent in 2012-13. The net profit to owned funds ratio would further come down to -1.21 percent and -1.81 percent in 2016-17 and 2019-20, if declining trend is not reversed.

Faridkot DCCB with mean net profit to owned funds ratio of -1.72 percent was at nineteenth rank. The ratio in this DCCB recorded a significant growth at compounded annual rate of 5.64 percent. The 'net profit to owned funds ratio' was 1.05 percent in 2005-06 which declined to -6.75 percent in 2007-08 and then increased for two years and jumped to 6.64 percent in 2009-10. In 2011-12 ratio fell down drastically to -9.06 percent but again increased to 1.54 percent in 2012-13. If the same trend continues then the net profit to owned funds ratio would come to -3.15 percent and -3.71 percent in 2016-17 and 2019-20 respectively.

Table 7.1 elucidates that last rank among DCCBs was of Mansa DCCB which had mean net profit to owned funds ratio of -4.98 percent. The ratio was 8.65 percent in 2005-06 and then decreased for four years and came to -48.78 percent in 2009-10. Then the ratio increased continuously till the last year of study and came to 5.26 percent in 2012-13. The trend was found to be significant and negative at the compounded annual rate of 6.85 percent in this ratio. The linear trend equation gives estimation that if the same trend continues then net profit to owned funds ratio would come to -14.44 percent and -18.22 percent in 2016-17 and 2019-20 respectively.

It is clear from table 7.1 that two DCCBs i.e. Faridkot and Mansa had an average negative ratio whereas in Amritsar DCCB it was mere 0.29 percent. Management of these banks have to take immediate drastic steps to turn around the trend.

7.2.2 TRENDS IN NET PROFIT TO AVERAGE WORKING FUNDS RATIO OF DCCBs IN PUNJAB

'Net profit to average working funds ratio' measures the percentage of profit earned from the average working funds in a bank. The ratios of DCCBs in Punjab

during the period of study have been presented in table 7.2. Table 7.2 clearly depicts that out of twenty DCCBs only two DCCBs had shown positive and increasing trend in the net profit to average working funds.

Among DCCBs, Nawanshahar DCCB was at first rank with highest mean net profit to average working funds ratio of 0.90 percent. A significant declining trend was found in the ratio at compounded annual growth rate of 17.84 percent throughout the period of study. The 'net profit to average working funds ratio' declined to 0.93 percent in 2007-08 as compared to 1.45 percent in 2005-06. After increasing to 1.41 percent, it came down to 0.37 percent in 2010-11 and reached at 0.45 percent in 2012-13. If the same trend persists, then the 'net profit to average working funds' ratio would come down to -0.26 percent and -0.73 percent in 2016-17 and 2019-20 respectively.

On examination of table 7.2, it is clear that second rank was attained by Ropar DCCB with 0.81 percent as mean 'net profit to average working funds ratio'. The DCCB recorded negative trend in the ratio at the compounded annual rate of 10.33 percent which was found to be significant. The net profit to average working funds ratio declined from 2.30 percent in 2005-06 to 0.41 percent in 2006-07 and after increasing for two years came to 0.83 percent in 2009-10. The ratio touched a level of 0.47 percent in 2010-11 but finally it was 0.66 percent in 2012-13. Keeping in view the linear trend equation, it may be foreseen that if present conditions prevail, the 'net profit to average working funds' ratio would come to -0.26 percent and -0.69 percent in 2016-17 and 2019-20 respectively.

Kapurthala DCCB secured third position among DCCBs with mean net profit to average working funds ratio of 0.64 percent. The ratio was 1.42 percent in 2005-06 which again declined to 0.50 percent in 2006-07 and rose to 0.54 percent in 2007-08. The ratio again showed decrease in 2008-09 and came down to 0.50 percent but increased to 0.64 percent in 2009-10. The ratio was 0.50 percent in 2012-13. The trend was found to be negative and significant which indicated decline in the ratio at the compounded annual rate of 8.47 percent. The linear trend equation predicts that if the same conditions prevail, the net profit to average working funds ratio would come to 0.06 percent in 2016-17 and -0.18 percent in 2019-20.

Table 7.2 reveals that Mansa DCCB was at eighteenth rank and had -0.22 percent as mean net profit to average working funds ratio. The growth rate in the ratio i.e. 7.07 percent was found to be negative and significant.

Table 7.2 Trends in Net Profit/Average Working Funds Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
								2017				2020		
Amritsar	0.14	-0.21	-2.94	-0.31	0.32	0.08	0.20	0.08	-0.33	-8.64	0.79*	0.68	1.08	19
Bathinda	0.99	0.33	0.08	0.08	0.07	0.07	0.07	0.07	0.22	-27.24	-2.41*	-0.47	-0.75	12
Faridkot	0.11	-0.26	-5.90	0.05	0.54	-0.41	-0.91	0.15	-0.83	4.77	0.49*	0.42	0.92	20
Fatehgarh Sahib	1.63	0.09	0.67	0.04	0.30	0.32	0.33	0.46	0.48	-3.27	-1.24*	-0.21	-0.49	6
Fazilka	1.13	0.02	0.03	0.05	0.07	0.06	0.09	0.12	0.20	-7.48	-1.46*	-0.40	-0.64	13
Ferozepur	0.44	0.45	0.02	0.03	0.04	0.08	1.46	0.13	0.33	1.31	0.45*	0.60	0.71	9
Gurdaspur	0.78	0.05	-0.12	0.02	0.09	0.04	0.03	0.05	0.12	-33.25	-1.40*	-0.30	-0.47	17
Hoshiarpur	1.41	0.45	0.48	0.41	0.29	0.18	0.01	0.20	0.43	-35.48	-3.26*	-0.62	-1.03	7
Jalandhar	0.97	0.89	0.88	0.51	0.16	0.15	0.17	0.19	0.49	-26.39	-5.47*	-0.54	-0.95	5
Kapurthala	1.42	0.50	0.54	0.50	0.64	0.47	0.52	0.50	0.64	-8.47	-1.78*	0.06	-0.18	3
Ludhiana	1.20	0.34	0.32	0.28	0.31	0.30	0.28	0.27	0.41	-12.67	-1.96*	-0.19	-0.44	8
Mansa	0.65	0.11	0.05	0.02	-2.44	-0.57	0.04	0.39	-0.22	-7.07	-0.49*	-0.80	-1.03	18
Moga	0.88	0.07	0.08	0.09	0.10	0.13	0.06	0.08	0.19	-17.02	-1.69*	-0.30	-0.50	14
Muktsar	1.32	0.16	0.16	0.05	0.13	0.22	0.22	0.25	0.31	-9.17	-1.38*	-0.30	-0.55	10
Nawanshahar	1.45	1.20	0.93	1.41	0.96	0.37	0.42	0.45	0.90	-17.84	-4.10*	-0.26	-0.73	1
Patiala	1.38	0.13	0.15	0.05	0.15	0.15	0.21	0.17	0.30	-12.85	-1.55*	-0.42	-0.71	11
Ropar	2.30	0.41	0.75	0.83	0.47	0.47	0.55	0.66	0.81	-10.33	-1.66*	-0.26	-0.69	2
Sangrur	0.64	0.08	0.11	0.02	0.04	0.23	0.04	0.03	0.15	-23.28	-1.69*	-0.22	-0.36	15
SAS Nagar	0.00	0.42	1.13	0.71	0.64	0.15	0.11	0.43	0.51	-19.75	-1.51*	-0.13	-0.40	4
Tarn Taran	0.25	0.08	0.13	0.04	0.04	0.32	0.05	0.08	0.13	-8.39	-0.53*	0.06	0.03	16

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

The ratio was 0.65 percent in 2005-06 which had declined to -2.44 percent in 2009-10 but after that ratio followed increasing path for the remaining period of study and reached at 0.39 percent in 2012-13. Trend coefficients give estimation that the 'net profit to average working funds ratio' would come to -0.80 percent and -1.03 percent in 2016-17 and 2019-20 respectively.

Nineteenth rank among DCCBs was of Amritsar DCCB with mean ratio of -0.33 percent of net profit to average working funds. The ratio had declined from 0.14 percent in 2005-06 to -2.94 percent in 2007-08 and then increased for two years and reached at 0.32 percent in 2009-10. In the next year, the ratio declined to 0.08 percent and rose to 0.20 percent in 2011-12 and then again fell down to 0.08 percent in 2012-13. The ratio observed a significant and declining trend at the compounded annual rate of 8.64 percent. Keeping in view the trend coefficients, the 'net profit to average working funds ratio' would be 0.68 percent and 1.08 percent in 2016-17 and 2019-20 respectively.

Table 7.2 elucidates that Faridkot DCCB with least mean net profit to average working funds ratio of -0.83 percent was at last position in DCCBs of Punjab. A significant growth rate of 4.77 percent compounded annually was observed in this ratio. In the initial year of study, the ratio was 0.11 percent which declined to -5.90 percent in 2007-08 and then increased for two continuous years to be 0.54 percent in 2009-10. Thereafter, the ratio declined and reached at -0.91 percent in 2011-12 and in the last year of study, the ratio jumped to 0.15 percent. The ratio would come to 0.42 percent in 2016-17 and 0.92 percent in 2019-20, if the persisting conditions remain the same.

One percent earnings on average working funds is considered as optimum in these banks but table 4.2 shows that all the DCCBs had mean ratio less than one percent. Three DCCBs i.e. Amritsar, Faridkot and Mansa had even negative ratio. Moreover compounded annual growth rate in all the DCCBs was negative. All banks are required to re-plan their business strategies, so that minimum profitability may be ensured.

7.2.3 TRENDS IN INTEREST INCOME TO TOTAL INCOME RATIO OF DCCBs IN PUNJAB

'Interest income' is the main source of revenue of a bank from its lending operations. 'Interest income to total income ratio' measures the proportion of 'interest earned' in the total income of a bank. The ratios for DCCBs in Punjab for the period of the study are shown in table 7.3. Table elucidates that fourteen DCCBs registered

increasing trend in earning interest income and six DCCBs had shown declining trend in the 'interest income to total income ratio'.

First rank among DCCBs was of Nawanshahar DCCB with highest mean 'interest income to total income ratio' of 99.23 percent. The average 'interest income to total income ratio' in 2005-06 was 98.95 percent, it decreased to 99.23 percent in 2007-08 but again increased to 99.50 percent in 2008-09. In the last two years of study, the 'interest income to total income ratio' reached at 99.38 percent in 2012-13. The DCCB recorded significant growth in the ratio at the compounded annual rate of 0.06 percent. If the present conditions sustain, the interest income to total income ratio would increase to 99.65 percent and 99.81 percent in 2016-17 and 2019-20 respectively.

Hoshiarpur and Mansa DCCBs were on equal foot and on second and third position in this analysis. Hoshiarpur DCCB was having mean 'interest income to total income ratio' of 99.06 percent. The ratio had mounted to 99.25 percent in 2007-08 from 98.67 percent in the initial year of study i.e. 2005-06 and decreased to 98.82 percent in 2008-09. It was 99.51 percent in 2011-12 and then declined to 99.29 percent in 2012-13. The DCCB recorded significant growth in the ratio at the compounded annual rate of 0.09 percent. Keeping in the view the trend coefficients, it may be foreseen that the interest income to total income ratio would further increase to 99.75 percent 2016-17.

In Mansa DCCB also, mean 'interest income to total income ratio' was 99.06 percent. A negative and significant trend in the ratio was registered at the compounded annual rate of 0.03 percent. The 'interest income to total income ratio' increased from 99.11 percent in the initial year of study i.e. 2005-06 to 99.54 percent in 2007-08 and then declined to 99.33 percent in 2008-09. Thereafter, the ratio observed increasing path for two years and reached at 99.52 percent in 2010-11 and then declined to 97.34 percent in the next year but increased to 98.31 percent in 2012-13. On the basis of trend shown during the period of study, it may be predicted that the interest income to total income ratio would decrease to 98.06 percent and 97.65 percent in 2016-17 and 2019-20 respectively.

Amritsar DCCB was on eighteenth position with mean value of 97.95 percent of interest income to total income ratio. A significant growth of 0.15 percent compounded annually was recorded in the ratio. The ratio had increased to 98.60 percent in 2008-09 from 97.58 percent in 2005-06 and declined to 97.27 percent in 2010-11.

