"Critical Performance Evaluation of Regional Rural Banks in Uttar Pradesh: A Comparison of Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank"

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ABSTRACT

*Purpose-*The objective of this research paper is to know the difference of mean score among the three Regional Rural Banks such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank (Sometimes Grameen Bank of Aryavrat) with respect to various parameters like Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio.

*Design/methodology/approach-*Three Regional Rural Banks such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank operating in Uttar Pradesh (India) was considered for the analysis. The data were taken from Annual Reports of RRBs and Reserve Bank of India website. The parameters like Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio. The Descriptive statistics, ANOVA and Post Hoc Tools were used to examine the difference of mean score among the three Regional Rural Bank such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. The study covers the period ranging from 2007-2008 to 2016-2017.

*Findings-*The study reveals that there exists a statistically significant difference among three RRB's such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank with respect to Burden Ratio, Operating Profits to Total Assets, Return on Assets and Return on Net Worth and also there was no significant difference among three RRB's with respect to Spread Ratio, Net Interest to Total Income, and Provision Coverage Ratio..

Research limitations- The limitation in this research paper was the financial data of Regional Rural Bank during 2007-2008 to 2016-2017time period.

Practical implications- The results thus imply that mean score of difference among three RRB's such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank with respect to various parameters like Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio.

*Originality/value-*This research paper analysis results are derived with the help of a software

statistical package SPSS 23.0 by using Descriptive statistics, One Way ANOVA and Post Hoc Multiple Comparison.

Keywords- *Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio.*

Paper type- *Research Paper*

INTRODUCTION

Uttar Pradesh is agricultural based State and its utmost population stays in rural areas. The Regional Rural Banks have played a vital role in agriculture and allied sector of agricultural financing. After Amalgamation and consolidation of RRBs there are (07) Seven Regional Rural Banks working at present in the State. Uttar Pradesh is one of those Four States in which the Regional Rural Banks was established. At the time of inception of RRBs, On October 2, 1975, two Regional Rural Banks were set up in Uttar Pradesh, Prathama Bank in Moradabad and Gorakhpur Kshetriya Grameen Bank (Now renamed Purvanchal Grameen Bank) in Gorakhpur. Gradually the time passed, the number of Regional Rural Banks and their Branches continued to increase but in November 2005, Amalgamation and Consolidation of RRBs 25 RRBs merged into 10 RRBs in just 9 months in India. After 3 phases of consolidation and merger procedure as Result there are 56 RRBs functioning in India on 31st March 2016 Seven of which RRBs functioning in Uttar Pradesh. The aim behind the consolidation of RRBs is to improve efficiency and helping RRBs in achieving the scale. The process of Amalgamation and Consolidation of Regional Rural Banks is still underway.

This research paper focused on only Three RRBs namely Prathama Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank (Now renamed Grameen Bank of Aryavrat) out of seven RRBs in Uttar Pradesh. The main reason behind this is that these three banks provide financial assistance and services to the maximum districts and Population of Uttar Pradesh and also played a vital role in the state economy.

REVIEW OF RELATED LITERATURE

On the basis of reviewing various literatures via off line and online, we have found that the following studies were related to the selected topic which is given below:

This study finally analyzed financial performance of RRBs at post and pre amalgamation scenario measuring based on the spread ratio, burden ratio and profitability ratio. The spread ratio has shown significance performance in terms of pre-amalgamation period and post- amalgamation period. As spread ratio comprises of Interest income earned and interest income expensed divided by total assets. The lending in priority sector and increased in deposits has been clearly seen in the above chart and as a result spread ratio has shown significance growth. The p-value of spread ratio is 0.025, which is smaller than 0.05, which lead us to reject the null hypothesis. The other two ratios have not shown any significance difference, as the p-values of burden ratio and profitability ratio are 0.103

and 0.429 respectively, which lead us to accept the null hypothesis. The reason behind for this is that too much emphasis on priority sector which badly effect on lending in non- priority sector as interest rates are higher in non-priority sector to that of priority sector. The other financial indicators such as no. of RRBs, branches, district coverage, deposits and advances have shown growth but it is not significant growth. **(Patel & Shah, 2016).**

In this study, the researcher can safely conclude that the average change in the ratios of the bank after the merger of the bank is not due to chance alone. The government or bank boards can take decisions on future merger of banks. From the study it was found that most of the ratios related to capital adequacy, Earning quality and Asset Quality have performed well but most of the ratios related to Management quality (i.e. Business per employee and profit per employee) and liquidity ratios have not performed well. Overall it can be concluded that the Merger and Acquisition is beneficial for both the banks. Researcher further suggests that for future the study can be conducted for same bank for other time period also. The study can also examine the impact of Merger and Acquisition on Employees also. The study can also be conducted for various non-financial parameters also. **(Sahni & Gambhir, 2018).**

In this study, the rapid development of RRB has helped in reducing substantially the regional inequality in respect of banking facilities in India. The efforts made by RRB in branch expansion, deposit mobilization, rural development and credit deployment in weaker section of rural areas are appreciable. RRB successfully achieve its prime objectives like to take banking facilities and services to door steps particularly in banking deprived rural areas, to avail trouble-free and low cost credit to rural section who are dependent on private lenders, to encourage rural peoples for savings, to generate employment in rural areas and to bring down the cost of providing credit in rural areas. Thus in the present scenario RRBs have a strongest banking network in comparison to cooperatives banks and commercial banks. Government should take some more effective remedial steps to make Rural Banks viable. RRBs play an important role in rural areas with the objective of providing credit to small, marginal farmers & economically weaker section, for the development of agriculture, trade and industry. But still its commercial viability has been questioned due to its limited business flexibility, smaller size of loan, low percentage of loan recovery & high risk in loan & advances. Rural banks need to remove lack of transparency in their operation which leads to unequal relationship between banker and customer. Banking staff should interact more with their customers to overcome this problem. Banks should open their branches in areas where customers are not able to avail banking facilities. In this digitization era RRBs have to concentrate on speedy, qualitative and secure banking services to retain existing customers and attract potential customers. **(Kumar, Goyal, & Sharma, 2017).**

The study reveals that there are fluctuations in growth of RRBs where the prominent backward areas such as North Eastern states have given the least priority. Hence it is needed to open requisite number of branches in remote area that provides equal opportunities to all areas and income strata of

population. It is observed that RRBs have failed to maintain the cadence of growth in deposits. Hence it is needed to design the appropriate deposit mobilization policy on which the survival of RRBs in future. So RRBs must be develop the good relation with the customers and should create confidence to the formers. There is also a wide gap in C/D ratio between the RRBs and commercial banks. Hence it is recommended to make consistent efforts to augment the C/D ratio of RRBs on par with commercial banks. **(Ghouse & Reddy, 2017)**

OBJECTIVES

On the basis of review of related literature, the researcher has designed the following objectives

1. To study the performance of the three RRBs with respect to various financial parameters.

2. To know the difference of mean score among the three Regional Rural Bank such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank with respect to various parameters like Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio.

