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Analyzing Financial Performance of Commercial Banks in India: Application of CAMEL Model

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Abstract

Sound financial health of a bank is the guarantee not only to its depositors but is equally significant for the shareholders, employees and whole economy as well. As a sequel to this maxim, efforts have been made from time to time, to measure the financial position of each bank and manage it efficiently and effectively. In this paper, an effort has been made to evaluate the financial performance of the two major banks operating in northern India .This evaluation has been done by using CAMEL Parameters, the latest model of financial analysis. Through this model, it is highlighted that the position of the banks under study is sound and satisfactory so far as their capital adequacy, asset quality, Management capability and liquidity is concerned.

Keywords: financial performance, commercial banks, capital Adequacy, asset quality, management capability, earnings analysis, liquidity analysis.

1. Introduction

With the integration of Indian financial sector with the rest of the world, the concept of banks and banking has undergone a paradigm shift. Before financial reforms, Indian Banks were enjoying, in a protected environment with a strong cushion of the government and their banks. This had made them operationally inefficient and commercially almost wreck, as they had cumulated as much as Rs.37,000 Crores as Non-performing advances. However, with the RBI taking strong measures based on the recommendations of the Narsimahan Committee, the landscape of Indian banking changed altogether. All the banks were directed to follow the norms of capital adequacy, asset quality, provisioning for NPAs, prudential norms, disclosure requirements, acceleration of pace and reach of latest technology, streamlining the procedures and complying with accounting standards and making financial statements transparent. Towards this end, they re-defined their objectives, strategies, policies, processes, methods and technologies which have a direct bearing on the financial health and performance of these banks. In this way, these banks were not only required to take the above steps but always evaluate their financial position from period to period. Because of this factor, the interest of the analysts and researchers got developed to analyze, evaluate, measure and finally manage the financial performance of the Indain banks. In this direction, the researchers like Chidambaram and Alemelu (1994),joo (1996), Sarkar and

Das(1997), Ajit and Bangar (1998), Bhatia and Verma (1998), Kaur and Bhatia (1998), Padmanabhan (1998), Dasgupta (2000), Desai and Farmer (2001), Edirisuriya and Fang (2001), Mittal (2001), Passah (2001), Sikander and Mukherjee (2001), Khatik (2002), Sangmi (2002), Jain (2003),Purohit,et al (2003), Kapil and Nagar (2003), Duncan et al (2004), Reddy (2004), Tabasum and Sangmi (2005) and Mohanty (2006) have attempted to make a contribution in the field. Among all these researchers, no one has used the latest technique of CAMEL Parameters to study the financial performance of the Indian banks. It is against this backdrop that the present study has been undertaken to fill up this gap.

2. Objectives

The main objectives of the study are as follows :-

(i) to analyse the financial performance of the banks under study;

(ii) to undertake the factors which have led to the current financial performance; and

(iii) to suggest measures, on the basis of the study results, to improve further the financial performance of the banks under study.

3. Methodology

Methodology describes the research route to be followed, the instruments to be used, universe and sample of the study for the data to be collected, the tools of analysis used and pattern of deducing conclusions. For the purpose of the present study, the research instrument used is the CAMEL Model which is the recent innovation in the area of financial performance evaluation of banks. The model is explained as under:

3.1 CAMEL parameters

This system was adopted in India since 1995 at the suggestion of Mr. Padmanabhan, Governor RBI. Under this system the rating of individual banks is done along five key parameters- Capital adequacy, Asset quality, Management capability, Earnings capacity, and Liquidity (yielding the rating systems acronym – CAMEL). Each of the five dimensions of performance is rated on a scale of 1 to 5, varying from fundamentally strong bank to fundamentally weak bank. This model has been applied in the following select banks.

3.2 Sample of the study

The present study seeks to evaluate the financial performance of the two top banks based in northern India, representing the biggest nationalized bank (i.e Punjab National Bank, PNB) and the biggest private sector bank (i.e Jammu and Kashmir Bank, JKB). These two banks were purposely selected for the study, keeping in view their role and involvement in shaping the economic conditions of northern India, specifically in terms of advances, deposits, manpower employment, branch network etc.

3.2 Data and tools

The study is mainly based on secondary data drawn from the annual reports of the respective banks. This data is related to 5 years (2001-2005). For analysis of the data, two important statistical tools viz. Mean and standard deviation has been used to arrive at conclusions in a scientific way.