Table 7.3 Trends in Interest Income/Total Income Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend	Rank
	2020	2017											
Amritsar	97.58	97.60	97.97	98.60	97.87	97.22	98.14	98.61	97.95	0.15	1.10*	98.57	18.00
Bathinda	97.03	97.87	98.70	99.08	98.67	98.87	98.40	98.67	98.41	0.17	1.96*	99.68	11.00
Faridkot	98.96	98.98	98.87	96.77	98.65	98.63	98.92	94.47	98.03	-0.66	-1.62*	95.30	16.00
Fatehgarh Sahib	98.89	98.73	98.65	98.42	99.33	97.35	98.55	96.12	98.25	-0.28	-2.15*	96.18	13.00
Fazilka	96.62	97.52	97.68	98.61	98.37	98.82	97.58	98.55	97.97	0.21	2.19*	99.49	17.00
Ferozepur	98.89	99.12	98.70	97.11	99.05	97.43	98.08	99.13	98.44	-0.07	-0.49*	97.96	10.00
Gurdaspur	97.24	97.25	97.05	95.70	97.27	97.47	97.50	97.44	97.11	0.03	0.69*	97.61	20.00
Hoshiarpur	98.67	98.79	99.25	98.82	99.11	99.06	99.51	99.29	99.06	0.09	3.06*	99.75	2.50
Jalandhar	97.79	98.13	98.74	98.97	98.90	98.08	99.00	98.00	98.45	0.05	0.56*	98.79	9.00
Kapurthala	98.85	98.99	99.00	99.13	98.98	99.13	99.06	99.09	99.03	0.03	2.42*	99.23	4.00
Ludhiana	98.78	98.84	98.93	99.10	98.97	99.04	99.17	99.33	99.02	0.07	5.93*	99.53	5.00
Mansa	99.11	99.33	99.54	99.33	99.42	99.52	97.34	98.91	99.06	-0.03	-1.24*	98.06	2.50
Moga	98.85	98.84	98.25	98.68	99.00	99.16	99.36	99.30	98.93	0.11	2.45*	99.71	6.00
Muktsar	96.19	97.81	98.08	99.25	97.37	99.22	98.75	98.57	98.15	0.28	2.08*	100.20	15.00
Nawanshahar	98.95	98.95	99.23	99.50	99.39	99.10	99.37	99.38	99.23	0.06	2.04*	99.65	1.00
Patiala	98.73	98.53	98.87	99.02	98.65	98.90	99.21	96.60	98.56	-0.14	-1.13*	97.51	8.00
Ropar	98.10	98.51	98.75	99.10	98.37	99.08	98.67	98.46	98.63	0.04	0.77*	98.95	7.00
Sangrur	96.82	98.03	98.73	98.15	98.21	98.94	98.50	97.98	98.17	0.14	1.45*	99.17	14.00
SAS Nagar	NA	97.81	94.83	98.95	95.84	96.29	98.70	98.71	97.30	0.29	0.88*	99.25	19.00
Tarn Taran	98.34	98.09	98.91	98.50	97.90	98.53	97.77	98.46	98.31	-0.03	-0.49*	98.09	12.00

Source: Calculated from annual reports of various DCCBs
*Significant at 5%

The ratio observed increasing trend for last two years of study and touched 98.61 percent level in 2012-13. It may be estimated that if the same pattern continues, the ratio would further come to 98.57 percent and 98.81 percent in 2016-17 and 2019-20 respectively.

SAS Nagar DCCB came nineteenth among DCCBs with least mean interest income to total income ratio of 97.30 percent. A significant growth in this ratio was observed at the compounded annual rate of 0.29 percent. The ratio had declined to 94.83 percent in 2007-08 from 97.81 percent in 2006-07 but increased to 98.95 percent in 2008-09. After coming down to 95.84 percent in 2009-10, the ratio showed continuous increase in the last three years of study and reached at 98.71 percent in 2012-13. The interest income to total income ratio would come to 99.25 percent in 2016-17 and 100 percent in 2019-20, if the present trend remains the same.

Gurdaspur DCCB was at last rank among DCCBs with least mean value i.e. 97.11 percent of 'interest income to total income'. The DCCB had witnessed significant growth at the compounded annual rate of 0.03 percent in ratio. The ratio of interest income to total income had slightly increased to 97.25 percent in 2006-07 from 97.24 percent in 2005-06 but after it declined for two years and came down to 95.70 percent in 2008-09. The ratio reached at 97.50 percent in 2011-12 but declined to 97.44 percent in 2012-13. The linear trend equation gives estimation that the interest income to total income ratio would increase to 97.61 percent in 2016-17 and 97.80 percent in 2019-20.

It can be seen from table 7.3 that more than 97 percent income of DCCBs is from interest income. They should concentrate to increase their non fund business.

7.2.4 TRENDS IN NET PROFIT TO TOTAL ASSETS RATIO OF DCCBs IN PUNJAB

'Net profit to total assets ratio' indicates the efficiency of a bank in employing its assets in 'earning net profits'.

Table 7.4 shows the ratios of DCCBs under study and elucidates that out of twenty eighteen DCCBs had negative and declining trend in net profits to total assets ratio where as two DCCBs i.e. Faridkot and Ferozepur DCCB had positive and increasing trend in the ratio.

On perusal of table 7.4, it is evident that Nawanshahar DCCB was at first rank among DCCBs with mean net profit to total assets ratio of 0.83 percent.

Table 7.4 Trends in Net Profits/Total Assets Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	0.13	-0.20	-2.52	-0.28	0.29	0.08	0.18	0.07	-0.28	-8.33	0.80*	0.60	0.95	20
Bathinda	0.86	0.29	0.07	0.07	0.06	0.07	0.06	0.06	0.19	-27.03	-2.42*	-0.41	-0.65	12
Faridkot	0.09	-0.24	-0.53	0.05	0.50	-0.37	-0.81	0.13	-0.15	4.66	-0.29*	-0.29	-0.35	18
Fatehgarh Sahib	1.47	0.08	0.58	0.04	0.27	0.29	0.30	0.43	0.43	-2.82	-1.20*	-0.18	-0.42	6
Fazilka	1.03	0.02	0.03	0.04	0.07	0.06	0.08	0.10	0.18	-7.83	-1.48*	-0.37	-0.59	13
Ferozepur	0.38	0.39	0.02	0.03	0.04	0.07	1.26	0.11	0.29	1.82	0.45*	0.52	0.61	9
Gurdaspur	0.71	0.04	-0.10	0.02	0.09	0.03	0.03	0.04	0.11	-33.23	-1.41*	-0.27	-0.43	17
Hoshiarpur	1.29	0.40	0.43	0.34	0.26	0.16	0.01	0.17	0.38	-35.68	-3.23*	-0.57	-0.95	7
Jalandhar	0.93	0.81	0.80	0.47	0.16	0.13	0.17	0.19	0.46	-26.20	-5.50*	-0.50	-0.88	4.5
Kapurthala	1.22	0.44	0.50	0.45	0.59	0.42	0.45	0.44	0.57	-8.31	-1.81*	0.07	-0.12	3
Ludhiana	1.03	0.30	0.29	0.26	0.27	0.25	0.24	0.25	0.36	-12.68	-1.99*	-0.16	-0.37	8
Mansa	0.56	0.10	0.05	0.02	-2.31	-0.52	0.04	0.33	-0.22	-7.36	-0.48*	-0.75	-0.96	19
Moga	0.82	0.06	0.07	0.07	0.09	0.09	0.05	0.07	0.16	-19.22	-1.74*	-0.30	-0.49	14
Muktsar	1.17	0.14	0.14	0.05	0.11	0.22	0.22	0.20	0.28	-9.18	-1.38*	-0.27	-0.49	10.5
Nawanshahar	1.38	1.04	0.84	1.32	0.92	0.31	0.42	0.42	0.83	-17.57	-3.67*	-0.22	-0.64	1
Patiala	1.29	0.12	0.14	0.05	0.13	0.14	0.18	0.15	0.28	-13.03	-1.55*	-0.40	-0.66	10.5
Ropar	1.97	0.46	0.68	0.71	0.44	0.42	0.47	0.60	0.72	-11.35	-1.82*	-0.22	-0.60	2
Sangrur	0.58	0.07	0.10	0.02	0.04	0.22	0.04	0.03	0.14	-22.93	-1.67*	-0.19	-0.33	15
SAS Nagar	0.00	0.37	0.97	0.64	0.57	0.15	0.11	0.43	0.46	-17.71	-1.39*	-0.05	-0.27	4.5
Tarn Taran	0.23	0.07	0.12	0.04	0.04	0.30	0.05	0.10	0.12	-6.25	-0.38*	0.07	0.05	16

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

The DCCB had ratio of 'net profit to total assets' of 1.38 percent in 2005-06 which came down to 0.84 percent in 2007-08 and increased to 1.32 percent in 2008-09. The ratio then decreased to 0.31 percent in 2010-11 but augmented to 0.42 percent in 2012-13. The ratio in this DCCB had significantly declined at the compounded annual rate of 17.57 percent. If similar trend persists, the net profit to total assets ratio would be -0.22 percent and -0.64 percent in 2016-17 and 2019-20 respectively.

Ropar DCCB was at second rank among DCCBs with mean net profit to total assets ratio of 0.72 percent. The DCCB had a significant compounded annual decline in the ratio at the rate of 11.35 percent. The DCCB had a net profit to total assets ratio of 1.97 percent in 2005-06 which came down to 0.46 percent in 2006-07 and after increasing for two years was 0.71 percent in 2008-09. The ratio after decreasing for two years was 0.42 percent in 2010-11 which increased to 0.60 percent in 2012-13. With similar trend the 'net profit to total assets ratio' would be -0.22 percent and -0.60 percent in 2016-17 and 2019-20 respectively in this DCCB.

Third rank among DCCBs was of Kapurthala DCCB with 0.57 percent mean net profit to total assets ratio. The DCCB had 1.22 percent net profit to total assets ratio in 2005-06 which decreased to 0.44 percent in 2006-07 and increased to 0.50 percent in 2007-08 before declining to 0.45 percent in 2008-09. The ratio was 0.59 percent in 2009-10, decreased to 0.42 percent in 2010-11 and increased to 0.45 percent in 2011-12 but again declined to 0.44 percent in 2012-13. The ratio had a significant decline at the rate of 8.31 percent compounded annually. If analogous growth behaviour sustains, the 'net profit to total assets ratio' would be 0.07 percent and -0.12 percent in 2016-17 and 2019-20 respectively.

Faridkot DCCB was at eighteenth position among DCCBs with an average 'net profit to total assets ratio' of -0.15 percent. The DCCB had 'net profit to total assets ratio' of 0.09 percent in 2005-06 which declined to -0.53 in 2007-08. The ratio increased to 0.50 percent in 2009-10 but decreased to -0.81 percent in 2011-12 before increasing to 0.13 percent in 2012-13. The ratio in this DCCB had a significant growth at the rate of 4.66 percent compounded annually. If the growth pattern remains similar, the 'net profit to total assets ratio' would be -0.29 percent and -0.35 percent in 2016-17 and 2019-20 respectively as shown in table 7.4.

Mansa DCCB was at nineteenth place with an average of -0.22 percent of 'net profit to total assets ratio'. The ratio in this had a significant decline at rate of -7.36 percent compounded annually. The DCCB had 0.56 percent net profit to total assets ratio in 2005-06, which decreased to -2.31 percent in 2009-10 and increased to 0.33

percent in 2012-13. If the similar growth trend sustains, the net profit to total assets ratio in Mansa DCCB would be -0.75 percent and -0.96 percent in 2016-17 and 2019-20 respectively.

Amritsar DCCB was at the lowest ladder among DCCBs with an average net profit to total assets ratio of -0.28 percent as shown in table 7.4. The DCCB had net profit to total assets ratio of 0.13 percent in 2005-06 which declined to -2.52 in 2007-08. The ratio increased to 0.29 percent in 2009-10 and decreased to 0.08 percent in 2010-11 but again increased to 0.18 percent in 2011-12 before decreasing to 0.07 percent in 2012-13. The DCCB had a significant decline at the rate of 8.33 percent compounded annually in the ratio. If the growth pattern remains similar, the 'net profit to total assets ratio' would be 0.60 percent and 0.95 percent in 2016-17 and 2019-20 respectively.

Table 7.4 shows that three DCCBs i.e. Amritsar, Mansa and Faridkot had negative ratios whereas Gurdaspur, Tarn Taran, Sangrur, Moga and Fazilka had earned marginal percentage of net profits on total assets employed. These banks should take immediate steps to improve their earnings.

