

CHAPTER 4

CAPITAL ADEQUACY

4.1 INTRODUCTION

Every organisation needs resources to undertake its operations. The resources in various forms are the backbone of an enterprise. Bank as a financial intermediary needs resources to operate successfully as an engine of economic growth. The efficient management of resources leads toward successful economic activity/production process. Sources of funds in an organisation comprises of share capital, reserves, loans and current liabilities. But in banks, share capital and reserves (owned funds), deposits (time and demand deposits), borrowings and other liabilities constitute the sources of funds. ‘Composition of resources (i.e. resource mix), cost of resources and conditions to raise resources are important factors which have direct impact on working of an organisation’ (Sukhmani, 2011). In case of banking industry, composition of resources plays a major role in its profitability. Banks always ought to develop a favourable mix of resources.

Capital is an essential and important ingredient of resources of a banking company. Capital enables the establishment of a bank by supplying the funds necessary to acquire the physical and human resources that comprises it. It is also critical to the perpetuation of banking entity in its capacity as an ongoing concern. “Capital plays an important role from the inception of a bank and throughout its functioning life” (Hampel et. al., 1990). Capital is termed as net worth of an organisation showing owner’s interest in the firm. “Capital is the difference between total assets and total liabilities of the firm (Koch, 1988)”.

Share capital is permanent and cheapest source of funds in every corporate entity because of its no obligatory cost. Shares of corporate sector are easily transferable and through well established regulated and fool proof mechanism to protect the interest of the shareholders. People invest in companies to get a fair rate of dividend and also to increase their worth. On the other hand, cooperative banks have some peculiar features associated with this source of funds. Legally, cooperative banks are voluntary organizations established by people for their economic good. But in India, they are organised by government by means of state policy to provide basic requirements to the poorest strata of society. The main objective of cooperative banks is to provide low cost credit to its members and to provide maximum return on equity

remains their secondary objective. Due to some peculiar conditions profitability of these banks is low. So, investors do not prefer to invest in share capital of these organisations. Hence, these banks have poor capital base and remains undercapitalised. To overcome the problem of undercapitalisation, on the one hand, state governments have taken the responsibility to solve the problem and have contributed towards equity of these banks. Secondly, contribution to share capital has been made mandatory for borrowers of these organisations. “Every borrower has to contribute a fixed percentage of the amount to be borrowed in shares of the cooperative society from which he borrows a loan. In Punjab, share linkage was five per cent which has been reduced to 2.5 percent w.e.f. July 2002 (Govt. of Punjab, 2002).”

Bank capital can be defined in both narrow and broad sense. In narrow sense, it can be termed as contribution by the owners in a bank in the form of share capital. This contribution by owners makes them entitled to get share in the earnings of the bank. In broader sense, it is owners’ funds that can be used to strengthen a bank’s business (Ikpefun, 2013). A bank can raise resources through deposits or borrowing only if it has good capital base consisting of equity and reserves.

4.2 CAPITAL ADEQUACY

Funds collected by banks in the form of deposits i.e. demand deposits and time deposits are deployed in loans and advances. Despite of taking due care while granting loans, banks face greater risk of loss due to default in payment by borrower and some part of banks’ assets becoming irrecoverable. “Banks are considered as the custodian of depositors’ money. They have to maintain the depositors’ confidence that their bank deposits and assets are safe from various types of risks and losses. Banks absorb losses from the earnings but there are certain unexpected losses which can not be absorbed from the normal earning” (Olalekan and Adeyinka, 2013). “In that case capital can be served as a cushion to absorb unexpected losses. It will increase the depositors’ confidence as well as maintains stability and efficiency of financial system” (Aggarwal, 2011). “Capital is a source of long term funds i.e. debt and equity which helps to absorb losses and supplements bank’s long term assets” (Mamun, 2013). “It indicates the ability of bank to honour its obligation along with absorbing unexpected shocks” (Srivastva et.al., 2011). “Banks can reduce risk by remaining solvent and providing cushion to absorb losses. It provides ready access to financial

markets so that liquidity crunch can be faced which are caused due to deposit outflows” (Koch, 1988).

Therefore, a minimum reasonable percentage of share capital must be there in total funds of a bank. Robinson and Pettway (1967) have rightly observed, “The function of bank capital is that of absorbing short and intermediate term losses resulting from events that managerial foresight cannot be reasonably expected to anticipate a margin of safety that, preferably would allow a bank to continue operations without loss of momentum and at least, would buy time in which a bank could re-establish its operational momentum” (Kaur, 2012).

“Safety and soundness of individual banks can be attained by maintaining adequate capital in the banks” (Nachane et.al., 2000). “Capital adequacy has strong impact on the overall performance of the bank, like opening of new branches, lending of money in risky and profitable ventures and diversification of business” (Sangmi and Nasir, 2010). Adequate capital in banking provides confidence to the customer, public and regulatory authorities that bank is financial viable to absorb the unexpected shocks. “Thus, the basic philosophy for the concept of adequate capital is based on the three aspects namely strengthening of institutions’ structure, protecting the depositors against the risk and maintaining general confidence in the banking system (Adhikary, 1988)”.

“The concept of adequate capital came into being in the middle of 1970 when banks expanded their lending activities without a parallel increase in its capital and it led to evolution of international debt crisis which resulted in the failure of biggest American bank. This event gave authorities concrete cause to have more control procedures to avoid bank failures (Al-sabbag, 2004)”. It resulted in the emergence of the concept of capital adequacy. Capital adequacy concept is the invention of the ‘Basel Committee on Banking Supervision (BCBS)’. BCBS recommended Basel I norms for risk weighted capital adequacy in 1988 which were amended in 1996. In 1999, Basel II framework was suggested.

4.3 CAPITAL ADEQUACY IN INDIA

The Reserve Bank of India is well aware about the problem of inadequate share capital base in Indian banks since a long. With low level of profits, the banks could not plough back adequate resources to their net worth. “As far back in 1961, the RBI advised the banks to maintain 6 per cent of paid-up capital and reserves to total deposits because banks had been increasing their assets without a corresponding

augmentation of their capital base” (Singh, 2007). “In terms of Section 17 of the Banking Regulation Act, 1949, every banking company incorporated in India is required to create a reserve fund and transfer a sum equivalent to not less than 20 per cent of its disclosed profits, to the reserve fund every year while Reserve Bank has advised banks to transfer 25 percent to 30 per cent to the reserve fund” (Pasha and Swamy, 2012)”.

“Narasimham Committee on financial sector reforms suggested a capital to risk-weighted assets system for banks in India since April 1992 which was in conformity with international standards” (Nachane, 2000). “Under this system, the balance sheet assets, non-funded items and other off-balance sheet exposures are assigned weights according to the prescribed risk weights. Banks have to maintain minimum capital funds corresponding to the prescribed ratio on the total risk weighted assets and other exposures” (Datar and Banerjee, 2004). Risk-weighted assets held by the bank are weighted by credit risk, operational risk and market risk. “Capital adequacy requirements are the powerful obstacle to the spread of moral hazard, protecting the economy from excessive expansion of credit and money supply, since the shareholders at the same risk of losing investment can reap the potentially large profits, exposing the economy to the possibility of devastating banking crisis” (Volkov, 2010).

As per RBI’s guidelines, capital consists of ‘tier I capital’ and ‘tier II capital’. Tier I capital is most dependable source of capital. It is termed as core capital which is used to absorb losses without ceasing a bank’s trading. It provides protection to its depositors. “The tier I capital includes paid-up capital (ordinary shares), statutory reserves, disclosed free reserves, perpetual non-cumulative preference shares (PNCPS), innovative perpetual debt instruments (IPDI) and capital reserves representing surplus arising out of sale proceeds of assets (RBI circular DBOD.No.BP.BC.16 /21.06.001/2012-13)”.

“Tier II capital is also known as supplementary capital. It helps the bank to absorb losses in the happening of winding up and provides lesser degree of protection to its depositors. The elements of tier II capital include undisclosed reserves, revaluation reserves, general provisions and loss reserves, hybrid capital instruments, subordinated debt and investment reserve account. But tier II should be limited to a maximum of 100 percent of total tier I for the purpose of compliance with the norms (RBI circular No.DBOD.No.BP.BC.16 /21.06.001/2012-13)”.

“Till the year ending 31 March 1999, it was mandatory for the commercial banks to keep a minimum capital to risk weighted assets ratio (CRAR) of 8 per cent. But with effect from the year ended 31 March 2000, banks are required to maintain a minimum CRAR of 9 percent (RBI Circular on prudential norms on capital adequacy DBOD No .BP.BC.12/21.01.002/2004-05DT.19/07/2004)”. “Earlier these provisions of capital adequacy was not mandatory for central cooperative banks but after realizing the importance of capital adequacy, the RBI issued directives where by each cooperative bank has to meet the capital adequacy standard of 9 percent in a phased manner over a period of three years” (Waraich and Dhawan, 2014). “The capital adequacy standards for district central cooperative banks should be 7 percent ongoing basis up to March 31, 2015 and 9 percent up to 31st march 2017’ (RBI circular No. RPCD.RCB.BC.73 /07.51.012 /2013-14)”.

4.4 CAPITAL ADEQUACY IN DISTRICT CENTRAL COOPERATIVE BANKS IN PUNJAB

Adequacy of capital can be assessed with the help of following capital ratios. Capital ratios act as an indicator of bank leverage.

- ‘Capital Adequacy Ratio’
- ‘Tier I Capital to Risk Weighted Assets Ratio’
- ‘Tier II Capital to Risk Weighted Assets Ratio’

4.4.1 TRENDS IN TIER I CAPITAL IN SELECTED DCCBs OF PUNJAB

“Tier I capital is referred as core capital of a bank. It helps banks to absorb losses without closing down the trading and provides more of protection to its depositors (Fatima, 2014)”. On perusal of table 4.1, it is clear that eighteen DCCBs had positive compounded annual growth in tier I capital. Three DCCBs i.e. Mansa, Amritsar and Faridkot DCCBs had very low and insufficient tier I capital.

