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Detecting Critical Input Measure Of Regional Rural Banks In India Through Multifaceted Super-Efficiency Model

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Abstract: The transition with the well-argued restructuring of the financial sector that was initiated globally over the last few years has affected the functioning of not only the banking industry in India but also the efficiency and effectiveness of Regional Rural Banks with a diverse range of decision issues. Since the events associated with everyday decision tradeoffs among the multiple variables the RRB units can filter out costly errors before they do any damage and can influence the performance, so deciding with the multiple measures, the managerial prerequisites are to identify and utilize different influential inputs by pursuing the best-practiced resource regenerating process to put the operating unit in a stronger position. Ruling out all other possibilities than the chosen one can best be identified with the relative magnitudes of different inputs and outputs. Using last year published data of all the forty-five RRBs, operating all over the country, the study drill down to identify the decisive one from the three inputs namely non-performing assets, operating expenditure, and interest costs on a bundle of tangible activities covering net profit, number of branches, and total business, as these are more regular in banking operation. The best practice rank based on efficiency score is evaluated to see whether a change in the value of one or a set of decisive factors significantly affects the performance ranking between the banking units under study. The study provided two key interesting indications: first, there is almost adequate uniformity in the performance grades between the RRB units with a clear signal that the non-performing assetsare not the only decisive value driver to change the unsatisfying performance score of the banking units under study, except five decision-making units, and second, only one-fourth of the RRB units are more fulfilling in achieving the best practice status with a set of decisive variables.

JEL classification
N5; O 44; Q56

Keywords: Tangible Banking Activities, Efficiency Score, Multiple Performance Measures, Regional Rural Bank.

INTRODUCTION

In retaining competitive advantages, Regional Rural Banks (RRBs) in India, marked sense because of greater customer confidence and unbeatable 'rural' brand name. Theory and evidence suggest that despite microscopic scale in banking operation, area coverage, may steer financial systems toward social inclusion, sustain growth during the crisis, and compete against private and foreign banks (Manish, 2017**)**, (Nguyen & Shrimal, 2012). The financial crisis of the nineties spelled the near-death of many banking units, but government assistance and restructuring enabled these units to remain in business, and most returned to profitability. These institutions are commanding heights, by providing a channel for social inclusion of the bank less in the rural area and essential policy alternatives for reform (Michael & Sivaramakrishnan, 2017). In banking operations, some activities may not have a high financial impact, may still have high societal visibility (Asli & Harry, 2010). The compelling fit between the welfare-based and market-based financial systems seemed to provide the key to explaining why RRBs remained so important in rural India. Theories of decision issues have demonstrated that government and civil society have a selective interest in a particular activity (Minghua & Rui, 2017), while the manager may not find it beneficial for performance management (Pierre-Richard & Karim, 2010). By measuring the impact of these activities in a holistic approach, the unit may be able to respond to most of the issues.

In the banking sector, performance evaluation in the context of multiple decision variables became an important theme from the 1980s onwards and was often regarded as an element of the new public management approach. The initiatives were to measure performance, mainly in the form of measuring the efficiency of government entities (Javad, 2019) (Bouckaert & Haligan, 2008). The traditional systems developed from costing and

accounting systems were criticized for encouraging short-term behavior, lacking strategic focus, encouraging local optimization, minimization of variance rather than continuous improvement, and not being externally focused (Shubhashis & Gurbachan, 2000), (Bourne & Platts, 2000). A lack of an increase in efficiency is irrefutably indicative that the conduct of the unit is motivated by opportunistic behavior. It is widely believed that the banking units in developing countries are dangerously unsafe because of their inherent tradeoffs among the multiple measures (Shaddady & Tomoe, 2019), resulting which lots of units conceal the enormous variation in terms of efficiency sensitivity both between and within them. Since each unit has its inherent compromises among numerous measures that significantly influence the performance (Epstein & Roy, 2001), the decision-makers need to know the decisive value drivers. The approach is to identify the decisive variable to the unit's performance with a view to either maintain best practice for the efficient unit or achieve the best practice for the inefficient unit.