HYPOTHISIS

Null Hypothesis

On the basis of Review of related literature and objectives, we have formulated the following Null Hypothesis such as:

H01: There is no significant difference of mean Spread ratio among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H02: There is no significant difference of mean Burden ratio among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H03: There is no significant difference of mean Net Interest to Total Income among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H04: There is no significant difference of mean Operating Profits to Total Assets among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H05: There is no significant difference of mean Return on Assets among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H06: There is no significant difference of mean Return on Net Worth among three Regional Rural

Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

H07: There is no significant difference of mean Provision Coverage Ratio among three Regional Rural Banks vs. Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

RESEARCH METHODOLOGY

Research Design

In this case the exploratory as well as descriptive research design was used such as for the new facts, new knowledge, more in-depth study and formulation of null hypothesis; the researchers has applied the exploratory research design and for the testing of above null hypothesis the descriptive research design were applied for more conclusive oriented research for decision making.

Data Collection

The secondary data collection was collected through the website of Reserve Bank of India and annual report of RRBs issued by NABARD annually.

Significance Level

In the above study, we have set in advance the 5% significance level that means we would be wrong only 5% and this is known as Alpha error and or confident 95% or known as Beta error in the decision making. The alpha error is the Type I error in which Reject Null Hypothesis when it is True and the beta error is the Type II error in which Accept Null Hypothesis when it not true.

Statistical Tools

The Descriptive statistics, ANOVA and Post Hoc Tools were used to examine the difference of mean score among the three Regional Rural Banks such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank with respect to various parameters like Spread Ratio, Burden Ratio, Net Interest to Total Income, Operating Profits to Total Assets, Return on Assets, Return on Net Worth and Provision Coverage Ratio. The study covers the period ranging from 2006 to 2017. The IBM SPSS 23.0, a statistical package for social science package was used for this study, which was designed by International Business Machine Company.

Decision Rule

In this study the researcher has fixed in advance 5% level of significance that means the researcher would be 5 % wrong or 95% confident (correct) in the decision making or hypothesis testing. If sig. value (p Value) will be less than 0.05 than reject Null Hypothesis (H0).If sig. value (p value) is greater than 0.05 accept Null Hypothesis (H0), Since Alternative Hypothesis is opposite of Null Hypothesis therefore we can also use the following decision rule such as, If sig. value (P Value) will be less than 0.05 than Accept Alternative Hypothesis (H1), If sig. value (p value) is greater than 0.05 reject Alternative Hypothesis (H1).

DATA ANALYSIS AND INTERPRETATION

Spread Ratio

Spread Ratio
Descriptives

|	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	**3.6173**	.70434	.22273	3.1134	4.1211	2.54	4.55
PURVANCHAL GRAMEEN BANK	10	**3.6350**	.55468	.17540	3.2382	4.0318	2.68	4.52
ARYAVRAT GRAMEEN BANK	10	**3.7774**	.61683	.19506	3.3362	4.2187	2.32	4.50
Total	30	3.6766	.61061	.11148	3.4485	3.9046	2.32	4.55

From the above descriptive statistics table, it is clear that mean score for spread ratio of Prathma Bank is 3.62, Purvanchal Grameen Bank 3.63 and Aryavarat Bank is 3.78, therefore it can be concluded that the spread ratio was almost same for Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

ANOVA

	Sum of Squares	d.f	Mean Square	F	Sig.	Null Hypothesis
Between Groups	.154	2	.077	**.195**	**.824**	**H01:Accept**
Within Groups	10.658	27	.395			
Total	10.812	29				

Since the Null Hypothesis was H01: there is no significant difference of mean spread ratio among three Regional Rural Banks such as Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. From the AVOVA Table it is clear that the sig. Value (p value=0.824) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean spread ratio among all the three banks that is Prathma Bank , Purvanchal Grameen Bank and Aryavarat Grameen Bank.

Means Plots
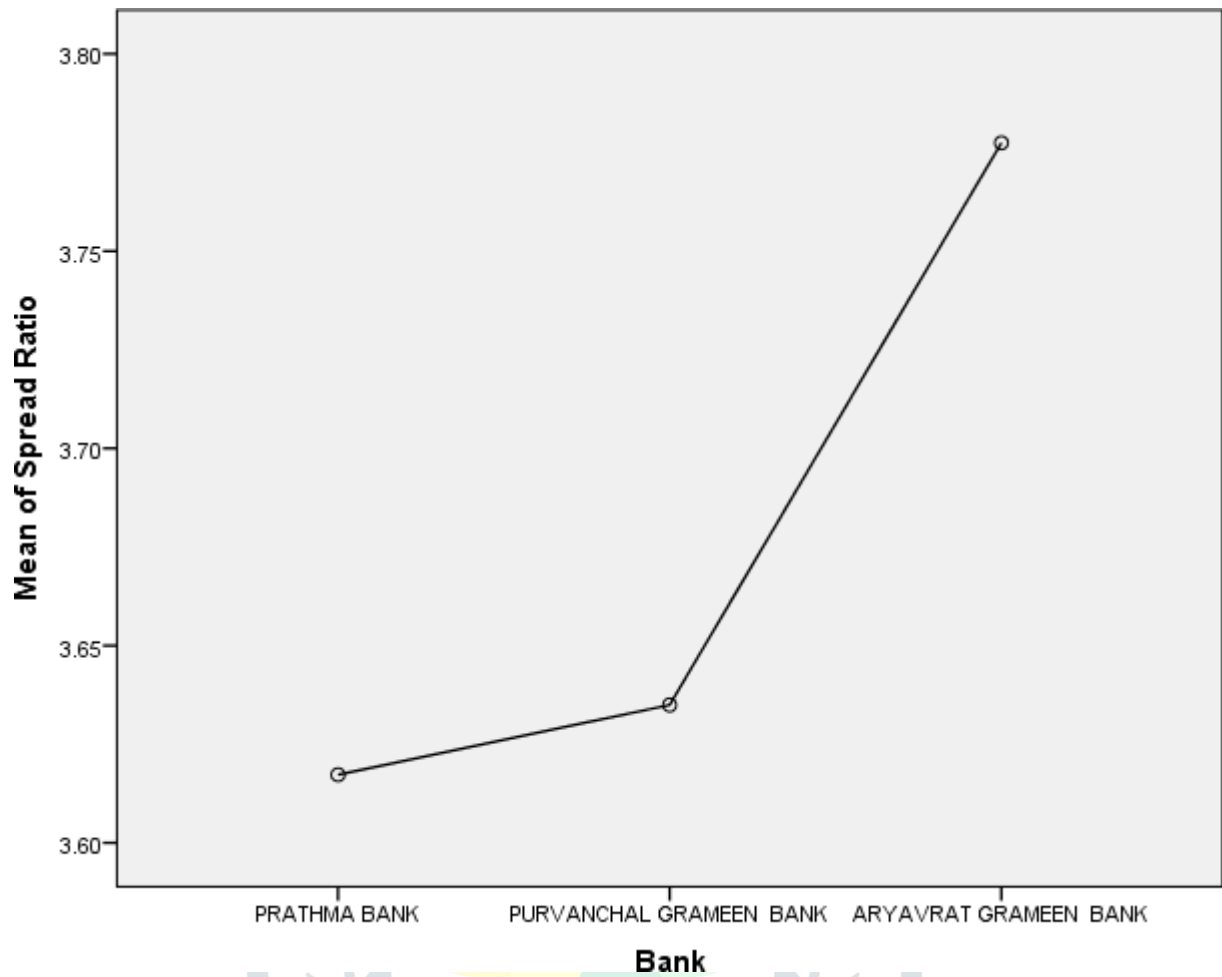
From the above plots under high precision, it is clear that Mean score of spread ratio was slightly high for Aryavarat Grameen Bank then Purvanchal Bank, then and lowest ratio was for Prathma Bank.

