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Performance Evaluation of Regional Rural Banks in India

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Abstract

As said by Gandhiji, "Real India lies in villages and village economy is the backbone of Indian economy, so the importance of banking in rural areas for the economic development of a country can't be overlooked. The country can't achieve the objectives of economic planning without the development of the rural economy. Thus, banks and other financial institutions play an essential role in developing the rural areas of India and RRBs were set up with the motive of providing easy credit and banking facilities to the people who are not economically strong. Hence, it becomes important to conduct the study of RRBs and see how much they are actually contributing to the success of rural India. The study is confined to the regional rural banks and how they are helping the rural India.

The objectives of this analysis are to examine the growth pattern and progress of RRBs during 2001-2002 to 2015-16, evaluate the performance of RRBs before and after the merger into two phases, and analyze the financial health of RRBs. The methodology includes conducting ANOVA and "t" test using EXCEL and data sources include annual reports of RBI and NABARD.

Through the analysis of the data, it was found that RRBs are developing and expanding their operations at a great speed, thus helping India to reduce the inequalities that exist in regards to the banking services regionally. RRBs have made appreciable efforts in terms of expanding the number of branches, covering more districts, mobilization of deposits, developing the rural sector, and providing credit facilities and thus, helping weaker sections of the society. Government should focus more on micro-credit schemes, should punish the defaulters, open the branches in remote areas and make the cooperative societies to work as sponsor banks for efficient working of the RRBs.In today's globalization era, RRBs should focus on providing the speedy, secure and qualitative services to the customers.

Keywords - Credit, Economic development, Globalization, Regional Rural Banks.

JEL Classification - E5, O0, F6, G2

1.Introduction

Banking system of a country plays a crucial role in the economic development of a country. In India, the banking system has been divided into three groups in which some banks operate only in rural areas while some in both rural and urban areas. The system has commercial banks, regional rural banks and cooperative banks (Ghouse, 2017). But now, the government recognizes that there is a need of fourth category in the banking system in lieu of digital payment banks for promoting more financial inclusion into the country.

The central bank of India is Reserve Bank of India (RBI) which is the main monetary authority and controls the entire banking system of India. National Bank for Agriculture and Rural Development (NABARD) was also set up in July, 1982 to look after the agricultural credit related functions and to ensure the success of the rural economy by promoting the sustainable and equitable development.

As said by Gandhiji, "real India lies in villages and village economy is the backbone of Indian economy" (Singh, 2018), so the importance of banking in rural areas for the economic development of a country can't be overlooked. RRBs were set up with the motive of providing easy credit and banking facilities to the people who are not strong economically.This study is confined to the regional rural banks and how they are helping the rural India. Their performance is being analyzed for India and in the end some suggestions are given how they could improve their performance and hence perform in a better way.

1.1 Literature review

Some researchers analyzed the performance of regional rural banks for all over India while some did the research for only one specific state and they analyzed only one of the key performance indicators.

J. U. Ahmed (2014) analyzed the case of Meghalaya rural bank and examined that it performed better as they were able to mobilize more deposits.

Vaibhav Joshi (2015) studied about the RRBs located in Madhya Pradesh and helped the financial management to choose parameters so that they could decrease the cost of capital, increase the efficiency, reduce the misuse of funds, and maximize the long run profit of the banks.

Dr. S. Dilli, Miss K. Venkata Lakshmi, and Dr. P. Subramanyam (2014) examined that the branches and districts covered, their number showed an increasing trend during the period of 2000-01 to 2012-13 and the results of "t" test conducted through SPSS software showed the significant growth in loans and advances, investment and profitability performance.

Dr. Satish Kumar, Vibhor Goyal, and Poonam Sharma (2018) found that RRBs are performing well after the period of their establishment in India due to the steps taken by the government for their improvement after their merging process.

Anil Kumar Soni, and Abhay Kapre (2012) calculated growth rate in specific areas like deposits mobilized, credits, etc. where 2010-11 was taken as current year and 2009-10 as base year and concluded that RRBs were helping India to overcome the problem of differences arising in respect of banking facilities regionally.

A study by **Srivastava Uma Kant (1977)** analyzed the case of two banks out of five banks which started their operations initially on October 2, 1975,namely, the Haryana Kshetriya

Gramin Bank, Haryana and the Jaipur Nagaur Aanchalik Gramin Bank, Rajasthan and evaluated that working of RRBs were influenced by the specific local conditions. It was found that there is need for reorganizing their working to achieve the objectives.