4. Results and discussion

The results and discussions of the study are described under the following heads:

- Capital adequacy analysis
- Asset quality analysis
- Management capability analysis
- Earnings analysis
- Liquidity analysis

4.1 Capital adequacy analysis

Capital adequacy is a reflection of the inner strength of a bank, which would stand it in good stead during the times of crisis. Capital adequacy may have a bearing on the overall performance of a bank, like opening of new branches, fresh lending in high risk but profitable areas, manpower recruitment and diversification of business through subsidiaries or through specially designated branches, as the RBI could think these operational dimensions to the bank's capital adequacy achievement (Shankar, 1997). Realizing the importance of capital adequacy, the Reserve Bank of India (RBI) issued directive in 1992, whereby each banks in India was required to meet the capital adequacy standard of 8%, the norm fixed on the basis of the recommendations of Basel Committee. As a sequel to this direction almost all banks in India try to adhere to this norm, thus compute the ratios of capital adequacy.

The computation of capital adequacy ratio is done by taking ratio of equity capital and loan loss provisions minus non-performing loans to total assets. Expressed as a percentage, the ratio shows the ability of a bank to withstand losses in the value of its assets. The simultaneous monitoring of two important elements, viz. the level of NPAs and equity capital is facilitated by the use of this ratio. (Joshi & Joshi, 2002). For computation of the capital adequacy ratio, capital is classified as Tier-1 and Tier-2 capitals. Tier-1 capital comprises the equity capital and free reserves, while Tier-2 capital comprises subordinated debt of 5-7 year tenure. The higher the capital adequacy ratio (CAR), the stronger the bank. However, a very high CAR indicates that the bank is conservative and has not utilized the full potential of its capital. The capital adequacy ratios of the banks under study are given in tables 1 and.2.

Table 1 : Capital Adequacy Ratios of Punjab National Bank

S. No	Capital Adequacy Ratios	2001	2002	2003	2004	2005	Mean	Standard Deviation
A	Capital Adequacy Ratio	10.24%	10.70%	12.02%	13.10%	14.78%	2.168%	1.843
B	Leverage Ratio	1.762	1.682	1.580	1.876	1.827	1.746	0.119
C	Net worth protection	7714.2	7768.8	8098.3	10731	21813	11225	6050

Source: Annual Reports of PNB (2001-2005.)

The position of capital adequacy of the Punjab National Bank (PNB) has been measured with the help of Capital Adequacy Ratio (CAR), Leverage ratio and Net worth

protection. An introspection of the table 1 reveals that the capital adequacy ratio of the PNB in the last five years have been well above the norm of RBI i.e. 8% level. This ratio has been increasing year after year 10.24% in the year 2001 and 14.78% in the year 2005. The average of the five years also is good 12.16% which seems quite consistent as standard deviation being only 1.84.

Similarly the leverage ratio (Total outside liability to shareholders funds also show a healthy sign; Although the ratio declined from 1.76 in 2001 to 1.68 in 2002, but has picked up in the subsequent years.

However, the mean value of the leverage ratio is 1.74 with .119 standard deviation. So far as Net worth protection (Net Worth to Non-Performing assets) is concerned. The ratio has been all along rising during the period under study with 7714.235 in 2001 to 21813.839 in 2005 with the mean value 11225.To maintain the capital adequacy, the bank has mobilised capital from the stock market. Thus the bank has been able to maintain the confidence of investors and depositors.

The position of capital adequacy of the Jammu & Kashmir Bank (JKB) has been measured with the help of Capital Adequacy Ratio (CAR), Leverage ratio and Net worth protection. An introspection of the table 5.2 reveals that the capital adequacy ratio of the JKB in the last five years has been well above the norm of RBI i.e. 8% level, although decreasing year after year 17.44% in the year 2001 and 15.15% in the year 2005. But still it is comfortably much above the minimum stipulated standard. The average of the five years also is good 16.28% which seems quite consistent as standard deviation being only .961.

Table 2: Capital Adequacy Ratios of Jammu & Kashmir Bank

S. No.	**Capital Adequacy Ratios**	**2001**	**2002**	**2003**	**2004**	**2005**	**Mean**	**Standard Deviation**
A	Capital Adequacy Ratio	17.44%	15.46%	16.48%	16.88%	15.15%	16.282 %	0.961
B	Leverage Ratio	1.217	0.907	0.706	0.596	0.702	0.828	0.246
C	Net worth protection	28,786	39,539	49,090	55,725	52,536	45136	10968

Source: Annual Reports of JKB (2001-2005)