Table 4.1 reveals that Nawanshahar DCCB had highest mean value of tier I capital of Rs 9244.77 lacs. Tier I capital of Nawanshahar DCCB was Rs 7324.66 lacs in 2005-06 and had shown an increasing trend till 2009-10 raising it to Rs 10671.4 lacs. The value had shown a sudden decline in the year 2010-11 and was found to be Rs 9827.21 lacs. However the tier I capital was Rs 10705.67 lacs in year 2012-13. The Nawanshahar DCCB indicated a significant compounded annual growth rate (CAGR) of 5.79 percent in tier I capital. The future projections of the bank for year

2016-17 and 2019-20 shows that the value of tier I capital would be Rs. 13024.5 lacs and Rs. 14536.4 lacs respectively, if present growth pattern continues.

Second highest mean value of the tier I capital among DCCBs was Rs. 6804.30 lacs of Ludhiana DCCB. In the initial year of study i.e. 2005-06 the tier I capital was found to be Rs 6157.21 lacs. In year 2006-07, the value had decreased to Rs 6037.77 lacs. But after year 2006-07, the trend for the tier I capital was noticed to be increasing continuously till year 2012-13 and it was Rs 7920.20 lacs as revealed in Table 4.1. The tier I capital had a significant compounded annual growth rate (CAGR) of 4.03 percent in this DCCB. The linear expression for projecting the trend for the value shows that the value of tier I capital would be Rs. 8842.83 lacs and Rs. 9658.24 lacs in the year 2016-17 and 2019-20 respectively.

Jalandhar DCCB followed Ludhiana DCCB with mean tier I capital of Rs 6337.46 lacs. The tier I capital of this DCCB had increased to Rs 7239.18 lacs in the last year of study i.e. 2012-13 as compared to Rs 5173.39 lacs in the initial year of study i.e. 2005-06. This DCCB registered a significant growth in tier I capital at 4.53 percent compounded annually. Keeping in view trend coefficients, it may be predicted that value of tier I capital would further increase to Rs 8400.38 lacs in the year 2016-17 and Rs 9225.55 lacs in the year 2019-20.

Faridkot DCCB had secured eighteenth rank with mean tier I capital of Rs 921.70 lacs. No definite pattern of growth was established during the period of study. Tier I capital noticed declining trend till 2007-08 and reached the level of Rs 970.01 lacs as compared Rs. 1108.68 lacs in the first year of study i.e. 2005-06. In the year 2008-09, tier I capital observed an increase in value and was Rs 1000.75 lacs. It decreased to Rs. 892.98 lacs in 2009-10 and noticed a slight increase in the year 2010-11, where it was Rs. 893.55 lacs. Again the tier I capital decreased to Rs. 663.50 lacs in the year 2011-12. In the last year of study i.e. 2012-13, tier I capital had increased and reached the level of Rs 771.31 lacs. This DCCB registered a declining trend in the tier I capital with 6.12 percent compounded annual rate. If the same trend continues, the tier I capital would come to Rs 498.01 lacs and Rs 328.54 lacs in the year 2016-17 and 2019-20 respectively.

The second lowest mean value of tier I capital was that of Amritsar DCCB with Rs 632.35 lacs as mean value for entire period of study. The DCCB had Rs. 1014.88 lacs as tier I capital in the year 2005-06 and witnessed decline in this capital.

Table 4.1 Trends in Capital (Tier 1) of DCCBs in Punjab

As on 31st March->	(Rs. In Lacs)											Mean	CAGR	t- value	Future Trend		Rank
	2006	2007	2008	2009	2010	2011	2012	2013	2017	2020							
	Amritsar	1014.88	982.68	-387.36	-495.12	-194.9	1045.66	1477.09	1615.9	632.35	6.87				1.02*	1639.36	
Bathinda	1904.82	1926.29	1945.52	2074.68	2108.53	2223.04	2298.37	2424.82	2113.26	3.62	11.94	2681.72	2909.11	10			
Faridkot	1108.68	1072.81	970.01	1000.75	892.98	893.55	663.5	771.31	921.70	-6.12	-5.88*	498.01	328.54	18			
Fatehgarh Sahib	1445.72	1317.49	1552.79	1454.33	1660.44	1779.19	1947.17	2143.79	1662.62	6.45	6.19*	2459.06	2777.64	15			
Fazilka	1692.29	1599.75	1627.68	1680.02	1737.58	1812.61	1782.81	1983.21	1739.49	2.42	3.97*	2057.72	2185.00	13			
Ferozepur	1026.85	910.27	1035.9	1030.7	1113.73	1307.23	2016.55	2133.76	1321.87	12.47	4.17*	2587.66	3093.97	17			
Gurdaspur	1379.08	1330.62	1390.44	1407.06	1529.95	1691.35	2422.02	2546.66	1712.15	9.94	4.33	3020.69	3544.11	14			
Hoshiarpur	3736.4	3747.49	4031.29	4284.37	4532.32	4530.41	4566.12	5201.46	4328.73	4.52	8.20*	5765.69	6340.47	5			
Jalandhar	5173.39	5623.75	6152.38	6353.09	6467	6674.23	7016.69	7239.18	6337.46	4.53	12.30*	8400.38	9225.55	3			
Kapurthala	4070.74	4462.64	4743.84	5012.57	5467.13	5708.95	6318.62	6539.65	5290.52	7.02	26.04*	7961.25	9029.54	4			
Ludhiana	6157.21	6037.77	6293.51	6512.13	6798.26	7151.34	7563.97	7920.2	6804.30	4.03	9.83*	8842.83	9658.24	2			
Mansa	814.63	814.58	854.84	908.81	142.79	-24.66	42.87	283.51	479.67	-14.00	-3.17*	-500.77	-892.94	20			
Moga	1890.66	1686.39	1740.21	1792.86	1869.6	1945.42	1993.81	2278.6	1899.69	3.05	3.08	2341.22	2517.83	11			
Muktsar	2161.29	2174.25	2228.63	2278.87	2362.4	2495.78	2538.64	2746.59	2373.31	3.42	8.95*	2980.81	3223.81	9			
Nawanshahar	7324.66	7766.37	8202.37	9225.08	10671.4	9827.21	10235.4	10705.7	9244.77	5.79	5.99*	13024.50	14536.40	1			
Patiala	2853.02	2536.47	2700.64	2848.14	3265.47	3520.77	3842.95	4159.25	3215.84	6.96	6.16*	4872.42	5535.05	7			
Ropar	3873.78	2755.37	3039.85	3314.98	3321.15	3520.19	3757.29	4082.83	3458.18	2.85	1.50*	4165.34	4448.20	6			
Sangrur	2374.58	2235.4	2315.5	2362.08	2576.37	3178.34	3240.92	3494.95	2722.27	6.89	5.54*	4121.64	4681.39	8			
SAS Nagar	NA	1146.9	1420.52	1475.54	1625.65	1686.35	1751.92	1946.9	1579.11	7.94	10.10*	2397.51	2748.26	16			
Tarn Taran	1373.08	1428.15	1420.12	1430.62	1467.48	1692.14	2497.13	2647.17	1744.49	9.91	3.88	3094.17	3634.04	12			

Source: Compiled from annual reports of various DCCBs

* Significant at 5%

It was Rs 982.68 lacs in the year 2006-07, Rs -387.36 lacs in the year 2007-08 and was Rs -194.9 in the year 2009-10. Thereafter an increase in Tier I capital was observed and it was Rs. 1045.66 lacs in 2010-11, Rs. 1477.09 lacs in 2011-12 and Rs 1615.9 Lacs in 2012-13. The DCCB had a significant compounded annual growth at the rate of 6.87 percent. The future projections using linear trend equation indicated that the value of tier I capital would be Rs. 1639.36 lacs in the year 2016-17 and Rs. 2042.16 lacs in the year 2019-20 if same trend continues.

The least mean value of tier I capital was noticed for Mansa DCCB as shown in Table 4.1 for the study period. The DCCB observed an initial marginal fall in tier I capital from Rs. 814.63 lacs in 2005-06 to Rs. 814.58 lacs in 2006-07. The tier I capital witnessed an increase thereafter and reached a value of Rs. 908.81 lacs in the year 2008-09. There was a steep decline in the tier I capital in the year 2009-10 to Rs. 142.79 lacs. A further decline in tier I capital was observed and it was Rs.-24.66 lacs in the year 2010-11. Thereafter the capital witnessed an increasing trend to Rs. 42.87 lacs in 2011-12 and Rs. 283.51 lacs in 2012-13. The mean value of tier I capital was Rs. 479.67 lacs for the period of study. The DCCB had a significant compounded annual decline at the rate of 14.00 percent in tier I capital. The future prediction of value of tier I capital had shown that if same trend persist, the value of tier I capital in the year 2016-17 and 2019-20 would be Rs. -500.77 lacs and Rs. -892.94 lacs respectively.

Above analysis shows that two DCCBs i.e. Mansa and Faridkot had negative compounded growth in tier I capital. Even government of Punjab had to contribute Rs 15 crore each in 2013 to both these banks toward their capital base to save them from closure as per RBI norms. Despite of this, both the DCCBs reflected decline in the tier I capital. It is the core capital which helps the banks to absorb losses without ceasing its business and protect the interests of investors also. These DCCBs are required to augment the amount of tier I capital to strengthen their capital base.

4.4.2 TRENDS IN TIER II CAPITAL OF SELECTED DCCBs OF PUNJAB

“Tier II capital is a supplementary capital that absorbs losses in the event of winding up and thus gives lesser degree of protection to its depositors (Pasha and Swamy, 2012)”. Study of table 4.2 shows that nineteen DCCBs had shown positive compounded annual growth in tier II capital. Only Fazilka DCCB had registered negative compounded annual growth.

Table 4.2 reflects that among DCCBs, Ludhiana DCCB had highest tier II capital with mean value Rs 860.59 lacs. During the period of study, tier II capital had shown a continuous growth from Rs 497.01 lacs in the year 2005-06 to Rs 1312.69 lacs in the last year of study i.e. 2012-13. The tier II capital of Ludhiana DCCB showed significant growth at compounded rate of 14.38 percent per annum. The linear trend equation shows that if the same trend continues, tier II capital for the year 2016-17 and 2019-20 would be Rs 1704.81 lacs and Rs 2042.49 lacs respectively.