1.2 Rationale and objectives

Many studies have been conducted for all over India, even for one particular state with respect to one or two performance indicators but none are conducted taking into account their amalgamation in different phases and then analyzing their performance.

This paper deals with the growth pattern and progress of regional rural banks along with their performance analysis.So the objectives of this study are-

- To examine the growth pattern and progress of RRBs during 2000-01 to 2015-16.
- To evaluate the performance of RRBs before and after the merger of the banks in two phases, first in 2001-01 to 2010-11 and second in 2011-12 to 2015-16.
- To analyze the financial health of RRBs.

1.3 Research methodology

The research is analytical and exploratory in nature and makes use of secondary data. The data have been collected from the annual reports of RBI and NABARD. The period undertaken for study is from 2001 to 2016. The study is divided into two parts in regards to the amalgamation of RRBs, firstly the performance will be analyzed from 2001 to 2010 where the pre-merger period will be from 2001-2005 and post-merger period will be from 2006-2010 and in the second phase, pre-merger period will be 2011-2013 and post-merger will be 2014-2016.

For the first objective, parameters like number of RRBs, number of branches, deposits and coverage of districts are taken into account to evaluate the growth and progress.

To fulfill the second objective, performance indicators like productivity of branch and staff, growth of capital, and growth in investments are to be used.

For measuring the financial health, parameters like credit-deposit ratio, and return on investment are to be used. Statistical tools like t-test and ANOVA test will be used through EXCEL to examine the performance of various indicators before and after merger.

2.Data analysis and discussion

Before the regional rural banks, cooperative and commercial banks cater to the needs of the rural people and fulfill their requirements but rural people faces a lot of credit issues in spite these banks. So, the need to develop regional rural banks was felt so that the rural India could also develop.

2.1 Growth pattern and progress of RRBs in India

To examine the growth pattern and progress of RRBs, parameters like number of RRBs, number of branches, number of districts covered and deposits are considered.

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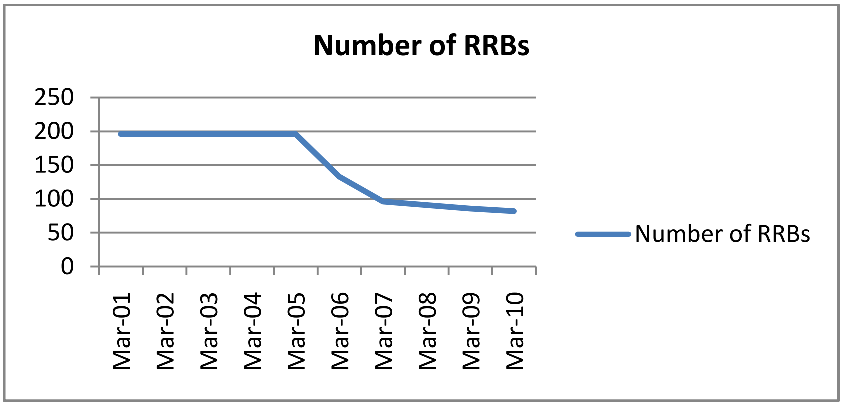
Phase 1 (2001-2010)

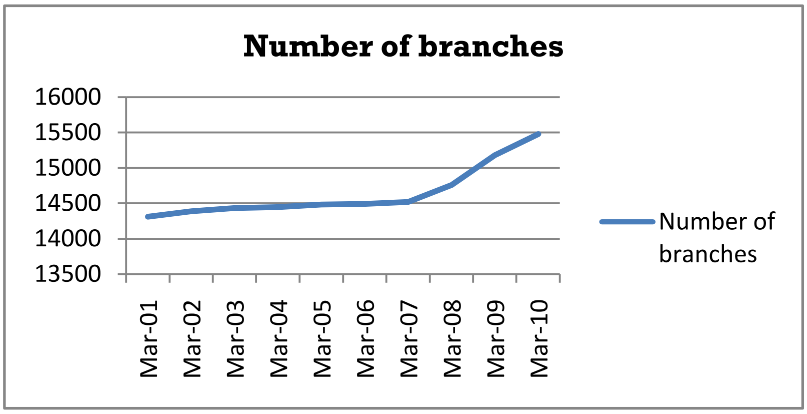
Figure 1 : Number of RRBs in phase 1



Source- Author's own work based on data from RBI

Above line chart shows that number of RRBs had decreased. In 2001, there were **196 RRBs in India which reduced to 133 in 2006 due to the merging of RRBs**. RRBs were merged in order to increase the operational area and efficiency of the banks

