



Measuring The Effectiveness Of Regional Rural Banks In India - An Empirical Analysis

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Citation: Bandaru Srinivasa Rao, et.al (2024), Measuring The Effectiveness Of Regional Rural Banks In India - An Empirical Analysis,

Educational Administration: Theory And Practice, 30(5) 13986 – 13994,

Doi: 10.53555/kuey.v30i5.6175

ARTICLE INFO

ABSTRACT

This study evaluates the growth of deposits, credit, and credit-deposit ratio of Regional Rural Banks and the banking industry (India) from 1975 to 2022. The data shows that Regional Rural Banks have experienced steady growth in deposits and advances, but the credit-deposit ratio has fluctuated over time. The Indian Banking Industry has also experienced consistent growth, with a higher credit-deposit ratio. The correlation analysis indicates a strong positive relationship between the credit-deposit ratio of Regional Rural Banks and the banking industry. The study suggests that policies aimed at improving the financial inclusion of rural areas and promoting the growth of Regional Rural Banks could lead to a more equitable and robust banking sector.

KEYWORDS: Regional Rural Banks, Credit-deposit ratio, deposits, credit, banking industry.

INTRODUCTION

Regional Rural Banks were established in the 1970s as a joint initiative of the central government, state governments, and commercial banks to render banking services to rural and semi-urban areas in India. The objective was to promote financial inclusion and rural development by mobilizing deposits and providing credit to the rural population. Regional Rural Banks have played a crucial role in the growth and development of the rural economy in India, but their performance has been subject to various challenges such as operational inefficiencies, lack of adequate capitalization, and regional disparities in distribution. To further promote financial inclusion and rural development, it is essential to understand the growth and performance of Regional Rural Banks and identify opportunities for their expansion in underserved areas. This paper aims to investigate the effectiveness of Regional Rural Banks in India. It is structured into five sections. The first section presents the objectives, the second reviews the relevant literature, the third describes the research design and methodology. The fourth section reports on the results and discusses them, and finally, the fifth section presents the major findings, draws conclusions, and discusses the implications.

OBJECTIVES

- To provide a comprehensive overview of the growth and performance of Regional Rural Banks in India.
- To highlight the growth of Regional Rural Banks in terms of the number of branches and districts covered, the increase in deposits and credit, and the Credit-deposit ratio of Regional Rural Banks compared to the banking industry.
- To analyze the state-wise distribution of Regional Rural Banks in order to understand the reach of Regional Rural Banks in different regions of India.

- To identify the challenges and opportunities for further growth and development of Regional Rural Banks in India, especially in underserved areas with a large rural population.
- To provide a clear picture of the role of Regional Rural Banks in rural development and financial inclusion in India

LITERATURE REVIEW

The Reserve Bank of India (RBI) is responsible for overseeing the functioning of Regional Rural Banks in India. Regional Rural Banks were established with the aim of providing credit and other financial services to the rural population, particularly to small and marginal farmers, agricultural laborers, and small entrepreneurs in rural areas. As per the RBI guidelines, Regional Rural Banks are required to have a local focus and provide credit and other financial services to the rural and semi-urban areas in their designated region. Regional Rural Banks are jointly owned by the central government, state government, and sponsor banks, with the majority ownership being held by the sponsor banks. Regional Rural Banks offer a range of financial services, including savings and deposit accounts, loans for agriculture and other rural activities, remittance facilities, and various government-sponsored schemes. The RBI provides regulatory oversight to Regional Rural Banks and ensures that they comply with the prescribed norms and guidelines. Overall, Regional Rural Banks play a crucial role in promoting financial inclusion and economic development in rural areas (Reserve Bank of India, 2021).

The National Bank for Agriculture and Rural Development (NABARD) is an apex development financial institution in India that promotes sustainable and equitable agriculture and rural development. The article provides information about Regional Rural Banks in India, which were established to provide banking and financial services to rural areas. The article discusses the history of Regional Rural Banks, their objectives, and the role played by NABARD in their development. It also provides information about the structure, governance, and operations of Regional Rural Banks, as well as their financial performance over the years. The article concludes by highlighting the challenges faced by Regional Rural Banks and the initiatives taken by NABARD to overcome these challenges (NABARD, 2021).