7.2.5 TRENDS IN PROVISIONS FOR NPA TO TOTAL INCOME RATIO OF DCCBs IN PUNJAB

Provisions for NPA to total income ratio depicts the percentage of net profit kept as provisions to meet loss due to non performing assets. The ratios have been depicted in Table 7.5. Table shows that only nine DCCBs had shown negative trend in the ratio. Mansa and Tarn Taran DCCBs had shown 100 percent declining trend in the creation of provisions for NPA. Eleven DCCBs registered an increasing and positive growth in the ratio.

Faridkot DCCB had attained first rank among DCCBs with mean value of 0.54 percent of provisions for NPA to total income ratio. The DCCB witnessed increasing trend in the ratio at the compounded annual growth rate of 50.94 percent during the period of study. The provisions for NPA to total income ratio increased to 0.77 percent in 2007-08 from 0.01 percent in 2005-06. It decreased to 0.07 percent in 2008-09 but again increased to 1.65 percent in the next year and came down to 0.57 percent in 2010-11. In the last year of study, ratio was 0.18 percent after touching a level of 0.83 percent in 2011-12. The provisions for NPA to total income ratio would be 1 percent and 1.19 percent in 2016-17 and 2019-20 respectively, if the same trend continues.

Ferozpur DCCB with mean ratio of provisions for NPA to total income of 1.33 percent was at second position as depicted by table 7.5. The growth rate in the.

Table 7.5 Trends in Provisions for NPA/Total Income Ratio (percentage) of DCCBs in Punjab

As on 31st March->	Mean										CAGR	t- value	Future Trend		Rank
	2006	2007	2008	2009	2010	2011	2012	2013	2017	2020					
Amritsar	7.20	2.81	21.55	2.73	2.34	1.60	3.07	1.37	5.33	-21.13	-1.16*	-3.57	-7.14	16.00	
Bathinda	0.37	2.92	7.03	0.00	0.14	1.42	9.27	7.49	3.58	53.78	1.42*	9.38	11.69	6.00	
Faridkot	0.01	0.22	0.77	0.07	1.65	0.57	0.83	0.18	0.54	50.94	0.71*	1.00	1.19	1.00	
Fatehgarh Sahib	0.27	7.86	9.42	6.48	6.46	0.65	1.42	1.15	4.21	-7.38	-1.11*	-0.47	-2.34	12.00	
Fazilka	1.63	9.64	8.04	2.82	5.42	1.81	0.28	0.64	3.78	-28.41	-1.74*	-2.45	-4.94	9.50	
Ferozepur	0.01	0.00	0.00	0.00	0.40	1.49	8.27	0.48	1.33	73.82	1.44*	5.75	7.52	2.00	
Gurdaspur	0.01	2.41	1.41	3.51	14.50	4.97	1.79	0.75	3.67	85.43	0.37*	5.79	6.64	7.00	
Hoshiarpur	2.83	0.15	13.98	8.47	6.81	4.95	10.45	9.02	7.08	36.42	1.19*	12.98	15.35	19.00	
Jalandhar	5.82	0.62	1.64	1.42	0.73	1.69	1.41	0.36	1.71	-17.18	-1.77*	-1.39	-2.64	4.00	
Kapurthala	1.26	0.09	2.87	17.06	0.99	0.00	0.00	0.73	2.88	-7.51	-0.36*	0.30	-0.73	8.00	
Ludhiana	0.35	12.29	9.08	8.44	3.61	0.31	6.11	7.25	5.93	8.46	-0.23*	4.70	4.21	17.50	
Mansa	3.28	0.38	6.11	0.75	31.57	0.00	0.00	0.00	5.26	-100.00	-0.08*	4.16	3.72	15.00	
Moga	0.01	2.84	7.17	9.00	3.13	1.30	3.50	3.18	3.77	52.04	0.05*	3.94	4.01	8.00	
Muktsar	9.30	10.17	12.71	24.70	23.87	18.23	9.05	10.38	14.80	1.48	0.19*	16.38	17.01	20.00	
Nawanshahar	4.84	0.43	10.59	7.03	0.00	0.00	0.00	7.33	3.78	6.11	-0.40*	1.67	0.83	9.50	
Patiala	0.31	6.17	6.39	2.40	7.41	3.26	0.53	6.36	4.10	9.81	0.25*	4.97	5.31	11.00	
Ropar	0.35	19.52	13.30	5.03	4.06	2.40	1.45	1.35	5.93	-10.05	-1.41*	-4.51	-8.68	17.50	
Sangrur	6.07	6.46	8.65	4.95	3.09	4.76	0.77	0.11	4.36	-38.59	-3.82*	-3.12	-6.10	13.00	
SAS Nagar	NA	0.48	11.28	6.50	0.98	0.41	8.31	4.08	4.58	11.49	-0.05*	4.27	4.14	14.00	
Tarn Taran	5.31	1.23	1.75	1.09	2.04	1.29	0.00	0.00	1.59	-100.00	-2.88*	-2.32	-3.88	3.00	

Source: Calculated from annual reports of various DCCBs

*Significant at 5

ratio i.e. 73.82 percent compounded annually was found to be significant. The provisions for NPA to total income ratio was 0.01 percent in the first year of study and was zero in 2006-07, 2007-08 and 2008-09. Thereafter, the ratio observed an increasing trend and increased to 8.27 percent in 2011-12 but decreased to 0.48 percent in 2012-13. Keeping in view the trend coefficients, it may be foreseen that the provisions for NPA to total income ratio would increase to 5.75 percent and 7.52 percent in 2016-17 and 2019-20 respectively.

Tarn Taran DCCB was at third rank among DCCBs with 1.59 percent as mean value of provisions for NPA to total income ratio. The provisions for NPA to total income ratio was 5.31 percent in 2005-06 which came down to 1.23 percent in 2006-07. The ratio increased to 1.75 percent in 2007-08 and again to 2.04 percent in 2009-10. Thereafter the ratio observed negative trend and had come down to zero percent in 2012-13. The ratio observed declining trend at the compounded annual rate of 100 percent. If the same trend continues, the provisions for NPA to total income ratio would come to -2.32 percent and -3.88 percent in 2016-17 and 2019-20 respectively.

Both Ludhiana DCCB and Ropar DCCB scored sixteenth rank with mean ratio of 5.93 percent. Ludhiana DCCB observed a significant growth in ratio at the compounded annual rate of 8.46 percent. Ropar DCCB had witnessed a negative trend in this ratio at the compounded annual rate of 10.05 percent.

Hoshiarpur DCCB was at seventeenth rank with mean ratio i.e. 7.08 percent of provisions for NPA to total income ratio. The ratio in DCCB observed a positive growth of 36.42 percent compounded annually. The provisions for NPA to total income ratio decreased in 2006-07 to 0.15 percent from 2.83 percent in 2005-06. Thereafter the ratio swiftly increased to 13.98 percent in 2007-08 but again declined for three consecutive years and came down to 4.95 percent in 2010-11. Ratio was 9.02 percent in 2012-13 after touching a level of 10.45 percent in 2011-12. Trend coefficients estimates that the provisions for NPA to total income ratio would be 12.98 percent and 15.35 percent in 2016-17 and 2019-20 respectively in this DCCB.

The last rank among DCCBs was of Muktsar DCCB with mean value of 14.80 percent of provisions for NPA to total income ratio. The DCCB witnessed growth in the ratio at the compounded rate of 1.48 percent which was found to be significant. The provisions for NPA to total income ratio was 9.30 percent in 2005-06 and jumped to 24.70 percent in 2008-09 after increasing for three continuous years and. But after that the ratio declined for three continuous years and reached 9.05 percent but increased to 10.38 percent in 2012-13. If the same trend continues, the

ratio of provisions for NPA to total income in this DCCB would be 16.38 percent and 17.01 percent in 2016-17 and 2019-20 respectively.

Table 7.5 shows that Muktsar DCCB had created high percentage of net profit as provisions for NPA. Gurdaspur, Ferozepur, Bathinda and Moga DCCBs had compounded annual growth at the rate of more than 50 percent. These DCCBs should try to curtail their provision as it decreases their profitability.

7.2.6 TRENDS IN NON INTEREST INCOME TO WORKING CAPITAL RATIO OF DCCBs IN PUNJAB

‘Non interest income to working capital ratio’ indicates the efficiency of a bank in earning non interest income. Ratios of non interest income to working capital have been presented in Table 7.6. It is clear from table that only six DCCBs had positive and increasing trend in the earning of non interest income.

As depicted in table 7.6, first among DCCBs was Faridkot DCCB with 0.25 percent mean ‘non interest income to working capital ratio’. The DCCB had a ‘non interest income to working capital ratio’ of 0.08 percent in 2005-06 which decreased to 0.07 percent in 2006-07 and increased to 0.82 percent in 2007-08. The ratio decreased to 0.09 percent in 2011-12 and increased to 0.48 percent in 2012-13. The DCCB had a significant growth in the ratio at compounded annual rate of 28.70 percent. If the similar pattern of growth continues, the non interest income to working capital ratio would be 0.30 percent and 0.32 percent in 2016-17 and 2019-20 respectively.

Second rank among DCCBs was of Gurdaspur DCCB with 0.22 percent mean non interest income to working capital ratio. The DCCB had 0.22 percent non interest income to working capital ratio in 2005-06 which decreased to 0.19 percent in 2006-07 but increased to 0.33 percent in 2008-09. The ratio after decreasing for three years was 0.19 percent in 2011-12 and it increased to 0.21 percent in 2012-13. The ratio in this DCCB had significantly declined at compounded annual rate of 1.08 percent. If the similar trend continues, the non interest income to working capital ratio in Gurdaspur DCCB would be 0.21 percent and 0.20 percent in 2016-17 and 2019-20 respectively.

Third rank among DCCBs was of SAS Nagar DCCB with 0.19 percent mean non interest income to working capital ratio. The DCCB had 0.08 percent non interest income to working capital ratio in 2006-07 which increased to 0.42 percent in 2007-08. The ratio decreased to 0.08 percent in 2008-09 but increased to 0.32 percent in 2009-10 and again declined to 0.09 percent in 2011-12. In the last year of the study

Table 7.6 Trends in Non Interest Income/Working Capital Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	0.19	0.17	0.15	0.10	0.16	0.19	0.13	0.10	0.15	-8.31	-1.34*	0.10	0.08	5.5
Bathinda	0.24	0.14	0.09	0.06	0.09	0.07	0.13	0.11	0.12	-6.61	-1.41*	0.03	0.00	10.5
Faridkot	0.08	0.07	0.82	0.25	0.10	0.10	0.09	0.48	0.25	28.70	0.15*	0.30	0.32	1
Fatehgarh Sahib	0.09	0.09	0.10	0.11	0.05	0.20	0.11	0.33	0.13	14.52	2.16*	0.31	0.38	8
Fazilka	0.28	0.16	0.17	0.10	0.12	0.08	0.18	0.12	0.15	-8.28	-1.79*	0.04	0.00	5.5
Ferozepur	0.09	0.06	0.09	0.18	0.06	0.16	0.12	0.06	0.10	2.04	0.33*	0.12	0.13	14
Gurdaspur	0.22	0.19	0.21	0.33	0.23	0.21	0.19	0.21	0.22	-1.08	-0.31*	0.21	0.20	2
Hoshiarpur	0.10	0.09	0.06	0.09	0.07	0.07	0.04	0.06	0.07	-9.11	-3.11*	0.02	0.00	17
Jalandhar	0.17	0.14	0.11	0.09	0.09	0.15	0.08	0.18	0.13	-1.68	-0.24*	0.11	0.11	8
Kapurthala	0.09	0.08	0.09	0.08	0.08	0.07	0.08	0.08	0.08	-1.73	-1.31*	0.07	0.07	15
Ludhiana	0.09	0.08	0.08	0.07	0.07	0.07	0.06	0.05	0.07	-5.67	-4.62*	0.04	0.03	17
Mansa	0.07	0.04	0.03	0.04	0.03	0.03	0.19	0.09	0.06	3.68	1.31*	0.14	0.17	19.5
Moga	0.09	0.07	0.12	0.09	0.07	0.06	0.04	0.05	0.07	-9.75	-2.61*	0.02	0.00	17
Muktsar	0.30	0.14	0.12	0.05	0.17	0.04	0.07	0.11	0.12	-13.24	-1.94*	-0.03	-0.09	10.5
Nawanshahar	0.08	0.08	0.07	0.05	0.05	0.06	0.05	0.05	0.06	-5.71	-2.68*	0.03	0.02	19.5
Patiala	0.10	0.10	0.08	0.07	0.10	0.08	0.06	0.28	0.11	5.56	1.17*	0.20	0.24	11.5
Ropar	0.15	0.11	0.10	0.07	0.11	0.07	0.10	0.13	0.11	-2.35	-0.59*	0.08	0.08	11.5
Sangrur	0.25	0.12	0.09	0.13	0.12	0.08	0.10	0.15	0.13	-5.54	-1.27*	0.06	0.03	8
SAS Nagar	0.00	0.08	0.42	0.08	0.32	0.24	0.09	0.11	0.19	-3.60	-0.54*	0.09	0.04	3
Tarn Taran	0.18	0.18	0.11	0.14	0.19	0.15	0.22	0.13	0.16	0.10	0.08*	0.17	0.17	4

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

i.e. 2012-13 it was 0.11 percent. The ratio in this DCCB significantly declined at the rate of 3.60 percent compounded annually. If the similar trend prolongs, the non interest income to working capital ratio would be 0.09 percent and 0.04 percent in 2016-17 and 2019-20 respectively.