Similarly, the leverage ratio (Total outside liability to shareholders funds) also shows a bit weak sign as the ratio declined from 1.21 in 2001 to 0.90 in 2002 and has gone down in the subsequent years. The mean value of the leverage ratio is .82 with .246 standard deviation. The bank needs to be careful here about the declining trend of leverage ratio. So far as Net worth protection (Net worth to Non-performing assets) is concerned, the ratio has been all along rising during the period under study with 28786.493 in 2001 to 52536.343 in 2005 with the mean value 45136. To maintain the capital adequacy, the bank has mobilised capital from the stock market. Thus the bank has been able to maintain the confidence of investors and depositors. Also the bank continued its efforts to reduce its non-performing assets. With the strenuous efforts and enhanced recovery drive coupled with stress on sound asset quality and prevention of fresh slippages, the bank has been able to further reduce its NPA level. Which has strengthened its capital base as otherwise too many loss making efforts would have eroded the capital position of

the bank.

4.2 Assets quality analysis

Asset quality is another important aspect of the evaluation of a bank's performance under the Reserve Bank of India guidelines, the advances of a bank are to be disclosed in a classified manner as:

- Standard
- Sub-Standard
- Doubtful and loss asset

4.2.1 Standard Asset/Advance

Standard assets are those assets that are performing and loance is paying interest and installment at due date, further they do not carry more than normal risk. Formerly, no provisions were required. However, banks will now have to make a general provision of 0.25 percent on standard assets as well.

4.2.2 Sub-Standard Asset/Advance

Sub-standard assets are those assets that have been classified as non-performing for a period less than or equal to three quarters. In such cases, the current networth of the borrower/guarantor or the current market value of the security charged is not enough to ensure recovery fully. It has fully developed weaknesses that jeopardize the liquidation of a debt.

4.2.3 Doubtful Asset/Advance

Doubtful assets are those assets that have remained substandard for 18 months. The provision of 100% of the provisions are to be made by the realizable value of the security to which a bank has recourse. The provisions for this is to be done as:

First year of doubtful status ----- Deficit +20% of security

Second year of doubtful status ----- Deficit + 30% of security

Third year of doubtful status ----- Deficit + 50% of security.

4.2.4 Loss Asset/Advance

Loss assets are the ones where loss has been identified but the amount has not been written off wholly or partly. Such an asset is uncollectible/unrecoverable and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage value. Since the loss assets are to be written off, 100% provision needs to be made for loss assets.

Under the above classification, the advance/asset which cease to earn income/interest is termed as non-performing asset and a bank has to keep a provision for its probable loss. More NPAs means more sub-standard, doubtful and loss assets which is total for the future financial performance of a bank. Therefore, keeping the NPAs minimum should be the attempt of every consicious bank. The main ratios of asset quality of the banks under study is given in tables 3 and .4.

Table 3: Asset Quality Ratios of Punjab National Bank

S. No	Asset Quality Ratios.	2001	2002	2003	2004	2005	Mean	Standard Deviation
a	Net NPA to NET Advances	6.74%	5.32%	3.86%	0.98%	0.20%	3.42%	2.79
b	Loan Loss Cover	9.415 %	9.452 %	9.497 %	8.587 %	4.490 %	8.288 %	2.156

Source: Annual Reports of PNB (2001-2005)

The analysis in table 3 reveals that the PNB has been successful to manage its NPAs. The Net NPAs which were 6.74% of total Net advances of the bank in 2001 have comedown to 0.20% in 2005. This has been possible by using various strategies by the bank. The bank through a well defined Recovery Management Policy, was able to effect reduction of Rs 1647 crore in NPAs during the year as against Rs 1354 crore last year. NPAs with outstanding of Rs 1 crore and above continued to be monitored at corporate level. The bank also made effective use of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002(SARFAESI) to accelerate reduction of NPAs. For enforcement of security interest under SARFAESI Act, notices were issued to 9640 defaulters and consequently a large number of borrowers came forward for resolution of their accounts. Sale of financial assets to Asset Reconstruction Company (ARC) enabled the bank to take off NPAs from its books and release funds for further recycling. During the year, 34 non-performing loans amounting to Rs. 239 crore were sold to ARC.

Moreover, under the scheme of one time settlement of the cases for small and marginal farmers, NPAs to the tune of Rs. 513 lakhs were cleared during the period 2004-2005. Thus the bank has been able to manage the Net NPA to Net Advances at an average of 3.42%. To be secure and safe the bank has been maintaining the provisions for NPAs as per norms fixed by RBI. It has been in a position to consistently maintain such provision with 9.415% of Gross NPAs in 2001 with an average of 8.28% having standard deviation of 2.156. In this way the asset quality position of the bank seems good as the loan loss cover for NPAs has been provided prudently.