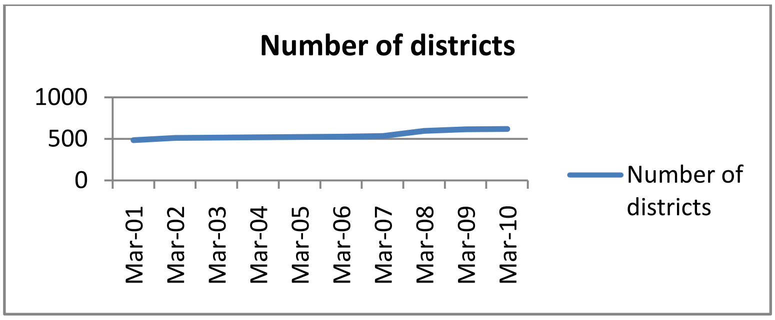
Figure 2 : Number of branches in phase



Source- Author's own work based on data from RBI

Figure 2 clearly shows that branches had increased significantly from 2001 to 2010 and branch growth in percentage terms had increased considerably after the merging of RRBs in 2005. **Percentage growth of branches was 0.08% in 2004, with the merging of RRBs, it increased greatly and reached to 1.97% in 2010.**

Figure 3 : Number of districts covered in phase 1



Source- Author's own work based on data from RBI

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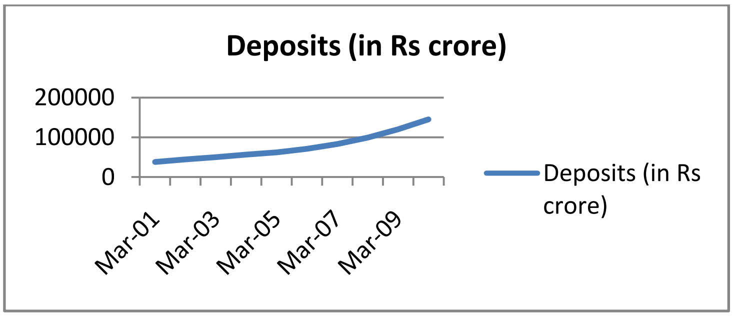
The above line chart shows that number of districts covered by RRBs had increased .**In the pre-merger phase of 2004, number of districts that were covered were 518, with the merging,** more districts were covered every year and **618 districts were found to be covered by RRBs in the year 2010.**

Figure 4 : Deposits (Rs. in crore) in phase 1



Source- Author's own work based on data from RBI

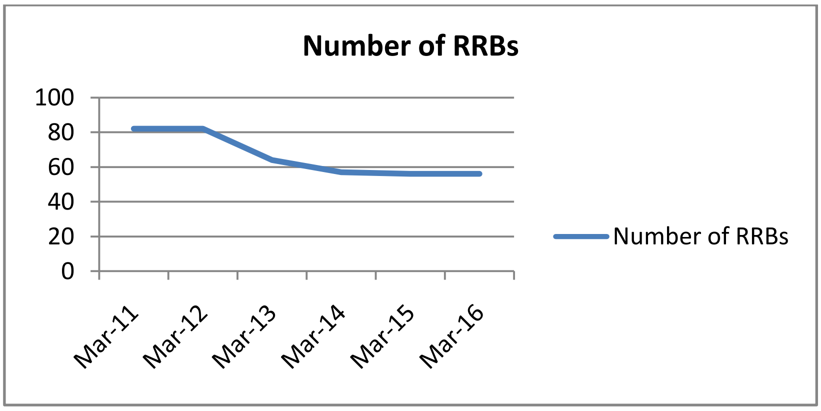
The above chart shows the upward trend in the **number of deposits of RRBs** and it **rose from 38277.78 in 2001 to 56350 in 2004 (pre-merger case for phase 1) and from 62143 in 2005 to 145034.95 in 2010 (post-merger case for phase 2).**

In phase 1 with the merging of RRBs in year 2005, it was found that RRBs had grown significantly in all respects. In the post-merger period, number of branches, number of districts covered and number of deposits all grew which proved the improved performance and increased growth after the merger of RRBs in September 2005 in some selected states of India.

Phase 2 (2011-2016)

In phase 2 of merger, **25 RRBs were merged into 10 RRBs in January, 2013** and then **56 RRBs in 2016 only** and recently the government has thought to bring the number to 36 but at present total 53 RRBs are operating in India in different states according to RBI.

Figure 5 : Number of RRBs in phase 2



Source- Author's own work based on data from RBI

With the merging process of RRBs in 2013, the total number of RRBs operating in India decreased from 82 to 64 in 2013 and further to 56 in 2016.

