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COMPARATIVE STUDY OF FINANCIAL AND OPERATIONAL PERFORMANCE ANALYSIS OF REGIONAL RURAL BANKS (HARYANA AND PUNJAB)

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ABSTRACT

The Rural Banking Institutions play significant role in the socio-economic development of rural India through funding to different sections of rural sector, In the Northern India, Haryana and Punjab has pivotal place in utilizing the services of Rural Banking/Financial Institutions. The Sarva Haryana Gramin Bank (SHGB) and Punjab Gramin Bank (PGM) is committed to cater to the financial needs of rural masses to make them self-reliant and to facilitate them with better and safer saving opportunities, keeping in view the social responsibility with special care for weaker sections of the society. The present study is an attempt to Comparative analysis of financial and operational performance of SHGB and PGM. The main objectives of the study are to examine financial performance, operational performance and bankruptcy level of the banks. For this purpose CAMEL model and Z-Score model have been used besides other statistical techniques to analyse financial and operational performance of this bank. Through CAMEL model capital adequacy, asset quality, management efficiency, earning quality and liquidity level are evaluated and through z-score model bankruptcy level of the bank is evaluated. After identifying the weaknesses through study, significant suggestions have been given.

KEY WORDS: *Financial Performance, Operational Performance, Capital Adequacy, Asset Quality, Earning Quality, Liquidity Position and Bankruptcy*

I. INTRODUCTION

The Regional Rural Banks (RRBs) were established as sponsored banks with a view to develop the rural economy and to create a supplementary channel to the 'Cooperative Credit Structure' and to enlarge institutional credit for the rural and agriculture sector. Sarva Haryana Gramin Bank (SHGB)**:** It came into existence on 29th November 2013 after amalgamation of two RRBs viz. Haryana Gramin Bank and Gurgaon Gramin Bank under the Regional Rural Banks Act, 1976 and the new substance called as Sarva Haryana Gramin Bank with its Head Office at Rohtak (Haryana) which is supported by Punjab National Bank. The Sarva Haryana Gramin Bank is giving the most grounded financial system in Haryana. By and by, the Sarva Haryana Gramin Bank has 542 branches all through Haryana with a workforce of in excess of 2300 committed Employees; the Bank is endeavouring hard to give best financial administrations in its direction region. SHGB has increasing trend in Deposit and loan issued with the CAGR are (7.23%) and (6.38%) and decreasing trend in profit and borrowing with the CAGR are (-7.75%) and (-15.60%). NPAs are increased with CAGR are (6.18%)". (Website of SHGB and annual report of NABARD)

Punjab Gramin Bank (PGB): The PGB is a pioneer banking organization in India. It appeared after amalgamation of three recent RRBs; viz. Kapurthala Firozpur Kshetria Gramin Bank, Gurdaspur Amritsar Kshetria Gramin Vikas Bank and Shivalik Kshetria Gramin Bank. It by and by has 240 branches crosswise over 13 districts of Punjab and is working on very basic level solid and sound financial tasks. The PGB, having the greater part of its branches in rustic zones is assuming real job in inspiring expectation for everyday comforts of rural individuals by giving different kinds of deposit and advance schemes and is submitted for comprehensive development. The Bank has just financed 172571 Kisan Credit Cards (KCCs) to the farmer. PGB has been expanding pattern in Deposit, loan issued and profit with the CAGR are (14.5%), (10.6%) and (10.7%). There are diminishing pattern in borrowing and NPAs with the CAGR are (- 17.7%) and (- 7.57)". (Annual report of NABARD and website of PGB)

II. REVIEW OF LITERATURE

The bank management and the sponsored bank take corrective measures to raise the credit-deposit ratio of the bank that would make RRBs relevant in the rural India. Singh and Agarwal (2017) Analyzed the operational performance of PGB and KGSGB using CAMEL Model with twelve variables measured in the study, eight variables shows that performance of Prathma Bank is better than Kashi Gomti