Under RBI's non-discretionary and non-discriminatory guidelines for compromise settlements, there was an encouraging response from the borrowers. During April-October, 2004, settlements were approved in 2610-cases for Rs. 44.46 Crore. Recovery of NPAs received focused attention. Apart from other recovery efforts, the bank also organized 20661 Recovery Camps during the year 2004-05 compared to 17125 camps organized in the previous year. In most of such camps locally elected representatives also participated. Awareness campaigns for recovery were also launched in different Zones. Besides these, services of Debt Recovery Tribunals and Lok Adalats were also utilized for supplementing the recovery efforts. The bank also initiated the process of engaging Recovery Agencies for effecting recovery in NPAs. A special drive was launched in the bank towards execution of decrees allowed by the courts. In deserving cases, restructuring of debts under CDR mechanism was pursued with encouraging results.

Table 4: Asset Quality Ratios Of Jammu & Kashmir Bank

S.No	Asset Quality Ratios	2001	2002	2003	2004	2005	Mean	Standard Deviation
a	Net NPA to Net Advances	2.45%	1.88%	1.58%	1.48%	1.41%	1.760 %	0.425
b	Loan Loss Cover	8.691 %	11.552 %	5.110 %	10.374 %	11.902 %	9.52%	2.77

Source: Annual Reports of PNB (2001-2005)

The analysis in table 4 reveals that the JKB has been successful to manage its NPAs. The Net NPAs which were 2.45% of total Net advances of the bank in 2001 have comedown to 1.41% in 2005. This has been possible by using various strategies by the bank. The bank continued its efforts to reduce its non-performing assets. With the strenuous efforts and enhanced recovery drive, the bank has been able to further reduce its NPA level. Thus the bank has been successful to manage the Net NPA to Net Advances at an average of 1.76%. To be secure and safe, the bank has been maintaining the provisions for NPAs as per norms fixed by RBI. It has been in a position to consistently maintain such provision with 8.691% of Gross NPAs in 2001 with an average of 9.52% having standard deviation of 2.77. In this way, the asset quality position of the bank seems quite good as the loan loss cover for NPAs has been provided prudently.

4.3 Management capability ratios

The performance of Management capacity is usually qualitative and can be understood through the subjective evaluation of Management systems, organization culture, control mechanisms and so on. However, the capacity of the management of a bank can also be gauged with the help of certain ratios of off-site evaluation of a bank. The capability of the management to deploy its resources, aggressively to maximize the income, utilize the facilities in the bank productively and reduce costs etc. (Purohit, et.al-2003). This can be evaluated with reference to the following ratios given in tables 5, 6, 7 and 8.

Table 5: Management Capability Ratios of Punjab National Bank (Growth In Various Parameters)

S. No		2001	2002	2003	2004	2005	Compound growth rate
a	Advances	280,29.053	343,69.416	402,28.120	472,24.719	604,12.751	16%
b	Deposits	56131.130	64123.475	75813.497	87916.395	103166.88	13%
c	Business	84160.183	98492.891	116041.61	135141.11	163579.63	14%
d	Total Expenses	5696.6912	6151.7862	6418.0244	6525.7167	7428.3229	5%
e	Operating Profit	945.2087	1473.8010	2317.2946	3120.8582	2707.2064	24%
f	Net Profit	463.6434	562.3891	842.2002	1108.6904	1410.1201	24%
g	E.P.S	21.85	26.49	31.74	41.79	44.72	15%

Source: Annual Reports of PNB (2001-2005)

Table 6: Management Capability Ratios Of Punjab National Bank

S. No	(3) Mgt. Capability Ratios	2001	2002	2003	2004	2005	Mean	Standard Deviation
a	Expenditure to Income Ratio	0.857	0.806	0.734	0.676	0.732	0.762	0.071
b	Credit- Deposit Ratio	0.499	0.535	0.530	0.537	0.585	0.540	0.032
c	Asset Utilization Ratio	0.104	0.104	0.101	0.094	0.080	0.094	0.008
d	Diversification Ratio	11.719%	12.821%	14.313%	19.360%	16.532%	14.95%	3.05
e	Earnings per employee	79.514	97.199	142.791	188.427	241.752	149.9	66.5
f	Expenditure per employee	976.983	1063.23	1088.15	1109.08	1273.52	1102.2	108.2

Source: Annual Reports of PNB (2001-2005)

In the table 5, it is exhibited that the PNB has been a quite successful bank so far as its business is concerned. During the period under reference the bank has been able to mark a rising trend in its advances and deposits with Rs. 28029.05 crores, and 56131.13 crores respectively in the year 2001 to Rs. 60412.75 crores and 103166.88 crores in 2005. Thus advances and deposits have registered a compound growth rate of 16% and 13% respectively, with the total fund based business (advances + deposits) marking a growth of 14% P.a.

