

PROFITABILITY AND EFFICIENCY ANALYSIS OF PUNJAB NATIONAL BANK**Dr. B. PARASHURAMULU****Mrs. G. SAROJA****Assistant Professor, Department of Management, Vaagdevi Institute of Management Sciences, Bollikunta, Warangal - 506005 (Telangana State),****Assistant Professor, Department of Management, Vaagdevi College of Engineering, Bollikunta, Warangal - 506005 (Telangana State),**

ABSTRACT

Profitability is considered a very important test for measuring efficiency of the Bank as it is a means to measure the ability of the bank to earn profits. Bank has to take care of profitability while granting advances along with the other two aspects i.e. funds remain fairly liquid, safe and give a reasonable return. Liquidity in bank's investment would mean that a bank is able to acquire cash as and when required, i.e., in short period of time. By solvency of a bank means that the advances granted by the bank are safe enough and the borrowers are able to repay them in time so that bank is in the position to fulfill its obligations.

An important component of the mechanism of the banks is profit management systems and methods for its analysis. Profit analysis is the process of investigation of the conditions and results of its formation and use of reserves in order to identify further efficiency management. The purpose of the analysis of profit and profitability is to increase the absolute value of profits and profitability of the bank based on the effective management of revenue and expenditure Profit is the main reason for the continued existence of every commercial organization and profitability depicts the relationship of the absolute amount of profit with various other factors.

This paper attempts to analyze the profitability and efficiency of Punjab National Bank in India during the study period from 2005-06 to 2014-2015. Key Performance Indicators such as number branches, employees, deposits, advances, business, spread, burden and average and growth rate is taken for the present study. The PNB maintained the highest operating profit in 2014-15 among nationalized banks. The study finds and concludes that the profitability, efficiency and business performance of PNB were improved over the period of study.

Key words: Performance, Efficiency, Spread, Burden, Profit earning capacity and Profitability.

INTRODUCTION

A commercial bank is said to be standing on the three main pillars namely profitability, solvency and liquidity. Profitability is considered a very important test for measuring efficiency of the Bank as it is a means to measure the ability of the bank to earn profits. Bank has to take care of profitability while granting advances along with the other two aspects i.e. funds remain fairly liquid, safe and give a reasonable return. Liquidity in bank's investment would mean that a bank is able to acquire cash as and when required, i.e., in short period of time. By solvency of a bank means that the advances granted by the bank are safe enough and the borrowers are able to repay them in time so that bank is in the position to fulfill its obligations.

An important component of the mechanism of the banks is profit management systems and methods for its analysis. Profit analysis is the process of investigation of the conditions and results of its formation and use of reserves in order to identify further efficiency management. The purpose of the analysis of profit and profitability is to increase the absolute value of profits and profitability of the bank based on the effective management of revenue and expenditure Profit is the main reason for the continued existence of every commercial organization and profitability depicts the relationship of the absolute amount of profit with various other factors.

To study the efficiency of the banks, Financial Statements - Balance Sheet and Profit and Loss Account –are the basis. The financial statements are indicators of two important factors of the bank which are profitability and financial soundness. As stated earlier, profitability is an indication of the operational efficiency of the Bank. The general health of a bank is determined by health of its earnings. Earnings are considered the most sensitive of all financial indicators to change in a firm's financial health.

REVIEW OF LITERATURE

As the present study is concerned with the profitability and efficiency of Punjab National Bank, an attempt is made to review in brief the earlier studies relating to banking activities so as to gain greater insight into the subject. Some of the relevant studies which are concerned with the profitability in banking sector are presented briefly.

Satyanarayane (1996)¹, studied "Productivity beyond per employee business", and suggested a model to measure overall efficiency of the banks. He emphasized that the size of the bank should be squared off while measuring efficiency of bank. According to him, Productivity of bank = (Average index market share of all the output factors/Average index market share of all the input factors) X 100 where, output factors were deposits, non-deposit working funds, loans & advances, investments, interest spread, non-interest income and the net profit. The input factors were network of branches, number of staff, wage bill, non-wage operating expenses, etc. In order to facilitate comparison of one bank with the other, irrespective of size, the market share of each factor in percentage terms has to be taken into account instead of absolute levels.

Ramamoorthy (1997)² analysed Profitability and Productivity in Indian Banking and observed that the old banks were not conscious of their profitability and productivity levels. But new economic order

¹Satyanarayane, K. (1996), "Productivity Beyond Per Employee Business", IBA Bulletin (April), Mumbai.