The Ministry of Finance, Government of India's website provides a comprehensive overview of Regional Rural Banks in India. The article highlights the historical background and objectives of Regional Rural Banks, which were established to provide banking and financial services to rural areas in India. The website also describes the organizational structure, governance, and functions of Regional Rural Banks, including their role in promoting rural development and financial inclusion. Additionally, the website provides data on the business and financial performance of Regional Rural Banks, as well as information on the government's initiatives to improve their functioning. These initiatives include capital infusion, technology adoption, and capacity building programs for Regional Rural Banks staff. Overall, the article serves as a valuable resource for anyone interested in learning more about the functioning and performance of Regional Rural Banks in India (Ministry of Finance, Government of India, 2021).

Singh and Singh (2020) conducted a financial performance analysis of Regional Rural Banks in India. The study analyzed the financial ratios of 45 Regional Rural Banks for the period of 2014-15 to 2018-19. The results showed that the Regional Rural Banks had improved their profitability and asset quality over the study period. However, the Regional Rural Banks faced challenges related to capital adequacy and liquidity. The study recommended that the Regional Rural Banks should focus on increasing their capital base and improving their asset-liability management practices. Das and Roy (2019) evaluated the performance of Regional Rural Banks in India using the CAMEL model. The study analyzed the financial statements of 56 Regional Rural Banks for the period of 2014-15 to 2017-18. The results showed that the Regional Rural Banks had improved their capital adequacy, asset quality, and management efficiency over the study period. However, the Regional Rural Banks faced challenges related to earnings and liquidity. The study recommended that the Regional Rural Banks should focus on improving their earnings and liquidity management practices.

Panda (2018) examined the performance, challenges, and prospects of Regional Rural Banks in India. The study analyzed the financial and non-financial factors that affect the performance of Regional Rural Banks. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and lack of technological advancement. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and technological capabilities to enhance their performance and prospects. Bhaskaran and Mohapatra (2017) provided an overview of Regional Rural Banks in India, with a case study of Odisha. The study analyzed the role and performance of Regional Rural Banks in promoting rural development and financial inclusion in the state of Odisha. The results showed that the Regional Rural Banks had contributed significantly to the development of the rural economy and the provision of banking services to the unbanked population in Odisha. However, the Regional Rural Banks faced challenges related to inadequate capitalization, lack of technological advancement, and high non-performing assets. The study recommended that the Regional Rural Banks should focus on improving their capital base, adopting modern technology, and enhancing their risk management practices.

Parashar and Gupta (2017) examined the performance and prospects of Regional Rural Banks in India. The study analyzed the financial and non-financial factors that affect the performance of Regional Rural Banks. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and lack of technological advancement. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and technological capabilities to enhance their performance and prospects. Sahoo and Kaur (2016) evaluated the performance of Regional Rural Banks in India. The study analyzed the financial statements of 82 Regional Rural Banks for the period of 2009-10 to 2013-14. The results showed that the Regional Rural Banks had improved their performance in terms of profitability, asset quality, and capital adequacy. However, the Regional Rural Banks faced challenges related to low operational efficiency and high cost of funds. The study recommended that the Regional Rural Banks should focus on improving their operational efficiency, reducing their cost of funds, and enhancing their risk management practices to sustain their performance.

Rath and Satpathy (2015) evaluated the financial performance of Regional Rural Banks in India. The study analyzed the financial statements of 64 Regional Rural Banks for the period of 2008-09 to 2012-13. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and low operational efficiency. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and operational efficiency to enhance their financial performance. Rout and Kumar (2014) studied the financial performance of Regional Rural Banks in India. The study analyzed the financial statements of 40 Regional Rural Banks for the period of 2007-08 to 2011-12. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and low operational efficiency. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and operational efficiency to enhance their financial performance.

Sharma and Anand (2013) evaluated the performance of Regional Rural Banks in India. The study analyzed the financial statements of 40 Regional Rural Banks for the period of 2008-09 to 2012-13. The study used various financial ratios to assess the Regional Rural Banks' performance. The results showed that the Regional Rural Banks had improved their performance in terms of profitability, liquidity, and solvency. However, the Regional Rural Banks faced challenges related to low operational efficiency and high non-performing assets. The study recommended that the Regional Rural Banks should focus on improving their operational efficiency and asset quality to enhance their performance. Majhi (2012) reviewed the performance of Regional Rural Banks in India. The study analyzed the financial statements of Regional Rural Banks for the period of 2006-07 to 2010-11. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and low operational efficiency. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and operational efficiency to enhance their financial performance.