The Jalandhar DCCB ranked second with Rs 843.58 lacs average tier II capital. This bank had shown significant compounded annual growth rate in tier II capital at 11.69 percent. In the year 2005-06, the tier II capital of this bank was Rs 493.44 lacs which increased to Rs 840.79 lacs in 2008-09 and Rs 1080.46 lacs in 2012-13. The linear trend equation predicts that in the year 2016-17 and 2019-20, the tier II capital would be Rs 1488.76 lacs and Rs 1746.83 lacs respectively, if the same trend persists.

On examining the table 4.2, it is observed that tier II capital of Hoshiarpur DCCB ranked third and had average tier II capital of Rs 827.01 lacs. The DCCB had tier II capital of Rs. 466.28 lacs in 2005-06 which rose to Rs. 866.81 lacs in 2009-10 and Rs. 1203.30 lacs in 2012-13. The tier II capital in this DCCB had a significant growth at the compounded annual rate of 14.55 percent. If the present trend remains the same, tier II capital of bank would be Rs.1620.26 lacs and Rs. 1937.56 lacs in the year 2016-17 and 2019-20 respectively.

Fazilka DCCB ranked eighteenth among DCCBs with average tier II capital of Rs 316.20 lacs. Tier II capital had a significant decline of 1.12 percent compounded annually. The value of tier II capital had shown an increase from Rs 261.29 lacs in 2005-06 to Rs 399.59 lacs in 2008-09. Thereafter it decreased to Rs 318.37 lacs in 2009-10 and dipped drastically to Rs 119.07 lacs in the year 2010-11. A slight increase was noticed in the year 2011-12 raising it to Rs 201.23 lacs. However a steep rise in the value in the last year of study was observed raising it to Rs 532.98 lacs. Rs 358.15 lacs and Rs 374.93 lacs would be the predicted values of tier II capital in year 2016-17 and 2019-20 respectively, if the same trend continues.

As depicted in table 4.2 it is clear that the SAS Nagar DCCB followed Fazilka DCCB and ranked nineteenth among DCCBs. It had a mean tier II capital of Rs 255.80 lacs.

Table 4.2 Trends in Capital (Tier II) of DCCBs in Punjab

As on 31st March->	(Rs. In Laacs)										Mean	CAGR	t- value	Future Trend		Rank
	2006	2007	2008	2009	2010	2011	2012	2013	2017	2020						
Amritsar	70.51	82.47	91.33	447.60	456.16	458.38	1240.23	1253.42	512.51	58.25	5.47*	1867.77	2409.87	11		
Bathinda	427.71	499.21	590.88	622.79	644.04	695.29	800.60	2150.64	803.89	18.40	2.61*	2045.14	2541.63	4		
Faridkot	215.86	247.77	252.20	254.30	70.24	218.87	299.19	403.34	245.22	4.39	1.08*	359.99	405.90	20		
Fatehgarh Sahib	273.08	313.08	81.53	123.66	432.61	339.02	635.15	597.18	349.41	18.90	2.57*	792.31	969.47	16		
Fazilka	261.29	311.50	385.53	399.59	318.37	119.07	201.23	532.98	316.20	-1.12	0.26*	358.15	374.93	18		
Ferozepur	241.84	288.40	250.74	109.19	91.71	523.17	547.23	919.56	371.48	18.96	2.53*	982.02	1226.23	14		
Gurdaspur	166.35	511.93	195.25	193.88	243.81	244.09	1577.78	1758.87	611.50	31.55	2.64*	2100.19	2695.66	7		
Hoshiarpur	466.29	519.84	692.53	804.67	866.81	986.63	1076.02	1203.30	827.01	14.55	26.95*	1620.26	1937.56	3		
Jalandhar	493.34	581.27	796.27	840.79	875.70	1013.92	1066.91	1080.46	843.58	11.69	9.92*	1488.76	1746.83	2		
Kapurthala	389.56	426.83	536.31	568.96	620.29	666.71	753.89	808.92	596.43	10.91	22.47*	1044.05	1223.10	8		
Ludhiana	497.01	570.43	734.06	786.07	849.86	968.41	1166.16	1312.69	860.59	14.38	14.45*	1704.81	2042.49	1		
Mansa	163.04	236.55	340.76	339.91	380.45	396.91	443.44	616.84	364.74	16.77	7.31*	759.38	917.24	15		
Moga	185.12	327.71	386.46	423.35	433.96	585.95	673.61	1495.27	563.93	26.13	3.63*	1591.58	2002.63	10		
Muktsar	277.21	318.97	358.15	394.66	438.50	472.67	541.95	636.90	429.87	11.86	13.61*	788.82	932.40	12		
Nawanshahar	347.55	413.14	513.13	560.66	571.93	728.03	733.84	824.30	586.57	12.63	14.59*	1086.28	1286.17	9		
Patiala	349.08	771.52	612.89	256.05	456.96	722.14	1095.10	1044.50	663.53	13.31	2.20*	1289.83	1540.34	6		
Ropar	368.31	273.65	333.50	348.48	361.65	407.15	446.75	470.43	376.24	5.88	3.70*	538.24	603.04	13		
Sangrur	115.00	376.36	653.41	826.75	659.96	1028.48	1070.11	1517.90	781.00	33.74	7.78*	2053.09	2561.93	5		
SAS Nagar	NA	165.45	219.35	235.17	260.59	284.05	300.21	325.81	255.80	10.71	12.75*	428.72	502.83	19		
Tarn Taran	330.64	341.40	384.92	313.06	248.02	260.21	264.25	613.68	344.52	1.97	0.73*	447.76	489.06	17		

* Significant at 5%

Source: Compiled from annual reports of various DCCBs

It had tier II capital of Rs 165.45 lacs in the year 2005-06 and it registered continuous growth every year through the period of study and increased to Rs 325.81 lacs at the end of year 2012-13. SAS DCCB showed annual compounded growth rate of 10.71 percent in tier II capital. The future trend shows that tier II capital will be Rs 428.72 lacs and Rs 502.83 lacs in the year 2016-17 and 2019-20 respectively, if the same trend continues.

The Faridkot DCCB was at last rank among DCCBs with an average tier II capital of Rs 245.22 lacs. The tier II capital in this DCCB had a significant compounded annual growth at the rate of 4.39 percent. The tier II capital was Rs 215.86 lacs in the year 2005-06 which steadily increased to Rs 254.30 lacs in 2008-09. The capital swiftly dipped to Rs 70.24 lacs in the year 2009-10 and again steeply increased to Rs 218.87 lacs in the year 2010-11. The increase in the tier II capital continued and it was Rs 403.34 lacs in the year 2012-13. The linear trend shows that if the same trend prevails, tier II capital would be Rs 359.99 lacs and Rs 405.9 lacs in the year 2016-17 and 2019-20.

Above analysis reveals that Ludhiana, Jalandhar and Hoshiarpur DCCBs had high tier II capital. These banks are known as strongest banks in Punjab cooperative credit system. These banks are very old banks and have sufficient own funds. Three DCCBs i.e. Faridkot, SAS Nagar and Fazilka had very less tier II capital. Faridkot and SAS Nagar banks are youngest banks which were established in 1995 and 2006 respectively. Out of twenty DCCBs of Punjab, only Fazilka DCCB was observing declining compounded annual growth rate of -1.12 percent. It is due to very high incidence of NPAs in revolving cash credit facility to farmers. Steps should be taken to increase the tier II capital in Fazilka DCCB as tier II capital is the supplementary capital which provides protection to the investors.

4.4.3 TRENDS IN TOTAL CAPITAL OF SELECTED DCCBs OF PUNJAB

‘Total capital of a bank’ includes both ‘tier I capital’ and ‘tier II capital’. Table 4.3 demonstrates that all the DCCBs except Faridkot and Mansa DCCB registered increasing trend in compounded annual growth rate. Nawanshahar, Ludhiana and Jalandhar DCCBs had highest average total capital among all DCCBs.

Among DCCBs, Nawanshahar DCCB had highest average total capital during the period of study as revealed in table 4.3. The DCCB had a mean total capital Rs. 9831.34 lacs. The total capital in the year 2005-06 was Rs. 7672.21 lacs which escalated following a growing trend to Rs. 11243.33 lacs in year 2009-10. A declining

trend was observed next year and total capital was Rs. 10555.24 lacs in year 2010-11 but increased to Rs 11529.97 lacs in 2012-13. The total capital in the DCCB registered a significant annual compounded growth rate of 6.17 percent and if the same trend continues, the total capital would be Rs. 14110.78 lacs in the year 2016-17 and Rs. 15822.56 lacs in the year 2019-20.

Ludhiana DCCB with Rs. 7664.88 lacs average total capital was on second position among DCCBs. The DCCB had a significant growth rate of 5.08 percent compounded annually in total capital. The total capital in the year 2005-06 was Rs. 6654.22 lacs, which witnessed a decline in year 2006-07 to Rs. 6608.2 lacs. Thereafter the total capital had an increasing trend throughout the period of study and was Rs. 9232.89 lacs in last year of study. If the similar trend prevailed then the total capital would be Rs. 10547.64 lacs and Rs. 11700.74 lacs in the year 2016-17 and 2019-20 respectively.

Jalandhar DCCB followed Ludhiana DCCB with Rs. 7181.05 lacs average total capital during the period of study as depicted in table 4.3. The total capital in DCCB had 5.30 percent significant compounded annual growth rate. The DCCB witnessed an increasing trend throughout the period of study. Total capital of Rs. 5666.73 lacs in year 2005-06 had augmented to Rs 8319.64 lacs in year 2012-13. If same trend sustains the total capital in year 2016-17 and 2019-20 would be Rs. 9889.14 lacs and Rs. 10972.38 lacs.