²Ramamoorthy. (1997), "Profitability and Productivity in Indian Banking-International Comparisons and implications for Indian Banking", Paper Presented in Bank Economists Conference, IBA

has compelled these banks to shift towards market-oriented, commercially driven banking system. He also observed in his study that performance of banks operating in different economic systems with different levels of economic development and varying degrees of regulations were not comparable. The results further revealed that profitability of a bank was a function of allocation efficiency, volume of credit, provisioning for loan losses, interest rate movements and operating cost structure. He suggested that performance incentive plans, motivation, training and leadership of human resources and level of technology absorption can improve the productivity and profitability of the banks.

Kanjana.E.N(2007)³ "Efficiency, Profitability and Growth of Scheduled Commercial Banks in India" tested (1) whether the establishment expense was a major expense, and (2) out of total expense which is met by scheduled commercial banks is more due to more number of employees. In her empirical study, the earning factor and expense factor which are controllable and non-controllable by the bank.

Uppal (2009)⁴ examined the profitability which is an important criterion to evaluate the overall efficiency of a bank group. He studied the comparative trends in profitability behavior of five major bank groups in the post liberalization and globalization era. He offer suggestions on the basis of empirical results to increase the profitability and measures should be taken to increase the level spread and curtail the burden.

OBJECTIVES OF THE STUDY

- To analyse the business performance and efficiency of Punjab National Bank
- To evaluate the profit earning capacity and profitability of Punjab National Bank

DATA COLLECTION AND METHODOLOGY

The study is based on secondary data collected mainly from annual reports of Punjab National Bank, RBI and Trends and Progress reports published by RBI, reports published by National Institute of Bank Management, publications and notifications of RBI, reports published by Indian Bank Association etc. The data has been suitably arranged, classified, analysed and tabulated according to the requirements of the study. For analyzing the data the techniques like trends, ratios, and averages have been used. For evaluating the Business Performance, Efficiency, Profit earning capacity and Profitability ratios are used.

LIMITATIONS OF THE STUDY:

The study is mainly based on the secondary data only and the number of the employees per bank may differ due to their transfer or retirement which could affect the productivity and profit earning capacity of individual banks.

Bulletin, October, Mumbai.

5.Kanjana.E.N , Efficiency, Profitability and Growth of Scheduled Commercial Banks in India. Ph.D Thesis, Bharathiar University, Coimbatore, 2007.

6.Uppal, R.K. (2009), "Indian Banking – Prime Determinants of Profitability, Emerging Issues and Future Outlook," GITAM Journal of Management, Vol.7, No.2, pp. 78-106.

Factors Considered for Analysis:

Four parameters were considered for the study. Each parameter consist different variables. They are 1) Business Performance 2) Efficiency 3) Profit Earning Capacity 4) Profitability.

Efficiency Ratios

- Deposit per employee = Total Deposits / Total employee
- Deposit per Branch = Total Deposits / No. of branches
- Advances per Branch = Total Advances / No. of branches
- Advances per employee = Total Advances / Total employees
- Business per employee = Total Business / Total employees
- Business per Branch = Total Business / No. of branches
- Profit per Branch = Total Profit /No. of branches
- Profit per Employee = total Profit / Total employees

Profitability Ratios

- Interest earned ratio = Total interest earned / Volume of business
- Interest paid ratio = Total interest paid / Volume of business
- Non-interest income ratio = Total income-interest income / Volume of business
- Operating expenses ratio = Total expenses-interest expenses / Volume of business
- Spread ratio = Interest earned ratio - Interest paid ratio
- Burden ratio = Operating expenses ratio - Non interest income ratio
- Profitability ratio = Spread ratio - Burden ratio

LIST OF ABBREVIATIONS

IE = Interest Earned

IP = Interest Paid

NII = Non Interest Income

OE = Operating Expense

SP = Spread

BD = Burden

PR = Profitability

PPB = Profit per Branch

BPB = Business per Branch

BPE = Business per Employee

DPE = Deposit per Employee

DPB = Deposit per Branch

APE = Advances per Employee

APB = Advances per Branch

PPE = Profit per Employee

Business Performance:

The business performance of Punjab National Bank in relation to expansion of branches, recruitment of employees, deposits, advances and total business carried out by the bank during the study period from 2005-06 to 2014-15 are considered for the study.