Bhatia and Kumar (2011) provided an overview of Regional Rural Banks in India. The study discussed the history, objectives, structure, and functions of Regional Rural Banks. The study also analyzed the performance of Regional Rural Banks in terms of deposits, advances, and profitability. The authors suggested that Regional Rural Banks play an important role in rural development and suggested that the government should continue to support their operations. Rani and Gupta (2010) evaluated the financial performance of Regional Rural Banks in India. The study analyzed the financial statements of 46 Regional Rural Banks for the period of 2005-06 to 2008-09. The results showed that the Regional Rural Banks had improved their performance in terms of deposits, advances, and profitability. However, the Regional Rural Banks faced challenges related to low capital adequacy, high non-performing assets, and low operational efficiency. The study recommended that the Regional Rural Banks should focus on improving their capital adequacy, asset quality, and operational efficiency to enhance their financial performance.

The studies suggest that while Regional Rural Banks have made significant progress in promoting financial inclusion and rural development, they still face challenges related to capital adequacy, liquidity, and technological advancement. The studies recommend that Regional Rural Banks should focus on improving their capital base, adopting modern technology, and enhancing their risk management practices to enhance their performance and prospects. The studies highlight the importance of Regional Rural Banks in promoting financial inclusion and rural development and emphasize the need for continued support from the government and other stakeholders to strengthen the Regional Rural Banks' operations and infrastructure.

METHODOLOGY

This research aims to provide a comprehensive overview of the growth and performance of Regional Rural Banks in India and to identify opportunities for their expansion in underserved areas. The research objectives include conducting a literature review of existing studies on Regional Rural Banks, analyzing quantitative data on the number of branches and districts covered, deposits and credit growth, and the Credit-deposit ratio of Regional Rural Banks compared to the banking industry. The state-wise distribution of Regional Rural Banks will also be analyzed to understand the reach of Regional Rural Banks in different regions of India. Qualitative analysis, such as interviews with key stakeholders, will be conducted to identify challenges and opportunities for further growth and development of Regional Rural Banks in India. The methodology will be a combination of quantitative and qualitative analysis to provide a comprehensive understanding of the growth and performance of Regional Rural Banks in India and to identify opportunities for their further development. The study is analytical and exploratory, and uses secondary data from sources such as NABARD and RBI publications, and annual reports of relevant banks. The study focuses on Regional Rural Banks in India, the data used spans from the inception of Regional Rural Banks in 1975 to 2022. The analysis employs simple tables, ratios, and time series data.

ANALYSIS OF THE GROWTH AND DECLINE OF REGIONAL RURAL BANKS (REGIONAL RURAL BANKS) IN INDIA

Table I: Regional Rural Banks Growth and Decline from the year 1975 to 2022 - India.

YEAR	NUMBER OF Regional Rural Banks	NUMBER OF BRANCHES	NUMBER OF DISTRICTS COVERED
1975	6	17	11
1976	40	489	84
1977	48	1187	99
1978	51	1753	102
1979	60	2420	111
1980	85	3279	144
1981	107	4795	182
1982	124	6191	214
1983	150	7795	265
1984	173	10245	307
1985	188	12606	333
1986	194	12838	351
1987	196	13353	363
1988	196	13920	369
1989	196	14079	369
1990	196	14443	372
1991	196	14527	381
1992	196	14539	392
1993	196	14543	398
1994	196	14542	408
1995	196	14509	425
1996	196	14497	427
1997	196	14461	427
1998	196	14475	451
1999	196	14499	454
2000	196	14301	457
2001	196	14311	476
2002	196	14350	487
2003	196	14311	495
2004	196	14446	518
2005	133	14494	644.
2006	133	14494	523
2007	133	14494	554
2008	133	14494	524
2009	86	15181	617
2010	82	15480	618
2011	82	16001	620
2012	82	16909	638
2013	64	17861	635
2014	57	19082	642
2015	56	20024	642
2016	56	20920	648
2017	56	21422	648

2018	56	21747	648
2019	53	21871	648
2020	45	21850	685
2021	43	21000	689
2022	43	21915	791

Source: Gathered and compiled by Researcher.

Note: The numbers Regional Rural Banks decreased from 2005 due to amalgamation of Regional Rural Banks, Vide Table-V.