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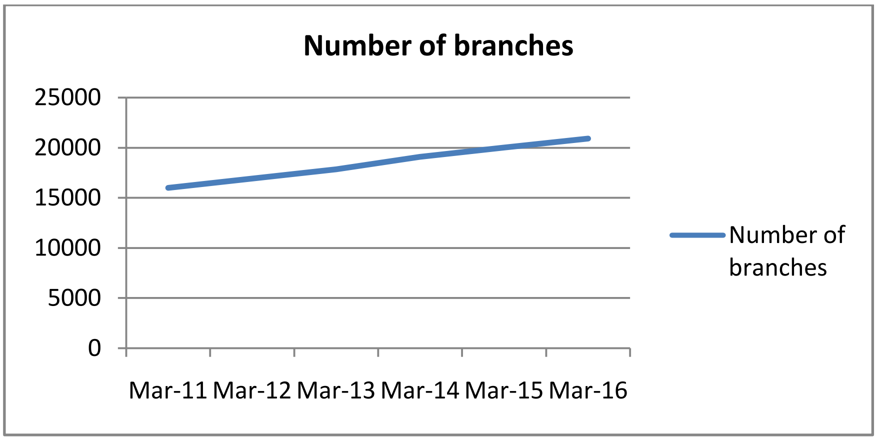
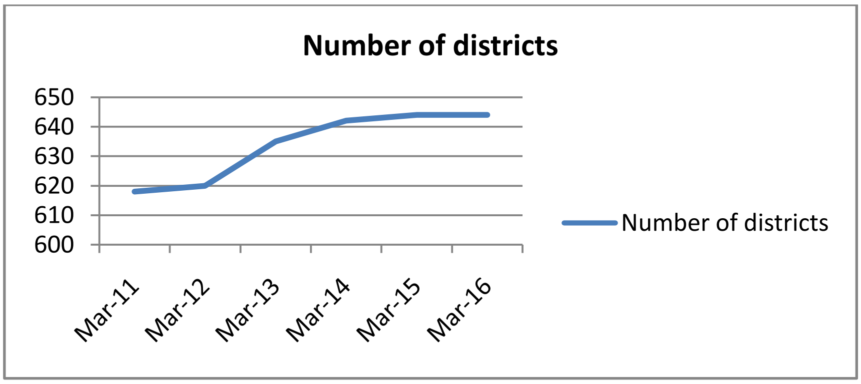
Figure 6 : Number of branches in phase 2



Source- Author's own work based on data from RBI

The above chart shows that number of branches kept on rising and specially **after the merger in 2013, branches rose significantly to 20904 in 2016.** Merging banks with one another helps them to successfully coordinate with each other and increasing the branches in the concentrated states so that more and more problems of rural people could be solved.

Figure 7 : Number of districts in phase 2



Source- Author's own work based on data from RBI

The graph clearly shows that in the post-merger period there was a sharp rise as with the increase in the number of branches, it became obvious that more districts would be taken into account. The figures show that **620 districts in 2012 which rose to 642 in 2014 i.e., 20 more districts were added after the merger in 2013.**

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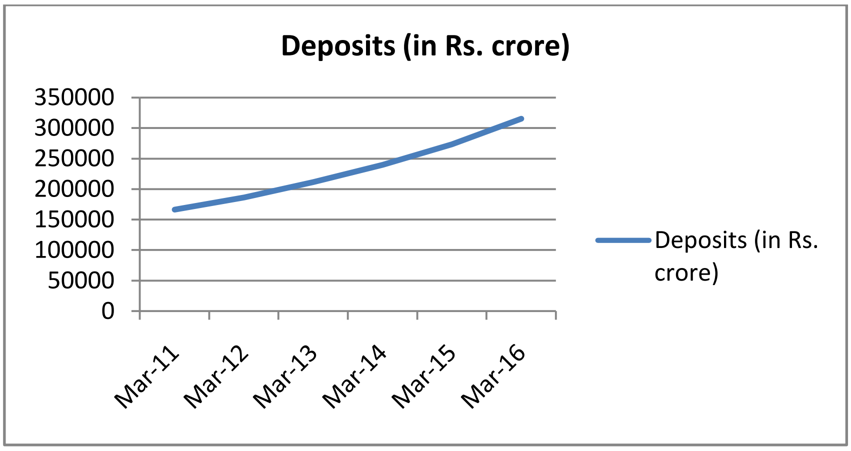
Figure 8 : Deposits (in Rs. crore) in phase 2



Source- Author's own work based on data from RBI

The line chart showing the steep rise in the amount of deposits and it increased significantly from 166232.07 in 2011 to 315408 in 2016. **It rose from 12.09% in 2012 to 13.24 % in 2014 with the merging of RRBs in 2013 with the highest percentage in 2016 as 15.39%.**More and more people started to make use of the banks for keeping their deposits and for fulfilling their credit related issues.