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Summit Gramin Bank. Hence amalgamation is not the only way of improving the status of regional rural banks. Consolidation of banks with proper strategy is essential for their sound and viable financial performance. Soni and Kapare (2012) "concluded that performance of RRBs has significantly improved". Kanika and Nancy (2013) "examined positive impact on the financial performance of RRB's due to amalgamation and various other factors" Bhatt (2013) showed that the selected banks of Rajasthan showed higher profitability than selected RRBs of Gujarat and Maharashtra. With the above review, it can be concluded that N.M. Makandar (2012), Bhatia, Aparana and Megha (2013), Jariwala and Noronha (2014), Madan (2014) "found the enhanced efficiency of RRBs in the post amalgamation period., merger and amalgamation of Regional Rural Banks (RRBs) may help in improving their health and viability, financial performance has improved in post merger period and number of loss making RRBs and amount of accumulated losses are significantly reduced" Pardeep and Sakshi (2017) Analysed the performance of Sarva Haryana Gramin Bank using the Camel Model. 21 ratios are considered to analyse the performance of bank under consideration. Secondary data of 9 years period ranges from 2005 to 2014. Sarva Haryana Gramin Bank performed best in the parameter of capital adequacy followed by management quality. Third rank is given to the assets quality parameter of the bank. Liquidity parameter is at fourth rank. The bank was not performed well in the parameter of earning quality

III. OBJECTIVES OF THE STUDY

The study under consideration proposes to achieve the following objectives:

i) To study and examine the comparative financial performance of RRB in Haryana and Punjab.
ii) To scan and analyse the comparative operational performance of RRB in Haryana and Punjab.
iii) To inspect into the comparative viability/bankruptcy level of RRB in Haryana and Punjab.

IV. RESEARCH METHODOLOGY

A. Type of Research and Data Collection: The present study is analytical and descriptive in nature. The data has been collected from secondary sources, i.e. Annual Financial Statements of the Bank, Research Journals, Financial Reports, Reports published by Government, e-newspapers etc. The data has been taken for five years i.e. from 2012-2013 to 2016-2017.

B. Hypothesis of the study

H_{01}: There is no significant difference in the financial performance of SHGB and PGB during the study period.
H_{02}: There is no significant difference in the operational efficiency of SHGB and PGB during the study period
H_{03}: There is no significant difference in the bankruptcy level of SHGB and PGB during the study period.

C. Statistical Tools and Techniques

The CAMEL Model and Z-Score model have been applied besides ratio analysis and statistical techniques like- t-test and Anova.

a) Ratios to measure profitability

i. Return on Capital Employed

$$\text{ROCE} = \frac{\text{NPAT}}{\text{TA}} \times 100$$ (Wherein, NPAT=Net Profit after tax, TA=Total Assets)

ii. Profit Margin= $\text{PM} = \frac{\text{NP}}{\text{TI}} \times 100$ (wherein, NP=Net Profit, TI=Total Income)

b) Ratios to Measure Current Obligation

i. Cash-Assets ratio– $\text{CAR} = \frac{\text{C}}{\text{TA}} \times 100$ (wherein, C=Cash, TA=Total Assets)

ii. Cash-Deposit ratio– $\text{CDR} = \frac{\text{C}}{\text{TD}} \times 100$ (wherein, C=Cash, TD=Total Deposit)

c) Ratios to Measure Solvency

i. Outside Liabilities to Total Assets–

$$\text{OLTA} = \frac{\text{TB}}{\text{TA}} \times 100$$ (Wherein, TB=Total Borrowings, TA=Total Assets)

ii. Interest coverage ratio or debt service ratio= $\text{ICR} = \frac{\text{PBIT}}{\text{TIE}} \times 100$ (wherein, PBIT=Profit before Interest and Taxes, TIE=Total Interest Expenditures)

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d) Ratios to Measure Efficiency

i. Operating Efficiency Ratio= $OER = \frac{TOE}{TA} \times 100$ (wherein, TOE=Total Operating Expenses, TA=Total Assets)

ii. Cost of funds= $COF = \frac{TIE}{TB} \times 100$ (wherein, TIE=Total Interest Expenses, TB=Total Borrowings)

e) Ratios to Measure Risk

i. Equity Assets Ratio= $EAR = \frac{TE}{TA} \times 100$ (wherein, TE=Total Equity, TA=Total Assets)

ii. NNPA to Sales– $NNPS = \frac{NNPA}{S} \times 100$ (wherein, NNPA=Net Non Performing Assets, S=Sales)

f) CAMEL Model

The composite ratings are assigned in the model in terms of 1-5 numerics. The number 1 indicates the highest rating, strongest performance, least degree of supervision concern, and sound health, while 5 indicates lowest rating, inadequate performance and weak health of bank and so receiving highest degree of supervisory concern.