Burden Ratio

Descriptives

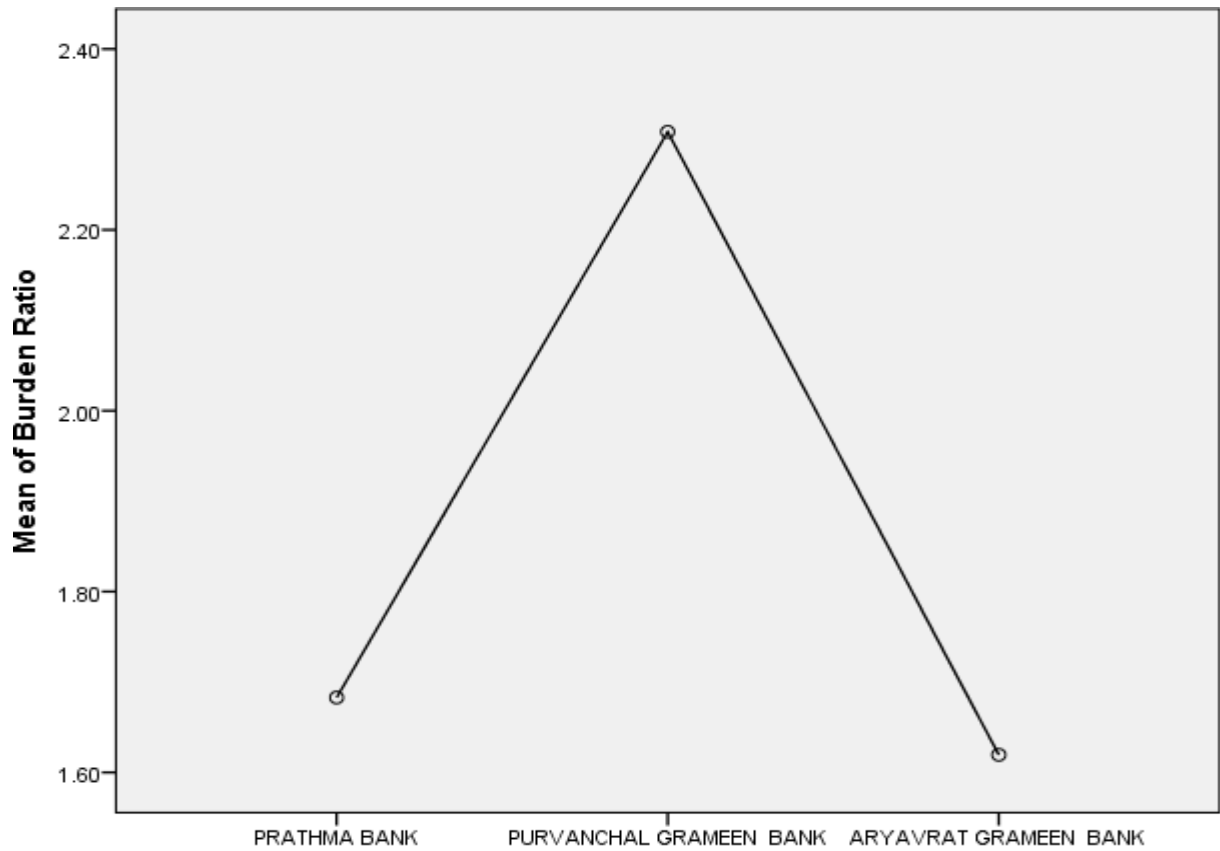|	N (Years)	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	**1.6828**	.34933	.11047	1.4329	1.9327	1.16	2.26
PURVANCHAL GRAMEEN BANK	10	**2.3084**	.34853	.11022	2.0591	2.5577	1.70	2.66
ARYAVRAT GRAMEEN BANK	10	**1.6195**	.42790	.13531	1.3134	1.9256	1.01	2.37
Total	30	1.8702	.48207	.08801	1.6902	2.0502	1.01	2.66

From the above descriptive statistics table, it is clear that mean score for Burden ratio of Prathma Bank is 1.68, Purvanchal Grameen Bank 2.30 and Aryavarat Grameen bank is 1.61, therefore it can be concluded that the burden ratio was maximum for Purvanchal Grameen Bank then Aryavrat Grameen Bank and Lowest for Prathma Bank.

ANOVA

Burden Ratio

	Sum of Squares	d.f	Mean Square	F	Sig.	Null Hypothesis
Between Groups	2.900	2	1.450	**10.196**	**.001**	**H02: Reject**
Within Groups	3.839	27	.142			
Total	6.739	29				

Since the Null Hypothesis was H02: there is no significant difference of mean burden ratio among three Regional Rural Banks among Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.001) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean burden ratio among all the three banks that is Prathma Bank , Purvanchal Grameen Bank and Aryavarat Grameen Bank.