Table - 1
Business Performance of Punjab National Bank
(2005-06 to 2014-15)

(Rs. in Crores)

Year	No. of Branches	No. of Employees	Deposits	Advances	Total Business
2005-06	4142	58047	119685	74627	194312
2006-07	4540	60542	139860	96597	236456
2007-08	4589	59329	166457	119502	285959
2008-09	4668	58205	209761	154703	364464
2009-10	5002	56928	249330	186601	435931
2010-11	5189	57020	312898	242107	555006
2011-12	5670	62127	379588	293775	673363
2012-13	5874	63292	391560	308725	700285
2013-14	6201	65541	451397	352689	800666
2014-15	6520	68290	501379	380534	881913
Mean	5239.50	60932.10	292191.50	220986.00	512835.50
Growth in Times	1.57	1.17	4.18	5.09	4.53

Source: Annual Reports of Punjab National Bank

Table – 1 shows that the Business Performance of Punjab National Bank during the period from 2005-06 to 2014-15. The number of branches of Punjab National Bank increased from 4142 in 2005-06 to 6520 in 2014-15. The registered growth rate is 1.57 times, with an average of 5239 branches functioning every year. Similarly the number of employees of Punjab National Bank increased from 58047 in 2005-06 to 68290 employees in 2014-15. It registered growth rate of 1.17 times with an average of 60932 employees working every year. The deposits of Punjab National Bank increased from Rs. 119685 crores in 2005-06 to Rs. 501379 crores in 2014-15. The growth rate is 4.18 times, with average deposits of Rs. 135175.30 crores deposits every year. The advances of Punjab National Bank increased from Rs. 74627 crores in 2005-06 to Rs. 380534 crores in 2014-15. The growth rate is 5.09 times, with an average of Rs. 220986 crores advances every year. The total business of Punjab National Bank increased from Rs. 194312 crores in 2005-06 to Rs. 881913 crores in 2014-15. It registered growth rate of 4.53 times, with an average of Rs. 512835 crores business every year.

Right from the second phase of economic liberalization the public sector banks in India aimed at reduction of manpower and improving their operation feasibility. At a glance it is evidenced that the growth rate of deposits, advances and total business is more than the growth rate of branch expansion and employee recruitment.

Efficiency of Punjab National Bank

To study the efficiency of the bank a few ratios relating to Business per Branch, Business per Employee, Deposit Per Branch, Deposit per Employee, Advances per Branch, Advances per Employee, Profit per Branch and Profit per Employee ratios were taken into consideration.

Table – 2
Efficiency of Punjab National Bank
(2005-06 to 2014-15)
(Rs. in Crores)

Year	BPB	BPE	DPB	DPE	APB	APE	PPB	PPE
2005-06	46.91	3.34	28.89	2.06	18.01	1.28	0.35	0.02
2006-07	52.08	3.90	30.80	2.31	21.27	1.59	0.34	0.03
2007-08	62.31	4.81	36.27	2.80	26.04	2.01	0.45	0.03
2008-09	78.07	6.26	44.93	3.60	33.14	2.65	0.66	0.05
2009-10	87.15	7.65	49.84	4.37	37.30	3.27	0.78	0.07
2010-11	106.95	9.73	60.30	5.48	46.65	4.24	0.85	0.08
2011-12	118.75	10.83	66.94	6.10	51.81	4.72	0.86	0.08
2012-13	119.21	11.06	66.65	6.18	52.55	4.81	0.81	0.08
2013-14	129.11	12.21	72.79	6.88	56.87	5.38	0.54	0.05
2014-15	135.26	12.91	76.90	7.34	58.36	5.57	0.47	0.04
Mean	93.58	8.27	53.43	4.71	40.20	3.55	0.61	0.05
Stdev	32.71	3.55	17.71	1.95	15.08	1.60	0.21	0.02
CV	0.35	0.43	0.33	0.41	0.38	0.45	0.34	0.44
CAGR	0.12	0.16	0.11	0.15	0.14	0.18	0.03	0.08