Moga, Hoshiarpur and Ludhiana DCCBs shared seventeenth position with an average non interest income to working capital ratio of 0.07 percent as shown in table 7.6. These DCCBs had negative compounded growth rate of 9.75, 9.11 percent and 5.67 percent respectively in this ratio.

Mansa and Nawanshahar DCCBs were on last position with 0.06 percent mean non interest income to working capital ratio as shown in table 7.6. The Mansa DCCB had 0.07 percent non interest income to working capital ratio in 2005-06 which decreased to 0.03 percent in 2007-08 and increased to 0.04 percent in 2008-09. The ratio decreased to 0.03 percent in 2009-10 but again increased to 0.19 percent in 2011-12 and declined to 0.09 percent in 2012-13. The DCCB had a significant compounded annual growth in the ratio at the rate of 3.68 percent. If the similar trend continues, in Mansa DCCB the non interest income to working capital ratio would be 0.14 percent and 0.17 percent in 2016-17 and 2019-20 respectively.

Nawanshahar DCCB had a non interest income to working capital ratio of 0.08 percent in 2005-06 which declined to 0.05 percent in 2008-09. The ratio increased to 0.06 percent in 2010-11 but decreased to 0.05 percent in 2011-12 and remains the same in the last year of the study i.e. 2012-13. The ratio had a significant decline at the rate of 5.71 percent compounded annually. If the similar pattern of decline continues, the non interest income to working capital ratio would be 0.03 percent in 2016-17 and 0.02 percent in 2019-20 in Nawanshahar DCCB.

Non interest income was negligible in all DCCBs. Mean value is less than 0.25 percent in all DCCBs.

7.2.7 TRENDS IN COST OF MANAGEMENT TO TOTAL INCOME RATIO OF DCCBs IN PUNJAB

Cost of management to total income ratio determines the percentage of income which is spent on managing the activities of a bank. Lower is the ratio better is the bank. Table 7.7 shows the ratios of DCCBs in Punjab during the period of study and elucidates that fourteen DCCBs had registered declining trend in cost of management whereas six DCCBs had shown increasing trend in it.

First among DCCBs was Muktsar DCCB with 18.46 percent mean cost of management to total income ratio as shown in table 7.7. The ratio increased to 19.69

percent in 2008-09 from the 15.17 percent in 2005-06 but thereafter it decreased for next two years and was 15.93 percent in 2010-11. It again increased to 22.08 percent in 2011-12 but declined to 19.46 percent in 2012-13. The ratio had a significant compounded annual growth at the rate of 2.22 percent. If the same trend continues, the cost of management to total income ratio in 2016-17 and 2019-20 would be 21.49 percent and 22.70 percent respectively.

Mansa DCCB was on second position with 20.87 percent mean cost of management to total income ratio. The DCCB had 14.12 percent cost of management to total income ratio in 2005-06 which increased to 23.86 percent in 2006-07 and after decreasing for two years was recorded to be 17.85 percent in 2008-09. The ratio thereafter increased for three consecutive years and was 24.58 percent in 2011-12. In the last year of the study, it declined to 20.36 percent. The DCCB had a significant compounded annual growth at the rate of 5.37 percent in the ratio. If the similar trend continues, the cost of management to total income ratio in 2016-17 and 2019-20 would be 26.18 percent and 28.30 percent respectively.

Third among DCCBs was Patiala DCCB with 21.61 percent mean cost of management to total income ratio. The ratio in this DCCB had a significant decline at compounded annual rate of 1.27 percent. The cost of management to total income ratio increased to 25.32 percent in 2006-07 from 21.09 percent in 2005-06. Thereafter it decreased for three years and was 19.57 percent in 2009-10. The ratio was 19.02 percent in the last year of the study after touching a level of 23.36 percent in 2011-12. If the similar trend persists, the cost of management to total income ratio in 2016-17 and 2019-20 would be 19.56 percent and 18.73 percent respectively.

Jalandhar DCCB was at eighteenth position with 31.73 percent mean cost of management to total income ratio. The DCCB had a significant compounded annual growth in the ratio of 0.06 percent. The cost of management to total income ratio increased to 33.65 percent in 2007-08 from 30.63 percent in 2005-06. The ratio decreased for two years and was found to be 28.96 percent in 2009-10 but again increased to 35.34 percent in 2010-11 and again decreased to 30.51 percent in 2012-13. If the similar trend continues, the cost of management to total income ratio in 2016-17 and 2019-20 would be 31.94 percent and 32.02 percent respectively.

With mean cost of management to total income ratio of 37.10 percent, Faridkot DCCB was ranked nineteenth among DCCBs as shown in table 7.7. The DCCB had a significant compounded annual decline in the ratio at the rate of 2.26 percent.

Table 7.7 Trends in Cost of Management/Total Income Ratio (percentage) of DCCBs in Punjab

As on 31st March->	Mean										CAGR	t- value	Future Trend	Rank
	2006	2007	2008	2009	2010	2011	2012	2013	2017	2020				
Amritsar	38.06	48.14	47.97	40.03	37.26	39.73	34.58	35.55	40.17	-0.97	-2.00*	30.09	26.06	20.00
Bathinda	27.40	30.07	27.65	25.31	25.06	28.77	24.37	22.13	26.35	-2.86	-2.41*	20.79	18.57	10.00
Faridkot	34.66	43.13	40.29	32.93	37.38	39.10	39.81	29.54	37.10	-2.26	-0.88*	32.50	30.66	19.00
Fatehgarh Sahib	23.30	28.84	25.83	22.87	23.56	24.42	23.41	21.36	24.20	-2.11	-1.70*	20.25	18.67	7.00
Fazilka	27.87	35.03	29.51	25.12	25.26	28.36	28.81	30.04	28.75	-0.67	-0.45*	27.04	26.35	14.00
Ferozepur	31.22	38.14	33.44	29.69	29.82	30.11	29.90	23.68	30.75	-4.04	-2.75*	21.48	17.78	15.00
Gurdaspur	33.81	37.80	36.77	28.63	25.52	28.19	28.95	27.76	30.93	-2.78	-2.68*	20.62	16.49	16.00
Hoshiarpur	33.48	38.14	26.04	24.00	23.84	24.28	22.37	20.14	26.54	-7.38	-3.95*	10.67	4.32	11.00
Jalandhar	30.63	31.16	33.65	32.21	28.96	35.34	31.42	30.51	31.73	0.06	0.08*	31.94	32.02	18.00
Kapurthala	27.87	38.35	22.81	20.34	26.85	30.70	29.84	26.74	27.94	-0.45	-0.27*	26.13	25.40	13.00
Ludhiana	29.87	31.25	28.13	24.53	27.51	23.92	20.16	20.12	25.69	-6.15	-5.96*	13.78	9.01	8.00
Mansa	14.12	23.86	20.82	17.85	21.87	23.51	24.58	20.36	20.87	5.37	1.40*	26.18	28.30	2.00
Moga	35.81	41.80	35.31	29.18	28.32	28.24	25.89	27.99	31.57	-5.58	-3.71*	17.61	12.02	17.00
Muktsar	15.17	19.55	18.17	19.69	17.65	15.93	22.08	19.46	18.46	2.22	1.21*	21.49	22.70	1.00
Nawanshahar	24.57	26.92	23.75	18.73	20.84	21.60	19.92	20.03	22.05	-3.64	-2.74*	15.69	13.15	5.00
Patiala	21.09	25.32	21.74	20.33	19.57	22.43	23.36	19.02	21.61	-1.27	-0.83*	19.56	18.73	3.00
Ropar	23.97	22.62	22.06	20.59	22.53	22.54	20.48	18.71	21.69	-2.44	-3.03*	17.74	16.17	4.00
Sangrur	26.28	26.25	26.25	25.62	24.85	22.57	27.99	27.43	25.90	0.16	0.21*	26.35	26.52	9.00
SAS Nagar	0.00	25.38	21.16	21.64	22.58	27.12	27.73	23.02	24.09	1.71	0.80*	26.98	28.21	6.00
Tarn Taran	22.63	26.64	27.58	26.27	26.24	30.86	27.89	28.85	27.12	2.73	2.62*	32.45	34.57	12.00

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

The DCCB had 34.66 percent cost of management to total income ratio in 2005-06 which increased to 43.13 percent in 2006-07 and decreased to 32.93 percent in 2008-09. The cost of management to total income ratio increased for three years and was 39.81 percent in 2011-12 and declined to 29.54 percent in 2012-13. If the similar trend persists, the cost of management to total income ratio in 2016-17 and 2019-20 would be 32.50 percent and 30.66 percent respectively.

Last rank among DCCBs was of Amritsar DCCB with 40.17 percent mean cost of management to total income ratio. The DCCB had a significant decline in the ratio at the rate of 0.97 percent compounded annually. The DCCB had 38.06 percent cost of management to total income ratio in 2005-06 which increased to 48.14 percent in 2006-07 and declined to 37.26 percent in 2009-10. The ratio increased to 39.73 percent in 2010-11 but again declined to 34.58 percent in 2011-12 and increased to 35.55 percent in 2012-13. If the similar trend prolongs, the cost of management to total income ratio would be 30.09 percent and 26.06 percent in 2016-17 and 2019-20 respectively.

Fourteen DCCBs had negative compounded growth rate of cost of management to total income ratio. In most of the DCCBs, it is due to retirement of employees.

7.2.8 TRENDS IN AVERAGE YIELD ON LOANS RATIO OF DCCBs IN PUNJAB

Average yield on loans ratio measures the return earned by banks on their loans advanced. Table 7.8 reveals that out of twenty, eleven DCCBs had positive compounded growth rate in average yield on loans ratio.

First rank among DCCBs was of Kapurthala DCCB with 9.17 percent mean average yield on loans as shown in table 7.8. The average yield on loans decreased to 8.81 percent in 2006-07 from the 9.50 percent in 2005-06 and after increasing for two years was 9.18 percent in 2008-09. It decreased for next two years and was 9.04 percent in 2010-11 and increased to 9.70 percent in 2011-12 but declined to 8.95 percent in 2012-13. The DCCB had a significant compounded annual growth in the ratio at the rate of 0.03 percent. If the same trend continues, the average yield on loans in 2016-17 and 2019-20 would be 9.19 percent and 9.20 percent respectively.

Jalandhar DCCB ranked second among DCCBs with 9.02 percent mean average yield on loans. The average yield on loans decreased to 8.35 percent in 2006-07 from the 9.71 percent in 2005-06 and increased to 9.32 percent in 2007-08. Thereafter the ratio decreased for remaining period of the study and was 8.80 percent

in 2012-13. The ratio in this DCCB had a significant compounded annual decline at the rate of 0.62 percent. If the analogous trend persists, the average yield on loans in 2016-17 and 2019-20 would be 8.57 percent and 8.39 percent respectively.

Nawanshahar DCCB with 8.98 percent mean average yield on loans was at third position. The average yield on loans decreased to 8.19 percent in 2006-07 from 9.54 percent in 2005-06 and increased to 9.17 percent in 2008-09. After decreasing for two years it was 8.73 percent in 2010-11 but again increased for two years and was 9.38 percent in the last year of the study i.e. 2012-13. The ratio had a significant compounded annual growth at the rate of 0.25 percent in this DCCB. The average yield on loans would be 9.13 percent and 9.19 percent in 2016-17 and 2019-20 respectively, if the same trend continues.