The concept of efficiency as a ratio of inputs to outputs only came into its contemporary common usage in the early twentieth century, with the institutionalization of economics as a discipline (Julia, 2014). Thus, any argument about the increasing excellence of any banking unit must ask at the outset: are we primarily concerned with the efficiency of the unit, which provides itself to at least relatively obvious criteria of measurement, or productivity, which encompasses elements of efficiency? Here lies the issue of measurement and assessing efficiency and it requires defining the standard against which a given policy can be measured. On the other hand, reviewing the effectiveness of any bank with rural operations needs agreement on what is a desirable set of goals to aspire to in the first place and a reasonable set of criteria as to how one would determine whether those goals have been met in whole, in part, or not at all. The experience of banking behavior set in motion the proposition as to whether changes in its value of identifying variables will impinge on the performance. Though regression-based methods can be used in evaluating performance, to get a more accurate result (Chen & Zhu, 2003) advocated an approach which is independent of identifying DEA (Data Envelopment Analysis) weights or DEA multiplier, to identify such variables in the name of critical measures.

In course of time, though the focus on performance, indicators has shifted from input indicators, via process and output indicators, to outcomes, but in practice due to measurability problems (Ahamed & Sushanta, 2019), it is often difficult to measure output and outcomes (Hofstede, 1981) (Anthony & Young, 2003). Another problem in performance measurement through output in the banking sector is that these units often have multiple goals that cannot be summarized into one ultimate goal, such as profit. However, specific techniques such as data envelopment analysis (DEA) may be helpful as they analyze the relative efficiency of entities or decision-making units (Roy & Bhattacharya, 2017), (Charnes & Rhodes, 1978). The search for and implementation of best practices can relate to operational issues through which continuous improvement is delivered by incorporating best practices in the work steps (Dattakumar & Jagadeesh, 2003). Although the DEA technique is helpful to take multiple input and output indicators into account in one analysis, it restricts the analysis to efficiency indicators and does not take qualitative aspects into account. However, as the benchmarking in the banking sector functions as a form of control, (Bowerman & Francis, 2001) advocate that compulsory benchmarking has much in common in that they both meet the need to demonstrate accountability.

LITERATURE REVIEW:

The best pointer for the health of the banking industry in a country is its level of Non-performing assets (NPAs). NPAs are one of the major threats for banks in India. It reflects the performance of banks. Reduced NPAs generally gives the impression that banks have strengthened their credit appraisal processes over the years and growth in NPAs involves the necessity of provisions, which bring down the overall profitability of banks (Stuti & Bansal, 2013). The study (Bachhawat, 2001) states that the prudential norm of 90 days for classifying the A/c s as NPA is very much strict looking to the Indian conditions where the whole of economy is still based on Agriculture and Agriculture is based on Monsoon and which is uncertain and erratic. A similar study by (Joshi, 2003) observed that several factors have contributed to the high level of NPAs in banking, particularly in the public sector banking system. The study conducted by (Vohra, 2007) highlighted that the impact of NPAs and the effect of NPA on the bank is nothing but there is the loss of interest income. A study by (Gupta, 1994) shows that the slow pace of recovery of bad and doubtful debts has been adversely affecting the viability of various banks and financial institutions. Studies by (Singh, 2005) in his article stated that the SARFAESI Act 2002-Need of the hour is essentially about enforcement of the lender rights and improving recovery of NPAs. The financial sector is under severe stress due to its inability to enforce security interests and other rights, mainly due to the slow legal system. Similarly, (Srinivasan, 1991), (Kulkarni, 2006) concluded that Non - Performing assets are affecting the viability and solvency of public sector as well private sector banks. Studies by (Chandran, 1992), (Narang & Prabhakar, 2011), (Chaudhury, 2012), and (Uppal & Juneja, 2012), have examined the Indian banking system in terms of its performance and profitability. (Khasnobis, 2006), stated that a large part of the banking sector growth has been on the back of financing consumption, as reflected in the growth of retail banking. The evaluation of the NPA has been blended by the author by the asset companies which specialize in a certain segment of the financial sector.

In a series of studies, several factors that have an impact on profitability are broadly classified as either internal determinants that originate within the firm such as bank size, capital, risk management, expenses management, and diversification, or external (Molyneux & Thornton, 1992), (Goddard, Molyneux, & Wilson, 2004), (Bodla & Verma, 2006). A recent study attempted to identify the key determinants of profitability of public sector banks in India and the study indicated that the variables such as non-interest income, operating expenses, provision, and contingencies and spread have a significant relationship with net profits. Several studies have examined the impact of key internal factors on profitability. The work (Smirlock & Brown, 1986) studied the impact of demand deposits as a function of total deposits on profitability. Their findings suggest that demand deposits had a significant positive relationship with profits. A study by (Miller & Noulas, 1997) found that loan loss provision and net charge-offs had a significant negative effect on the profitability of large banks. The results highlighted that net charge-offs were further affected by asset and liability composition. Thus, the asset-liability portfolio decisions of commercial banks can be expected to affect the profitability of these institutions via net charge-offs.