Source: Annual Reports of Punjab National Bank calculated values

Table - 2 shows that the efficiency performance of Punjab National Bank during the study period from 2005-06 to 2014-15. The business per branch of Punjab National Bank increased from Rs. 46.91 crores in 2005-06 to Rs. 135.26 crores in 2014-15. It is registered growth rate of 3.25 times, with an average of Rs. 84.06 crores. The business per employee of Punjab National Bank increased from Rs. 2.80 crores in 2005-06 to Rs. 12.21 crores in 2014-15. It is registered growth rate of 4.36 times, with an average of Rs. 7.25 crores. The deposits per branch of Punjab National Bank increased from Rs. 24.99 crores in 2005-06 to Rs. 72.79 crores in 2014-15. It is registered growth rate of 2.91 times, with an average of Rs. 48.24 crores. The deposits per employee of Punjab National Bank increased from Rs. 1.76 crores in 2005-06 to Rs. 6.88 crores in 2014-15. It is registered growth rate of 3.51 times, with an average of Rs. 4.15 crores. The advances per branch of Punjab National Bank increased from Rs. 14.63 crores in 2005-06 to Rs. 56.87 crores in 2014-15. It is registered growth rate of 3.88 times, with an average of Rs. 35.52 crores. The advances per employee of Punjab National Bank increased from Rs. 1.03 crores in 2005-06 to Rs. 5.38 crores in 2014-15. It is registered growth rate of 5.22 times, with an average of Rs. 3.09 crores. Overall efficiency of the Punjab National Bank improved during the study period.

Profit Earning Capacity

The profit earning capacity of Punjab National Bank during the study period from 2005-06 to 2014-15 is shown in Table – 3. The profit earning capacity is examined in terms of interest earned, other income, interest expended, operating expenses, provisions and contingencies, total income, total expenditure net profit and operating profits are considered for the study.

Table – 3 shows the profit earning capacity of Punjab National Bank during the period 2005-06 to 2014-15. The interest income of Punjab National Bank increased from Rs. 8460 crores in 2005-06 to Rs. 43223 crores in 2014-15. It is registered growth rate of 5.10 times, with an average of Rs. 23316.9 crores every year. The other income of Punjab National Bank increased from Rs. 1854 crores in 2005-06 to Rs. 4576 crores in 2014-15. It is registered growth rate of 2.46 times, with an average of Rs. 2925.7 crores every year. The interest expenditure of Punjab National Bank increased from Rs. 4453 crores in 2005-06 to Rs. 27077 crores in 2014-15. It is registered growth rate of 6.08 times, with an average of Rs. 14166.8 crores every year. The operating expenses of Punjab National Bank increased from Rs. 3257 crores in 2005-06 to Rs. 9338 crores in 2014-15. It is registered growth rate of 2.86 times, with an average of Rs. 5296.9 crores every year.

Table - 3
PROFIT EARNING CAPACITY OF PUNJAB NATIONAL BANK
(2005-06 to 2014-15)

(Rs. in Crores)

Year	Interest Earned	Other Income	Interest Expended	Operating expenses	Provisions & contingencies	Total Expenditure	Total Income	Net Profit
2005-06	9584	1273	4917	3023	1478	9418	10857	1439
2006-07	11537	1042	6023	3326	1690	11039	12579	1540
2007-08	14265	1997	8731	3525	1957	14213	16262	2049
2008-09	19326	2919	12295	4206	2653	19154	22245	3091
2009-10	21467	3565	12944	4762	3420	21126	25032	3905
2010-11	26986	3613	15179	6364	4622	26165	30599	4433
2011-12	36428	4202	23013	7003	5730	35746	40630	4884
2012-13	41893	4216	27036	8165	6160	41361	46109	4748
2013-14	43223	4576	27077	9338	8042	44457	47799	3343
2014-15	46315	5890	29759	10491	8863	49144	52206	3062
Mean	27102.40	3329.30	16697.40	6020.30	4461.50	27182.30	30431.80	3249.40
Stdev	13908.21	1534.74	9292.01	2667.13	2665.07	14535.97	15363.74	1267.45
CV	0.51	0.46	0.56	0.44	0.60	0.53	0.50	0.39
CAGR	0.19	0.19	0.22	0.15	0.22	0.20	0.19	0.09

Source: Annual Reports of Punjab National Bank

The Provisions and contingencies of Punjab National Bank increased from Rs. 1194 crores in 2005-06 to Rs. 8042 crores in 2014-15. It is registered growth rate of 6.73 times, with an average of Rs. 3694.6 crores every year. The total expenditure of Punjab National Bank increased from Rs. 8094 crores in 2005-06 to Rs. 44457 crores in 2014-15. It is registered growth rate of 5.49 times, with an average of Rs. 23077.3 crores every year. The total income of Punjab National Bank increased from Rs. 10314 crores in 2005-06 to Rs. 47799 crores in 2014-15. It is registered growth rate of 4.63 times, with an average of Rs. 26242.6 crores every year. The net profit of Punjab National Bank increased from Rs. 1410 crores in 2005-06 to Rs. 3342 crores in 2014-15. It is registered growth rate of 2.37 times, with an average of Rs. 3084.1 crores every year.