Faridkot DCCB ranked eighteenth among DCCBs with Rs. 1166.92 lacs mean total capital as shown in table 4.3. The DCCB had witnessed significant annual growth rate of -3.47 percent in total capital. The DCCB had Rs. 1324.54 lacs total capital in the year 2005-06, which came down to be Rs. 1320.58 lacs in 2006-07 and to Rs. 1222.21 lacs in 2007-08. After increasing marginally to Rs. 1255.05 lacs in 2008-09, it decreased considerably to Rs. 963.22 lacs in the year 2009-10 and to Rs. 962.69 lacs in 2011-12 but finally increased to Rs. 1174.65 lacs in 2012-13. Keeping the trend of capital decline of DCCB in view, it may be predicted that it would be Rs. 858 lacs and Rs. 734.44 lacs in the year 2016-17 and 2019-20 respectively.

Nineteenth rank among DCCBs was of Amritsar DCCB with Rs. 1144.87 lacs mean total capital. The DCCB witnessed a declining trend in initial years with steep decline in the year 2007-08.

Table 4.3 Trends in Total Capital of DCCBs in Punjab

As on 31st March->	(Rs. In Laacs)										Mean	CAGR	t- value	Future Trend		Rank
	2006	2007	2008	2009	2010	2011	2012	2013	2017	2020						
Amritsar	1085.39	1065.15	-296.03	-47.52	261.26	1504.04	2717.32	2869.32	1144.87	14.90	2.09	3507.13	4452.03	19		
Bathinda	2332.53	2425.50	2536.40	2697.47	2752.57	2918.33	3098.97	4575.46	2917.15	7.89	3.59*	4726.86	5450.74	9		
Faridkot	1324.54	1320.58	1222.21	1255.05	963.22	1112.42	962.69	1174.65	1166.92	-3.47	-2.40*	858.00	734.44	18		
Fatehgarh Sahib	1718.80	1630.57	1634.32	1577.99	2093.05	2118.21	2582.32	2740.97	2012.03	8.21	4.87	3251.37	3747.11	15		
Fazilka	1953.58	1911.25	2013.21	2079.61	2055.95	1931.68	1984.04	2516.19	2055.69	2.19	1.85	2415.86	2559.93	14		
Ferozepur	1268.69	1198.67	1286.64	1139.89	1205.44	1830.40	2563.78	3053.32	1693.35	14.08	3.73	3569.68	4320.20	17		
Gurdaspur	1545.43	1842.55	1585.69	1600.94	1773.76	1935.44	3999.80	4305.53	2323.64	15.01	3.28	5120.88	6239.77	12		
Hoshiarpur	4202.69	4267.33	4723.82	5089.04	5399.13	5517.04	5642.14	6404.76	5155.74	5.97	11.76*	7385.95	8278.03	5		
Jalandhar	5666.73	6205.02	6948.65	7193.88	7342.70	7688.15	8083.60	8319.64	7181.05	5.30	12.27*	9889.14	10972.38	3		
Kapurthala	4460.30	4889.47	5280.15	5581.53	6087.42	6375.66	7072.51	7348.57	5886.95	7.40	28.93*	9005.30	10252.64	4		
Ludhiana	6654.22	6608.20	7027.57	7298.20	7648.12	8119.75	8730.13	9232.89	7664.88	5.08	11.65*	10547.64	11700.74	2		
Mansa	977.67	1051.13	1195.60	1248.72	523.24	372.25	486.31	900.35	844.41	-9.95	-1.67*	258.61	24.29	20		
Moga	2075.78	2014.10	2126.67	2216.21	2303.56	2531.37	2667.42	3773.87	2463.62	7.60	3.71	3932.79	4520.46	11		
Muktsar	2438.50	2493.22	2586.78	2673.53	2800.90	2968.45	3080.59	3383.49	2803.18	4.64	10.73*	3769.63	4156.21	10		
Nawanshahar	7672.21	8179.51	8715.50	9785.74	11243.33	10555.24	10969.23	11529.97	9831.34	6.17	7.03*	14110.78	15822.56	1		
Patiala	3202.10	3307.99	3313.53	3104.19	3722.43	4242.91	4938.05	5203.75	3879.37	7.82	5.25*	6162.25	7075.40	6		
Ropar	4242.09	3029.02	3373.35	3663.46	3682.80	3927.34	4204.04	4553.26	3834.42	3.14	1.70*	4703.58	5051.24	7		
Sangrur	2489.58	2611.76	2968.91	3188.83	3236.33	4206.82	4311.03	5012.85	3503.26	10.60	9.23*	6174.73	7243.32	8		
SAS Nagar	NA	1312.35	1639.87	1710.71	1886.24	1970.40	2052.13	2272.71	1834.92	8.32	10.63	2826.24	3251.09	16		
Tarn Taran	1703.72	1769.55	1805.04	1743.68	1715.50	1952.35	2761.38	3260.85	2089.01	8.68	3.32	3541.93	4123.10	13		

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

The DCCB followed an increasing trend in the years afterwards till 2012-13. The DCCB with Rs. 1085.39 lacs as value of total capital in the year 2005-06, initial year of study, witnessed a decline in the year 2006-07 where the value recorded was Rs. 1065.15 lacs. The steep decline in the year 2007-08 resulted in Rs. -296.03 lacs as value of total capital. The total capital thereafter with an increasing trend registered a value of Rs. 2869.32 lacs in the year 2012-13. Total capital in this DCCB had compounded annual growth of 14.90 percent. Total capital in the year 2016-17 and 2019-20 would be Rs. 3507.13 lacs and Rs. 4452.03 lacs respectively, if same trend follows.

Mansa DCCB with Rs. 844.41 lacs average total capital during the period of study was ranked last among DCCBs as revealed in table 4.3. Total capital of Rs. 977.67 lacs in the year 2005-06 had increased to Rs. 1051.13 lacs in the year 2006-07 after following the increasing trend. It was Rs. 1248.72 lacs in the year 2008-09. Thereafter total capital decreased to Rs. 372.25 lacs in 2010-11. Again it increased in next two years and total capital was Rs. 900.35 lacs in the year 2012-13. The DCCB had a significant compounded annual growth rate of -9.95 percent in total capital. If the declining trend is not reverted, the predicted value of total capital would be Rs. 258.61 lacs in the year 2016-17 and Rs. 24.29 lacs in the year 2019-20 respectively.

Trend in total capital also establishes that Nawanshahar, Jalandhar and Ludhiana DCCBs have a very strong capital base. Amritsar DCCB had even negative total capital in the year 2007-08 and 2008-09. The apex bank had provided a financial assistance of Rs 11 crore to Amritsar DCCB to strengthen its financial position to prevent it from being closed. Two DCCBs which had poor capital base and negative growth in total capital i.e. Faridkot and Mansa DCCBs should take immediate steps to increase its total capital. Policy makers and management of these banks should immediate ponder upon this.

4.4.4 TRENDS IN RISK WEIGHTED ASSETS (RWA) OF SELECTED DCCBs OF PUNJAB

Loans advanced are major assets of a bank. Loaning business is risky too. RBI has assigned risk weights to different categories of loans. Amount of loan multiplied by risk assigned to it is known as risk weighted assets. As depicted in table 4.4, it is clear that all the DCCBs had registered increasing trend in terms of compounded annual growth in risk weighted assets.

Table 4.4 shows that Sangrur DCCB had highest mean value of RWA of Rs 84648.56 lacs. The DCCB had shown significant compounded annual growth of

11.55 percent in risk weighted assets. In the year 2005-06, RWA was Rs 53133.39 lacs and after continuous increase RWA was Rs 75576.91 lacs in 2008-09 and Rs 121431.9 lacs in last year of study i.e. 2012-13. The trend coefficient predicts that RWA would increase to level of Rs 152970.53 lacs and Rs 180299.32 lacs in the year 2016-17 and 2019-20 respectively.

Patiala DCCB followed Sangrur DCCB with mean value of Rs 82421.39 lacs for RWA for entire period of study. The DCCB had RWA of Rs 53380.82 lacs in 2005-06, which increased to Rs 113399.88 lacs in last year of study i.e. 2012-13. The RWA had significant compounded annual growth of 11.08 percent during the period of study. As per the trend coefficients, the value of RWA would be Rs 145656.13 lacs in the year 2016-17 and Rs 170950.02 lacs in the year 2019-20.

Table 4.4 shows that Ludhiana DCCB ranked third with mean value of risk weighted assets of Rs 68846.84 Lacs. The DCCB had Rs 39760.61 lacs of risk weighted assets in the year 2005-06 which increased to Rs 62885.24 lacs in 2008-09 and Rs 105014.84 in 2012-13. Ludhiana DCCB had shown significant compounded annual growth of 14.38 percent in RWA. If the same trend continues, the future value of RWA in 2016-17 and 2019-20 would be Rs 136384.50 lacs and Rs 163399.57 lacs respectively.

On perusal of table 4.4 it can be seen that Ropar DCCB had scored eighteenth rank among the DCCBs with mean value of Rs 30099.14 lacs. RWA had significant growth of 5.88 percent compounded annually. RWA of Ropar DCCB in the year 2005-06 was Rs 29465.15 lacs which declined to Rs 21891.78 lacs in 2006-07. Afterwards it witnessed a continuous growth and the value of RWA was Rs 26679.79 lacs in 2007-08 and Rs 28932.16 lacs in the year 2010-11 and Rs 37634.08 lacs in 2012-13. On the basis of trend coefficient, it may be predicted that the value of RWA will be raised to level of Rs 43059.34 lacs and Rs 48243.43 lacs in the year 2016-17 and 2019-20 if the same trend continues.

On examination of table 4.4, it is clearly depicted that Faridkot DCCB had gained the nineteenth rank among DCCBs with mean RWA of Rs 25855.31 lacs during the period of study. The RWA of this DCCB had attained significant growth at 10.64 percent compounded annually. It had RWA of Rs 17268.55 lacs in 2005-06 and rose to Rs 25335.04 lacs in the year 2010-11 and Rs 36131.62 lacs in the year 2012-13. On the basis of future predictions, it may be estimated that value of RWA in the year 2016-17 would be Rs 45307.52 lacs and Rs 53088.40 lacs in the year 2019-20 if the same trend prevails.