Means Plots

From the above mean plots, it is also clear that Mean score of Burden ratio was highest for Purvanchal Bank, then Prathma Bank and lowest ratio was for Aryavarat Grameen Bank.

Net Interest to Total Income

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	43.1590	7.48075	2.36562	37.8076	48.5104	31.08	52.57
PURVANCHAL GRAMEEN BANK	10	43.1224	7.23950	2.28933	37.9436	48.3012	31.61	53.57
ARYAVRAT GRAMEEN BANK	10	47.0660	5.27161	1.66703	43.2950	50.8371	39.39	53.76
Total	30	44.4491	6.76753	1.23558	41.9221	46.9762	31.08	53.76

From the above descriptive statistics table, it is clear that mean score for Net Interest to Total Income of Prathma Bank is 43.16, Purvanchal Grameen Bank 43.12 and Aryavrat bank is 47.06, therefore it can be concluded that the mean Net Interest to Total Income was highest for Aryavrat Grameen Bank and Prathma Bank, Purvanchal Grameen Bank were almost same mean Net Interest to Total Income.

ANOVA

Net Interest Income to Total Income

	Sum of Squares	d.f	Mean Square	F	Sig.	Null Hypothesis
Between Groups	102.729	2	51.365	**1.132**	**.337**	**H03:Accept**
Within Groups	1225.457	27	45.387			
Total	1328.186	29				

Since the Null Hypothesis was H03: there is no significant difference of mean Net Interest to Total Income among three Regional Rural Banks such as Prathma Bank , Purvanchal Grameen Bank and Aryavarat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.337) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean Net Interest to Total Income among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank.

Means Plots
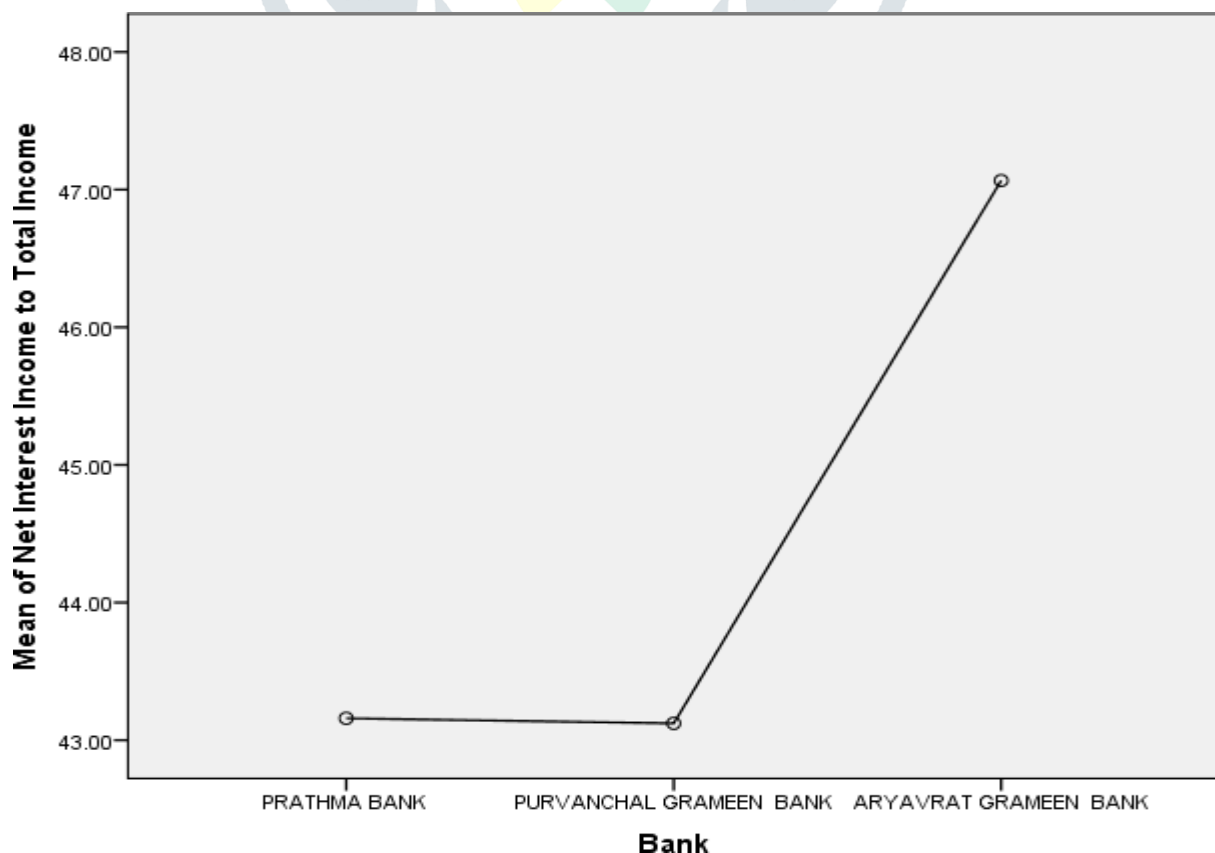
From the above plots under high precision, it is clear that mean of Net Interest to Total Income was high for Aryavrat Grameen Bank and Purvanchal Grameen Bank, Prathma Bank were almost same mean of Net Interest to Total Income.

Operating Profits to Total Assets

Descriptives

Operating profit to Total Assets

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	**1.7775**	.75859	.23989	1.2348	2.3201	.73	2.83
PURVANCHAL GRAMEEN BANK	10	**1.2207**	.41320	.13067	.9251	1.5163	.67	1.94
ARYAVRAT GRAMEEN BANK	10	**1.9156**	.44612	.14108	1.5964	2.2347	1.21	2.52
Total	30	1.6379	.62183	.11353	1.4057	1.8701	.67	2.83

From the above descriptive statistics table, it is clear that mean score for Operating Profits to Total Assets of Prathma Bank is 1.77, Purvanchal Grameen Bank 1.22 and Aryavrat Grameen bank is 1.91, therefore it can be concluded that the Operating Profits to Total Assets was maximum for Aryavrat Grameen Bank then Prathma Bank and Lowest for Purvanchal Grameen Bank .