The number of Regional Rural Banks grew rapidly from 6 in 1975 to 196 by 1987, after which it remained constant until 2014. However, from 2014 to 2022, the number of Regional Rural Banks declined from 57 to 43. The number of branches of Regional Rural Banks grew steadily from 17 in 1975 to 14,494 by 2005, after which it remained constant until 2022. During this period, there were some fluctuations in the number of branches, but the overall trend was one of steady growth. The number of districts covered by Regional Rural Banks grew from 11 in 1975 to 369 by 1990, after which it remained relatively stable until 2014. From 2014 to 2022, the number of districts covered increased from 642 to 791.

The growth of Regional Rural Banks in terms of the number of branches and districts covered shows a positive trend, indicating that Regional Rural Banks have been expanding their reach in rural areas. However, the decline in the number of Regional Rural Banks from 2014 to 2022 suggests that there may be challenges in sustaining the growth of Regional Rural Banks. The fluctuations in the number of branches and districts covered suggest that there may be challenges in maintaining consistency in Regional "Rural Banks growth across different regions and time periods. Overall, the data indicates that Regional Rural Banks have been playing an important role in rural development and financial inclusion in India, however there may be room for further growth and development in the future.

COMPARATIVE ANALYSIS OF CREDIT-DEPOSIT RATIO IN REGIONAL RURAL BANKS AND BANKING INDUSTRY IN INDIA

Table-II: Growth of deposits, credit and Credit-deposit Ratio C.D of Regional Rural Banks and Banking Industry(BI)

YEAR (up to December every year)	Regional Rural Banks DEPOSITS IN ₹-CRORE	Regional Rural Banks ADVANCES IN ₹-CRORE	Regional Rural Banks CREDIT DEPOSIT RATIO	BI CREDIT DEPOSIT RATIO
1975	0.2	0.1	50	---
1976	0.72	7.02	91	---
1977	33.04	42.35	128	---
1978	74011	122.02	165	---
1979	123.22	167.41	136	---
1980	199.83	243.38	122	---
1981	336	406.59	121	---
1982	502.26	577.11	115	---
1983	677.85	750.84	111	---
1984	959.97	1080.77	113	---
1985	1285.82	1407.67	109	---
1986	1714.94	1784.84	104	---
1987	2305.82	2232.26	97	---
1988	2965.88	2804.29	95	---
1989	3118.58	2918.25	94	---
1990	4150.52	3554.04	86	60.8
1991	4989.24	3535.35	72	60.8
1992	5867.83	4090.86	70	55.4
1993	6938.14	4626.79	67	56.3
1994	8826.51	5253.02	60	51.6
1995	11150.01	6290.97	56	54.7
1996	14187.9	7505.03	53	58.6
1997	17970.18	8711.82	48	55.1
1998	22189.23	9860.81	44	53.5
1999	27065.74	11355.85	42	51.1
2000	32204	13184	41	53.3
2001	38278	15815	41	53.5
2002	44539	18598	42	55.8
2003	48346	21755.7	45	56.9
2004	57010	25483.47	44.7	56.1
2005	62143	31817	51.2	58.7

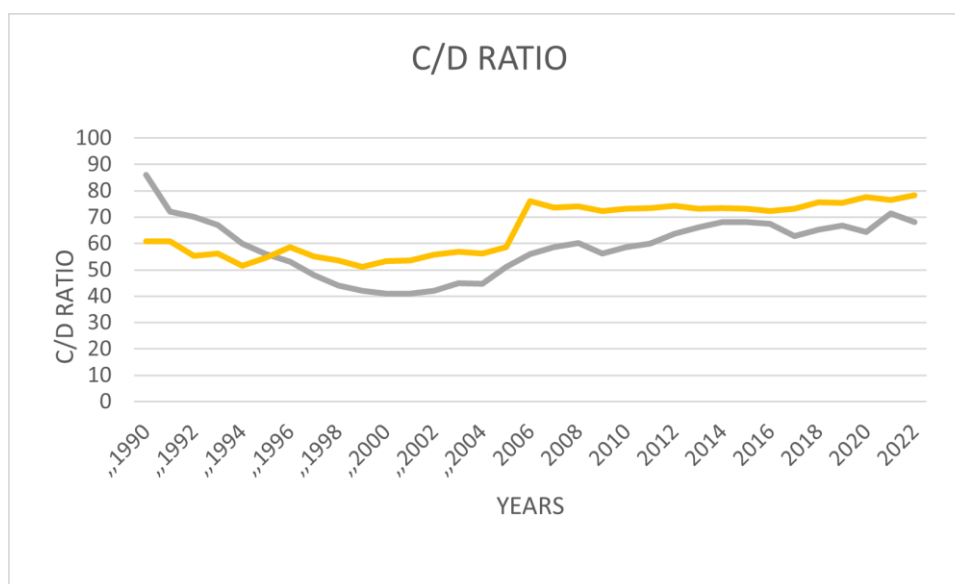
2006	70600	68091	55.9	76.1
2007	82100	81235	58.7	73.71
2008	97300	58600	60.2	74.1
2009	118700	67100	56.2	72.4
2010	142000	83500	58.6	73.2
2011	163900	98200	59.9	73.4
2012	183000	116600	63.7	74.3
2013	206500	136700	66.2	73.2
2014	233400	159000	68.1	73.4
2015	266200	181200	68.1	73.1
2016	306500	206700	67.4	72.3
2017	364900	292100	62.8	73.2
2018	391200	238600	65.2	75.6
2019	426568	284494	66.7	75.4
2020	467422	301051	64.4	77.6
2021	510900	339609	71.4	76.6
2022	546233	372066	68.1	78.4