In phase 2 i.e., amalgamation of RRBs in 2013 it was clearly visible that their performance improved as more of rural population started making use of RRBs and thus serving their purpose. Number of branches, deposits and districts covered by them all rose and showed the better performance of RRBs after their merger.

2.2 Performance of RRBs before and after the merger

RRBs were formed for the purpose of providing the credit facilities and other banking facilities to the people living in the rural areas. But later on, central bank and the government planned to merge these RRBs. For evaluating the performance of RRBs before and after the merger, performance indicators like staff productivity, branch productivity, growth of capital, growth in investments would be analyzed.

Phase 1 (2001-2010)

(1) Branch and staff productivity

To determine whether the process of merger in 2005 has resulted in improving the performance of banks or not, ANOVA test is being used to compare the per-branch productivity and per-staff productivity.

The hypothesis so framed are-

H_0: Performance of per-branch productivity and per-staff productivity are not different

H_1: Performance of per-branch productivity and per-staff productivity are different

The null hypothesis (H_0) is a statement of no difference whereas alternative hypothesis (H_1) says that there exists difference in the performance of per-branch and per-staff productivities.

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Table 1 : Summary output

Groups	Count	Sum	Average	Variance
Per-branch productivity	10	92.85	9.285	17.81940556
Per-staff productivity	10	20.73	2.073	1.080178889

ANOVA

Source of variation	SS	Df	MS	F	P-Value	F critical
Between groups	260.06472	1	260.0647	27.52068129	5.47E-05	4.413873
Within groups	170.09626	18	9.449792			
Total	430.16098	19				

ANOVA test is conducted at 0.05 significance level and the results show that the average productivity per employee (2.073) is less than the mean per-branch productivity (9.285). Calculated value of F (27.52) is more than the critical value (4.41), thus null hypothesis is rejected and we conclude that there is difference in the performance of the two productivities. Hence, **merger had bring about a improvement in the productivity per branch and productivity per employee.**

Phase 2 (2011-2016)

As the branches rose, there was increase in per-branch productivity from 17.90 crore in 2011-12 to 24.99 crore in 2015-16 and per-staff productivity also had grown.

Table 2 : Summary output

Groups	Count	Sum	Average	Variance
Per-branch productivity	5	105.98	21.196	7.58183
Per-staff productivity	5	13.67	2.734	6.33398

ANOVA

Source of variation	SS	Df	MS	F	P-Value	F critical
Between groups	852.11361	1	852.11361	122.467	3.9642E-06	5.317655
Within groups	55.66324	8	6.957905			
Total	907.77685	9				

Calculated value of F(122.467) is greater than the critical value of F (5.317655), so we will reject the null hypothesis and reach to the conclusion that actually there exist differences in the per-branch and per-staff productivities.

From combining the results of both the phases of merger, it was seen that with the amalgamation of RRBs, the performance of the branches and the staff improved significantly.

Phase 1 (2001-2010)

(2) Growth of capital

RRBs play an essential role in the credit market of rural India in comparison to commercial and cooperative banks. An organization in order to survive and operate constantly should possess a sound financial position. The total capital composition of RRBs is divided into two heads - owned and borrowed capital.

To test whether the merger process had resulted in improving the performance of total funds in India during 2001-2010, ANOVA and "t" test would be used for the analysis.

ANOVA test would be used to test the difference in the performance of borrowed and owned funds while "t" test would be used to test the performance difference of total funds between pre-merger and post-merger period.

The hypothesis framed is-

H_0: There is no difference between owned funds and borrowed funds' performance

H_1: There is difference between owned funds and borrowed funds' performance

Table 3 : Summary output

Groups	**Count**	**Sum**	**Average**	**Variance**
Owned funds	10	80005.79	8000.579	11110894
Borrowed funds	10	106010.22	10601.02	52063057

ANOVA

Source of variation	**SS**	**Df**	**MS**	**F**	**P-Value**	**F critical**
Between groups	33811518.98	1	33811519	1.070426	0.31455	4.413873
Within groups	568565553.8	18	31586975			
Total	602377072.8	19				

ANOVA test is conducted at 0.05 level of significance and the test results show that mean of owned funds i.e., 8000.579 is more than average of borrowed funds i.e., 10601.02. The calculated value of F is 1.07 and it is less than the critical value of F at 0.05 level is 4.41, thus null hypothesis is not rejected and we conclude that owned funds and borrowed funds do not differ in their performance during 2001-02 to 2010-11.