The management has been successful to manage a compound growth rate of 24% in its operating and Net profits but keeping the total expenses under control, as they grew only at a growth rate of 5% p.a. In the similar way, the efficiency of the management is explained by the growth of earning per share it grew at about 15% of compound growth rate.

The Management Capacity has also been explained in the table 6 with the help of various productivity rates, like expenditure to Income ratio, credit deposit ratio, asset utilization ratio, Diversification ratio, earnings per employee and expenditure per employee. The ratio of expenditure visa viz to Income which was 0.857 in 2001 has gone down to 0.732, in 2005 explaining thereby that for every rupee generated as income only 0.85 paise were incurred as cost in 2001 and so on. The mean value of this ratio is 0.76 with minor standard deviation of .071 is an encouraging fact. The credit deposit ratio which was 0.499 in 2001 has slightly improved to 0.585 in 2005 with the mean value 0.540 shows its consistency during the period under study. However, the asset utilization ratio which was 0.104 in 2001 has shown a declining trend as it has come down to 0.080 in 2005, but the mean value of the ratio remains by and large consistent at 0.09 level . Since modern days, the opportunities of sustaining on spread are squeezing day in and day out, the success of any bank lies in diversifying its business from fund based business to the fee based business. In this direction, the bank understudy has also achieved good results as the ratio of non-interest income to total income has increased from 11.71% in 2001 to 16.53% in 2005. This ratio has shown consistency with the average of 14.95% having a standard deviation of 3.05.The trend in the productivity of employees so far as earnings

are concerned are significantly improved. The earnings per employee were 79.51 in 2001 which has gone up to 241.75 in the year 2005, with the mean value 149.9. However, the expenditure per employee has gone up from 976.98 in 2001 to 1273.52 in 2005 which needs to be taken care of.

Table 7: Management Capability Ratios of Jammu & Kashmir Bank

(Growth in Various Parameters)

S. No		**2001**	**2002**	**2003**	**2004**	**2005**	**Comp. growt h rate**
a	Advances	47,62.89,58	64,23.88,51	80,10.94,95	92,84.93,62	1,15,17.14,13	24%
b	Deposits	1,11,68.08,26	1,29,11.11,17	1,46,74.89,96	1,86,61.38,38	2,16,44.97,27	14%
c	Business	159,30.9,784	193,34.9,968	226,85.8,491	279,46.3,200	331,62.1,140	16%
d	Total Expenses	8,84.4,829	11,49.6,214	11,60.8,345	11,94.5,257	12,75.7,917	7%
e	Operatin g Profit	2,72.7,951	4,61.2,419	5,53.7,241	6,28.4,207	3,55.4,660	5%
f	Net Profit	1,67.56,19	2,59.80,09	3,37.75,09	4,06.33,00	1,15.06,90	1%
g	E.P.S	34.83	53.94	70.07	84.22	23.72	1%

Source: Annual Reports of JKB (2001-2005)

In the table 7, it is exhibited that the JKB has been a quite successful bank so far as its fund based business is concerned. During the period under reference, the bank's business has shown a rising trend in its advances and deposits with Rs. 4762.89 crores, and 11168.08 crores-respectively in the year 2001 to Rs. 11517.14 crores and 21644.97 crores in 2005. The advances have registered a compound growth rate of 24% and a growth rate of 14% is observed in case of deposits, with the total business marking a growth of 16% p.a. A further analysis of the table reveals that management has been successful to manage a compound growth rate of 5% and 1% in its operating profits and Net Profits and keeping the total expenses under control, as the expenditure only grew at a growth rate of 7% p.a. In the similar way, the efficiency of the management is explained by the growth of earning per share which grew at about 1% of compound growth rate.

The Management capacity has also been explained in the table 5.8 with the help of various productivity ratios, like expenditure to Income ratio, credit deposit ratio, asset utilization ratio, diversification ratio, earnings per employee and expenditure per employee. The ratio of expenditure visa viz to Income which was 0.764 in-2001 has gone slightly up to 0.782 in 2005, explaining thereby that for every rupee generated as income only 0.76 paise were incurred as cost in 2001 and so on. The mean value of this ratio is 0.71, with minor standard deviation of .051 is an encouraging fact. The credit deposit ratio which was 0.426 in 2001 has slightly improved to 0.532 in 2005 with the mean value 0.48 shows its consistency during the period under study. However, the asset utilization ratio which was 0.090 in 2001 has shown a declining trend as it has come down to 0.066 in 2005, but the mean value of the ratio remains by and large consistent. So far as diversifying the business from fund based to fee based, the JKB has not achieved good performance in the last two years as the ratio of non-interest income to total income has decreased from 6.97% in 2001 to 5.02% in 2005. This ratio is highly skewed, with the average of 12.25% having a standard deviation of 5.75.