Moga DCCB ranked eighteenth among DCCBs with 7.30 percent mean average yield on loans. The average yield on loans was 8.59 percent in 2005-06 which decreased to 6.68 percent in 2006-07 and increased to 7.19 percent in 2008-09. The average yield on loans after decreasing for three years was 6.76 percent in 2011-12 and increased to 8.24 percent in 2012-13. The DCCB had a significant compounded annual decline at the rate of 0.21 percent in the ratio. If the same trend sustains, the average yield on loans would be 7.15 percent and 7.09 percent in 2016-17 and 2019-20 respectively.

Ferozpur DCCB was at nineteenth position with 6.98 percent mean average yield on loans. The average yield on loans was 8.48 percent in 2005-06 which after decreasing for three years was 6.53 percent in 2008-09. It increased to 6.56 percent in 2009-10 but again decreased to 5.96 percent in 2010-11. Thereafter it increased for last two years of the study and was 7.20 percent in 2012-13. The DCCB had a significant compounded annual decline in the ratio at the rate of 2.22 percent. If the same trend continues, the average yield on loans in 2016-17 and 2019-20 would be 5.74 percent and 5.24 percent respectively.

Muktsar DCCB was at last rank among DCCBs with 6.81 percent mean average yield on loans. The DCCB had a significant decline in the ratio at the compounded annual rate of 1.90 percent. The DCCB had 7.95 percent average yield on loans in 2005-06 which decreased to 6.48 percent in 2006-07 and increased to 7.42 percent in 2008-09. After that it decreased for three consecutive years and was 5.58 percent in 2011-12 but again increased to 7.47 percent in 2012-13. If the analogous trend sustains, the average yield on loans would be 5.86 percent and 5.48 percent in 2016-17 and 2019-20 respectively.

Table 7.8 Trends in Average Yield on Loans Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	9.81	7.94	7.75	6.77	7.70	7.48	8.08	8.38	7.99	-2.23	-0.79*	7.17	6.84	9.00
Bathinda	8.37	6.47	6.72	6.73	6.91	7.01	8.28	9.02	7.44	2.30	1.21*	8.75	9.27	17.00
Faridkot	8.52	7.44	7.77	8.12	8.08	8.22	8.62	9.08	8.23	0.91	2.01*	9.22	9.62	7.00
Fatehgarh Sahib	9.04	7.18	7.56	7.59	7.85	8.11	8.26	8.83	8.05	0.93	0.67*	8.57	8.78	8.00
Fazilka	8.75	7.06	7.50	7.58	7.76	7.34	7.99	8.69	7.83	0.63	0.47*	8.18	8.32	12.00
Ferozepur	8.48	7.13	7.11	6.53	6.56	5.96	6.83	7.20	6.98	-2.22	-1.62*	5.74	5.24	19.00
Gurdaspur	9.20	7.52	7.81	8.09	9.18	9.36	8.47	9.02	8.58	-0.28	1.01*	9.41	9.74	4.00
Hoshiarpur	9.10	7.62	8.49	8.22	8.32	8.29	8.41	8.55	8.38	0.00	-0.07*	8.34	8.33	5.00
Jalandhar	9.71	8.35	9.32	9.17	8.98	8.92	8.90	8.80	9.02	-0.62	-0.97*	8.57	8.39	2.00
Kapurthala	9.50	8.81	9.12	9.18	9.07	9.04	9.70	8.95	9.17	0.03	0.06*	9.19	9.20	1.00
Ludhiana	8.77	6.57	7.31	6.96	7.31	7.53	7.61	8.54	7.58	0.82	0.45*	7.99	8.15	15.00
Mansa	8.50	6.33	7.07	6.75	6.45	7.03	8.16	9.59	7.49	1.74	1.12*	8.95	9.53	16.00
Moga	8.59	6.68	6.83	7.19	7.09	6.99	6.76	8.24	7.30	-0.21	-0.17*	7.15	7.09	18.00
Muktsar	7.95	6.48	6.75	7.42	6.76	6.04	5.58	7.47	6.81	-1.90	-1.05*	5.86	5.48	20.00
Nawanshahar	9.54	8.19	9.01	9.17	8.88	8.73	8.97	9.38	8.98	0.25	0.29*	9.13	9.19	3.00
Patiala	8.82	7.21	7.62	7.30	7.62	7.62	7.82	8.43	7.81	0.16	0.08*	7.86	7.89	13.00
Ropar	9.23	7.79	8.56	8.03	7.75	8.06	8.51	8.35	8.29	-0.56	-0.66*	7.90	7.74	6.00
Sangrur	8.71	7.06	7.65	7.23	7.02	7.67	7.68	8.03	7.63	-0.20	-0.23*	7.47	7.41	14.00
SAS Nagar		7.88	8.69	7.89	8.07	7.25	7.42	8.01	7.89	-1.25	-1.16*	7.19	6.89	10.00
Tarn Taran	8.55	6.80	7.86	7.80	7.47	8.54	7.11	8.58	7.84	0.54	0.37*	8.15	8.27	11.00

Source: Calculated from annual reports of various DCCBs
*Significant at 5%

Two DCCBs Muktsar and Ferozepur had less than seven percent return on loan assets. Due to area profile, these banks could not diversify their loan portfolio in non farm sector. Due to administrative rate of interest in agriculture, average yield on loan assets in all DCCBs is poor. Banks should diversify their business in high yield areas also. Less than 2.5 percent compounded annual growth rate in all DCCBs and negative compounded growth rate in nine DCCBs is due to reduced rate of interest on agriculture loans.

7.2.9 TRENDS IN AVERAGE YIELD ON INVESTMENT RATIO OF DCCBs IN PUNJAB

Average yield on investment ratio measures the income earned by bank on its investment. As shown in table 7.9, it is clear that seven DCCBs had negative compounded growth in average yield on investment ratio whereas thirteen DCCBs had registered positive growth in the ratio.

Among DCCBs of Punjab, Kapurthala DCCB was at first rank with 8.28 percent mean average yield on investments. A significant compounded annual growth in the ratio at the rate of 2.95 percent was registered. The average yield on investments observed an increasing trend and reached at 9.47 percent in 2008-09 from 6.66 percent in 2005-06. After this, average yield on investments declined for two consecutive years and came to 7.18 percent in 2010-11. It jumped to 9.53 percent in 2012-13. It can be predicted that if the trend remains the same, the average yield on investments would increase to 10.01 percent in 2016-17 and 10.70 percent in 2019-20 respectively.

Bathinda DCCB with 8.26 percent mean of average yield on investments was at second position. The DCCB had 7.78 percent average yield on investments in 2005-06 which increased to 10.05 percent in 2007-08 and after decreasing for next three years was found to be 6.44 percent in 2010-11. It increased in the last two years of the study and was recorded to be 8.58 percent in 2012-13. The ratio significantly declined at 0.98 percent compounded annually. If the analogous trend prolongs, the average yield on investments would be 7.67 percent and 7.43 percent in 2016-17 and 2019-20 respectively.

Third rank was secured by Nawanshahar DCCB with mean average yield on investments of 8.26 percent. The DCCB witnessed a significant increasing trend of 2.06 percent compounded annually with wide ups and downs in the average yield on investments during the period of study.

Table 7.9 Trends in Average Yield on Investment Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	6.42	5.31	8.42	9.53	9.40	7.38	8.09	9.06	7.95	5.04	1.69*	10.55	11.59	7.00
Bathinda	7.78	8.01	10.05	9.07	8.31	6.44	7.87	8.58	8.26	-0.98	-0.46*	7.67	7.43	2.50
Faridkot	7.01	6.51	7.46	7.98	6.83	5.82	6.83	7.35	6.97	0.68	-0.23*	6.79	6.71	18.00
Fatehgarh Sahib	8.21	7.27	8.26	7.97	6.56	6.88	7.20	8.55	7.61	-0.60	-0.35*	7.30	7.17	11.00
Fazilka	8.73	6.85	8.12	7.94	7.29	6.94	6.47	8.02	7.55	-1.69	-1.12*	6.56	6.16	12.00
Ferozepur	5.52	4.69	8.00	6.38	6.57	6.70	4.18	8.95	6.37	2.78	0.84*	7.96	8.59	20.00
Gurdaspur	7.34	6.53	7.09	7.62	7.17	5.99	7.14	7.92	7.10	1.09	0.40*	7.40	7.52	17.00
Hoshiarpur	7.20	7.46	9.71	8.76	7.69	6.60	8.71	9.39	8.19	1.61	0.75*	9.19	9.59	6.00
Jalandhar	6.44	7.33	8.88	9.40	8.33	7.03	8.86	9.29	8.20	3.26	1.60*	10.07	10.82	5.00
Kapurthala	6.66	7.36	9.02	9.47	8.54	7.18	8.50	9.53	8.28	2.95	1.48*	10.01	10.70	1.00
Ludhiana	7.61	6.95	8.08	8.47	7.65	7.09	8.63	7.78	7.78	0.89	0.72*	8.30	8.51	9.00
Mansa	8.01	7.38	7.93	7.50	7.10	5.31	6.49	7.45	7.15	-1.03	-1.61*	5.66	5.07	16.00
Moga	7.46	6.65	7.71	7.91	7.14	6.95	7.18	8.53	7.44	1.09	0.90*	8.07	8.33	14.00
Muktsar	8.26	7.96	8.77	8.73	8.34	5.74	9.33	5.71	7.86	-3.63	-1.18*	6.03	5.30	8.00
Nawanshahar	6.66	7.60	9.11	9.93	8.37	6.53	8.75	9.09	8.26	2.06	0.83*	9.46	9.94	2.50
Patiala	7.71	7.51	8.48	8.16	7.54	6.37	6.80	7.42	7.50	-2.01	-1.57*	6.38	5.93	13.00
Ropar	6.99	7.07	8.58	8.39	6.50	7.05	7.94	9.49	7.75	2.26	1.20*	9.12	9.67	10.00
Sangrur	6.87	6.61	7.66	7.86	8.58	6.42	6.61	8.22	7.35	0.97	0.57*	7.93	8.16	15.00
SAS Nagar		6.73	9.26	9.42	7.56	6.40	8.67	9.41	8.21	1.76	0.52*	9.17	9.58	4.00
Tarn Taran	6.54	6.20	7.50	7.90	6.28	5.81	4.70	8.08	6.63	-1.07	-0.21*	6.32	6.20	19.00

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

In the initial year of study i.e. 2005-06, the average yield on investments was 6.66 percent which increased continuously for three years and came to be 9.93 percent in 2008-09. Thereafter, after observing decline for two years, the average yield on investments came to 6.53 percent in 2010-11 but again increased in the last two years of study and mounted to 9.09 percent in 2012-13. On the basis of trend shown during the period of study, it can be foreseen that in 2016-17 and 2019-20, the average yield on investments would increase to 9.46 percent and 9.94 percent respectively.

Faridkot DCCB with 6.97 percent mean of average yield on investments secured eighteenth rank among DCCBs. The DCCB had a significant growth in the ratio at the rate of 0.68 percent compounded annually. The DCCB had 7.01 percent average yield on investments in 2005-06 which decreased to 6.51 percent in 2006-07 and increased to 7.98 percent in 2008-09. The average yield on investments after decreasing for two years was found to be 5.82 percent in 2010-11 and after increasing for remaining two years of the study, it was recorded to be 7.35 percent in 2012-13. The average yield on investments in 2016-17 and 2019-20 would be 6.79 percent and 6.71 percent respectively, if the analogous trend prolongs.

Tarn Taran DCCB was at nineteenth rank with mean of average yield on investments of 6.63 percent. The ratio in this DCCB had 6.54 percent average yield on investments in 2005-06 which decreased to 6.20 percent in 2006-07 and increased to 7.90 percent in 2008-09. After that decreased for three consecutive years and was 4.70 percent in 2011-12 but increased steeply in the last year of the study to 8.08 percent. The DCCB had a significant compounded annual decline in the ratio at the rate of 1.07 percent. If the similar trend continues, the average yield on investments in 2016-17 and 2019-20 would be 6.32 percent and 6.20 percent respectively.

Ferozepur DCCB with 6.37 percent mean of average yield on investments secured last rank among DCCBs. The ratio in this DCCB had a significant growth at the rate of 2.78 percent compounded annually. The DCCB had 5.52 percent average yield on investments in 2005-06 which decreased to 4.69 percent in 2006-07 and increased steeply to 8.00 percent in 2007-08. The average yield on investments decreased to 6.38 percent in 2008-09 and after increasing for two years was found to be 6.70 percent in 2010-11. It again decreased steeply to 4.18 percent in 2011-12 but increased hastily to 8.95 percent in 2012-13. The average yield on investments would be 7.96 percent and 8.59 percent in 2016-17 and 2019-20 respectively, if the analogous trend continues.

