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## *Financial Performance Evaluation and Internal Process Business: A Study of Punjab National Bank*

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*Abstract: The study examined Punjab National Bank (PNB) business in two segments i.e. financial and internal business processes. The results reveal that the financial position of the bank is satisfactory in terms of capital adequacy and credit deposits ratio. The cost to income and business per employee ratio is efficient in regards to the internal business processes. The financial and internal business process ratios are positively correlated. It proves that increase in the financial position; internal business process performance will increase. The 't' value is insignificant at 95 percent level of confidence. The study focused on holistic measures for measuring the performance of the bank. At present, the performance is not appreciable. This happened to slow down the economy. The study may be useful for bank managers, savers, users, and govt. etc in the financing and non-financing decisions making.*

*Keywords: CAR, CDR, NIM, NNPAR, CIR, PPE, BPE, AGR and AAGR.*

### I. INTRODUCTION

The banking sector acts as a backbone of economic development. The banking system is the fuel injection system that spurs economic efficiency. The countries with a well-developed banking system grow faster than those with a weaker one. Thus, economic development is not possible without a sound financial system. The banks have been searching for new and innovative tools to improve their bottom lines. The banking sector in India especially the public sector banks is facing major threats in the form of assets quality, capital adequacy, technology, and competition from private sector competitors. Thus, the banking sector is seen as a growth driver of the economy.

### II. OBJECTIVES OF THE STUDY

1. To find out the financial performance evaluation of the Punjab National Bank.
2. To diagnose the internal business process of the Punjab National Bank.
3. To examine the relationship in terms of financial and internal business process perspectives of Punjab National Bank.

### III. SCOPE OF THE STUDY

Keeping in view of the objectives of the study, it has been decided to choose the Punjab National Bank on a purposive sampling basis. The study attempts to examine the appraisal of the bank in two segments i.e. financial and internal business processes.

## IV. METHODOLOGY

The study is based on secondary data. The data have been taken from published annual reports and statistical tables of the bank (PNB) during 2007-08 to 2016-17. The collected data have been analyzed through the use of various accounting and statistical techniques such as ratios, percentage, mean, coefficient of variation, annual growth rate (AGR), average annual growth rate (AAGR), correlation and 't' test.

**Analysis of the financial and internal business process of the Punjab National Bank**

In order to judge the financial and internal business process performance evaluation banks bank (PNB), the following ratios have been used.

	Sr. No.	Measures	Formula
Financial Performance	1.	Capital Adequacy Ratio (CAR)	$[\text{Tier I} + \text{Tier II} + \text{Tier III}(\text{capital funds}) / \text{Risk weighted Assts}] * 100$
	2.	Credit Deposits Ratio (CDR)	$[\text{Total Advances} / \text{Total Deposits}] * 100$
	3.	Net Interest Margin Ratio(NIM)	$[\text{Net Interest income} / \text{Average Earning Assets}] * 100$
	4.	Net Non-Performing Assets Ratio (NNPAR)	$[\text{Net Non- Performing Assets} / \text{Loan Given}] * 100$
Internal Business Procees Performance	5.	Cost to income Ratio (CIR)	$[\text{operating Expenses} / \text{NII} + \text{Non Interest Income}] * 100$
	6.	Profit Per Employee Ratio (PPE)	$[\text{Net Profit} / \text{No. of Employees}]$
	7.	Business Per Employee (BPE)	$[\text{Total Business} / \text{No. of Employees}]$

## V. ANALYSIS AND DISCUSSION

The data analyzed have been presented in different tables (eight in number), reflecting upon the various objectives of the study.

**Objective 1**

Performance evaluation analysis with respect to financial segment of bank has been shown in table number (1 to 4)

**Table1: Analysis of Capital Adequacy Ratio (CAR)**

Year	CAR (%)	A.G.R
2007-08	12.96	
2008-09	14.03	8.26
2009-10	14.16	0.93
2010-11	12.42	-12.29
2011-12	12.63	1.69
2012-13	12.72	0.71
2013-14	11.52	-9.43
2014-15	12.21	5.99
2015-16	12.28	0.57
2016-17	11.66	-5.05
Mean	12.66	
C.V.	.07	
AAGR	-0.96	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17.

**Table No. 1** shows the capital adequacy ratio of PNB for a period of ten years. The ideal capital adequacy ratio as prescribed in BASEL III norms is 10.5 percent. The mean value of CAR is recorded to be 12.66 percent. It proves that CAR is more than BASEL norms. It is positive signal for the bank. It can be inferred that capital adequacy ratio is quite satisfactory. It indicates the bank's ability to defend itself from risk against losses.