A very large set of research relating to impact assessment of operating expenditure on performance management highlighted that higher employees were consistently associated with higher net charge offs to total assets. Many studies indicated massive employee costs along with lack of an increase in efficiency gripping near-death of many banking units and that the first sign of trouble is lower profitability and suggested that banks with higher salaries and benefits would require higher net interest margins to maintain profitability. The study (Ganesan, 2001) examined the profitability of public sector banks in India and found that interest costs, interest income, other income, deposits per branch, credit to total assets, and proportion of priority sector advances were key determinants of profitability of these banks. Recent studies in developing countries found that banks with higher credit risk and loan concentration exhibit lower profitability levels (Kent & Zhiguo, 2020). On the other hand, the bank that has a higher level of capitalization, a higher proportion of income from non-interest sources, and high operational expenses proved to be relatively more profitable (Amir & Christine, 2020).

OBJECTIVES AND SIGNIFICANCE:

This study is to explore commanding depth in deciding with the multiple criteria, both in social (rural branch expansion) and financial (competitive best-practice efficiency) dimensions so that the study unit(s) can filter out costly errors before they do any damage. The specific objective of this study is to focus on the unique nature of branch expansion activity with the total business and net profit-earning capacity in terms of the multiple ranges of decision issues that the RRB units are currently attempting to optimize and to see whether there is uniformity in the performance grade between the units (Jean-Philippe & Ning, 2019) under study. The next explicit purpose is to focus on the decisive factors on a bundle of tangible activities covering net profit, number of branches, and total business, as these are more regular in banking operation of the sample units through DEA-Sensitivity score. Thus, a factor that is decisive to the performance should be characterized by whether the factor is significant in maintaining the best-practice for efficient units and achieving the best-practice for an inefficient unit (George & Kleoniki, 2019). With the help of nonperforming assets (N), operating expenditure (O), and interest costs (I) to the number of branches, net-profit, and total business as output variables of the banking unit, the efficient frontier is required to be identified and the optimized input-oriented DEA weights are to be used to categorize the banking unit. The purpose is to see whether the banking units under study behave differently in terms of the decisive factors.

RESEARCH QUESTION AND HYPOTHESIS:

The key question is how to influence and improve managerial decisions that can be more fulfilling and how to steer and control different decision variables concerning best practice benchmarking. This study posits the argument that with a set of multiple performance measures when one or more elements are found influential in maintaining and achieving the best practice, the decision-making unit (DMU) should consider that element or a set of elements as a decision value driver to that banking unit (Xiaoyang & Benjamin, 2019). Considering the conceptual framework, the purpose of the study, and the burden to prove the research question as amplified above, the following hypothesis is deduced from the theoretical propositions:

H0: With a set of multiple decision variables, there appears no uniformity in the performance grades between the RRB units under the study period, and that the units do not operate efficiently in achieving the best practice score with the changes in the value of critical variables.

HA: With a set of multiple decision variables, there appears uniformity in the performance grades between the RRB units under the study period and that the units do operate efficiently in achieving the best practice score with the changes in the value of critical variables.

DATA AND METHODOLOGY:

Using the three input variables of forty-five banking units, operating expenditure, non-performing assets, and interest costs on net profit, branch expansion, and total business of the banking unit, the best practice status

based on efficiency score is evaluated to see whether a change in the value of decisive factor significantly affects the performance grade between the units under study and accordingly the units are categorized to detect the key variable from the last year published data of the respective unit. DEA-Sensitivity analyses (Peter & Jorge, 2019) between units are carried out to unearth whether the decisive factors are influencing the performance in picking up the signal of the key variable. To identify the critical variables following models developed by (Chen & Zhu, 2003) is used as there is more than one, i.e. kth input measures are of interest to indicate that a measure is critical to the performance should be characterized by whether the measure is critical to maintaining the best-practice for efficient units and achieving the best practice for inefficient units.