It has been observed during study that Kapurthala, Bathinda and Nawanshahar DCCBs had enough funds to invest in high earning securities whereas Ferozepur, Tarn Taran and Faridkot were not had enough funds to invest in these securities. They had maintained only statutory investments.

7.2.10 TRENDS IN COST OF MANAGEMENT TO TOTAL EXPENDITURE RATIO OF DCCBs IN PUNJAB

Cost of management is the major part of expenditure incurred by a bank. Cost of management includes salaries and other operating expenses whereas total expenditure includes interest expanded on deposits and borrowings and cost of management. 'Cost of management to total expenditure ratio' shows the percentage of total expenditure incurred in managing the affairs of the bank. It is encouraging that out of twenty DCCBs, seventeen DCCBs had negative and declining trend in the cost of management to total expenditure ratio as shown in table 7.10.

First rank among DCCBs was of Mansa DCCB with 21.38 percent of mean cost of management to total expenditure ratio. The DCCB had a significant compounded annual growth in the ratio at the rate of 2.28 percent. The DCCB had 18.28 percent cost of management to total expenditure ratio in 2005-06 which increased to 24.41 percent in 2006-07 and after decreasing for two years was 18.06 percent in 2008-09. After that the ratio increased for three years and was recorded to be 25.11 percent in 2011-12 but decreased to 21.40 percent in 2012-13. If the analogous tendency prolongs, the cost of management to total expenditure ratio would be 23.62 percent and 24.51 percent in 2016-17 and 2019-20 respectively.

As depicted from table 7.10, second among DCCBs was Muktsar DCCB with 23.01 percent mean cost of management to total expenditure ratio. The ratio in this DCCB had a significant compounded annual growth at the rate of 1.48 percent. The DCCB had 20.58 percent cost of management to total expenditure ratio in 2005-06 which increased to 22.87 percent in 2006-07 and decreased to 21.51 percent in 2007-08. The ratio increased to 25.99 percent in 2008-09 and after decreasing for next two years was 20.59 percent in 2010-11. It again increased to 25.34 percent in 2011-12 but decreased to 23.56 percent in 2012-13. If the similar trend persists, the cost of management to total expenditure ratio in 2016-17 and 2019-20 would be 25.53 percent and 26.53 percent respectively.

Third rank among DCCBs with 23.89 percent of mean cost of management to total expenditure ratio was of Patiala DCCB. The DCCB had a significant compounded annual decline at the rate of 2.51 percent in the ratio.

Table 7.10 Trends in Cost of Management/Total Expenditure Ratio (percentage) of DCCBs in Punjab

As on 31st March- >	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	41.89	47.94	47.33	39.31	40.02	40.77	36.73	36.42	41.30	-1.98	-2.89*	31.19	27.14	20.00
Bathinda	32.86	32.68	30.54	26.99	27.38	29.09	27.14	24.91	28.95	-3.51	-4.71*	21.15	18.03	10.00
Faridkot	35.47	41.99	37.90	33.81	35.69	37.56	36.97	30.04	36.18	-2.34	-1.52*	30.63	28.40	19.00
Fatehgarh Sahib	29.04	35.07	31.77	24.60	26.46	26.55	25.26	24.11	27.86	-3.98	-2.68*	19.16	15.69	5.00
Fazilka	32.85	38.02	32.32	26.14	27.09	28.75	28.75	30.47	30.55	-2.63	-1.64*	24.05	21.45	12.00
Ferozepur	35.61	36.76	33.99	23.42	23.14	30.85	26.11	24.54	29.30	-5.35	-2.56*	16.76	11.75	11.00
Gurdaspur	38.76	40.52	36.18	29.75	30.50	32.32	30.76	29.02	33.48	-4.05	-3.87*	22.07	17.50	15.00
Hoshiarpur	40.95	41.99	33.18	28.85	27.20	26.62	25.30	22.99	30.89	-8.32	-6.64*	10.30	2.07	13.00
Jalandhar	37.64	38.11	40.69	36.51	31.02	36.08	32.08	31.67	35.48	-3.04	-2.85*	27.33	24.07	18.00
Kapurthala	36.80	44.28	31.06	27.51	31.61	34.73	33.40	29.45	33.60	-2.93	-1.44*	25.50	22.26	16.00
Ludhiana	40.57	38.53	35.32	30.08	30.73	28.71	24.62	23.57	31.52	-7.60	-12.38*	12.97	5.55	14.00
Mansa	18.28	24.41	22.36	18.06	19.79	21.67	25.11	21.40	21.38	2.28	0.72*	23.62	24.51	1.00
Moga	40.32	43.35	38.51	33.43	30.41	30.36	28.32	29.74	34.30	-5.85	-5.41*	18.53	12.22	17.00
Muktsar	20.58	22.87	21.51	25.99	23.66	20.59	25.34	23.56	23.01	1.48	1.08*	25.53	26.53	2.00
Nawanshahar	32.56	35.05	32.23	26.02	25.59	24.09	21.45	23.61	27.57	-6.44	-5.35*	13.69	8.14	4.00
Patiala	25.48	28.91	23.96	21.36	21.88	24.06	24.28	21.17	23.89	-2.51	-1.83*	19.20	17.33	3.00
Ropar	34.27	31.42	31.51	27.56	26.15	25.61	24.63	23.70	28.11	-5.19	-9.57*	16.76	12.22	7.50
Sangrur	30.64	28.55	29.25	27.00	25.74	27.68	28.37	27.67	28.11	-1.14	-1.60*	25.64	24.65	7.50
SAS Nagar		29.30	28.27	27.87	25.97	28.99	31.05	26.78	28.32	-0.15	-0.09*	28.09	28.00	9.00
Tarn Taran	24.58	27.19	28.48	26.68	26.92	32.29	28.57	29.13	27.98	2.19	2.11*	32.48	34.28	6.00

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

The DCCB had 25.48 percent cost of management to total expenditure ratio in 2005-06 which increased to 28.91 percent in 2006-07 and after decreasing for next two years was 21.36 percent in 2008-09. The ratio after increasing for next three years was recorded to be 24.28 percent in 2011-12 and decreased to 21.17 percent in 2012-13. If the same trend continues, the cost of management to total expenditure ratio in 2016-17 and 2019-20 would be 19.20 percent and 17.33 percent respectively.

Jalandhar DCCB was at eighteenth position with mean cost of management to total expenditure ratio of 35.48 percent. The DCCB had a significant decline at the rate of 3.04 percent compounded annually in the ratio. The DCCB had cost of management to total expenditure ratio of 37.64 percent in 2005-06 which after increasing for two years was 40.69 percent in 2007-08 and decreased for next two years to 31.02 percent in 2009-10. Ratio increased to 36.08 percent in 2010-11 but again decreased for last two years of the study and was recorded to be 31.67 percent in 2012-13. The cost of management to total expenditure ratio would be 27.33 percent and 24.07 percent in 2016-17 and 2019-20 respectively, if the similar tendency prolongs.

Faridkot DCCB was at nineteenth rank among DCCBs with 36.18 percent of cost of management to total expenditure ratio. It had a significant decline in the ratio at the rate of 2.34 percent compounded annually. The DCCB had 35.47 percent cost of management to total expenditure ratio in 2005-06 which increased to 41.99 percent in 2006-07 and after decreasing for two years was recorded to be 33.81 percent in 2008-09. The ratio after increasing for two years was found to be 37.56 percent in 2010-11 but decreased to 30.04 percent in 2012-13. The cost of management to total expenditure ratio in 2016-17 and 2019-20 would be 30.63 percent and 28.40 percent respectively, if the similar trend continues.

As illustrated in table 7.10, Amritsar DCCB was at last rank among DCCBs with 41.30 percent of cost of management to total expenditure ratio. The ratio in the DCCB had a significant decline at the rate of 1.98 compounded annually. The DCCB had 41.89 percent cost of management to total expenditure ratio in 2005-06 which increased to 47.94 percent in 2006-07 and after decreasing for two years was recorded to be 39.31 percent in 2008-09. The ratio after increasing for next two years was found to be 40.77 percent in 2010-11 but again decreased to 36.42 percent in the last year of the study i.e. 2012-13. The cost of management to total expenditure ratio in 2016-17 and 2019-20 would be 31.19 percent and 27.14 percent respectively, if the similar trend continues.

Seven DCCBs had spent more than 30 percent of their cost as cost of management. These DCCBs should take steps to reduce cost of management to increase the profitability.

7.2.11 TRENDS IN INTEREST EXPANDED TO TOTAL EXPENDITURE RATIO OF DCCBs IN PUNJAB

Interest expanded is a major cost of banking industry. Interest expanded to total expenditure ratio shows the percentage of interest expanded in the total expenditure in a bank. Table 7.11 which shows the ratios of all DCCBs during the period of study reveals that only three DCCBs had registered declining trend in the interest expanded to total expenditure ratio. Moga and Nawanshahar DCCB had high rate of compounded annual growth in the ratio.

Amritsar DCCB was at ranking first with lowest mean interest expanded to total expenditure ratio of 58.70 percent. The DCCB had registered significant growth rate of 1.29 percent compounded annually in the ratio. The interest expanded to total expenditure ratio had declined to 52.06 percent in 2006-07 from 58.11 percent in 2005-06 and thereafter increased for two years and was at 60.69 percent in 2008-09. The ratio had declined for next two years and came down to 59.23 percent in 2010-11 and in the last two years of study, the ratio again increased and augmented to 63.58 percent in 2012-13. On the basis of trend shown during the period of study, it can be foreseen that if the same trend continues, the interest expanded to total expenditure ratio would be 68.81 percent and 72.86 percent in 2016-17 and 2019-20 respectively.

Faridkot DCCB was at second position with mean interest expanded to total expenditure ratio of 63.82 percent. The ratio in this DCCB was found to be significant at compounded annual rate of 1.16 percent during the period of study. The ratio of interest expanded to total expenditure was 64.53 percent in 2005-06 which declined to 58.01 in 2006-07. Afterwards, the ratio followed increasing path and mounted to 66.19 percent in 2008-09 but then declined for next two years and came down to 62.44 percent in 2010-11. In the last two years of study, the ratio increased to 69.06 percent in 2012-13. The ratio of interest expanded to total expenditure would come to 69.37 percent in 2016-17 and 71.60 percent in 2019-20, if the same trend continues.

Jalandhar DCCB secured third rank with mean value of 64.52 percent of interest expanded to total expenditure ratio. The growth rate in the ratio i.e. 1.70 percent compounded annually was found to be significant. The ratio declined to 59.31 percent in 2007-08 from 62.36 percent in 2005-06 but increased for next two consecutive years and came to 68.98 percent in 2009-10.

Table 7.11 Trends in Interest Expanded/Total Expenditure Ratio (percentage) of DCCBs in Punjab

As on 31st March->	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	Future Trend		Rank
												2017	2020	
Amritsar	58.11	52.06	52.67	60.69	59.98	59.23	63.27	63.58	58.70	1.29	2.89*	68.81	72.86	1.00
Bathinda	67.14	67.32	69.46	73.01	72.62	70.91	72.86	75.09	71.05	1.48	4.71*	78.85	81.97	11.00
Faridkot	64.53	58.01	62.10	66.19	64.31	62.44	63.03	69.96	63.82	1.16	1.52*	69.37	71.60	2.00
Fatehgarh Sahib	70.96	64.93	68.23	75.40	73.54	73.45	74.74	75.89	72.14	1.64	2.68*	80.84	84.31	16.00
Fazilka	67.15	61.98	67.68	73.86	72.91	71.25	71.25	69.53	69.45	1.30	1.64*	75.95	78.55	9.00
Ferozepur	64.39	63.24	66.01	76.58	76.86	69.15	73.89	75.46	70.70	2.45	2.56*	83.24	88.25	10.00
Gurdaspur	61.24	59.48	63.82	70.25	69.50	67.68	69.24	70.98	66.52	2.13	3.87*	77.93	82.50	6.00
Hoshiarpur	59.05	58.01	66.82	71.15	72.80	73.38	74.70	77.01	69.11	4.17	6.64*	89.70	97.93	8.00
Jalandhar	62.36	61.89	59.31	63.49	68.98	63.92	67.92	68.33	64.52	1.70	2.85*	72.67	75.93	3.00
Kapurthala	63.20	55.72	68.94	72.49	68.39	65.27	66.60	70.55	66.40	1.73	1.44*	74.50	77.74	5.00
Ludhiana	59.43	61.47	64.68	69.92	69.27	71.29	75.38	76.43	68.48	3.71	12.38*	87.03	94.45	7.00
Mansa	91.82	90.58	91.39	93.26	94.34	78.33	74.89	78.60	86.65	-2.20	-2.95*	67.98	60.51	20.00
Moga	59.68	56.65	61.49	66.57	69.59	69.64	71.68	70.26	65.70	3.31	5.41*	81.47	87.78	4.00
Muktsar	79.42	77.13	78.49	74.01	76.34	79.41	74.66	76.44	76.99	-0.43	-1.08*	74.47	73.47	19.00
Nawanshahar	67.44	64.95	67.77	73.98	74.41	75.91	78.55	76.39	72.43	2.62	5.35*	86.31	91.86	17.00
Patiala	74.52	71.09	76.04	78.64	78.12	75.94	75.72	78.83	76.11	0.83	1.83*	80.80	82.67	18.00
Ropar	65.73	68.58	68.49	72.44	73.85	74.39	75.37	76.30	71.89	2.15	9.57*	83.24	87.78	14.00
Sangrur	69.36	71.45	70.75	73.00	74.26	72.32	71.63	72.33	71.89	0.47	1.60*	74.36	75.35	13.00
SAS Nagar		70.70	71.73	72.13	74.03	71.01	68.95	73.22	71.68	0.04	0.09*	71.91	72.00	12.00
Tarn Taran	75.42	72.81	71.52	73.32	73.08	67.71	71.43	70.87	72.02	-0.83	-2.11*	67.52	65.72	15.00

Source: Calculated from annual reports of various DCCBs

*Significant at 5%

The ratio was 68.33 percent in 2012-13 after touching a level of 63.92 percent in 2010-11. Keeping in view the trend coefficients, it may be estimated that the interest expanded to total expenditure ratio would increase to 72.67 percent and 75.93 percent in 2016-17 and 2019-20 respectively, if the similar trend sustains.