Source: Gathered and compiled by Researcher up to December of the year.

Table – II.A: Correlations of Regional Rural Banks' Credit-deposit ratio and Banking industry

		Regional Rural Banks	BI
Regional Rural Banks	Pearson Correlation	0.987	0.589
	Sig. (2-tailed)	.	0.019
	N	18	18
BI	Pearson Correlation	0.589	0.987
	Sig. (2-tailed)	0.019	.
	N	18	18

* **Correlation - significant at the 0.05 level, 2-tailed.**



***Credit deposit ratio from 1990 to 2022**

The above table shows the growth of deposits and credit and the Credit-deposit ratio of Regional Rural Banks and the banking industry in India from 1975 to 2022. The data suggests that both Regional Rural Banks and the banking industry have witnessed a significant increase in total deposits and advances over the years.

From the data, we can observe that the Credit-deposit ratio of Regional Rural Banks has been consistently higher than that of the banking industry. The Credit-deposit ratio of Regional Rural Banks increased from 50% in 1975 to 71.4% in 2021, while the Credit-deposit ratio of the banking industry increased from 60.8% in 1990 to 76.6% in 2021. The correlation analysis shows a strong positive correlation between the C/D ratios of Regional Rural Banks and the banking industry, with a correlation coefficient of 0.987, which is significant at the 0.05 level.

Overall, the data suggests that Regional Rural Banks have been able to maintain a higher Credit-deposit ratio than the banking industry, indicating that Regional Rural Banks have been able to mobilize deposits more efficiently than the banking industry. This could be due to Regional Rural Banks' focus on serving rural areas

and providing financial services to small and marginalized communities. The positive correlation between the Credit-deposit ratio of Regional Rural Banks and the banking industry indicates that Regional Rural Banks' performance is linked to the performance of the banking industry in India.

REGIONAL RURAL BANKS (REGIONAL RURAL BANKS) IN INDIA: STATE-WISE DISTRIBUTION AND THE NEED FOR EXPANSION IN UNDERSERVED AREAS

Table – III: Geographical Distribution of Regional Rural Banks in India

STATE NAME	NUMBER OF REGIONAL RURAL BANKS	NUMBER OF BRANCHES	NUMBER OF PERSONNEL
AndhraPradesh(AP)	16	1124	5781
ArunachalPradesh	01	20	70
Assam	05	395	1983
Bihar	16	1487	6395
Chattisgarh	05	439	1849
Gujarat	09	388	1623
Haryana	04	301	1639
HimachalPradesh(HP)	02	132	596
Jammu & Kashmir	03	267	1257
Jharkhand	06	394	1628
Karnataka	13	1093	5807
Kerala	02	347	2593
MadhyaPradesh(MP)	19	1067	4544
Maharashtra	10	589	2488
Manipur	01	30	107
Meghalaya	01	52	186
Mizoram	01	55	183
Nagaland	01	09	33
Orissa	09	825	4264
Punjab	05	205	753
Rajasthan	14	1026	4418
TamilNadu(TN)	03	211	1092
Tripura	01	86	713
UttarPradesh(UP)	36	2850	14511
Uttaranchal	04	173	631
WestBengal(WB)	09	881	5252
India	196	14446	70396

Source: Gathered and compiled by Researcher: 1975-2004.