Table 8: Management Capability Ratios of Jammu & Kashmir Bank

S. No	(3) Mgt. Capability Ratios	2001	2002	2003	2004	2005	Mean	Standard Deviation
a	Expenditure to Income Ratio	0.764	0.713	0.677	0.655	0.782	0.718	0.051
b	Credit-Deposit Ratio	0.426	0.497	0.545	0.497	0.532	0.502	0.045
c	Asset Utilization Ratio	0.090	0.109	0.102	0.085	0.066	0.092	0.014
d	Diversificatio n Ratio	6.979%	15.961%	16.750%	16.550%	5.028%	12.25%	5.75
e	Earnings per employee	258.982	400.001	474.902	573.507	167.421	375.0	163.2
f	Expenditure per employee	1367.052	1770.009	1632.219	1685.992	1856.237	1662.3	185.6

Source: Annual Reports of JKB (2001-2005)

The trend in the productivity of employees so far as Earnings are concerned have gone done. The earnings per employee were 258.98 in 2001 which has gone upto Rs. 573.50 in 2004, however, declined to Rs. 167.42 in the year 2005, with the mean value 375.0. Similarly, the expenditure per employee has gone up from 1367.05 in 2001 to 1856.23 in 2005 which needs to be taken care of if the banks wants to be successful in the long run.

4.4 Earning ratios

The 'Earnings/Profit' is a Conventional Parameter of measuring financial performance. Higher income generally reflects a lack of financial difficulties and so would be expected to reduce the likelihood of failure of a bank (Cole and Gunther, 1996). In the pre-liberalization phase (before 1991), interest income used to be reckoned on accrual basis with little variation therein. In the absence of any uniform norm on provisioning against bad debts and depreciation in investment, the variation in accounting profit was mainly due to provisions and contingencies. Some semblance of uniformity was first introduced in 1992-93 with the phased implementation of prudential accounting standards which however brought about a wide variation in the current period income, as interest income was henceforth required to be reckoned on a realization basis. This is reflected in the emergence of operational performance measure in the shape of earnings analysis (Hansda, 1995). The earnings analysis has been done by analysts like Sankaranarayan, (1995). Business India Study (2002), Kapil et.al, (2003), and so on, with the help of various accounting ratios. However, for the present study the accounting ratios calculated for the purpose of earnings analysis are depicted in tables.9 and 10.

Table 9: Earnings (Profitability) Ratios Of Punjab National Bank

S. No.	(4) Earnings Ratios	2001	2002	2003	2004	2005	Mean	Standard Deviation
1	R.O.A	0.729%	0.771%	0.976%	1.083%	1.117%	0.936%	0.177

2	R.O.E	13.027%	12.793%	14.970%	15.043%	13.424%	13.850%	1.078
3	(a) Spread Ratio	0.306	0.300	0.357	0.375	0.395	0.350	0.043
	(b) Net Interest Margin	0.032	0.031	0.036	0.035	0.031	0.034	0.005

Source: Annual Reports of PNB (2001-2005)

It is exhibited in the table 9 that the return on assets which is equal to Net profit to working funds has significantly gone up from 0.729% to 1.117% in the year 2001 to 2005, with the mean value of 0.93% having consistency, as the standard deviation is 0.177. However, the return on shareholders funds (R.O.E) has by and large remained constant with the mean value of 13.85%. In this way it seems the profitability of the bank is quite satisfactory. A further analysis of the table 5.9 reveals that the spread i.e. Interest earned on loans minus interest paid on deposits has been constantly rising from 0.306 in 2001 to 0.395 in 2005, with the mean value of .35 having a standard deviation of .043. Similarly, the contribution of the spread visa viz to total earning asset has slightly shown a down trend from 0.032 in 2001 to 0.031 in the year 2005, with the mean value of 0.03.