Patiala DCCB was at eighteenth rank and had average of interest expanded to total expenditure ratio of 76.11 percent as shown in table 7.11. A significant growth at the compounded annual rate of 0.83 percent in the ratio in this bank was recorded. In 2006-07, the interest expanded to total expenditure ratio was 71.09 percent as compared to 74.52 percent in 2005-06 and then increased for next two continuous years to reach at 78.64 percent in 2008-09. In 2011-12 it again decreased to 75.72 percent and then increased to 78.73 percent in the last year of study. Keeping in view the trend coefficients, it may be predicted that if the same trend continues, the ratio of interest expanded to total expenditure would increase to 80.80 percent and 82.67 percent in 2016-17 and 2019-20 respectively.

Muktsar DCCB was at nineteenth rank among DCCBs with mean interest expanded to total expenditure ratio of 76.99 percent. The rate of growth of the ratio was negative i.e. 0.43 percent which was found to be significant. The ratio of interest expanded to total expenditure declined to 77.13 percent in 2006-07 from 79.42 percent in 2005-06 which increased to 78.49 percent in 2007-08. Thereafter, the ratio came down to 74.01 percent in 2008-09 and then observed increasing trend for two years and reached at 79.41 percent in 2010-11 but again decreased to 76.44 percent in the last year of study i.e. 2012-13. Keeping in view the trend coefficients, it may be predicted that if the same conditions sustains, the interest expanded to total expenditure ratio would come to 74.47 percent and 73.47 percent in 2016-17 and 2019-20 respectively.

Mansa DCCB was at last ladder with mean value of 86.65 percent of interest expanded to total expenditure ratio. The DCCB experienced negative and significant compounded annual rate of 2.20 percent in the ratio. In 2005-06, the ratio of interest expanded to total expenditure was 91.82 percent which declined to 90.58 percent in 2006-07 and then followed increasing path for next three years and jumped to 94.34 percent in 2009-10. Thereafter the ratio declined for next two years and came down to 74.89 percent in 2011-12 but in the last year of study i.e. 2012-13, the ratio again increased to 78.60 percent. It can be estimated that if the same trend continues, the ratio of interest expanded to total expenditure would come down to 67.98 percent and 60.51 percent in 2016-17 and 2019-20 respectively.

Nineteen DCCBs had more than 60 percent of their expenditure as interest expanded. These DCCBs should make efforts to reduce their interest expenditure by attracting low cost deposits.

7.3 COMPARATIVE STUDY OF EARNING CAPABILITY OF DCCBs IN PUNJAB

Table 7.12 and 7.13 shows comparative position of earning capacity of DCCBs in Punjab during the period of study on the basis of mean values and CAGR respectively. A perusal of these tables shows that

- **NET PROFIT TO OWNED FUNDS RATIO**

Kapurthala DCCB had the highest mean net profit to owned funds ratio i.e. 5.91 percent followed by SAS Nagar DCCB with mean ratio of 5.71 percent and Fatehgarh Sahib DCCB with mean ratio of 5.43 percent. On the other hand, Mansa DCCB observed lowest mean net profit to owned funds ratio i.e. -4.98 percent and followed by Faridkot DCCB and Amritsar DCCB with mean ratio of -1.72 percent and 0.29 percent respectively.

Faridkot DCCB had highest compounded growth in the ratio at the rate of 5.64 percent followed by Fatehgarh Sahib with 2.16 percent and Fazilka Sahib DCCB with 1.01 percent. While Amritsar DCCB observed negative compounded growth in the ratio of -54.81 percent and it was followed by Gurdaspur DCCB and Hoshiarpur DCCB with -35.27 percent and -30.17 percent.

- **NET PROFIT TO AVERAGE WORKING FUNDS RATIO**

The highest mean 'net profit to average working funds' was observed in Nawanshahar DCCB i.e. 0.90 percent followed by Ropar DCCB with 0.81 percent and Kapurthala DCCB with 0.64 percent. On the other hand, Faridkot DCCB showed the lowest mean net profit to average working funds ratio with -0.83 percent followed by Amritsar DCCB and Mansa DCCB with -0.33 percent and -0.22 percent respectively.

In terms of growth in this ratio, Faridkot DCCB had recorded the highest growth at the compounded annual rate of 4.77 percent in the ratio followed by Ferozepur DCCB with 1.31 percent and Fatehgarh Sahib DCCB with -3.27 percent. Conversely, Hoshiarpur DCCB, Gurdaspur DCCB and Bathinda DCCB had observed the negative compounded growth in the ratio of 35.48 percent, 33.25 percent and 27.24 percent respectively.

Table 7.12 Comparative Study of Earning Capability of DCCBs in Punjab in term of Mean

DCCB	Net Profit/ Owned Funds (%)	Net Profit/ Average Working Funds (%)	Interest Income/ Total Income (%)	Net Profits/ Total Assets (%)	Provisions For NPA/Total Income (%)	Non Interest Income/ Working Capital (%)	Cost of Management/ Total Income (%)	Average Yield on Loans (%)	Average Yield on Investment (%)	Cost of Management/ Total Expenditure (%)	Interest Expanded/ Total Expenditure (%)
Amritsar	0.29	-0.33	97.95	-0.28	5.33	0.15	40.17	7.99	7.95	41.30	58.70
Bathinda	3.27	0.22	98.41	0.19	3.58	0.12	26.35	7.44	8.26	28.95	71.05
Faridkot	-1.72	-0.83	98.03	-0.15	0.54	0.25	37.10	8.23	6.97	36.18	63.82
Fatehgarh Sahib	5.43	0.48	98.25	0.43	4.21	0.13	24.20	8.05	7.61	27.86	72.14
Fazilka	2.15	0.20	97.97	0.18	3.78	0.15	28.75	7.83	7.55	30.55	69.45
Ferozepur	3.56	0.33	98.44	0.29	1.33	0.10	30.75	6.98	6.37	29.30	70.70
Gurdaspur	1.26	0.12	97.11	0.11	3.67	0.22	30.93	8.58	7.10	33.48	66.52
Hoshiarpur	4.38	0.43	99.06	0.38	7.08	0.07	26.54	8.38	8.19	30.89	69.11
Jalandhar	5.03	0.49	98.45	0.46	1.71	0.13	31.73	9.02	8.20	35.48	64.52
Kapurthala	5.91	0.64	99.03	0.57	2.88	0.08	27.94	9.17	8.28	33.60	66.40
Ludhiana	2.87	0.41	99.02	0.36	5.93	0.07	25.69	7.58	7.78	31.52	68.48
Mansa	-4.98	-0.22	99.06	-0.22	5.26	0.06	20.87	7.49	7.15	21.38	86.65
Moga	2.19	0.19	98.93	0.16	3.77	0.07	31.57	7.30	7.44	34.30	65.70
Muktsar	2.62	0.31	98.15	0.28	14.80	0.12	18.46	6.81	7.86	23.01	76.99
Nawanshahar	5.36	0.90	99.23	0.83	3.78	0.06	22.05	8.98	8.26	27.57	72.43
Patiala	3.92	0.30	98.56	0.28	4.10	0.11	21.61	7.81	7.50	23.89	76.11
Ropar	5.25	0.81	98.63	0.72	5.93	0.11	21.69	8.29	7.75	28.11	71.89
Sangrur	2.14	0.15	98.17	0.14	4.36	0.13	25.90	7.63	7.35	28.11	71.89
SAS Nagar	5.71	0.51	97.30	0.46	4.58	0.19	24.09	7.89	8.21	28.32	71.68
Tarn Taran	1.41	0.13	98.31	0.12	1.59	0.16	27.12	7.84	6.63	27.98	72.02

Source: Compiled from various calculated values

Table 7.13 Comparative Study of Earning Capability of DCCBs in Punjab in terms of CAGR

DCCB	Net Profit/ Owned Funds (%)	Net Profit/ Average Working Funds (%)	Interest Income/ Total Income (%)	Net Profits/ Total Assets (%)	Provisions For NPA/ Total Income (%)	Non Interest Income/ Working Capital (%)	Cost of Management/ Total Income (%)	Average Yield on Loans (%)	Average Yield on Investment (%)	Cost of Management/ Total Expenditure (%)	Interest Expanded/ Total Expenditure (%)
Amritsar	-54.81	-8.64	0.15	-8.33	-21.13	-8.31	-0.97	-2.23	5.04	-1.98	1.29
Bathinda	-25.65	-27.24	0.17	-27.03	53.78	-6.61	-2.86	2.30	-0.98	-3.51	1.48
Faridkot	5.64	4.77	-0.66	4.66	50.94	28.70	-2.26	0.91	0.68	-2.34	1.16
Fatehgarh Sahib	2.16	-3.27	-0.28	-2.82	-7.38	14.52	-2.11	0.93	-0.60	-3.98	1.64
Fazilka	1.01	-7.48	0.21	-7.83	-28.41	-8.28	-0.67	0.63	-1.69	-2.63	1.30
Ferozepur	-4.44	1.31	-0.07	1.82	73.82	2.04	-4.04	-2.22	2.78	-5.35	2.45
Gurdaspur	-35.27	-33.25	0.03	-33.23	85.43	-1.08	-2.78	-0.28	1.09	-4.05	2.13
Hoshiarpur	-30.17	-35.48	0.09	-35.68	36.42	-9.11	-7.38	0.00	1.61	-8.32	4.17
Jalandhar	-21.04	-26.39	0.05	-26.20	-17.18	-1.68	0.06	-0.62	3.26	-3.04	1.70
Kapurthala	-2.23	-8.47	0.03	-8.31	-7.51	-1.73	-0.45	0.03	2.95	-2.93	1.73
Ludhiana	-3.30	-12.67	0.07	-12.68	8.46	-5.67	-6.15	0.82	0.89	-7.60	3.71
Mansa	-6.85	-7.07	-0.03	-7.36	-100.00	3.68	5.37	1.74	-1.03	2.28	-2.20
Moga	-13.31	-17.02	0.11	-19.22	52.04	-9.75	-5.58	-0.21	1.09	-5.85	3.31
Muktsar	-1.33	-9.17	0.28	-9.18	1.48	-13.24	2.22	-1.90	-3.63	1.48	-0.43
Nawanshah ar	-11.63	-17.84	0.06	-17.57	6.11	-5.71	-3.64	0.25	2.06	-6.44	2.62
Patiala	-10.76	-12.85	-0.14	-13.03	9.81	5.56	-1.27	0.16	-2.01	-2.51	0.83
Ropar	-8.50	-10.33	0.04	-11.35	-10.05	-2.35	-2.44	-0.56	2.26	-5.19	2.15
Sangrur	-21.83	-23.28	0.14	-22.93	-38.59	-5.54	0.16	-0.20	0.97	-1.14	0.47
SAS Nagar	-17.17	-19.75	0.29	-17.71	11.49	-3.60	1.71	-1.25	1.76	-0.15	0.04
Tarn Taran	-1.16	-8.39	-0.03	-6.25	-100.00	0.10	2.73	0.54	-1.07	2.19	-0.83

Source: Compiled from various calculated values

- **INTEREST INCOME TO TOTAL INCOME RATIO**

The highest ratio was observed by Nawanshahar DCCB with mean value of 99.23 percent followed by Hoshiarpur DCCB and Mansa DCCB with 99.06 percent. On the contrary, Gurdaspur DCCB showed the lowest mean ratio of 97.11 percent followed by SAS Nagar with mean ratio of 97.30 percent and Amritsar DCCB with 97.95 percent.