CAMEL Model – Efficiency Parameters

Sr. No.	Efficiency Parameters	Measurement Ratios	**Rating** (on a five point scale)
1	Capital Adequacy	Risk weighted capital to Assets	**5** = 1-5, **4** = 6-10, **3** = 11-15, **2** = 16-20, **1** = more than 20
2	Asset Quality	NPA to Advances	**5** = more than 11, **4** = 8-10, **3**= 5-7, **2** = 2 - 4, **1** = less than 1
3	Management	Net Profit per Employee	**5** = less than 1, **4** = 1 - 2, **3** = 2 - 3, **2** = 3 - 4, **1** = more than 4
4	Earning Quality	Return on Assets	**5** = 0-0.5, **4** = 0.6-1.0, **3** = 1.1-1.5, **2** = 1.6-2.0, **1** = more than 2.0
5	Liquidity Position	Cash to Deposit	**5** = less than 5, **4** = 7 - 9, **3** = 10-12, **2** = 13-15, **1** = more than 15

g) Altman Z-Score Model

The model is defined as: $Z=0.012X_1 + 0.014X_2 + 0.33X_3 + 0.006X_4 + 0.999X_5$, Wherein, the variables X1 to X_4 are computed as absolute percentage values while X_5 is obtained in number of times and signify as: $\mathbf{X_1}$ is the ratio of working capital to total assets, X2 is the ratio of retained earnings to total assets, $\mathbf{X_3}$ is the ratio of earnings before interest and tax to total assets, X4 is the ratio of market value of equity to book value of debt, X5 is the ratio of sales to total assets. The model discriminate three categories in relation to the financial performance as given below:

Category	Z-score value	Inference/Implications
i	Below 1.8	Bankruptcy zone
ii	1.8 – 3.0	Good Performance
iii	Above 3.0	Very Healthy performance

V. (I) RESULTS AND DISCUSSION

The Sarva Haryana Gramin Bank (SHGB) and Punjab Gramin Bank has been playing pivotal role in the rural development. A detailed discussion is made on the analysis of financial and operational performance of the bank in the following section.

V (i) Comparison of Financial Performance in RRBs (Haryana and Punjab)

Table: V (i) Comparative Financial Performance Analysis of RRBs

	Profitability Ratio		Liquidity Ratio		Solvency Ratio		Efficiency Ratio		Risk Ratio	
	ROCE	PM	CAR	CDR	OLTA	ICR	OER	COF	EAR	NNPS
SHGB	1.02	11.77	3.19	4.33	14.69	30.6	1.722	41.83	10.24	3.71
PGB	0.77	9.23	2.58	3.94	24.71	21.7	1.33	26.27	7.767	0.69
F-Value	3.14 (0.12	2.38 (0.16)	6.60 (0.037)	20.8 (0.003)	3.003 (0.13)	5.15 (0.057)	5.73 (0.048)	1.39 (0.27)	20.43 (0.003)	58.94 (0.000)

(Source: Calculated from Financial Reports of SHGB and PGB)

In the profitability analysis both banks are performing not well. There are no significant difference in ROCE and PM in SHGB and PGB. There are lower values of ratios in both RRBs which prove the critical condition of returns in comparison to the assets and reveal that less part of the total income is available to the owners in the form of profits. Liquidity position of these banks against assets and

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deposits has been very poor and critical. In the Solvency Analysis SHGB has been performing better as comparison to PGB**.** Both banks are less efficient in fund management but PGB has performing well as comparison to SHGB. PGB has been lesser the proportion of operating expenditure to total assets as comparison to SHGB. SHGB and PGB Banks with insufficient capital base remain in worsening situation and face difficulty in making adequate use of assets for earning. NNPS has been greater than specified 3 percent in SHGB which indicate the danger zone for the bank. But in the case of PGB nonperforming assets to total advance less than 1%. It is good sign for bank. SHGB has performing well in three parameters profitability liquidity and solvency as comparison to PGB. PGB has been better performance in efficiency and risk parameters as compare to SHGB.