Min P_k

Subject to

$$\sum_{j=1}^{n} \lambda_j x_{kj} \leq P_K x_{ko}$$

$$\sum_{j=1}^{n} \lambda_j x_{ij} \leq x_{io} \qquad i \neq K \qquad (A)$$

$$\sum_{j=1}^{n} \lambda_j y_{rj} \geq y_{ro} \qquad r = 1, \ldots . s$$

$$\sum_{j=1}^{n} \lambda_j = 1$$

When $P_K < 1$, it indicates that inefficiency exists in DMU_0's kth input because DMU_0 needs to decrease its kth input to $P_K x_{ko}$ to reach the performance frontier.

Min G_M

Subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \leq G_M x_{io} \qquad i \epsilon M$$

$$\sum_{j=1}^{n} \lambda_j x_{ij} \leq x_{io} \qquad i \notin M \qquad (B)$$

$$\sum_{j=1}^{n} \lambda_j y_{rj} \leq y_{ro} \qquad r = 1, \ldots . s$$

$$\sum_{j=1}^{n} \lambda_j = 1$$

and Max H_Q

Subject to

$$\sum_{j=1}^{n} \lambda_j y_{rj} \geq H_Q y_{ro} \qquad r \epsilon Q$$

$$\sum_{j=1}^{n} \lambda_j y_{rj} \geq y_{io} \qquad r \notin Q \qquad (C)$$

$$\sum_{j=1}^{n} \lambda_j x_{ij} \leq x_{io} \qquad i = 1, \ldots . m$$

$$\sum_{j=1}^{n} \lambda_j = 1$$

Where inputs represented by set M and outputs represented by set Q are of interest. It is intended to assign Max $\{G^*_M\}$ and Min $\{H^*_Q\}$ when a unit is found inefficient to identify the most critical input and output measures, respectively. But when a unit is found efficient, infeasibility associated with the form-(B) and form-(C) indicates the non-critical inputs and outputs. It is assumed that the DEA frontier exhibit variable returns to scale (VRS). To address the research issue with the help of six identified variables, it is decisively considered a bundle of tangible activities covering net profit, number of branches, and t decisive input variables to the total business,

net profit, and the number of branches under the context of best-practice, the DEA sensitivity assessment is carried out and Table-1 depicts the results of the RRB units under study. The results of the input-oriented VRS efficiency scores for DMU (1) Andhra Pragathi Gramin Bank, DMU (2) Chaitanya Godavari Gramin Bank exhibited that only non-performing assets are the decisive value driver. It appears that when the model (A) applied for each input measure at a time, the non-performing assets independently attained the efficiency classification because of the comparative efficiency score. It is evident that when the model (A) applied for each input measures at a time the operating expenditure input individually influencing the efficiency classification of the decision-making unit DMU (3) Saptagiri Gramin Bank. In DMU (4) Arunachal Pradesh Gramin Bank the possible inefficiency has existed in each associated input when other inputs are fixed at their current level. Accordingly, a set of inputs are adjusted simultaneously and applied for all possible combinations of the three input measures, and when three inputs are applied in favor of model B it appears that the optimum yield is derived from the interest costs, non-performing assets, and operating expenditure with a quiet good efficiency score. It appears that when the model (A) was applied for each input measure at a time, the operating expenditure input independently attained the efficiency classification because of the comparative efficiency score of DMU (5) Assam Gramin Vikash Bank. It is discernible that DMU (6) Dakshin Bihar Gramin Bank which is an inefficient unit, the optimal values to model A point out that non-performing asset is the decisive determinant to achieve the performance frontier. Similarly, DMU (7) Uttar Bihar Gramin has the optimal solutions when the non-performing assets are the critical measure. But on the other hand, in support of model (B) DMU (8) Chhattisgarh Gramin Bank depicts an optimal solution when the two decision variables namely interest expense and non-performing assets are in the combined group.

When the score is calculated for DMU (9) Baroda Gujarat Gramin Bank, with the unsustainable score of below level indicates possible inefficiency exists and operating cost decisive driver. With the similar linear guidance when model A is applied to DMU (10) Saurashtra Gramin Bank for each associated input, it is found that interest cost is the critical input. A strong resemblance of inadequacies in optimal values to model A is found in DMU (11) Sarva Haryana Gramin Bank and in DMU (12) Himachal Pradesh Gramin Bank, otal business, as outputs to assess the contribution of the operating expenditure, non-performing assets, and interest costs, as the DEA inputs.