Table 4.4 Trends in Risk Weighted Assets of DCCBs in Punjab

As on 31st March->	(Rs. In Laacs)													Future Trend	Rank
	2006	2007	2008	2009	2010	2011	2012	2013	Mean	CAGR	t- value	2017	2020		
	Amritsar	33355.16	36436.95	43169.07	46418.92	48266.08	52511.53	60818.80	66636.78	48451.66	10.03	15.07*	82804.79		
Bathinda	34217.13	39936.89	47270.26	49822.82	51522.86	55623.10	64048.16	79061.39	52687.83	10.97	8.32*	93868.60	110340.92	7	
Faridkot	17268.55	19821.92	22962.09	23343.21	25335.04	29036.55	32943.52	36131.62	25855.31	10.64	14.10*	45307.52	53088.40	19	
Fatehgarh Sahib	21846.74	25046.18	32043.83	37097.34	43739.99	46170.86	50811.82	55054.59	38976.42	14.35	24.51*	75610.97	90264.78	11	
Fazilka	20903.25	24919.92	30842.56	34538.85	36781.12	39989.96	46808.94	53916.49	36087.64	13.49	16.56*	69143.20	82365.42	14	
Ferozepur	19347.01	23071.90	28138.66	30723.08	34921.38	39340.63	46190.67	52137.68	34233.88	14.73	20.14*	68424.30	82100.47	16	
Gurdaspur	37160.44	40954.43	48854.68	53795.41	54689.75	60973.39	68545.35	75283.52	55032.12	10.25	17.74*	94502.35	110290.45	6	
Hoshiarpur	37302.85	41587.32	55402.43	64373.86	69344.75	78930.44	86081.47	96263.84	66160.87	14.55	26.95*	129620.93	155004.95	5	
Jalandhar	39467.01	46501.54	63701.89	67263.49	70056.16	81113.48	85353.09	86436.96	67486.70	11.69	9.92*	119100.53	139746.06	4	
Kapurthala	31164.60	34146.07	42904.78	45516.92	49623.11	53336.42	60311.18	64713.58	47714.58	10.91	22.47*	83524.36	97848.27	9	
Ludhiana	39760.61	45634.41	58724.61	62885.24	67989.03	77472.92	93293.10	105014.84	68846.84	14.38	14.45*	136384.50	163399.57	3	
Mansa	22194.01	25117.02	28337.95	29911.61	30436.15	31752.49	35474.96	42326.94	30693.89	8.18	8.12*	48862.50	56129.94	17	
Moga	23249.63	26217.20	30916.77	33867.81	34716.45	46876.11	53889.17	51921.63	37706.84	13.31	9.18*	72331.00	86180.66	12	
Muktsar	22176.52	25517.46	28651.85	31572.40	35079.73	37813.28	43356.12	50952.06	34389.93	11.86	13.61*	63105.44	74591.64	15	
Nawanshahar	27803.87	33050.81	41050.15	44852.93	45754.34	58242.71	58707.00	65943.90	46925.71	12.63	14.59*	86902.51	102893.23	10	
Patiala	53380.82	61721.29	70891.45	75771.16	87007.47	93927.48	103271.60	113399.83	82421.39	11.08	40.02*	145656.13	170950.02	2	
Ropar	29465.15	21891.78	26679.79	27878.15	28932.16	32572.09	35739.94	37634.08	30099.14	5.88	3.70*	43059.34	48243.43	18	
Sangrur	53133.39	66093.77	71962.49	75576.91	87190.34	93569.51	108230.17	121431.91	84648.56	11.55	15.20*	152970.53	180299.32	1	
SAS Nagar	NA	13236.10	17547.82	18813.88	20846.83	22724.24	24016.46	26065.04	20464.34	10.71	12.75*	34297.96	40226.65	20	
Tarn Taran	26451.58	28161.65	32898.05	35542.25	38128.91	41068.45	45594.93	49094.10	37117.49	9.31	28.20*	61471.23	71212.72	13	

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

SAS DCCB had least amount of average RWA of Rs. 20464.34 lacs and ranked last among DCCBs. In the year 2006-07, the amount of RWA was Rs 13236.1 lacs which rose to Rs 18813.88 lacs in 2008-09 and Rs 26065.04 lacs in 2012-13. The SAS DCCB had witnessed significant and continuous growth at 10.71 percent compounded annually in the RWA. Trend coefficients predict that RWA would increase to Rs 34297.96 lacs and Rs 40226.65 lacs in the year 2016-17 and 2019-20.

It may be concluded from above analysis that Sangrur and Patiala DCCBs had very high investment in risk weighted assets. These banks should develop low risk loan portfolio. Aggressive policy of loaning may result in huge NPAs.

4.4.5 TRENDS IN CAPITAL ADEQUACY RATIO OF SELECTED DCCBs OF PUNJAB

“Capital adequacy reflects the overall financial position of the bank” (Mishra, 2013). It can be calculated with the following formula

‘Capital Adequacy Ratio (CAR) = (Total Capital of Bank/Risk weighted assets) *100’

Study of table 4.5 reveals that out of twenty DCCBs of Punjab, only eight banks had Capital Adequacy Ratio (CAR) of more than the rate prescribed by Reserve Bank of India i.e. 7 percent. Only two DCCBs i.e. Amritsar and Gurdaspur DCCB had positive compounded annual growth in the total capital adequacy ratio.

Nawanshahar DCCB had scored first rank in term of capital adequacy ratio with mean value of ratio equal to 21.78 percent. In the year 2005-06, the capital adequacy ratio was 27.59 percent which gradually decreased to 21.23 percent in the year 2007-08. Thereafter this ratio increased to 21.82 percent in the year 2008-09 and 24.57 percent in the year 2009-10. Afterward this ratio again decreased to 18.12 percent in 2010-11 and increased to 18.68 percent in 2011-12. In the last year the ratio was 17.48 percent registering significant negative growth rate at 5.73 percent compounded annually. The ratio after following similar trend would be 12.17 percent and 8.33 percent in the year 2016-17 and 2019-20 respectively

Ropar DCCB had attained second rank among DCCBs, as this DCCB had second highest mean capital adequacy ratio of 12.83 percent as shown in table 4.5. This ratio had registered significant decrease in ratio at 2.59 percent compounded annually. In the initial year of study i.e. 2005-06, this ratio was 14.40 percent and afterwards witnessed declining trend till 2007-08 and reached to 12.64 percent. After increasing to 13.14 percent in the year 2008-09, ratio had shown decrease for continuous three years and came down to 11.76 percent in the year 2011-12. In

2012-13, the ratio had increased to 12.10 percent. If the present trend continues, capital adequacy ratio in 2016-17 and 2019-20 would be 10.28 percent and 9.26 percent respectively.

On examining the table 4.5, it is reflected that Kapurthala DCCB was at third rank with mean ratio of 12.56 percent and witnessed significant decline in ratio at 3.17 percent compounded annually. This DCCB had not followed any definite pattern of growth. In the year 2005-06 the ratio was 14.31 percent and increased slightly to 14.32 percent in the year 2006-07. Thereafter, this ratio had decreased to 12.31 percent in 2007-08 and to 12.26 percent in 2008-09. There was marginal increase in the ratio to 12.27 percent in the year 2009-10 and thereafter reflected a declining trend up to last year of study and reached to 11.36 percent in the year 2012-13. If the same trend of values persists then the ratio would further decrease to 9.46 percent and 8.22 percent in the year 2016-17 and 2019-20.

Gurdaspur DCCB was ranked eighteenth with 4.11 percent as mean capital adequacy ratio during the period of study as shown in table 4.5. The DCCB experienced a significant annual compounded growth in ratio at 4.32 percent. The DCCB witnessed an increase in CAR from 4.16 percent in the year 2005-06 to 4.5 percent in the year 2006-07. Thereafter the ratio declined for next two consecutive years and was recorded 2.98 percent in the year 2008-09. CAR had increased to 3.24 percent in year 2009-10 and again it was 3.17 percent in year 2010-11. Afterwards it steeply increased to 5.84 percent in the year 2011-12 and slightly decreased to 5.72 percent in final year of study, i.e. 2012-13. Keeping the linear trend in view, the capital adequacy ratio would be 5.68 percent in the year 2016-17 and 6.31 percent in the year 2019-20.

Mansa DCCB ranked nineteenth among DCCBs with average CAR 2.92 percent. The ratio in this DCCB significantly declined at the rate of 16.76 percent compounded annually. The CAR of this DCCB declined from 4.41 percent in 2005-06 to 4.18 percent in 2006-07. The ratio experienced an increase in the year 2007-08 and was 4.22 percent, which came down to 4.17 percent in the year 2008-09. Thereafter a steep decline in CAR was witnessed and the value was 1.72 percent in 2009-10, which further declined to 1.17 percent in 2010-11. The DCCB observed an increasing trend in CAR for remaining period of study and in the final year of study i.e. 2012-13 was 2.13 percent.