Table 2: Analysis of Credit Deposits Ratio (CDR)

Year	CDR (%)	A.G.R
2007-08	71.79	
2008-09	73.75	2.73
2009-10	74.84	1.48
2010-11	77.38	3.39
2011-12	77.39	0.01
2012-13	78.86	1.89
2013-14	77.38	-1.88
2014-15	75.90	-1.91
2015-16	74.55	-1.78
2016-17	67.47	-9.50
Mean	74.93	
C.V.	0.15	
AAGR	-0.62	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No. 2 represents the total advances to total deposits ratio of the bank for a period of ten years. This ratio determines the productivity of the assets of the bank. It witnesses how far the assets of a bank have been utilized to provide advances to its customers. The mean value is recorded to be 74.93 percent with C.V. value .15. The average annual growth rate is slightly negative (i.e. -0.62). It can be said that higher ratio indicates an effective utilization of the assets and lower ratio reflects a low productivity of the assets of bank. Hence, assets of the bank (advances) were utilized properly and bank should try to invest in fruitful securities that generate more returns.

Table 3: Analysis of Net Interest Margin Ratio (NIM)

Year	NIM (%)	A.G.R
2007-08	3.58	
2008-09	3.52	-1.68
2009-10	3.57	1.42
2010-11	3.96	10.92
2011-12	3.84	-3.03
2012-13	3.52	-8.33
2013-14	3.44	-2.27
2014-15	3.15	-8.43
2015-16	2.60	-17.46
2016-17	2.38	-8.46
Mean	3.35	
C.V.	.08	
AAGR	-4.15	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No.3 highlights the net interest margin ratio of the bank over the ten years period of the study. The ratio measures of the difference between the interest income generated by bank and the amount of interest payout their lenders. The mean value of net interest margin ratio is noticed to be 3.35 percent with c.v. value .08. The average annual growth rate shows the negative figure. It can be concluded that net interest generated out of inertest earning assets of the bank is comparatively low to the bank rate. Thus, bank should be maintained at least the bank rate and try to enhance its position to this level.

Table 4: Analysis of Net Non-Performing Assets Ratio (NNPAR)

Year	NNPAR (%)	A.G.R
2007-08	.64	
2008-09	.17	-73.44
2009-10	.53	211.76
2010-11	.85	60.38
2011-12	1.52	78.82
2012-13	2.35	54.60
2013-14	2.85	21.28

2014-15	4.06	42.46
2015-16	8.61	112.06
2016-17	7.81	-9.29
Mean	2.94	
C.V.	.98	
AAGR	55.40	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No.4 depicts the net non-performing assets ratio of the bank over the ten years period of the study. The NPA level reflects the quality of the loan portfolio. The mean value is happened to be 2.94 percent with c.v. value .98. The c.v. value .98 proves sharp fluctuation in the growth of NNPAR. The average annual growth rate showed a positive figure. It shows the probability of large number of defaults which affects the profitability and liquidity of the bank. The bank should manage their NNPA<sub>s</sub> more efficiently and effectively. Therefore, a careful step is needed while distributing loans.

## Objective 2

Performance evaluation analysis in respect to internal business process of the bank has been shown in table number 5 to 7.

Table 5: Analysis of Cost to Income Ratio (CIR)

Year	CIR (%)	AGR
2007-08	46.81	
2008-09	42.50	-9.21
2009-10	39.39	-7.32
2010-11	41.27	4.77
2011-12	39.75	-3.68
2012-13	42.81	7.70
2013-14	45.06	5.26
2014-15	46.74	3.73
2015-16	46.79	0.11
2016-17	41.57	-11.16
Mean	43.27	
C.V.	.06	
AAGR	-1.09	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No. 5 portrays the cost to income ratio of PNB over the period of study. The cost to income ratio measures how costs are changing compared to income. The lower ratio reflects the better position. The mean value is observed to be 43.27 percent with C.V. value .06. The average annual growth rate shows the negative figure. It is found that cost incurred to generate income by the bank was comparatively low. It proves that bank is able to turn resources into revenue at low cost.

Table 6: Analysis of Profit per Employee (PPE)

Year	PPE	AGR
2007-08	.0365	
2008-09	.0531	45.48
2009-10	.0686	29.19
2010-11	.0777	13.27
2011-12	.0786	1.16
2012-13	.0750	-4.58
2013-14	.0510	-32.00
2014-15	.0448	-12.16
2015-16	-.0561	-225.22
2016-17	.0179	-131.91
Mean	.0447	
C.V.	.81	
AAGR	-35.20	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No. 6 reveals the ratio of net profit to number of employees over ten years period of the study. It tends to rise in the initial years but its position from 2012-13 has been declining and to reach a negative level in the year 2015-16. The mean value

is noticed to be .0447 with c.v. value .81. It proves the high variation in profit per employee. The average annual growth rate showed a negative figure. It can be said that bank experienced low profit per employee. Therefore, bank should increase the proportion of skilled employees with set business target to increase profit per employee.