ANALYSIS AND FINDINGS:

As the drive is to identify the contribution of operating expenditure, interest costs, and nonperforming assets to the performance grade, we selected a bundle of three variables as the DEA outputs. Output-oriented efficiency scores of the banking unit depict that one-fourth of the total units are running much lower than the normal practice, otherwise, there is uniformity in the performance grades between the RRB units under study. To identify the which indicate that operating expenditure is the decisive driver to achieve the performance frontier. For DMU (13) Ellaquai Dehati Bank, which is one of the efficient units for which model A is infeasible for each input measure, and hence as event shifts, all the three inputs are adjusted in different combination in support of the models (B), the DMU yielded better performance results indicating that all the inputs are critical measures. When operating costs are exclusively applied in favor of model (A), for DMU (14) J & K Gramin Bank, with a plausible inefficiency score, it reached the frail magnitude level during the study period. It appears that Jharkhand Rural Gramin Bank, DMU (15) exhibits optimal solutions when the three inputs, non-performing assets, operating expenditure, and interest costs are in the combined grouping. The results of the input-oriented VRS efficiency scores for DMU (16) Karnataka Gramin Bank, clearly exhibit that the operating expenditure alone is the decisive input. It is discernible that model A is feasible when each input is selected individually in DMU (17) Karnataka Vikas Gramin Bank yielded the optimal value when operating cost is the decisive driver. Similarly, Kerala Gramin Bank, DMU (18), indicates that the interest cost input is the decisive value driver to achieve the performance frontier. However, when operating expenses are specifically considered for DMU (19), Madhya Pradesh Gramin Bank, and DMU (21) Maharashtra Gramin Bank, model (A) yielded the optimal values for both the banking units.

TABLE: EFFICIENCY AND SENSITIVITY SCORES OF RRBs UNDER THE STUDY PERIOD

DMU	Name of the Bank	VRS	I	O	N	Decisive Driver(s)	
1	ANDHRA PRAGATHI GB	1.00000	1.070	INF	1.073	N	–
2	CHAITANYA GODAVARI GB	0.98234	0.818	0.740	0.982	N	–
3	SAPTAGIRI GB	1.00000	INF	1.241	INF	O	–
4	ARUNACHAL PRADESH RB	1.00000	INF	INF	INF	–	ION
5	ASSAM GVB	0.65773	0.450	0.465	0.179	O	–
6	DAKSHIN BIHAR GB	0.79363	0.345	0.615	0.672	N	–
7	UTTAR BIHAR GB	0.91635	0.835	0.709	0.861	N	–

8	CHHATTISGARH RGB	1.00000	28.998	INF	INF	–	IN
9	BARODA GUJARAT GB	0.86426	0.443	0.759	0.643	O	–
10	SAURASHTRA GB	1.00000	4.081	INF	3.440	I	–
11	SARVA HARYANA GB	0.89488	0.673	0.803	0.589	O	–
12	HIMACHAL PRADESH GB	0.85095	0.430	0.726	0.647	O	–
13	ELLAQUAI DEHATI BANK	1.00000	INF	INF	INF	–	IO
14	J & K GB	0.46034	0.116	0.319	0.304	O	–
15	JHARKHAND RGB	1.00000	INF	INF	INF	–	IO
16	KARNATAKA GB	1.00000	INF	INF	INF	–	ION
17	KARNATAKA VIKAS GB	0.63173	0.237	0.455	0.198	O	–
18	KERALA GB	0.83539	0.628	0.628	0.563	I	–
19	MADHYA PRADESH GB	0.74272	0.540	0.547	0.442	O	–
20	MADHYANCHAL GB	1.00000	4.704	INF	INF	I	–
21	MAHARASHTRA GB	0.86994	0.647	0.792	0.460	O	–
22	VIDHARBHA KONKAN GB	0.83537	0.434	0.349	0.767	N	–
23	MANIPUR RB	0.50652	0.000	0.506	0.192	O	–
24	MEGHALAYA RB	1.00000	4.704	1.371	INF	I	–
25	MIZORAM RB	0.77034	0.492	0.673	0.428	O	–
26	NAGALAND RB	1.00000	INF	INF	INF	–	ON
27	ODISHA GB	1.00000	14.482	INF	INF	I	–
28	UTKAL GB	1.00000	14.105	INF	INF	I	–
29	PUDUVAI BHARATHIYAR GB	1.00000	INF	1.342	INF	O	–
30	PUNJAB GB	0.56795	0.193	0.435	0.201	O	–
31	BARODA RAJASTHAN KGB	1.00000	INF	INF	INF	–	IN
32	RAJASTHAN M GB	0.94803	0.767	0.929	0.730	O	–
33	TAMIL NADU GB	1.00000	INF	1.016	INF	O	–
34	ANDHRA PRADESH GVB	1.00000	INF	INF	INF	–	ION
35	TELANGANA GB	0.71646	0.428	0.615	0.608	O	–
36	TRIPURA GB	1.00000	3.691	INF	INF	I	–
37	ARYAVART BANK	1.00000	INF	INF	INF	–	ION
38	BARODA U P GB	1.00000	INF	INF	1.029	–	IN
39	KASHI GOMTI SAMYUT GB	0.61372	0.223	0.390	0.364	O	–
40	PRATHAMA U.P GB	1.00000	1.168	INF	INF	I	-
41	PURVANCHAL BANK	0.72247	0.314	0.577	0.364	O	–
42	UTTARAKHAND GB	0.76582	0.450	0.538	0.500	O	–
43	BANGIYA GVB	1.00000	4.734	INF	INF	I	–
44	PASCHIM BANGA GB	0.92940	0.378	0.917	0.544	O	–
45	UTTAR BANGA KGB	0.90998	0.328	0.890	0.370	O	–