Table 4.5 Trends in Capital Adequacy ratio 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	3.25	2.92	-0.69	-0.10	0.54	2.86	4.47	4.31	2.20	4.08	1.02*	4.55	5.49	20
Bathinda	6.82	6.07	5.37	5.41	5.34	5.25	4.84	5.79	5.61	-2.77	-2.16*	4.38	3.88	12
Faridkot	7.67	6.66	5.32	5.38	3.80	3.83	2.92	3.25	4.85	-12.76	-8.09*	-0.12	-2.11	15
Fatehgarh Sahib	7.87	6.51	5.10	4.25	4.79	4.59	5.08	4.98	5.40	-5.38	-2.34*	2.86	1.85	13
Fazilka	9.35	7.67	6.53	6.02	5.59	4.83	4.24	4.67	6.11	-9.95	-6.92*	1.16	-0.82	10
Ferozepur	6.56	5.20	4.57	3.71	3.45	4.65	5.55	5.86	4.94	-0.57	-0.21*	4.66	4.55	14
Gurdaspur	4.16	4.50	3.25	2.98	3.24	3.17	5.84	5.72	4.11	4.32	1.22*	5.68	6.31	18
Hoshiarpur	11.27	10.26	8.53	7.91	7.79	6.99	6.55	6.65	8.24	-7.49	-7.09*	3.28	1.30	8
Jalandhar	14.36	13.34	10.91	10.70	10.48	9.48	9.47	9.63	11.05	-5.73	-5.18*	5.96	3.92	5
Kapurthala	14.31	14.32	12.31	12.26	12.27	11.95	11.73	11.36	12.56	-3.17	-4.97*	9.46	8.22	3
Ludhiana	16.74	14.48	11.97	11.61	11.25	10.48	9.36	8.79	11.83	-8.12	-7.58*	4.15	1.08	4
Mansa	4.41	4.18	4.22	4.17	1.72	1.17	1.37	2.13	2.92	-16.76	-3.80*	-0.79	-2.28	19
Moga	8.93	7.68	6.88	6.54	6.64	5.40	4.95	7.27	6.79	-5.05	-2.33*	4.14	3.08	9
Muktsar	11.00	9.77	9.03	8.47	7.98	7.85	7.11	6.64	8.48	-6.45	-11.73*	4.21	2.50	7
Nawanshahar	27.59	24.75	21.23	21.82	24.57	18.12	18.68	17.48	21.78	-5.73	-4.23*	12.17	8.33	1
Patiala	6.00	5.36	4.67	4.10	4.28	4.52	4.78	4.59	4.79	-2.94	-1.92*	3.62	3.16	16
Ropar	14.40	13.84	12.64	13.14	12.73	12.06	11.76	12.10	12.83	-2.59	-5.40*	10.28	9.26	2
Sangrur	4.69	3.95	4.13	4.22	3.71	4.50	3.98	4.13	4.16	-0.85	-0.76*	3.88	3.77	17
SAS Nagar	NA	9.91	9.35	9.09	9.05	8.67	8.54	8.72	9.05	-2.16	-5.04*	8	7	6
Tarn Taran	6.44	6.28	5.49	4.91	4.50	4.75	6.06	6.64	5.63	-0.58	-0.20*	5.43	5.34	11

Source: Compiled from annual reports of various DCCBs

*Significant at 5%

Keeping in view the trend observed by the CAR of DCCB, the CAR in year 2016-17 and 2019-20 would be -0.79 percent and -2.28 percent respectively.

With 2.2 percent average capital adequacy ratio during the period of study Amritsar DCCB ranked last among the DCCBs. The DCCB had recorded a significant annual compounded growth rate of 4.08 percent in the ratio. The CAR observed a decreasing trend and it was 3.25 percent in the year 2005-06 had reduced to -0.69 percent in the year 2007-08. The ratio observed an increasing trend thereafter till year 2011-12 where it was 4.47 percent. In the final year of study i.e. 2012-13, the CAR observed a slight decrease and was 4.31 percent. The linear trend equation predicts CAR would be 4.55 percent in 2016-17 and 5.49 percent in 2019-20, if same trend follows.

It is clear from above analysis that Amritsar, Bathinda, Faridkot, Fatehgarh Sahib, Fazilka, Ferozepur, Gurdaspur, Mansa, Moga, Patiala, Sangrur and Tarn Taran DCCBs had CAR less than 7 percent. Having CAR less than 7 percent is a matter of serious concern. Amritsar DCCB and Mansa DCCB need more efforts to have CAR equal to 7 percent. As majority DCCBs had CAR less than 7 percent therefore immediate surgical operations are needed to increase their CAR.

4.4.6 TRENDS IN TIER I CAPITAL TO RISK WEIGHTED ASSETS OF SELECTED DCCBs OF PUNJAB

‘Tier I capital to total risk weighted assets ratio’ reflects the relationship between tier I capital and risk weighted assets of DCCB. As per RBI guidelines, ‘tier I capital to risk weighted assets ratio should not be less than 4 percent’. Table 4.6 demonstrates that Amritsar, Gurdaspur, Mansa and Sangrur DCCBs had tier I capital to RWA ratio less than 4 percent out of twenty DCCBs, only Tarn Taran DCCB had registered positive annual compounded growth in the ratio.

Nawanshahar DCCB had maximum mean tier I to RWA ratio of 20.53 percent and ranked first among DCCBs as shown in table 4.6. This DCCB depicted no definite trend. In 2005-06 tier I to RWA ratio was 26.34 percent but subsequently it decreased to 23.5 percent in 2006-07 and to 19.98 percent in 2007-08. This ratio increased to 20.57 percent in 2008-09 and 23.32 percent in 2009-10. Again in 2010-11 it had decreased to 16.87 percent. In 2012-13, the ratio decreased and was 16.23 percent. This ratio registered a significant decline of 6.07 percent compounded annually with no definite pattern of trend. If the same trend continues, then it may be predicted that this ratio would further decrease and would get to the level of 10.92 percent and 7.08 percent in the year 2016-17 and 2019-20 respectively.

After Nawanshahar DCCB, the Ropar DCCB had second highest mean of tier I to RWA ratio of 11.58 percent, this DCCB also had shown a fluctuating trend. In 2005-06, this ratio was 13.15 percent but decreased to 11.39 percent in 2007-08. The ratio increased to 11.89 percent in 2008-09 but afterwards it showed a decreasing trend till 2012-13 and in the last year of study, it was 10.85 percent. The ratio registered a significant decline of 2.86 percent compounded annually. Trend coefficients predicts that in the year 2016-17 the ratio would be 9.03 percent and in the year 2019-20, it will become 8.01 percent , if the similar trend persists.

Kapurthala DCCB was at third rank with 11.31 percent mean tier I to RWA ratio. This DCCB had shown a significant declining trend of 3.51 percent compounded annually in the ratio. It had an increasing trend till 2006-07 when it reached to 13.07 percent from 13.06 percent in initial year of study i.e. 2005-06. This ratio decreased for next two years to be 11.01 percent in the year 2008-09. Again in the year 2009-10, the ratio had shown a marginal increase and was 11.02 percent. But after this year, this bank had shown consistent declining trend till the last year of study and ratio of tier I to RWA reached to 10.11 percent in last year of study i.e. 2012-13. On the basis of trend shown, it may be predicted that this ratio would further decline to 8.21 percent and 6.97 percent in the year 2016-17 and 2019-20 respectively.

Gurdaspur DCCB had a mean value of 3.11 percent of tier I to RWA ratio and was ranked eighteenth among DCCBs in Punjab. The ratio in the DCCB had significantly declined at the compounded annual rate of 0.28 percent. During 2005-06 to 2008-09, tier I to RWA ratio decreased from 3.71 percent to 2.62 percent. The ratio then followed zig zag trend. It increased to 2.82 percent in the year 2009-10 but again decreased to 2.77 percent in 2010-11. The ratio had again increased to 3.53 percent in 2011-12 but decreased to 3.38 in last year of study i.e. 2012-13. If the similar trend prevails, the value of ratio in year 2016-17 and 2019-20 would be 3.03 percent and 3.0 percent respectively.

Table 4.6 reveals that Mansa DCCB with 1.77 percent mean value of tier I to RWA ratio for the period of study was ranked nineteenth among DCCBs. The DCCB had 3.67 percent ratio in the year 2005-06 which declined to 3.02 percent in year 2007-08. A deep plunge in the ratio witnessed in the year 2009-10 it came down to 0.47 percent and further declined to -0.08 in the year 2010-11. The ratio witnessed a slight increase for next two years and was 0.67 in last year of study i.e. 2012-13.

Table 4.6 Trends in Capital (Tier 1) to RWA 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	3.04	2.70	-0.90	-1.07	-0.40	1.99	2.43	2.42	1.28	-3.19	0.15*	1.60	1.74	20
Bathinda	5.57	4.82	4.12	4.16	4.09	4.00	3.59	3.07	4.18	-6.62	-6.36*	2.02	1.16	13
Faridkot	6.42	5.41	4.22	4.29	3.52	3.08	2.01	2.13	3.89	-15.15	-10.93*	-0.68	-2.51	16
Fatehgarh Sahib	6.62	5.26	4.85	3.92	3.80	3.85	3.83	3.89	4.50	-6.91	-3.79*	1.89	0.84	12
Fazilka	8.10	6.42	5.28	4.86	4.72	4.53	3.81	3.68	5.18	-9.75	-6.01*	1.04	-0.62	10
Ferozepur	5.31	3.95	3.68	3.35	3.19	3.32	4.37	4.09	3.91	-1.97	-0.82*	3.22	2.95	15
Gurdaspur	3.71	3.25	2.85	2.62	2.80	2.77	3.53	3.38	3.11	-0.28	-0.16*	3.03	3.00	18
Hoshiarpur	10.02	9.01	7.28	6.66	6.54	5.74	5.30	5.40	6.99	-8.76	-7.09*	2.03	0.05	8
Jalandhar	13.11	12.09	9.66	9.45	9.23	8.23	8.22	8.38	9.80	-6.42	-5.18*	4.71	2.67	5
Kapurthala	13.06	13.07	11.06	11.01	11.02	10.70	10.48	10.11	11.31	-3.51	-4.97*	8.21	6.97	3
Ludhiana	15.49	13.23	10.72	10.36	10.00	9.23	8.11	7.54	10.58	-9.05	-7.58*	2.90	-0.17	4
Mansa	3.67	3.24	3.02	3.04	0.47	-0.08	0.12	0.67	1.77	-21.57	-4.58*	-2.56	-4.29	19
Moga	8.13	6.43	5.63	5.29	5.39	4.15	3.70	4.39	5.39	-9.06	-5.36*	1.44	-0.14	9
Muktsar	9.75	8.52	7.78	7.22	6.73	6.60	5.86	5.39	7.23	-7.54	-11.73*	2.96	1.25	7
Nawanshahar	26.34	23.50	19.98	20.57	23.32	16.87	17.43	16.23	20.53	-6.07	-4.23*	10.92	7.08	1
Patiala	5.34	4.11	3.81	3.76	3.75	3.75	3.72	3.67	3.99	-3.72	-2.52*	2.75	2.26	14
Ropar	13.15	12.59	11.39	11.89	11.48	10.81	10.51	10.85	11.58	-2.86	-5.40*	9.03	8.01	2
Sangrur	4.47	3.38	3.22	3.13	2.95	3.40	2.99	2.88	3.30	-4.18	-2.61*	2.17	1.71	17
SAS Nagar	NA	8.66	8.10	7.84	7.80	7.42	7.29	7.47	7.80	-2.50	-5.04*	6.40	5.79	6
Tarn Taran	5.19	5.07	4.32	4.03	3.85	4.12	5.48	5.39	4.68	0.56	0.29*	4.92	5.01	11

Source: Compiled from annual reports of various DCCBs

*Significant at 5%

The ratio had a significant declining trend at the compounded annual rate of 21.57 percent. If same conditions remains, the ratio would be -2.56 percent and -4.29 percent in year 2016-17 and 2019-20 respectively.