Now, to test whether performance during pre-merger and post-merger periods differ and whether with the merging of RRBs the performance of the total funds improved or not, "t" test will be performed.

The hypothesis framed would be-

H_0: There exist no difference in the performance of total funds before and after merger of 2005

H_1: There exist difference in the performance of total funds before and after merger of 2005

Table 4 : "t" test assuming unequal variances of total funds

	Post-merger	**Pre-merger**
Mean	11288.1925	28804.6175
Variance	4051538.084	79309475.05
Observations	4	4
Hypothesized mean difference	0	
Df	3	
T Stat	-3.837019245	
P(T<=t) one-tail	0.015606086	
T critical one-tail	2.353363435	
P(T<-t) two-tail	0.031212172	
T critical two-tail	3.182446305	

The test results of "t" test show that observed value of t i.e., |-3.84| is greater than critical value of t (3.18), thus we would reject the null hypothesis at 0.05 significance level and arrive to a conclusion that there exist difference in the total funds performance before and after merging of RRBs in 2005.

Hence, after conducting both ANOVA and "t" tests we could conclude that **with the merging of RRBs in 2005, performance with respect to total funds improved but considering separately the effect of owned funds and borrowed funds, there exist no difference in their performance during 2001-02 to 2010-11.**

Phase 2 (2011-2016)

Now, ANOVA test would be used to judge whether the performance between owned funds and borrowed funds differs significantly or not.

So, the hypothesis formed would be-

H_0: There is no difference in the performance of owned funds and borrowed funds

H_1: There is difference in the performance of owned funds and borrowed funds.

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Table 5: Summary output

Groups	Count	Sum	Average	Variance
Owned funds	5	110879	22175.8	19814059
Borrowed funds	5	226123.84	45224.768	1.27E+08

ANOVA

Source of variation	SS	Df	MS	F	P-Value	F critical
Between groups	1328137315	1	1328137315	18.05687	0.002802	5.317655
Within groups	588424275.1	8	73553034.4			
Total	1916561590	9				

The results are drawn assuming significance level to be 0.05 and the table above shows that mean of owned funds (22175.8) is less than the mean of borrowed funds (45224.768) and also the calculated value of F is 18.05687 which is greater than the critical value of F at 0.05 level is 5.317655. We would reject the null hypothesis and conclude that **with the merging process in 2013, the performance of owned funds and borrowed funds improve**.

On comparison of the two phases of merger of RRBs, it was found that with the merging process in 2005, the performance of total funds improved after the merging of the banks while the performance of owned funds and borrowed funds, considering the individual impact, performance did not improve while in 2013, owned funds and borrowed showed an improved performance and so did the total funds.

(3) Growth in investments

Just only increasing the number of branches and the coverage of more districts is not sufficient, to know that rural people are actually availing the services and they are investing more and more is what matters a lot.

Phase 1 (2001-2010)

To test whether there is growth in total investments and determine whether the pre-merger performance of total investments differs significantly from the post-merger performance of total investments of RRBs, "t" test would be performed and then the conclusion is drawn.

The hypothesis so framed are-

H_0: No difference in the pre-merger and post-merger performance of total investments

H_1: Difference in the pre-merger and post-merger performance of total investments

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Table 6 : "t" test assuming unequal variances

	Post-merger	**Pre-merger**
Mean	36787.015	70089.77
Variance	11204996.75	2.79E+08
Observations	4	4
Hypothesized mean difference	0	
Df	3	
T Stat	-3.909933248	
P(T<=t) one-tail	0.014861818	
T critical one-tail	2.353363435	
P(T<-t) two-tail	0.029723636	
T critical two-tail	3.182446305	

Here, the calculated value of "t" is 3.909 whereas the critical value is 3.182 which implies that **calculated value > critical value at 0.05 significance level, so null hypothesis is rejected and we conclude that performance of total investment differs between pre-merger and post-merger periods and there is actually growth in the total investments of RRBs during 2001-2010.**

Phase 2 (2011-2016)

Now, to evaluate the growth in total investments with the merging of the RRBs in 2013."t" test would be conducted to determine whether there occurs significant difference in the performance of total investments pre-merger and post-merger period with amalgamation in 2013.

H_0: There is no difference in the total investments' performance before and after the merger

H_1: There is difference in the performance of total investments between the two periods.