Table 10: Earnings (Profitability) Ratios Of Jammu & Kashmir Bank

S. No.	**(4) Earnings Ratios**	**2001**	**2002**	**2003**	**2004**	**2005**	**Mean**	**Standard Deviation**
1	R.O.A	1.317 %	1.767 %	2.111 %	1.916 %	0.470 %	1.498 %	0.633
2	R.O.E	21.304 %	25.369 %	25.413 %	24.175 %	6.566 %	20.57 %	8.00
3	(a) Spread Ratio	0.308	0.272	0.307	0.340	0.365	0.320	0.037
	(b) Net Interest Margin	0.028	0.029	0.031	0.029	0.024	0.028	0.004

Source: Annual Reports of JKB (2001-2005)

It is exhibited in the table 10 that the return on assets which is equal to Net Profit to working funds has gone down from 1.317% to 0.470% in the year 2001 to 2005, with the mean value of 1.49% having consistency, as the standard deviation is 0.633. However, the return on shareholders funds (R.O.E) has by and large remained constant with the mean value of 20.57%. In this way, it seems the profitability of the bank is quite satisfactory. A further analysis of the table 5.10 reveals that the spread i.e. Interest earned on loans minus interest paid on deposits has been constantly rising from 0.308 in 2001 to 0.365 in the year 2005, with the mean value of .32 having a standard deviation of .037. Similarly, the contribution of the spread visa viz to total earning asset has slightly shown a down trend from 0.028 in 2001 to 0.024 in the year 2005, with the mean value of .02.

4.5 Liquidity ratios

a) The ability of a bank to provide liquidity requires the existence of a highly liquid and readily transferable stock of financial assets. Liquidity and transferability are the key ingredients for such transactions. The liquidity requirement means that financial

assets must be available to owners on short notice (a day or less) at par. The transferability requirement means that ownership rights in financial assets must be portable, at par, to other economic agents, and in a form acceptable to the other party (Sinkey, Joseph F, JR. 1998).

b) Liquid assets such as investment securities, enable a bank to respond quickly to unexpected demands for cash and typically reflect relatively conservative financial strategies, whereas volatile liabilities, such as large certificates of deposits, often reflect relatively aggressive financial strategies impose high interest expenses, and are subject to quick withdrawal. As a result, we expect higher values of investment securities to reduce the chance of failure, whereas higher values of large certificates of deposit should increase the probability of failure (Cole and Gunther, 1996). Thus liquidity management is one of the most important functions of a bank. If funds tapped are not properly utilized, the institution should suffer loss. Idle cash balance in hand has no yield. On the other hand if the bank does not keep balanced liquid cash in hand, it cannot be able to pay the demand withdrawal of depositors, as well as, installment of creditors and ultimately payment for other contingent liabilities. These will lead overtrading position to the institution and create problems to borrow funds at high rate. So proper balanced liquidity should be maintained by avoiding inadequate cash position, or excess cash position (Panigrahi, 1996). The liquidity position of the banks understudy is presented in tables11 and 12 .

Table 11: Liquidity Ratios of Punjab National Bank

S. No.	**(5) Liquidity Ratios**	**2001**	**2002**	**2003**	**2004**	**2005**	**Mean**	**Standard Deviation**
A	Liquid Assets to total Assets Ratio.	0.095	0.087	0.093	0.086	0.064	0.086	0.015
B	Govt. & other Securities to total Assets. (Investment to total Assets)	0.392	0.383	0.392	0.409	0.398	0.394	0.011
C	Liquid Assets to Deposits	0.108	0.099	0.106	0.100	0.078	0.100	0.012
D	Investment to Deposits.	0.443	0.436	0.445	0.476	0.488	0.460	0.023

Source: Annual Reports of PNB (2001-2005)

In the table 11, it is depicted that the liquid assets which consist of cash, balances with RBI and other banks as well as money at call and short notice, formed Re 0.095 visa viz to rupee 1 (total assets). This ratio has gone down in 2005 0.064, but at an average it has remained consistent with average 0.08. The investment in Govt. and other securities held by the bank visa viz to total assets are clear indicators of banks liquidity position, as this investment ratio has remained consistent around an average of 0.39. The total liquid assets (combination of the above two ratios visa viz to depositors has brought the fact to the forefront that the bank has the ability to meet any eventuality in case of depositors demand cash/liquid assets, as this ratio has also remained by and large consistent at an average of 0.10 with the standard deviation of 0.012. Similarly, the investment in securities (Govt. as well others) shows a satisfactory position of the bank as the ratio of investment in securities compared to deposits also remained consistent around an average of 0.46 with 0.023 standard deviation.