The above table shows the state-wise distribution of Regional Rural Banks in India. These were established in India in the 1970s with the aim of rendering banking services to the rural and semi-urban areas. As of 2004, there are a total of 196 Regional Rural Banks in India, operating through 14,446 branches with a staff strength of 70,396. Uttar Pradesh has the highest number of Regional Rural Banks (36), followed by MP (19), Bihar (16), and Rajasthan (14). Nagaland, Mizoram, Arunachal Pradesh, and Manipur have only one RRB each, indicating that the presence of Regional Rural Banks in these states is limited. The total number of Regional Rural Banks in the southern states of Karnataka, AP, Kerala, and TN is 44, which is less than the number of Regional Rural Banks in UP alone. In terms of the number of branches, UP again tops the list with 2,850 branches, followed by Bihar (1,487) and MP (1,067). The staff strength of Regional Rural Banks in UP is also the highest with 14,511 employees, followed by AP (5,781) and Bihar (6,395). Some of the states with a large rural population such as WB, Odisha, and Assam have a moderate number of Regional Rural Banks. In summary, the distribution of Regional Rural Banks is not proportional to the population or size of the state. Some states with a large rural population have a relatively smaller number of Regional Rural Banks. The presence of Regional Rural Banks is important for financial inclusion and providing banking services to the rural population. Therefore, there is a need to expand the reach of Regional Rural Banks in underserved areas, especially in the northeastern states and other regions with a large rural population.

AMALAGMATION OF Regional Rural Banks

Table: V - Amalgamation of Regional Rural Banks 2005 (196) To 2021 (43)

YEAR (31/Mar)	Number of Sponsor Banks	Number of Regional Banks	Number of Stand Alone Regional Rural Banks	Number of Amalgamated Regional Rural Banks
2005	28	196	196	--
2006	28	133	107	26
2007	28	96	51	45
2008	28	91	45	46
2009	27	86	41	45
2010	27	82	36	46
2011	26	82	36	46
2012	26	82	36	46
2013	23	64	21	43
2014	23	57	15	42
2015	22	56	14	42
2016	22	56	14	42
2017	22	56	14	42
2018	18	56	14	42
2019	17	53	12	41
2020	15	45	09	36
2021	12	43	09	34

Source: Gathered and compiled by Researcher from NABARD ...

Challenges and Opportunities for the Growth and Development of Regional Rural Banks in Underserved Rural Areas in India"

To identify the challenges and opportunities for further growth and development of Regional Rural Banks (Regional Rural Banks) in India, especially in underserved areas with a large rural population, this report aims to review the current literature and expert opinions on the subject. Regional Rural Banks play a crucial role in promoting financial inclusion and providing access to banking services to rural populations in India. However, there are several challenges that impede the growth and development of Regional Rural Banks, including limited access to financial services due to low literacy levels and inadequate infrastructure in remote areas. These challenges make it difficult for Regional Rural Banks to provide customized financial products that meet the specific needs of rural customers. Additionally, Regional Rural Banks face competition from other financial institutions and inadequate customer redressal mechanisms (Mohana Turag, Nagendra Kumar Turaga, SrinivasaRao Bandaru, 2019).

Despite these challenges, there are several opportunities for Regional Rural Banks to overcome these obstacles and promote further growth and development. For instance, the increasing penetration of mobile and internet technology presents a way to reach more customers in remote areas (SR Bandaru, S Kamepalli , 2019; Dr. Sujatha Kamepalli, and Dr. Srinivasa Rao Bandaru , 2018). Furthermore, government initiatives like Pradhan Mantri Jan-Dhan Yojana and Digital India aim to promote financial inclusion and digital connectivity in rural areas, which can be leveraged by Regional Rural Banks to expand their reach.

CONCLUSION AND IMPLICATIONS

The Credit-deposit ratio of Regional Rural Banks has shown some fluctuations over the years, but has remained fairly stable, with a correlation of 0.987 with the banking industry. The high correlation between Regional Rural Banks and the banking industry suggests that Regional Rural Banks have kept pace with the overall growth of the banking industry. The implications of this analysis are that Regional Rural Banks have played an important role in extending banking services to rural and semi-urban areas of India. The steady growth in deposits and credit of Regional Rural Banks shows that they have been successful in mobilizing savings and providing credit to people in these areas. However, the fluctuations in Credit-deposit ratio indicate the need for continued monitoring and appropriate policies to ensure that Regional Rural Banks continue to serve their intended purpose. Overall, Regional Rural Banks have made a significant contribution to financial inclusion in India and need to be supported to continue their efforts.

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