ANOVA

Operating profit to Total Assets

	Sum of Squares	df	Mean Square	F	Sig.	Null Hypothesis
Between Groups	2.707	2	1.353	**4.295**	**.024**	**H04: Reject**
Within Groups	8.507	27	.315			
Total	11.214	29				

Since the Null Hypothesis was H04: there is no significant difference of mean Operating Profits to Total Assets among three Regional Rural Banks among Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.024) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Operating Profits to Total Assets among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

Means Plots
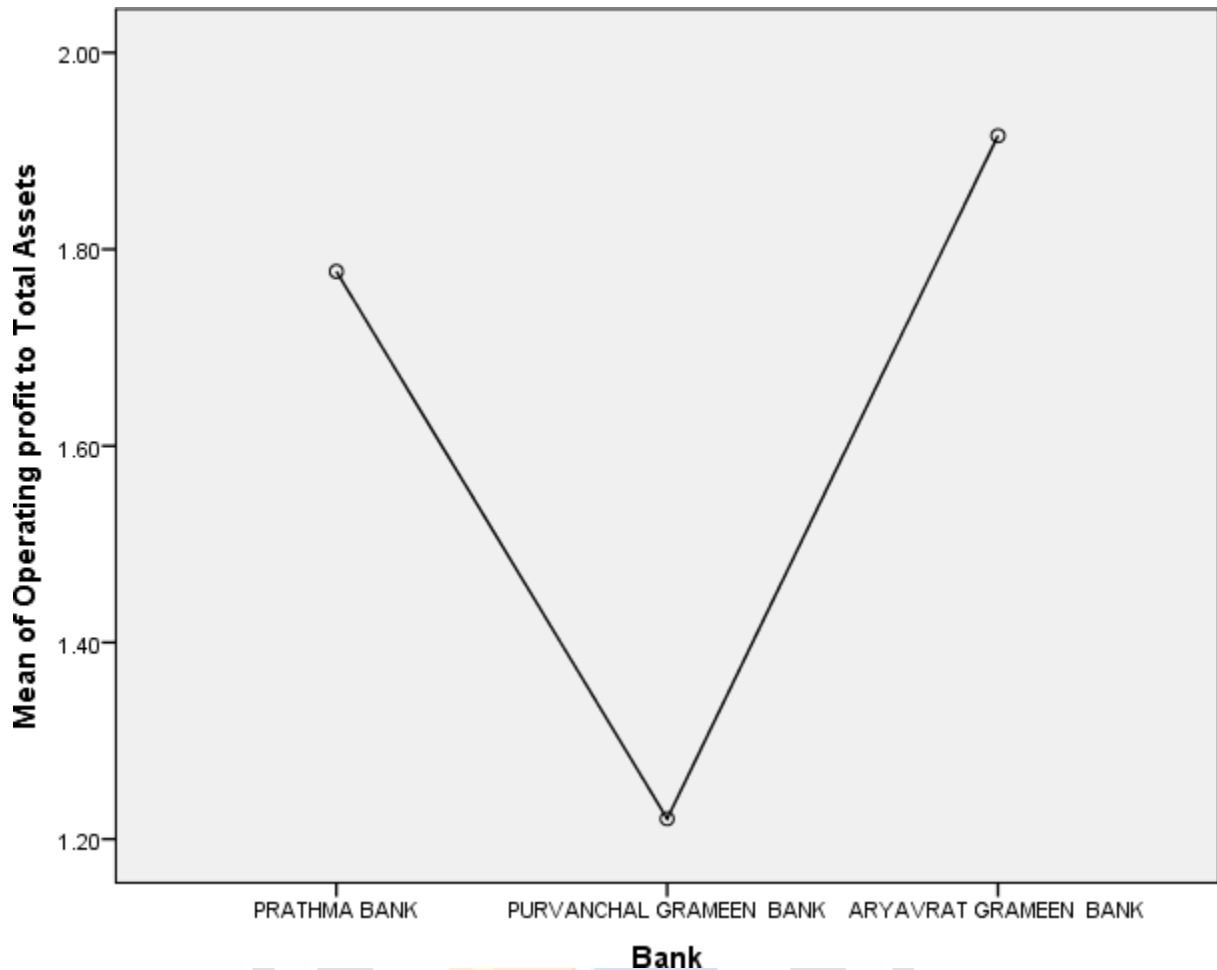
From the above mean plots, it is also clear that Mean score of Operating Profits to Total Assets was the highest for Aryavrat Grameen Bank, then Prathma Bank and lowest for Purvanchal Bank for.

Return on Assets

<div align="center">Descriptives</div>

Return on Assets

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	1.2720	.33975	.10744	1.0289	1.5150	.73	1.71
PURVANCHAL GRAMEEN BANK	10	.5939	.30183	.09545	.3780	.8098	.32	1.20
ARYAVRAT GRAMEEN BANK	10	1.3307	.65815	.20812	.8599	1.8015	.05	2.22
Total	30	1.0655	.56051	.10234	.8562	1.2748	.05	2.22

From the above descriptive statistics table, it is clear that mean score for Return on Assets of