In the table 12, it is depicted that the liquid assets which consist of cash, balances with RBI and other banks as well as money at call and short notice, formed Re. 0.161 visa viz to (total assets). This ratio has gone down in 2005 0.129, but at an average it has remained consistent with average 0.13. The investment in Govt. and other securities held by the bank visa viz to total assets are clear indicators of banks liquidity position, as this investment ratio has remained consistent around an average of 0.39. The total liquid assets (combination of the above two ratios visa viz to depositors has exposed the fact that the bank has the ability to meet any eventuality in case of depositors demand for cash/liquid assets, as this ratio has also remained by and large consistent at an average of 0.14 with the standard deviation of 0.029. Similarly, the investment in securities (Govt. as well others) shows a satisfactory position of the bank as the ratio of investment in securities compared to deposits also remained consistent around an average of 0.45 with 0.022 standard deviation.

Table 12: Liquidity Ratios of Jammu And Kashmir Bank

S. No.	**(5) Liquidity Ratios**	**2001**	**2002**	**2003**	**2004**	**2005**	**Mean**	**Standard Deviation**
A	Liquid Assets to total Assets Ratio.	0.161	0.133	0.090	0.137	0.129	0.130	0.025
B	Govt. & other Securities to total Assets. (Investment to total Assets)	0.421	0.390	0.400	0.398	0.370	0.396	0.018
C	Liquid Assets to Deposits	0.184	0.152	0.103	0.156	0.146	0.148	0.029
D	Investment to Deposits.	0.480	0.444	0.458	0.452	0.419	0.450	0.022

Source: Annual Reports of JKB (2001-2005)

4.6 Overall Financial Performance of the Banks understudy

The overall Financial Performance of the Banks as exhibited in the table 13 reveals that both the Banks have maintained their capital adequacy ratio well above the RBI standard of 10%. The other three ratios viz Expenditure to Income, Net Interest Margin, and Return on Assets show a mixture of behaviour, some are more in PNB and less in JKB and vice-versa. However, the overall Index (which has been calculated by dividing the average of individual banks by the average of all items of both banks in part first of table 5.13) which is more in case of PNB compare to JKB but part second and part third in the table show a reverse trend.

Table 13: Overall Financial Performance of the Banks Understudy

Part	**Ratios**	**PNB**	**JKB**
Part I	Capital Adequacy Expenditure Expenses/Income Net Interest Margin Return on Assets Overall Index Rank	12.16 76.2 3.4 0.93 1.006 1	16.28 71.8 2.8 1.49 0.998 2
Part II	NPA to Net Advances Index Rank	3.42 3.42 2	1.76 1.76 1
Part III	Liquid assets to Total Deposits	10.00 2	14.8 1

Source: Annual Reports of PNB and JKB (2001-2005)

Note : Overall Performance Index has been calculated by dividing the average of individual banks by the average of all items of both banks in Part I.

5. Conclusion

The analysis and the discussion in the proceeding pages reveals that both the banks are financially viable as both have adopted prudent policies of financial management. Both the banks have managed their capital adequacy ratio well above the minimum standard of 10% fixed by RBI. The average leverage ratio in case of PNB is more (1.746) compare to JKB (0.828).

So far as Asset quality is concerned both the banks have shown significant performance. The PNB has been able to maintain the ratio of Net NPAs to Net advances at 3.42%. The JKB bank has been more efficient by maintaining the average ratio of Net NPAs to Net advances at 1.760%. Similarly, the average loan loss cover maintained by JKB (9.52%) is more than that of PNB (8.288%).

The business (Advances +Deposits) of the PNB and the JKB have registered a compound growth rate of 14% & 16% respectively. However, the compound growth rate of operating profit has been 24% in PNB and 5% in JKB. The PNB has succeeded in diversifying its business from fund based to fee based activities and registered an average income of 14.95% while as JKB has generated 12.25% from this activity. The JKB, in view of the squeezing of spread scenario needs to add more fee based products and services in its portfolio. However, the productivity ratios like earnings per employee and expenditure per employee are more in case of JKB compare to the PNB.

The PNB has generated an average Net Interest margin of 0.034 compare to 0.028 generated by JKB. However, return on assets is more (1.498%) in case of JKB compare to PNB (0.936%).

The spread management shows that PNB has received more interest on advances viz-a-viz interest paid on deposits, the average spread ratio being 0.350. With average spread ratio of 0.320, the JKB has not been as successful as PNB in the management of its spread (interest received-interest paid).

The liquidity in a bank is what is blood in a human body. The bank should be in a position to meet its liability holders as an when demand arises. Thus the appropriate mixture of liquid and non liquid asset is maintained. For this an appropriate strategy of liability and assets management is designed. The liquidity position of JKB, with 0.148 liquid assets to deposits ratio is better than the PNB where the same ratio is only 0.100. However, the investment to deposit ratio is better in PNB (0.460) compare to JKB (0.450).

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