V. (ii) Comparison of Operational Performance in Regional Rural Banks (Haryana and Punjab)

	Capital Adequacy		Assets Quality		Management Efficiency		Earning Quality		Liquidity	
Year	**PGM**	**SHGM**	**PGM**	**SHGM**	**PGM**	**SHGM**	**PGM**	**SHGM**	**PGM**	**SHGM**
2013	*	18.07	*	3.2	*	5.55	*	1.3	*	4.25
2014	14.97	18.19	0.74	3.34	8.13	5.46	0.69	1.16	4.081	4.36
2015	17.07	19.28	0.83	2.97	7.14	5.57	0.72	1.17	3.88	4.35
2016	19.27	19.26	0.67	4.73	8.15	3.61	0.83	0.77	3.74	4.23
2017	21.57	18.12	0.54	4.32	9.3	3.8	0.85	0.701	4.06	4.47
Mean	18.22	18.58	0.69	3.71	8.18	4.79	0.77	1.02	3.94	4.33
F-value	0.080(0.78)		58.94(0.000)		28.035(0.001)		3.143(0.120)		20.73(0.003)	
Rank	2	1	1	2	1	2	2	1	2	1

(Source: Calculated from secondary data in Annual Reports of SHGB and PGB)

In brief it can be acknowledged that overall performance under CAMEL model in PGB was better than SHGB in this study period. Assets Quality ratio of PGB (rating 1) was good as compared to SHGB (rating 2) it indicate that satisfactory asset quality and credit monitoring and administration. The rating (1 and 2) in the capital adequacy and management efficiency ratio both banks was performing well. It indicates that overall satisfactory level of capital that abundant supports the bank to risk report and higher efficiency of employees. Earning quality and liquidity position of PGB and SHGB has been worse with rating 4 and 5 throughout the study period rating 5. Possibility it would difficult for the banks to performance its routine function with lesser cash availability. In case of sudden huge withdrawals the bank face total liquidity crunch. The t-value mention in the table proves that there is no significant difference in all parameter during the study period.

V (iii) Comparison of Regional Rural Banks (Haryana and Punjab)

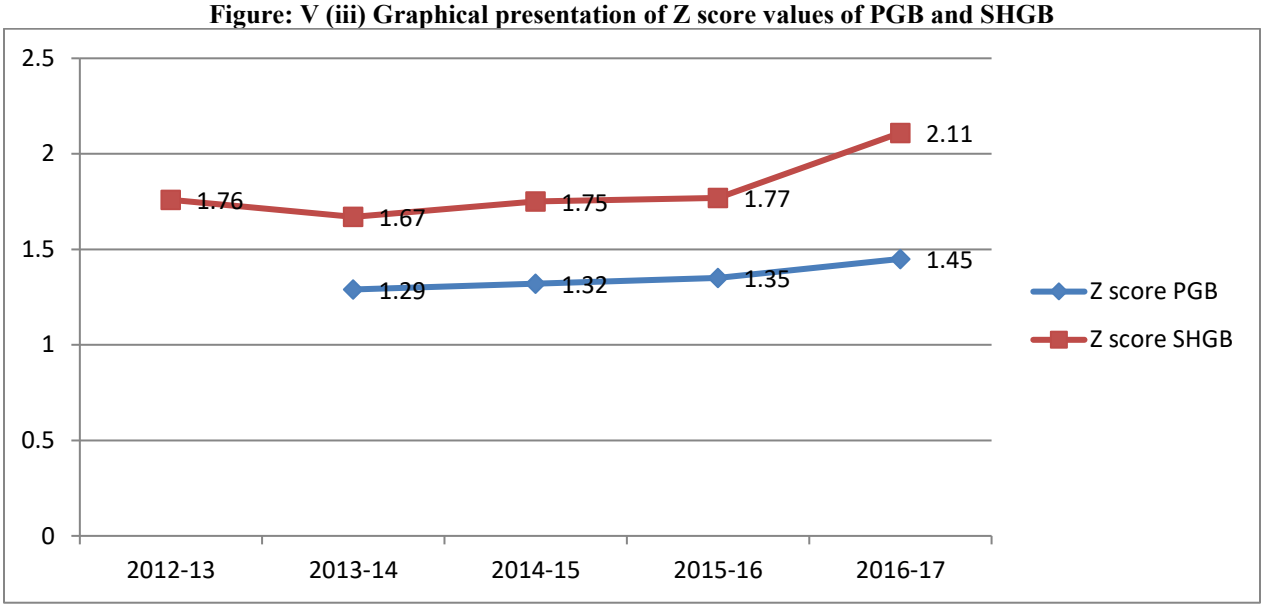
Table: V (iii) Z-Score Values of PGB and SHGB (Year 2009-2017)

Year	Z score of PGB	Z score of SHGB
2012-13	--	1.76
2013-14	1.29	1.67
2014-15	1.32	1.75
2015-16	1.35	1.77
2016-17	1.45	2.11
Mean	1.34	1.73