I=Interest expense O= Operating costs, N= Non-performing assets, VRS=Variable Return to Scale.

More importantly, DMU (22) Vidarbha Konkan Gramin Bank yields the optimal value when non-performing asset input is applied in model A. But, DMU (23) Manipur Gramin Bank, and DMU (25) Mizoram Gramin Bank, both exhibit operating expenditure as the alike decisive value driver for the units under study. DMU (26) Nagaland Rural Bank secured optimal value with the two components in a set. Odisha Gramin Bank, DMU (27), Utkal Gramin Bank, DMU (28), Tripura Gramin Bank DMU (36), Prathama U. P. Gramin Bank DMU(40); and Bangiya Gramin Vikash Bank, DMU (43) all the banking units exhibited optimal solutions when the interest cost is the decisive one to achieve the performance frontier.

On the other hand, DMU (30) Panjab Gramin Bank, DMU (32) Rajasthan M Gramin Bank, DMU (33) Tamil Nadu Gramin Bank, DMU (35) Telangana Gramin Bank; and DMU (39) Kashi Gomti Samyut Gramin Bank

and the like attained optimal value when operating cost is the critical measure. The results of the input-oriented VRS efficiency scores for the DMU (41) Purvanchal Bank, and DMU (42) Uttarakhand Gramin Bank, clearly exhibits that the operating expenditure alone is the decisive input. But It is discernible that model A is infeasible when each input is selected individually in DMU (37) Aryavart Bank yielded the optimal value when non-performing assets, operating expenditure, and interest costs are in a set. It appears that when the model (A) applied for each input measure at a time DMU (38) Baroda U. P. Gramin Bank attained optimum solution with interest costs and non-performing asset as a set of decisive value drivers.

CONCLUSION:

With the help of operating expenditure, nonperforming assets, and interest costs, the output-oriented efficiency scores of the banking units when measured covering the three output measures depicted that nearly half of the total units are running much lower than the normal practice, otherwise there is uniformity in the performance grades between the RRB units under study. Further, the optimized input-oriented DEA weights are used to categorize the right kind of decisive variable for each banking unit. To reach the performance frontier for possible inefficiency, when one input is selected at a time, it appears that most of the units are inefficient for each input value. The value of the sensitivity reports eventually indicates possible inefficiency in twenty-three units. The results indicate that there is almost adequate uniformity in the performance grades between the RRB units with a clear signal that the nonperforming assets are not the decisive value driver to change the performance grade of the banking units under study, except five units, and that only few RRB units are effectively geared to operate in achieving the best practice status with the operating expenditure in terms of a set of decisive variables. Accordingly, the study accepts the alternative hypothesis and concludes that with a set of multiple decision variables, there is uniformity in the performance grades between the RRB units under study and that the units do operate efficiently in achieving the best practice score with the changes in the value of critical variables.

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