Table 7 : "t" test assuming unequal variances

	Post-merger	**Pre-merger**
Mean	102261.465	186858.5
Variance	79041044.61	1.16E+09
Observations	2	2
Hypothesized mean difference	0	
Df	1	

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T Stat	-3.399565018	
P(T<=t) one-tail	0.091064027	
T critical one-tail	6.313751514	
P(T<-t) two-tail	0.182128054	
T critical two-tail	12.70620473	

The above table representing the results of t test says that the observed value of t is |-3.399565018| and is less than the critical value of t (12.70620473), thus the null hypothesis is not rejected and the conclusion drawn is that there is no difference in the performance in investments between pre-merger and post-merger periods.

Talking about the process of amalgamation first in 2005 and then in 2013 and comparing them, the drawn results depicted that with the merging of RRBs in 2005, there is growth and the total investments showed an improved performance before and after the process of merger while in the second phase of merging in 2013, total investments did not show growth.

2.3 Financial health of RRBs

It is vital for the banks to be financially strong and should focus more on their financial health along with the operational efficiency. By merging the RRBs, it was recorded that net profit of RRBs increased tremendously and the outstanding loans and advances also rose under various schemes of government.

To check the financial health of RRB, credit-deposit ratio and return on investment will be analyzed and the results drawn will be interpreted.

Phase 1 (2001-2010)

(1) Credit-deposit Ratio

Credit-deposit ratio depicts the amount of credit created out of the deposits that have been mobilized by the banks. It is one of the indictors that is dependent on the efficiency of active participation of banks in the developmental process and shows the extent of deposits that have been advanced to various tasks in the areas. It showed an increasing trend and increased from **41.32% in March 2001, was 46.34% in 2004 before merger and 55.68% after merger in 2005 and reached to 57.10% in 2010.**

To find out whether the process of merger had resulted in improving the performance of RRBs or not, ANOVA test is being applied for comparing the performance of deposit mobilization with loans/advances during 2001-10.

The hypothesis framed would be-

H_0: There is no difference in the performance with respect to deposits and loans/advances

H_1: There is difference in the performance with respect to deposits and loans/advances

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Table 8 : Summary output

Groups	Count	Sum	Average	Variance
Deposits	10	770198.62	77019.86	1.22E+09
Loans/advances	10	413397.01	41339.7	5.14E+08

ANOVA

Source of variation	SS	Df	MS	F	P-Value	F critical
Between groups	6.37E+09	1	6.37E+09	7.344271	0.014343	4.413873
Within groups	1.56E+10	18	8.67E+08			
Total	2.2E+10	19				

The test is conducted at 0.05 significance level and the results depict that mean value of loans/advances (41339.7) is smaller than the mean value of deposits (77019.86) and the critical value of F at 0.05 level is 4.413873 and is smaller than the calculated value of F (7.344271).Thus, we would reject the null hypothesis and conclude that **there existed difference in the performance of deposits and loans/advances of RRBs during 2001-10 with the merging of RRBs in 2005.**

Phase 2 (2011-2016)

To determine whether the merger in 2013 resulted in improving the condition of loans/advances and deposits of RRBs, ANOVA test will be used.

The hypothesis formed are-

H_0: Performance of deposits and loans/advances do not differ

H_1: Performance of deposits and loans/advances differ

Table 9 : Summary output

Groups	Count	Sum	Average	Variance
Deposits	6	1391616	231936.1	3.09E+09
Loans/advances	6	900020.4	150003.4	1.65E+09

ANOVA

Source of variation	SS	Df	MS	F	P-Value	F critical
Between groups	2.01E+10	1	2.01E+10	8.497116	0.015433	4.964603
Within groups	2.37E+10	10	2.37E+10			
Total	4.38E+10	11				

Test is performed at significance level of 0.05 and depicted that the average value of loans/advances (150003.4) is less than the mean value of deposits (231936.1) but the calculated value of F i.e., 8.497116 is much higher than the F's critical value i.e., 4.964603, so the null hypothesis of no difference is rejected and conclude that **performance of loan/advances and deposits improve and merger in 2013 brought about the improvement in the performance of the two.**

Thus, analyzing both the phases of merger of RRBs, we could say that loans/advances and deposits both improved and grew significantly after the process of merger and hence their performance improved.

Phase 1 (2001-2010)

(2) Return on investment

Return on investment calculates the profit or loss generated on an investment in comparison to the amount invested. It is useful for making the decisions of finance for personal motive, helps in comparing the efficiency and profitability of different types of investments.