To sum up the growth rate of interest income and other income is less than the proportionate growth of interest expenses, operating expenses and provisions and contingencies. It creates pressure on profit earnings of Punjab National Bank. Interest income of Punjab National Bank constantly increased throughout the study period due to increase in granting loans and advances. Similarly the interest expenses too. Non-interest income was highly volatile, but the operating expenses steadily increased throughout the study period except 2005-06. In general the proportionate growth rate of total income (4.63 times) was less than the growth rate of total expenditure (5.49 times). Due to this reason the net profit of Punjab National Bank remains under stress. It can be concluded that net profit earning of the Punjab National Bank was directly influenced by operational and interest expenses.

PROFITABILITY

Profitability is considered a very important test for measuring efficiency of the Bank as it is a means to measure the ability of the bank to earn profits. The details of interest earned ratio, interest paid ratio, non – interest cost ratio, non – interest income ratio, spread ratio, burden ratio and profitability ratios are show in Table – 4.

Table – 4
PROFITABILITY OF PUNJAB NATIONAL BANK
(2005-06 to 2014-15)
(Per cent)

Year	IE	IP	OE	NII	SP	BD	PR
2005-06	5.17	2.72	2.72	1.13	2.45	1.59	0.86
2006-07	4.93	2.53	2.31	0.65	2.40	1.66	0.74
2007-08	4.87	2.54	2.12	0.43	2.33	1.69	0.64
2008-09	4.98	3.05	1.91	0.69	1.93	1.22	0.71
2009-10	5.30	3.37	1.88	0.80	1.93	1.08	0.85
2010-11	4.92	2.96	1.87	0.81	1.96	1.06	0.90
2011-12	4.86	2.73	1.97	0.65	2.13	1.32	0.81
2012-13	5.40	3.41	1.89	0.62	1.99	1.27	0.72
2013-14	5.98	3.86	2.04	0.60	2.12	1.44	0.68
2014-15	5.39	3.38	2.17	0.57	2.01	1.60	0.41
Mean	5.18	3.06	2.09	0.70	2.13	1.39	0.73
Stdev	0.35	0.44	0.27	0.19	0.20	0.24	0.14
CV	0.07	0.14	0.13	0.27	0.09	0.17	0.19
CAGR	0.00	0.02	-0.02	-0.07	-0.02	0.00	-0.08

Source: Annual Reports of Punjab National Bank

The above table shows that the Profitability of Punjab National Bank during the period 2005-06 to 2014-15. The interest earned ratio of Punjab National Bank is highly volatile with an average of 5.18 per cent. The interest paid ratio of Punjab National Bank is also volatile with increase and decrease, with an average of 3.05 per cent. Like wisenon-interest income ratio and operating expenditure ratio also volatile, with an average of 0.69 per cent and 2.08 percent respectively. Spread and burden ratio are also highly volatile, so as the profitability ratio also. Only interest earned, paid ratio and burden ratio are positive growth 1.04, 1.24 and 1 per cent. To sum up the profitability remains under pressure due to increase of burden ratio and decrease in spread ratio.

Conclusion and Suggestions

In view of the foregoing issues, it may be meaningful to suggest the following strategies for the Punjab National bank for enhancing operational efficiency and profitability. Business expansion through setup branches paves way bringing out large geographical area customer coverage by the banks. Thereby exploring the unexplored of clients is possible. Even though efficiency of banks improved over the period of study, Indian banks are far behind to the performance of global banks. Banks have to take steps to improve the efficiency by adopting new technologies. Added thrust is required for enhancing the non-interest income. This can significantly improve profitability. Non-interest income can be improved through undertaking more of fee based activities, besides the traditional fund based activities like providing credit. In this regard, it may be pointed out that higher investments in technology would help to improve the non-interest income of banks.

The profitability of the Punjab National Bank is remain under pressure due to increased cost of borrowings, declining interest spreads and lower fee income due to slowdown in retail lending. It has been concluded that the number of offices and number of employees did not directly influenced the business performance. It shows that the business performance and efficiency of Punjab National Bank is improved during the study period. However profit earning capacity and profitability ratios are remains under pressure due to increase of burden ratio and decrease in spread ratio.

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