The Amritsar DCCB ranked last among DCCBs with 1.28 percent mean value of tier I to RWA ratio for the period of study as shown in table 4.6. The ratio was 3.04 percent in the year 2005-06 which declined continuously till year 2008-09 and was -1.07 percent. Thereafter the DCCB had witnessed an increasing trend in this ratio till year 2011-12 and the ratio was 2.43 percent. The last year of study i.e. 2012-13, the ratio again decreased marginally to 2.42 percent. The ratio was significantly declined at compounded annual rate of 3.19 percent. The future prediction, following the same trend predicts that the ratio would be 1.60 percent and 1.74 percent in year 2016-17 and 2019-20 respectively.

Above analysis depicted that Amritsar and Mansa DCCBs had to take measures to increase their tier I capital. In Amritsar DCCB, tier I to RWA ratio was negative in the year 2007-08, 2008-09 and 2009-10 and in Mansa DCCB, it was negative in year 2010-11. The main reason for this negative tier I capital was huge accumulated losses and these DCCBs had to take more effective steps to increase its capital base. While, Nawanshahar DCCB had very high tier I capital to RWA which signifies that this bank was conservative in investing its funds.

4.4.7 TRENDS IN TIER II TO RISK WEIGHTED ASSETS (RWA) OF SELECTED DCCBs OF PUNJAB

‘Tier II capital to risk weighted assets’ expresses the relationship between ‘tier II and risk weighted assets’ of a bank. Perusal of table 4.7, it is evident that only three DCCBs had shown negative and declining compounded annual growth in the ratio where as seven DCCBs had not shown any growth.

As depicted from table 4.7, Hoshiarpur DCCB had registered a mean tier II to RWA ratio of 3.48 percent and was ranked first among DCCBs. The ratio had a significant compounded annual growth rate of 1.11 percent. No definite pattern of growth in the ratio was followed in this DCCB. In the first year of study i.e. 2005-06, this ratio was 2.80 percent and increased to 4.17 percent in the year 2008-09.

Table 4.7 Trends in Capital (Tier II) to RWA 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	0.21	0.23	0.21	0.96	0.95	0.87	2.04	1.88	0.92	43.82	5.57*	2.95	3.76	10
Bathinda	1.25	1.25	1.25	1.25	1.25	1.25	1.25	2.72	1.43	6.69	1.73*	2.35	2.72	2
Faridkot	1.25	1.25	1.10	1.09	0.28	0.75	0.91	1.12	0.97	-5.65	-1.08*	0.57	0.41	7
Fatehgarh Sahib	1.25	1.25	0.25	0.33	0.99	0.73	1.25	1.08	0.89	3.97	0.16*	0.98	1.01	11
Fazilka	1.25	1.25	1.25	1.16	0.87	0.30	0.43	0.99	0.94	-12.87	-2.37*	0.13	-0.20	9
Ferozepur	1.25	1.25	0.89	0.36	0.26	1.33	1.18	1.76	1.04	3.69	0.65*	1.44	1.60	5
Gurdaspur	0.45	1.25	0.40	0.36	0.45	0.40	2.30	2.34	0.99	19.32	1.95*	2.65	3.31	6
Hoshiarpur	2.80	3.08	4.06	4.17	3.85	3.35	2.87	3.69	3.48	1.11	0.37*	3.73	3.82	1
Jalandhar	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	-1.40*	1.25	1.25	3
Kapurthala	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	-0.80*	1.25	1.25	3
Ludhiana	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	1.57*	1.25	1.25	3
Mansa	0.73	0.94	1.20	1.14	1.25	1.25	1.25	1.46	1.15	7.95	5.15*	1.76	2.01	4
Moga	0.80	1.25	1.25	1.25	1.25	1.25	1.25	2.88	1.40	11.31	2.31*	2.70	3.22	3
Muktsar	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	-0.58*	1.25	1.25	3
Nawanshahar	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.00*	1.25	1.25	3
Patiala	0.65	1.25	0.86	0.34	0.53	0.77	1.06	0.92	0.80	2.00	0.20*	0.87	0.90	13
Ropar	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.10*	1.25	1.25	3
Sangrur	0.22	0.57	0.91	1.09	0.76	1.10	0.99	1.25	0.86	19.89	3.64*	1.71	2.06	12
SAS Nagar	NA	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	0.00	0.00*	1	1	3
Tarn Taran	1.25	1.21	1.17	0.88	0.65	0.63	0.58	1.25	0.95	-6.71	-1.36*	0.51	0.33	8

Source: Compiled from annual reports of various DCCBs

*Significant at 5%

Thereafter a steep decline in the ratio was observed and it was 2.87 percent in the year 2011-12. In the last year of study i.e. 2012-13 this ratio increased to 3.69 percent. It may be predicted that if same trend persists then the value of this ratio in the year 2016-17 and 2019-20 will increase to 3.73 percent and 3.82 percent respectively.

Bathinda DCCB ranked second among DCCBs with mean tier II to RWA ratio of 1.43 percent. The ratio in this DCCB had a significant growth at compounded annual rate of 6.69 percent. DCCB had witnessed the constant ratio of tier II to RWA throughout the period of study i.e. 1.25 percent but it increased to 2.72 percent in 2012-13. If the same trend prevails, then it may be estimated that this ratio would become 2.35 percent and 2.72 percent in the year 2016-17 and 2019-20 respectively.

On study of table 4.7, it is found that Moga, Jalandhar, Nawanshahar, Ropar, Kapurthala, Ludhiana, SAS Nagar and Muktsar DCCB ranked third among twenty DCCBs of Punjab.

The Sangrur DCCB had the second least mean tier II to RWA ratio i.e. 0.86 percent throughout the period of study. The increasing trend in ratio was found to be significant with the compounded annual growth of 19.89 percent. This DCCB had indicated increase in the ratio from 0.22 percent in the year 2005-06 to 1.09 percent in the year 2008-09. Afterwards it witnessed ups and down, the ratio was 0.76 percent in 2009-10 which increased to 1.10 percent in 2010-11. The ratio was 1.25 percent in the year 2012-13. Keeping in view the trend coefficients, it may be estimated that this ratio would further increase to 1.71 percent and 2.06 percent in the year 2016-17 and 2019-20 respectively.

Among DCCBs of Punjab, Patiala DCCB was on the last rank in tier II to RWA with mean value of 0.80 percent during the period of study. The DCCB had noticed significant growth in ratio of 2 percent compounded annually. In the year 2005-06 this ratio was 0.65 percent which increased to 1.25 percent in the year 2006-07. Afterwards this ratio recorded decreasing trend and had decreased to 0.34 percent in the year 2008-09 and increased to 1.06 percent in the year 2011-12. In the last year of study i.e. 2012-13, this ratio again showed a declining trend and was 0.92 percent. Keeping in view the trend, the ratio would be 0.87 percent and 0.90 percent in the year 2016-17 and 2019-20 respectively.

4.5 COMPARATIVE STUDY OF CAPITAL ADEQUACY RATIOS OF SELECTED DCCBs OF PUNJAB

Table 4.8 shows the mean values of 'tier I', 'tier II', 'total capital', 'risk weighted assets' and 'capital adequacy ratio', 'tier I to RWA', 'tier II to RWA' in DCCBs of Punjab during the period of study and Table 4.9 shows the comparison of capital adequacy in terms of CAGR for the DCCBs under study. Study of both these tables shows that

- **TIER I CAPITAL**

The Nawanshahar DCCB had on average highest tier I capital of Rs 9244.77 lacs and followed by Ludhiana DCCB and Jalandhar DCCB with Rs 6804.30 lacs and Rs 6337.46 lacs respectively. On the other hand, on average the lowest tier I capital was of Mansa DCCB with Rs 479.67 lacs followed by Amritsar DCCB with Rs 632.35 lacs and Faridkot DCCB with Rs 921.70 lacs. On the other side, in terms of compounded annual growth, Mansa DCCB was showing negative growth rate of 14 percent and Faridkot DCCB had growth rate of -6.12 percent in tier I capital. Even government of Punjab had to contribute Rs 15 crore each in the year 2013 to both these banks toward their capital base to save them from closure as per RBI norms. Despite of this, both the DCCBs reflected decline in the tier I capital. Tier I capital is the basic capital which helps the banks to absorb losses without ceasing its business and it protects the interest of investors also. So efforts should be made to increase the amount of 'tier I capital'.

- **TIER II CAPITAL**

'Tier II capital' was on an average highest in Ludhiana DCCB i.e. Rs 860.59 lacs followed by Jalandhar DCCB with Rs 843.58 lacs and Hoshiarpur DCCB with Rs 827.01 lacs. These banks are known as strongest banks in Punjab cooperative credit system. These banks are very old banks and have sufficient own funds.

On average lowest tier II capital was in Faridkot DCCB i.e. Rs 245.22 lacs followed by SAS Nagar with Rs 255.80 lacs and Fazilka DCCB with Rs 316.20 lacs. Out of twenty DCCBs of Punjab, only Fazilka DCCB had recorded declining compounded annual growth rate of -1.12 percent in tier II capital during the period of study. Steps should be taken to increase the tier II capital in Fazilka DCCB as tier II capital is the supplementary capital which provides protection to the investors in the winding up situation.