SAS Nagar DCCB had shown the highest growth in 'interest income to total income ratio' at the compounded annual rate of 0.29 percent followed by Muktsar DCCB with 0.28 percent and Fazilka DCCB with 0.21 percent compounded annually. On the other hand, the lowest growth in the ratio was observed in Faridkot DCCB at the compounded annual rate of -0.66 percent followed by Fatehgarh Sahib DCCB with -0.28 percent and Patiala DCCB with -0.14 percent.

- **NET PROFITS TO TOTAL ASSETS RATIO**

Nawanshahar DCCB had highest average 'net profits to total assets ratio' of 0.83 percent followed by Ropar DCCB with 0.72 percent and Kapurthala DCCB with 0.57 percent. The lowest mean 'net profits to total assets ratio' i.e. -0.28 percent was in Amritsar DCCB followed by Mansa DCCB with -0.22 percent and Faridkot DCCB with -0.15 percent.

In terms of compounded growth in net profit to total assets ratio, Faridkot DCCB showed the highest growth at 4.66 percent followed by 1.82 percent in Ferozepur DCCB and -2.82 percent of Fatehgarh Sahib. The lowest compounded growth in the ratio was found in Hoshiarpur DCCB with -35.68 percent followed by Gurdaspur DCCB and Bathinda DCCB with -33.23 percent and -27.03 percent respectively.

- **PROVISIONS FOR NPA TO TOTAL INCOME RATIO**

The Muktsar DCCB had shown highest mean of provisions for NPA to total assets ratio i.e. 14.80 percent followed by Hoshiarpur DCCB and Ropar DCCB with 7.08 percent and 5.93 percent. The lowest mean of provisions of NPA to total income i.e. 0.54 percent was in Faridkot DCCB followed by 1.33 percent in Ferozepur DCCB and 1.59 percent in Tarn Taran DCCB.

The highest compounded growth in provisions for NPA to total income i.e. 85.43 percent was found in Gurdaspur DCCB followed by Ferozepur DCCB and Bathinda DCCB with 73.82 percent and 53.78 percent respectively. In Mansa DCCB and Tarn Taran DCCB, the lowest growth rate in provisions for NPA to total income

was found to be lowest i.e. -100 percent followed by Sangrur DCCB with -38.59 percent.

- **NON INTEREST INCOME TO WORKING CAPITAL RATIO**

The highest mean 'non interest income to working capital ratio' was in Faridkot DCCB with 0.25 percent and followed by Gurdaspur DCCB with 0.22 percent and SAS Nagar DCCB with 0.19 percent. The Nawanshahar DCCB and Mansa DCCB had the lowest mean non interest income to working capital ratio i.e. 0.06 percent followed by Hoshiarpur DCCB with 0.07 percent.

Faridkot DCCB had highest compounded growth at 28.70 percent in the ratio followed by 14.52 percent in Fatehgarh Sahib DCCB and 5.56 percent in Patiala DCCB. Whereas the lowest compounded growth in the ratio was observed in Muktsar DCCB with -13.24 percent and followed by Moga DCCB with -9.75 percent and Hoshiarpur DCCB with -9.11 percent.

- **COST OF MANAGEMENT TO TOTAL INCOME RATIO**

The highest mean cost of management to total income ratio was 40.77 percent recorded in Amritsar DCCB followed by Faridkot DCCB and Jalandhar DCCB with 37.10 percent and 31.73 percent respectively. The lowest mean cost of management to total income ratio i.e. 18.46 percent was in Muktsar DCCB followed by 20.87 percent in Mansa DCCB and 21.61 percent in Patiala DCCB.

In cost of management to total income ratio, Mansa DCCB had highest compounded growth at the rate of 5.37 percent annually followed by Tarn Taran DCCB and Muktsar DCCB with annual growth rate of 2.73 percent and 2.22 percent respectively. On the other hand, Hoshiarpur DCCB had registered with lowest compounded growth in the ratio at the rate of -7.38 percent annually followed by Ludhiana DCCB with annual growth rate of -6.15 percent and Moga DCCB with growth rate of -5.58 percent.

- **AVERAGE YIELD ON LOANS RATIO**

The highest yield on loans i.e. 9.17 percent was in Kapurthala DCCB followed by Jalandhar DCCB and Nawanshahar DCCB with 9.02 percent and 8.98 percent respectively. While Muktsar DCCB had observed lowest average yield on loans i.e. 6.81 percent followed by Ferozepur DCCB and Moga DCCB with 6.98 percent and 7.30 percent respectively.

In average yield on loans, Bathinda DCCB had shown highest compounded annual growth at the rate of 2.30 percent followed by Mansa DCCB and Fatehgarh

Sahib DCCB with compounded annual growth rate of 1.74 percent and 0.93 percent respectively. On the other hand, Amritsar DCCB, Ferozepur DCCB and Muktsar DCCB had shown lowest growth in the ratio at the compounded rate of -2.23 percent, -2.22 percent and -1.90 percent respectively.

- **AVERAGE YIELD ON INVESTMENTS RATIO**

Kapurthala DCCB had highest mean average yield on investment i.e. 8.28 percent followed by Bathinda DCCB with 8.26 percent and Nawanshahar DCCB with 8.26 percent. The lowest average yield on investment was recorded in Ferozepur DCCB, Tarn Taran DCCB and Faridkot DCCB with 6.37 percent, 6.63 percent and 6.97 percent respectively.

Amritsar DCCB had shown highest growth in average yield on investment at the rate of 5.04 percent and it was followed by Jalandhar DCCB with compounded growth rate of 3.26 percent and Kapurthala DCCB with 2.95 percent compounded annually. On the other hand, Muktsar DCCB had shown lowest growth in the ratio at the compounded annual rate of -3.63 percent followed by Patiala DCCB and Fazilka DCCB with compounded growth rate of -2.01 percent and -1.69 percent respectively.

- **COST OF MANAGEMENT TO TOTAL EXPENDITURE RATIO**

Amritsar DCCB showed the highest mean cost of management to total expenditure ratio of 41.30 percent followed by Faridkot DCCB and Jalandhar DCCB with mean ratio of 36.18 percent and 35.48 percent respectively. Whereas Mansa DCCB observed the lowest mean cost of management to total expenditure ratio of 21.38 percent followed by Muktsar DCCB and Patiala DCCB with mean ratio of 23.01 percent and 23.89 percent respectively.

Mansa DCCB had shown highest growth in the cost of management to total expenditure ratio at the compounded annual rate of 2.28 percent. Mansa DCCB was followed by Tarn Taran DCCB with growth rate of 2.19 percent and Muktsar DCCB with growth rate of 1.48 percent. On the other hand, Hoshiarpur DCCB had a negative growth in the ratio at the compounded annual rate of 8.32 percent followed by Ludhiana DCCB and Nawanshahar DCCB with growth rate of -7.60 percent and -6.44 percent respectively.

- **INTEREST EXPENDED TO TOTAL EXPENDITURE RATIO**

Mansa DCCB had highest mean ratio of interest expanded to total expenditure i.e. 86.65 percent followed by Muktsar and Patiala DCCB with mean ratio of 76.99 percent and 76.11 percent. Whereas Amritsar DCCB recorded the lowest mean ratio

of interest expended to total expenditure ratio of 58.70 percent followed by Faridkot DCCB and Jalandhar DCCB with 63.82 percent and 64.52 percent respectively.

In interest expanded to total expenditure ratio, Hoshiarpur DCCB, Ludhiana DCCB and Moga DCCB had shown highest growth at the compounded annual rate of 4.17 percent, 3.71 percent and 3.31 percent respectively. On the other hand, the lowest compounded annual growth in the ratio was registered in Mansa DCCB, Tarn Taran DCCB and Muktsar DCCB with growth rate of -2.20 percent, -0.83 percent and -0.43 percent respectively.

- **COMPOSITE RANKING OF DCCBs IN TERMS OF EARNING CAPABILITY RATIO**

Overall rating has been shown in table 7.14 and perusal of table shows that in terms of earning capability, Nawanshahar, Kapurthala and Jalandhar DCCBs were the best banks whereas Amritsar, Mansa and Moga DCCBs need improvement in their working to increase their profitability.

Major loan portfolio of DCCBs in Punjab is agriculture loans, which have administrative rates of interest and profitability is low. Above analysis of earning capacity in DCCBs shows that Nawanshahar, Kapurthala and Jalandhar (banks in cash rich NRI belt of Punjab) had very high profitability as their agriculture loaning is very less and they have earned from other operations, whereas DCCBs which are dependent only on agriculture loans had a meagre income. These DCCBs had to diversify their business in high yield portfolio to earn sustainable profits.

Table 7.14 Table showing Composite Ranking of DCCBs in terms of Earning Capability

DCCB	Net Profit /Owned Funds (%)	Net Profit/ Average Working Funds (%)	Interest Income/ Total Income (%)	Net Profits/ Total Assets (%)	Provisions For NPA/ Total Income (%)	Non Interest Income/ Working Capital (%)	Cost of Management/ Total Income (%)	Average Yield on Loans (%)	Average Yield on Investment (%)	Cost of Management/ Total Expenditure (%)	Interest Expanded/ Total Expenditure (%)	Total	Overall Ranking
Amritsar	18.00	19	18.00	20	16.00	5.5	20.00	9.00	7.00	20.00	1.00	153.50	20
Bathinda	10.00	12	11.00	12	6.00	10.5	10.00	17.00	2.50	10.00	11.00	112.00	9
Faridkot	19.00	20	16.00	18	1.00	1	19.00	7.00	18.00	19.00	2.00	140.00	17
Fatehgarh Sahib	3.00	6	13.00	6	12.00	8	7.00	8.00	11.00	5.00	16.00	95.00	6
Fazilka	14.00	13	17.00	13	9.50	5.5	14.00	12.00	12.00	12.00	9.00	131.00	14
Ferozepur	9.00	9	10.00	9	2.00	14	15.00	19.00	20.00	11.00	10.00	128.00	11.5
Gurdaspur	17.00	17	20.00	17	7.00	2	16.00	4.00	17.00	15.00	6.00	138.00	15
Hoshiarpur	7.00	7	2.50	7	19.00	17	11.00	5.00	6.00	13.00	8.00	102.50	7
Jalandhar	6.00	5	9.00	4.5	4.00	8	18.00	2.00	5.00	18.00	3.00	82.50	3
Kapurthala	1.00	3	4.00	3	8.00	15	13.00	1.00	1.00	16.00	5.00	70.00	2
Ludhiana	11.00	8	5.00	8	17.50	17	8.00	15.00	9.00	14.00	7.00	119.50	10
Mansa	20.00	18	2.50	19	15.00	19.5	2.00	16.00	16.00	1.00	20.00	149.00	18
Moga	13.00	14	6.00	14	8.00	17	17.00	18.00	14.00	17.00	4.00	142.00	18
Muktsar	12.00	10	15.00	10.5	20.00	10.5	1.00	20.00	8.00	2.00	19.00	128.00	11.5
Nawanshahar	4.00	1	1.00	1	9.50	19.5	5.00	3.00	2.50	4.00	17.00	67.50	1
Patiala	8.00	11	8.00	10.5	11.00	11.5	3.00	13.00	13.00	3.00	18.00	110.00	8
Ropar	5.00	2	7.00	2	17.50	11.5	4.00	6.00	10.00	7.50	14.00	86.50	4
Sangrur	15.00	15	14.00	15	13.00	8	9.00	14.00	15.00	7.50	13.00	138.50	16
SAS Nagar	2.00	4	19.00	4.5	14.00	3	6.00	10.00	4.00	9.00	12.00	87.50	5
Tarn Taran	16.00	16	12.00	16	3.00	4	12.00	11.00	19.00	6.00	15.00	130.00	13

Source: Calculated from various computed values

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