Prathma Bank is 1.27, Purvanchal Grameen Bank 0.59 and Aryavrat Grameen bank is 1.33, therefore it can be concluded that the Return on Assets was almost same for Aryavrat Grameen Bank and Prathma Bank and lowest for Purvanchal Grameen Bank.
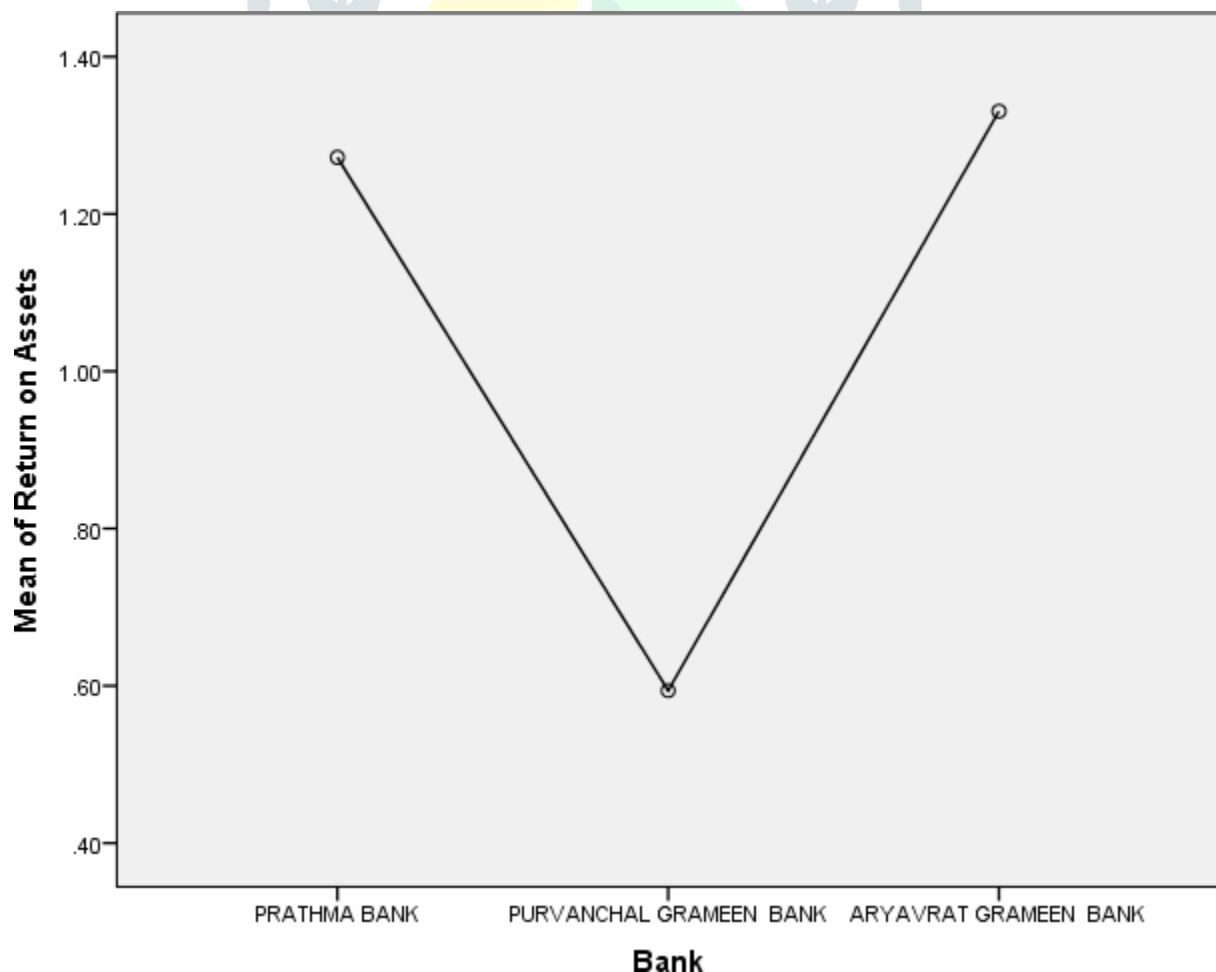
ANOVA

Return on Assets

	Sum of Squares	d.f	Mean Square	F	Sig.	Null Hypothesis
Between Groups	3.354	2	1.677	**7.865**	**.002**	H05:Reject
Within Groups	5.757	27	.213			
Total	9.111	29				

Since the Null Hypothesis was H02: there is no significant difference of mean Return on Assets among three Regional Rural Banks among Prathma Bank , Purvanchal Grameen Bank and Aryavrat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.002) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Return on Assets among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

Means Plots

From the above mean plots, it is also clear that Mean score of Return on Assets was the highest for Aryavrat Grameen Bank, then Prathma Bank and lowest ratio was for Purvanchal Grameen Bank.

Return on Net Worth

Descriptives

Return On Net Worth

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
PRATHMA BANK	10	10.8049	1.79026	.56613	9.5242	12.0856	7.62	13.56
PURVANCHAL GRAMEEN BANK	10	6.7881	2.52605	.79881	4.9811	8.5951	4.65	12.55
ARYAVRAT GRAMEEN BANK	10	14.5147	6.87617	2.17443	9.5958	19.4336	.69	23.07
Total	30	10.7026	5.28650	.96518	8.7285	12.6766	.69	23.07

From the above descriptive statistics table, it is clear that mean score for Return on Net Worth of Prathma Bank is 1.68, Purvanchal Grameen Bank 2.30 and Aryavrat Grameen bank is 1.61, therefore it can be concluded that the Return on Net Worth was maximum for Purvanchal Grameen Bank then Aryavrat Grameen Bank and lowest for Prathma Bank.
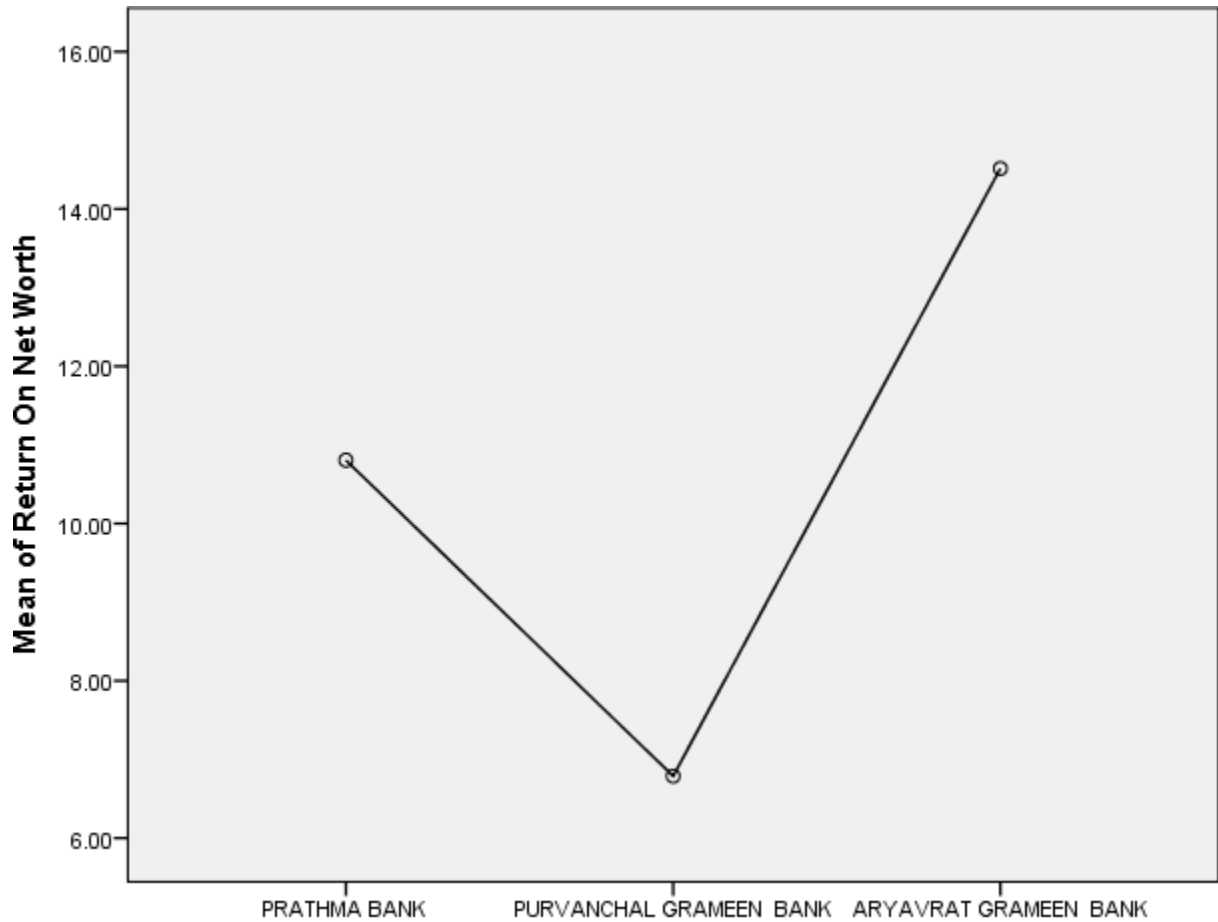
ANOVA