Table 4.8 Comparative Analysis of 'Capital Adequacy' in terms of Mean

DCCB	Tier I	Tier II	Total Capital	RWA	CAR	Tier I to RWA	Tier II to RWA
Amritsar	632.35	512.51	1144.87	48451.66	2.20	1.28	0.92
Bathinda	2113.26	803.89	2917.15	52687.83	5.61	4.18	1.43
Faridkot	921.70	245.22	1166.92	25855.31	4.85	3.89	0.97
Fatehgarh Sahib	1662.62	349.41	2012.03	38976.42	5.40	4.50	0.89
Fazilka	1739.49	316.20	2055.69	36087.64	6.11	5.18	0.94
Ferozepur	1321.87	371.48	1693.35	34233.88	4.94	3.91	1.04
Gurdaspur	1712.15	611.50	2323.64	55032.12	4.11	3.11	0.99
Hoshiarpur	4328.73	827.01	5155.74	66160.87	8.24	6.99	3.48
Jalandhar	6337.46	843.58	7181.05	67486.70	11.05	9.80	1.25
Kapurthala	5290.52	596.43	5886.95	47714.58	12.56	11.31	1.25
Ludhiana	6804.30	860.59	7664.88	68846.84	11.83	10.58	1.25
Mansa	479.67	364.74	844.41	30693.89	2.92	1.77	1.15
Moga	1899.69	563.93	2463.62	37706.84	6.79	5.39	1.40
Muktsar	2373.31	429.87	2803.18	34389.93	8.48	7.23	1.25
Nawanshahar	9244.77	586.57	9831.34	46925.71	21.78	20.53	1.25
Patiala	3215.84	663.53	3879.37	82421.39	4.79	3.99	0.80
Ropar	3458.18	376.24	3834.42	30099.14	12.83	11.58	1.25
Sangrur	2722.27	781.00	3503.26	84648.56	4.16	3.30	0.86
SAS Nagar	1579.11	255.80	1834.92	20464.34	9.05	7.80	1.25
Tarn Taran	1744.49	344.52	2089.01	37117.49	5.63	4.68	0.95

Source: Compiled from various computed values

Table 4.9 Comparative Analysis of 'Capital Adequacy' in terms of CAGR

DCCB	Tier I	Tier II	Total Capital	RWA	CAR	Tier I to RWA	Tier II to RWA
Amritsar	6.87	58.25	14.90	10.03	4.08	-3.19	43.82
Bathinda	3.62	18.40	7.89	10.97	-2.77	-6.62	6.69
Faridkot	-6.12	4.39	-3.47	10.64	-12.76	-15.15	-5.65
Fatehgarh Sahib	6.45	18.90	8.21	14.35	-5.38	-6.91	3.97
Fazilka	2.42	-1.12	2.19	13.49	-9.95	-9.75	-12.87
Ferozepur	12.47	18.96	14.08	14.73	-0.57	-1.97	3.69
Gurdaspur	9.94	31.55	15.01	10.25	4.32	-0.28	19.32
Hoshiarpur	4.52	14.55	5.97	14.55	-7.49	-8.76	1.11
Jalandhar	4.53	11.69	5.30	11.69	-5.73	-6.42	0.00
Kapurthala	7.02	10.91	7.40	10.91	-3.17	-3.51	0.00
Ludhiana	4.03	14.38	5.08	14.38	-8.12	-9.05	0.00
Mansa	-14.00	16.77	-9.95	8.18	-16.76	-21.57	7.95
Moga	3.05	26.13	7.60	13.31	-5.05	-9.06	11.31
Muktsar	3.42	11.86	4.64	11.86	-6.45	-7.54	0.00
Nawanshahar	5.79	12.63	6.17	12.63	-5.73	-6.07	0.00
Patiala	6.96	13.31	7.82	11.08	-2.94	-3.72	2.00
Ropar	2.85	5.88	3.14	5.88	-2.59	-2.86	0.00
Sangrur	6.89	33.74	10.60	11.55	-0.85	-4.18	19.89
SAS Nagar	7.94	10.71	8.32	10.71	-2.16	-2.50	0.00
Tarn Taran	9.91	1.97	8.68	9.31	-0.58	0.56	-6.71

Source: Compiled from various computed values

- **TOTAL CAPITAL**

Nawanshahar DCCB had on average highest total capital of Rs 9831.34 lacs. It was followed by Ludhiana DCCB and Jalandhar DCCB with total capital of Rs 7664.88 lacs and Rs 7181.05 lacs respectively. The lowest average capital was of Mansa DCCB i.e. Rs 844.41 lacs followed by Amritsar DCCB and Faridkot DCCB i.e. Rs 1144.87 lacs and Rs 1166.92 lacs respectively.

Mansa DCCB and Faridkot DCCB showed negative annual compounded growth at the rate of 9.95 percent and 3.47 percent in total capital. It is encouraging that out of all DCCBs, eighteen DCCBs had shown increasing trend in total capital of DCCB. Trend in total capital also establishes that Nawanshahar, Jalandhar and Ludhiana DCCBs have a very strong capital base whereas Faridkot and Mansa DCCBs had very poor capital base and most disturbing fact is that these both banks had declining compounded growth rate. Policy makers and management of these banks should immediate ponder upon this.

- **RISK WEIGHTED ASSETS**

On an average, Sangrur DCCB had highest risk weighted assets of Rs 84648.56 lacs followed by Patiala DCCB and Ludhiana DCCB with risk weighted assets of Rs 82421.39 lacs and Rs 68846.84 lacs respectively. These banks should avoid aggressive policy of loaning. While SAS Nagar, Faridkot DCCB and Ropar DCCB had lowest risk weighted assets of Rs 20464.34 lacs, Rs 25855.31 lacs and Rs 30099.14 lacs respectively.

- **CAPITAL ADEQUACY RATIO**

Only eight banks had Capital Adequacy Ratio (CAR) of more than 7 percent. The highest CAR on an average was of Nawanshahar DCCB i.e. 21.78 percent which was quite high than the recommended rate of 7 percent. It was followed by Ropar DCCB and Kapurthala DCCB with 12.83 percent and 12.56 percent respectively. On the other hand, the lowest CAR on an average was of Amritsar DCCB i.e. 2.20 percent only. After Amritsar DCCB, Mansa DCCB and Gurdaspur DCCB came with CAR of 2.92 percent and 4.11 percent respectively.

Only Amritsar DCCB and Gurdaspur DCCB had shown growing trend at the annual compounded growth rate of 4.08 percent and 4.32 percent respectively in capital adequacy ratio. As majority DCCBs had CRR less than 7 percent therefore immediate surgical operations are needed to increase their CAR.

- **TIER I TO RISK WEIGHTED ASSETS RATIO**

The Nawanshahar DCCB on an average had highest 'tier I to risk weighted assets ratio' i.e. 20.53 percent followed by Ropar DCCB with 11.58 percent and Kapurthala DCCB with 12.56 percent. Such a high ratio shows conservative loaning approach of these banks. On the other hand, Amritsar DCCB had on an average lowest 'tier I to risk weighted assets ratio' of 1.28 percent followed by Mansa DCCB and Gurdaspur DCCB with 1.77 percent and 3.11 percent respectively.

In term of compounded annual growth only Tarn Taran DCCB had registered positive and increasing trend and rest all other DCCBs had negative and declining trend in 'tier I to risk weighted assets ratio'.

- **TIER II TO RISK WEIGHTED ASSETS RATIO**

The Hoshiarpur DCCB on an average had highest 'tier II to risk weighted assets ratio' i.e. 3.48 percent followed by Bathinda DCCB with 1.43 percent. On the other hand, Patiala DCCB had on an average lowest 'tier II to risk weighted assets ratio' of 0.80 percent followed by Sangrur DCCB and Fatehgarh Sahib DCCB with 0.86 percent and 0.89 percent respectively.

In term of compounded annual growth Fazilka, Tarn Taran and Faridkot DCCBs had declining trend in 'tier II to risk weighted assets ratio'.

- **COMPOSITE RANKINGS OF DCCBs IN TERMS OF CAPITAL ADEQUACY**

Table 4.10 shows that Ludhiana DCCB ranked first in composite capital adequacy ratios followed by Jalandhar, Nawanshahar and Kapurthala DCCB on the parameter of composite ranking of capital adequacy. On the other hand Amritsar, Faridkot and Mansa DCCB were at the tail end in the ranking table. Amritsar, Bathinda, Faridkot, Fatehgarh Sahib, Fazilka, Ferozepur, Gurdaspur, Mansa, Moga, Patiala, Sangrur and Tarn Taran DCCBs had CAR less than 7 percent. Having CAR less than 7 percent is a matter of serious concern. Mansa, Faridkot and Amritsar DCCBs need fire fighting efforts to have CAR equal to 7 percent to avoid any operational complications.

Table 4.10 Composite Ranking of DCCBs in Terms of Capital Adequacy

DCCB	Tier I	Tier II	Total Capital	RWA	CAR	Tier I to RWA	Tier II to RWA	Total Ranking	Overall Rank
Amritsar	19	11	19	8	20	20	10	107	18
Bathinda	10	4	9	7	12	13	2	57	7
Faridkot	18	20	18	19	15	16	7	113	19
Fatehgarh Sahib	15	16	15	11	13	12	11	93	16
Fazilka	13	18	14	14	10	10	9	88	15
Ferozepur	17	14	17	16	14	15	5	98	17
Gurdaspur	14	7	12	6	18	18	6	81	12
Hoshiarpur	5	3	5	5	8	8	1	35	5
Jalandhar	3	2	3	4	5	5	3	25	2
Kapurthala	4	8	4	9	3	3	3	34	4
Ludhiana	2	1	2	3	4	4	3	19	1
Mansa	20	15	20	17	19	19	4	114	20
Moga	11	10	11	12	9	9	3	65	10
Muktsar	9	12	10	15	7	7	3	63	8
Nawanshahar	1	9	1	10	1	1	3	26	3
Patiala	7	6	6	2	16	14	13	64	9
Ropar	6	13	7	18	2	2	3	51	6
Sangrur	8	5	8	1	17	17	12	68	11
SAS Nagar	16	19	16	20	6	6	3	86	14
Tarn Taran	12	17	13	13	11	11	8	85	13

Source: Calculated from various computed values

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