Table 7: Analysis of Business per Employee (BPE)

Year	BPE	AGR
2007-08	5.104	
2008-09	6.262	22.69
2009-10	7.658	22.29
2010-11	9.734	27.11
2011-12	10.838	11.34
2012-13	11.065	2.09
2013-14	12.216	10.40
2014-15	12.914	5.71
2015-16	13.635	5.58
2016-17	14.086	3.31
Mean	10.351	
C.V.	.28	
AAGR	12.28	

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No. 7 exhibits the ratio of total business to number of employees over the period of the study. This is the major ratio which focuses the management efficiency of a bank. This ratio showed an increasing trend over the period of the study. It proves that revenue generated by each employee of the bank. The mean value is recorded to be 10.35 with C.V. value .28. The average annual growth rate shows the positive figure. It can be concluded that rising trend of BPE and positive figure of annual growth rate reflect the positive signal for bank. Thus, the bank should be maintained this position in future years also.

### Objective 3:

Relationship analysis between the ratio of financial and internal business process performance evaluation has been shown in Table No 8.

Table No. 8: Relationship analysis between financial and internal business process segments

Year	CAR Rank	CDR Rank	NIM Rank	NNPAR Rank	Total	Ultimate Rank(R <sub>1</sub> )	CIR Rank	PPE Rank	BPE Rank	Total	Ultimate Rank (R <sub>2</sub> )
2007-08	8	2	8	3	21.0	6	10	3	1	14	3.0
2008-09	9	3	5.5	1	18.5	2	5	6	2	13	2.0
2009-10	10	5	7	2	24.0	7	1	8	3	12	1.0
2010-11	5	7.5	10	4	26.5	8	3	9	4	16	4.5
2011-12	6	9	9	5	29.0	10	2	10	5	17	6.0
2012-13	7	10	5.5	6	28.5	9	6	7	6	21	10.0
2013-14	1	7.5	4	7	19.5	3	7	5	7	19	7.5
2014-15	3	6	3	8	20.0	4.5	8	4	8	20	9.0
2015-16	4	4	2	10	20.0	4.5	9	1	9	19	7.5
2016-17	2	1	1	9	13	1	4	2	10	16	4.5
R	.18										
't' Value	.52										

Source: Compiled Annual Reports of Punjab National Bank from 2007-08 to 2016-17

Table No. 8 shows the relationship between financial and internal business process segment over the ten years period of study. The ratios are ranked in order that reflects the position of the bank. The ultimate rank has been calculated from total ranks of the ratios. It appears that ratio of financial perspective and internal business process perspectives are positively correlated with 'r' value .18 in PNB. It proves that increase in the financial ratios, internal business process ratios will increase. The 't' value .52 means correlation co-efficient is insignificant. It can be concluded that positive correlation between financial ratios and internal business process ratios point out the appropriate signal for the bank.

## VI. CONCLUSION

The study observed that financial ratio of the bank is satisfactory in terms of capital adequacy and credit deposits ratio. On the other hand, internal business process ratio is efficient in terms of cost to income ratio and business per employee ratio. The overall performance evaluation of the bank during the study periods was not remarkable due to the slowdown of the economy. The traditional methods of performance evaluation are lopsided and focused on holistic performance measures. The finding of this study may be useful to the bank's manager, government, savers, users etc. in planning the financing and non- financing decisions. In fact, the Indian banking system has reached even the remote corners of the country. This is one of the main reasons of India's growth process. Thus, the bank should increase the credit flow to the industry sector that helps in economic growth of the nation.

## VII. SCOPE FOR FURTHER RESEARCH

There is vast scope for further research on various factors that is customer satisfaction, learning & growth, interest rate and inflation etc. The study can be extended to more number of banks over a large period of time.

## References

1. Annapurna, V., & Manchala, G. (2007). Balanced scorecard evaluation of the performance of Indian Public Sector Banks. *Indian Journal of Finance*, 2(9) (Sept.), 7-19.
2. Bharati, V., & Pathak (2005). *The Indian Financial System*, New Delhi, Dorling Kindersley (India) Pvt. Ltd., Licensees of Person Education in South Asia, 474-548.
3. Bodla, B.S, & Verma, R. (2006). Evaluating performance of banks through CAMEL model: A case study of SBI and ICICI. *The ICFAI Journal of Bank Management*, 5(3), 49-63.
4. Hanumantha R. P., & Dutta, Subhendu, (2014). *Fundamental Analysis of the Banking Sectors in India*. *Indian Journal of Finance*, 8(9) (Sept.), 47-55.
5. Pandey, I.M. (2004). *Essentials of Financial Management*, New Delhi, Vikas Publishing House Limited.
6. Prasuna Chandra (2008), *Financial Management*, New Delhi, Tata Mcgraw Hill Publishing company Ltd.
7. Singh, S.P., Arora, A., & Anand, M. (1991). Performance evaluation of SFCs: A comparative study of PFC and HFC. *Parjnan*, 2(3), 16-25.
8. Verma, H.L, & Malhotra, A.K. (2009). *Funds Management in Commercial Banks*, New Delhi, Deep and Deep Publication.