Return On Net Worth

	Sum of Squares	df	Mean Square	F	Sig.	Null Hypothesis
Between Groups	298.658	2	149.329	7.878	.002	H06: Reject
Within Groups	511.809	27	18.956			
Total	810.466	29				

Since the Null Hypothesis was H06: there is no significant difference of mean Return on Net Worth among three Regional Rural Banks among Prathma Bank , Purvanchal Grameen Bank and Aryavrat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.002) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Return on Net Worth among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

Means Plots

From the above mean plots, it is also clear that Mean score of Return on Net Worth was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest for Purvanchal Bank.

Provision Coverage Ratio

Descriptives

Provision Coverage Ratio

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRATHMA BANK	10	**40.5785**	42.95009	13.58201	9.8539	71.3032	.27	106.53
PURVANCHAL GRAMEEN BANK	10	**23.7475**	13.64900	4.31619	13.9836	33.5114	7.08	47.85
ARYAVRAT GRAMEEN BANK	10	**20.8902**	21.15387	6.68944	5.7577	36.0228	.97	74.74
Total	30	28.4054	29.10742	5.31426	17.5365	39.2743	.27	106.53

From the above descriptive statistics table, it is clear that mean score for Provision Coverage

Ratio of Prathma Bank is 40.57, Purvanchal Grameen Bank 23.75 and Aryavrat Bank is 20.89, therefore it can be concluded that the Provision Coverage Ratio was the highest for Prathma Bank then Purvanchal Grameen Bank and lowest for Aryavrat Grameen Bank.

ANOVA

Provision Coverage Ratio

	Sum of Squares	df	Mean Square	F	Sig.	Null Hypothesis
Between Groups	2263.588	2	1131.794	1.370	.271	H07:Accept
Within Groups	22306.425	27	826.164			
Total	24570.013	29				

Since the Null Hypothesis was H07: there is no significant difference of mean Provision Coverage Ratio among three Regional Rural Bank such as Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. From the AVOVA Table it is clear that the sig. value (p value=0.271) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean Provision Coverage Ratio among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank.

Means Plots
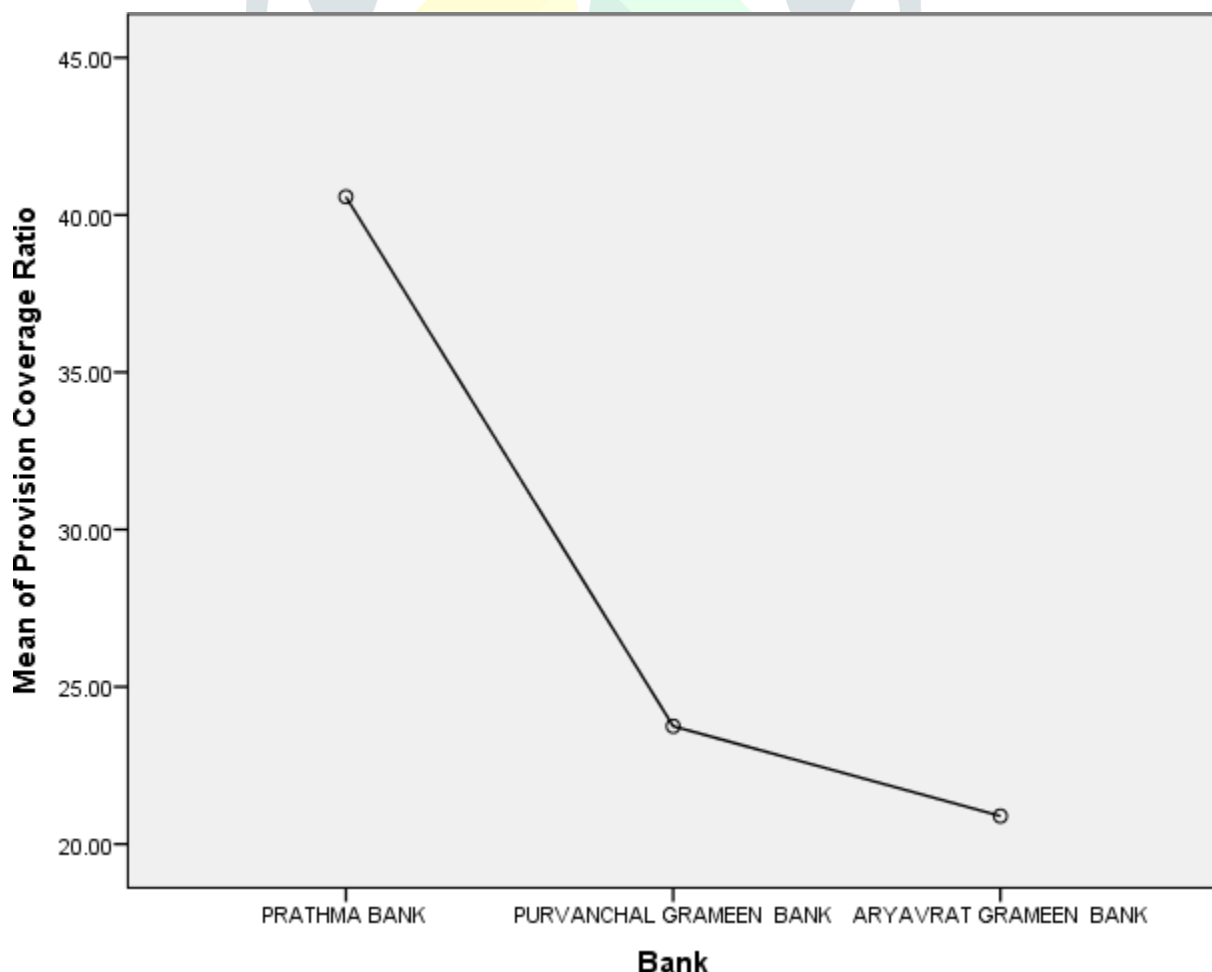
From the above plots under high precision, it is clear that Mean score of Provision Coverage Ratio was the highest for Prathma Bank then Purvanchal Grameen Bank and lowest provision coverage ratio for Aryavrat Grameen Bank.