"t" test would be applied to check whether there was improvement in the performance of return on investment before and after the merger in 2005 or not.

The hypothesis so farmed would be-

H_0: There is no difference in the performance of return on investment between pre-merger and post-merger periods

H_1: There is difference in the performance of return on investment between pre-merger and post-merger periods

Table 10 : "t" test assuming unequal variances

	Post-merger	**Pre-merger**
Mean	1.7025	2.8325
Variance	0.078691667	0.047825
Observations	4	4
Hypothesized mean difference	0	
Df	6	
T Stat	-6.353815044	
P(T<=t) one-tail	0.000356308	
T critical one-tail	1.943180274	
P(T<-t) two-tail	0.000712615	
T critical two-tail	2.446911846	

The above table depicts that observed value of t i.e., |-6.353815044| is higher than the critical value of t for two-tailed test at 0.05 significance level, so rejection of null hypothesis and we drew the conclusion that **performance of the return on investment differs between pre-merger and post-merger period after merging in 2005.**

Phase 2 (2011-2016)

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Now, the results would be seen with respect to second round of merging of RRBs in 2013.To determine whether the performance of return on investment differ significantly between pre-merger and post-merger periods or not, "t" test would be conducted.

The hypothesis framed would be-

H_0: There is no difference in return on investment performance before and after the merger

H_1: There is difference in return on investment performance before and after the merger

Table 11 : "t" test assuming unequal variances

	Post-merger	**Pre-merger**
Mean	2.015	1.42
Variance	0.01125	0.1458
Observations	2	2
Hypothesized mean difference	0	
Df	1	
T Stat	2.123308	
P(T<=t) one-tail	0.140104	
T critical one-tail	6.313752	
P(T<-t) two-tail	0.280208	
T critical two-tail	12.7062	

The results of "t" test conducted at 0.05 significance level showed that observed value of t (2.123308) is less than the critical value of t (12.7062), so we do not reject the null hypothesis and draw the conclusion that **return on investment performance do not differ significantly between pre-merger and post-merger period during 2011-12 to 2015-16 with the merging process of 2013.**

Now, comparing the results of amalgamation of RRBs in the two phases, it was seen that in the first merger of 2005, the performance of return on investment did improve but in the second phase in 2013, the performance of return on investment did not improve before and after the merger.

3. Conclusion and Findings

The major findings of the analysis are-

- Within the two phases of merging of RRBs in 2005 and 2013 analyzed in this study, it was observed that there was significant increase in the number of RRBs, branches covered, deposits and districts covered. Also, improvement in financial performance with the increase in credit-deposit ratio in both 2005 and 2013.
- Secondly, improvement in the productivity performance of RRBs in respect to per branch productivity and per staff productivity was realized in the merging of 2005 while results showed the poor performance in 2013 merging process.

- Then, total funds' performance of the banks increased both with the merger in 2005 and 2013 and also improvement in investments in 2005 while negative growth of investments in 2013.

From the above results and analysis, it was concluded that the fast development of regional rural banks has helped India in decreasing the number of inequalities that exist in regard of the banking facilities regionally. RRBs have made appreciable efforts in terms of expanding the number of branches, covering more districts, mobilization of deposits, developing the rural sector, and providing credit facilities and thus, helping weaker sections of the society. They have successfully achieved their objectives of taking the banking services and facilities to the doorsteps specially to those sections of poor people who are deprived of these services.

4. Limitation and Scope

The limitation of the above study is that the RRBs have undergone with the third phase of merging process in 2016 also but since being the more recent merger and hence will take time to show its effect on their performance, this phase has not been considered in the present study and left for the future studies to be conducted on the same branch.

The scope of the study is that it showed that RRBs have improved their performance to a great extent by analyzing about their profitability position, financial performance and their productivity status. The merging of RRBs done with the aim of improving their performances have actually contributed to their increased results as shown in the study.

5. Suggestions

The government should take the appropriate measures and steps for making the RRBs more successful.

- RRBs should focus more on micro-credit schemes and motivate them to form the self-help groups.
- They should punish the defaulters and should not announce the schemes like loan waiving.
- Policies should be framed and concentrated on opening up of more branches in the remote areas of the state.
- They should focus on providing credit at lower interest rates and hence reducing the cost of credit for the small borrowers.
- Cooperative societies should be allowed to become the sponsor along with commercial banks in the establishment of RRBs.
- Government should frame effective policies for attracting the more of rural people to keep their deposits with the banks, save a larger proportion of their income and thus help in increasing the financial inclusion in the country.

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