(Source: Calculated from Financial Reports of PGB and SHGB Bank)

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Figure: V (iii) Graphical presentation of Z score values of PGB and SHGB



It can be deduced from the above table and figure V(iii) that the viability/bankruptcy situation of SHGB and PGB bank has been weak during the study period as the value of z-score has been less than 1.8 during the study period except in the year 2017 (SHGB). The average values noticed are both banks 1.73 and 1.34 which are also less than 1.8. But SHGB has performed better as compared to PGB. The SHGB have even crossed the demarcation line (1.8) for good performance zone in year 2017 with z-score value 2.11. These banks have to maintain proper level of working capital, adequate level of retained earnings, higher rate of returns and high business in terms of loans and advances to enter and sustain in healthy zone.

VI. CONCLUSION

The RRBs activate deposits fundamentally from rustic/semi-urban regions and give loan and advances generally to small and negligible ranchers, horticultural workers, rural craftsman's and different fragments of need segment. As a result of amalgamation, number of the RRBs has been reduced from 196 to 56 as on 31 March 2017. It is good sign for bank. SHGB has performing well in three parameters profitability liquidity and solvency as comparison to PGB. PGB has been better performance in efficiency and risk parameters as compare to SHGB.

In brief it can be acknowledged that overall performance under CAMEL model in PGB was better than SHGB in this study period. Assets Quality ratio of PGB (rating 1) was good as compared to SHGB (rating 2) it indicate that satisfactory asset quality and credit monitoring and administration. The rating (1 and 2) in the capital adequacy and management efficiency ratio both banks was performing well. It indicates that overall satisfactory level of capital that abundant supports the bank to risk report and higher efficiency of employees. Earning quality and liquidity position of PGB and SHGB has been worse with rating 4 and 5 throughout the study period rating 5. Possibility it would difficult for the banks to performance its routine function with lesser cash availability. In case of sudden huge withdrawals the bank face total liquidity crunch. But the PGB could not even touch the demarcation line. Except the year 2017, both the banks remained in bankruptcy zone which signify the weak financial viability of these banks.

REFERENCES

- Research Journals/Articles

1. *Bhatt (2013), "Profitability Analysis of Regional Rural Banks in India: with Special Reference to Western Region" Volume No. 3 (2013), Issue No. 08 (August) ISSN 2231-1009*
2. *Soni and Abhay Kapre (2012), "A Study on Current Status of Regional Rural Banks in India" Volume No.2, Issue No.2 ISSN: 2277-1166*
3. *Versha, Mohindra. (2014), "Performance review of Regional Rural Banks in India using ratio analysis", International Journal of Economics, Commerce and Management, Vol. II, No. 6.*
4. *Pardeep and Sakshi (2017) "A Camel Model Analysis of Sarva Haryana Gramin Bank" Vol-3 Issue-4 2017 IJARIIE-ISSN (O)-2395-4396*
5. *Sweety Madan (2014), "Financial Performance of Regional Rural Banks in India For Post Merger Period: An Analytical study" Vol. 4, No2 (2014), ISSN: 2251-1571*

SJIF Impact Factor (2026): 8.863| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 11 | Issue: 2 | February 2026 - Peer Reviewed Journal

6. *Makandar (2012), "Analysis of Investment Profitability of RRBs; A Comparative Study of Pre and Post Amalgamation of KVGB and PGB" Indian Stream Research Journal. Volume 2 Issue 10 Nov 2012*
7. *Bhatia, Aparana and Megha (2013), "Performance evaluation of regional rural banks (RRBS) in India during pre and post amalgamation period" Abhigyan (Jan 2013)*
8. *Anoop Kumar Singh and Ravi Agarwal (2017) "A Comparative Study on Standalone And Amalgamated Regional Rural Banks Using Camels Approach" ISSN (P):2347-4564; ISSN (E): 2321-8878 Vol. 5, Issue 5, May 2017,*
9. *Jariwala And Noronha(2014), " Performance of RRB Before and after Amalgamation "Ret Academy for International Journals of Multidisciplinary Research (RAIJMR),Vol. 2, Issue: 5, June: 2014 ISSN::(P) 2347-5404 ISSN::(O) 2320 771*

- **Websites**

1. *Official website of Sarva Haryana Gramin Bank*
2. *Official website of Punjab Gramin Bank*
3. *Official website of Reserve Bank of India*
4. *Official website of NABARD*