RESULTS AND FINDINGS

Spread Ratio

Mean score for spread ratio of Prathma Bank is 3.62, Purvanchal Grameen Bank 3.63 and Aryavarat bank is 3.78, therefore it can be concluded that the spread ratio was almost same for Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. The sig. value (p value=0.824) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean spread ratio among all the three Banks that is Prathma Bank , Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean score of spread ratio was slightly high for Aryavarat Grameen Bank then Purvanchal Bank, then and lowest ratio was for Prathma Bank.

Burden Ratio

Mean score for Burden ratio of Prathma Bank is 1.68, Purvanchal Grameen Bank 2.30 and Aryavarat Grameen bank is 1.61, therefore it can be concluded that the burden ratio was maximum for Purvanchal Grameen Bank then Aryavrat Grameen Bank and lowest for Prathma Bank. The sig. value (p value=0.001) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean burden ratio among all the three banks that is Prathma Bank , Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean score of Burden ratio was highest for Purvanchal Bank, then Prathma Bank and lowest ratio was for Aryavarat Grameen Bank.

Net Interest to Total Income

Mean score for Net Interest to Total Income of Prathma Bank is 43.16, Purvanchal Grameen Bank 43.12 and Aryavrat bank is 47.06, therefore it can be concluded that the mean Net Interest to Total Income was highest for Aryavrat Grameen Bank and Prathma Bank, Purvanchal Grameen Bank were almost same mean Net Interest to Total Income. The sig. value (p value=0.337) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean Net Interest to Total Income among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean of Net Interest to Total Income was high for Aryavrat Grameen Bank and Purvanchal Grameen Bank, Prathma Bank were almost same mean of Net Interest to Total Income.

Operating Profits to Total Assets

Mean score for Operating Profits to Total Assets of Prathma Bank is 1.77, Purvanchal Grameen Bank

1.22 and Aryavrat Grameen bank is 1.91, therefore it can be concluded that the Operating Profits to Total Assets was maximum for Aryavrat Grameen then Prathma Bank and lowest for Purvanchal Grameen Bank. The sig. value (p value=0.024) is less than

0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Operating Profits to Total Assets among all the three Regional Rural Banks that is Prathma Bank , Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Operating Profits to Total Assets was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest for Purvanchal Bank.

Return on Assets

Mean score for Return on Assets of Prathma Bank is 1.27, Purvanchal Grameen Bank 0.59 and Aryavrat Grameen bank is 1.33, therefore it can be concluded that the Return on Assets was almost same for Aryavrat Grameen Bank and Prathma Bank and lowest for Purvanchal Grameen Bank. The sig. value (p value=0.002) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Return on Assets among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Return on Assets was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest ratio was for Purvanchal Grameen Bank.

Return on Net Worth

Mean score for Return on Net Worth of Prathma Bank is 1.68, Purvanchal Grameen Bank

2.30 and Aryavrat Grameen Bank is 1.61, therefore it can be concluded that the Return on Net Worth was maximum for Purvanchal Grameen Bank then Aryavrat Grameen Bank and lowest for Prathma Bank. The sig. value (p value=0.002) is less than 0.05 at 95% confidence Interval, hence Rejected Null Hypothesis, therefore it can be concluded that there was a significant difference of mean Return on Net Worth among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Return on Net Worth was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest for Purvanchal Bank.

Provision Coverage Ratio

Mean score for Provision Coverage Ratio of Prathma Bank is 40.57, Purvanchal Grameen Bank 23.75 and Aryavrat bank is 20.89, therefore it can be concluded that the Provision Coverage Ratio was the highest for Prathma Bank then Purvanchal Grameen Bank and lowest for Aryavrat Grameen Bank. The sig. value (P value=0.271) is greater than 0.05 at 95% confidence Interval, hence accepted Null Hypothesis, therefore it can be concluded that there was no significant difference of mean Provision Coverage Ratio among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Provision Coverage Ratio was the highest for Prathma Bank then Purvanchal Grameen Bank and lowest provision coverage ratio for Aryavrat Grameen Bank.

COCLUSIONS AND DISCUSSION

At 95% confidence Interval, it can be concluded that there was no significant difference of mean spread ratio among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean score of spread ratio was slightly high for Aryavarat Grameen Bank then Purvanchal Bank, then and lowest ratio was for Prathma Bank. There was a significant difference of mean burden ratio among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean score of Burden ratio was Highest for Purvanchal Bank, then Prathma Bank and lowest ratio was for Aryavarat Grameen Bank. There was no significant difference of mean Net Interest to Total Income among all the three Regional Rural Banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavarat Grameen Bank. Mean of Net Interest to Total Income was high for Aryavrat Grameen Bank and Purvanchal Grameen Bank, Prathma Bank were almost same mean of Net Interest to Total Income. There was a significant difference of mean Operating Profits to Total Assets among all the three RRBs that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Operating Profits to Total Assets was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest for Purvanchal Bank for. There was a significant difference of mean Return on Assets among all the three RRBs that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Return on Assets was the highest for Aryavrat Grameen Bank, then Prathma Bank and lowest ratio was for Purvanchal Grameen Bank. There was a significant difference of mean Return on Net Worth among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Return on Net Worth was the highest for Aryavrat Grameen Bank then Prathma Bank and lowest for Purvanchal Bank. There was no significant difference of mean Provision Coverage Ratio among all the three banks that is Prathma Bank, Purvanchal Grameen Bank and Aryavrat Grameen Bank. Mean score of Provision Coverage Ratio was the highest for Prathma Bank then Purvanchal Grameen Bank and lowest provision coverage ratio for Aryavrat Grameen Bank.

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