

A COMPARATIVE STUDY ON STANDALONE AND AMALGAMATED REGIONAL RURAL BANKS USING CAMELS APPROACH

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ABSTRACT

The regional rural banks would be a 'model financial infrastructure' for rural development with patronage and encouragement given by planners in the field. With this viewpoint the State sponsored, regionally based and rural oriented commercial banks had taken birth in rural India, which is popularly known as 'Regional Rural Bank'. Despite the fact that RRBs worked for around four decades and they achieved performance to the expected level quantitatively, but not turning towards sound financial management and productivity. Moreover the achieved performance is not uniform, though they are working under the same approach of administration and management. In order to achieve the effective and efficient performance, the RRBs have been taken up amalgamation process at a larger scale in the year 2005-06. Amalgamation of regional, rural banks was considered to be a strong mechanism to strengthen all banks financially. In the present study an attempt has been made to assess the effectiveness of Amalgamation and comparing the financial performance of selected standalone and amalgamated regional rural bank during the post reorganization period. To measure the financial soundness of these banks, the CAMELS Model, which is an appropriate technique, is adopted. It is observed from the study that only an amalgamation of banks is not enough for strengthening the financial performance of the RRBs. Consolidation of banks with proper strategy is essential for their sound and viable financial performance.

KEYWORDS: RRBs, CAMELS, Amalgamation

INTRODUCTION

The emergency and moratorium on loans were compelling the situations to think separate institutions in meeting the credit requirements of the rural community. The then Prime Minister, Smt. Indira Gandhi has taken up the initiative for appointment of the committees on rural credit. Based on the recommendations of Banking Commission and the Working Group, the Government of India established Regional Rural Banks under the RRBs Act, 1976. These banks were set-up with a rural-orientation having the benefits of low cost profile of cooperatives and at the same time benefiting from the professionalism and modernity of commercial banks. The weaker sections have been a target group for assistance in the multi-agency approach. The regional rural banks would be a 'model financial infrastructure' for rural development with patronage and encouragement given by planners in the field. Thus, the State sponsored, regionally based and rural oriented commercial banks have taken birth in rural India, which popularly known as 'Regional Rural Banks'. These banks penetrate every corner of the country and have been extending a helping hand in the growth of the economy. Studies by Saveeta and Verma Sateesh (2001), Shravan Singh (2001), Kantawala Amita S (2004), Ketkar W Kusum et al. (2004), analyze the performance of banks from a profitability point of view, using various parameters. Gunjan M Sanjeev (2009)

conducted a study on the Efficiency of Indian public sector banks and found that the efficiency of public sector banks not increased during the period 2003-07. R. C. Dangwal and Reetu Kapoor (2010) conducted a study on the financial performance of commercial banks. In this study, they compared the financial performance of 19 commercial banks with respect to eight parameters and they classified the banks as excellent, good, fair and poor categories. Dilip Kumar Jha and Durga Sankar Sarangi (2011) conducted a study on Performance of the new generation banks using modern techniques to rate the banks. Government of India starts the procedure of operational amalgamation, in discussion with State Governments and Sponsor Banks, by mixing the RRBs of the similar sponsor bank in the State in September 2005. Till March 31, 2005, a lot before in the integration process, 196 rural banks that were supported by 27 Public Sector Banks and one State Cooperative Bank were functioning in the nation with a channel of 14,484 branches distributed in 523 regions. The Government of India started the process of consolidation and amalgamation of RRBs in September 2005, bringing their number down to 82 in 2010. This number fell down to 64 in March 2013. As on 1st April 2014, the number of RRBs has been reduced to 56 with 19,022 branches. Out of 56 RRBs 12 are stand alone RRBs, 43 are amalgamated RRBs and 1 RRB is newly set up in the Union Territory of Punducherry. The institutions so emerged after amalgamation were expected to have a stronger presence and capabilities to provide sustained financial and developmental services to the rural banking sector. After more than one decade of amalgamation process, it is realized that there are various weaknesses in amalgamated RRBs while some standalone RRBs are performed comparatively better than amalgamated RRBs. Though various studies analyzed the performance of RRBs, but still none of them have evaluated the comparative performance of standalone and amalgamated RRBs.

In view of the above, this study aims to compare financial performance of standalone and amalgamated RRBs in post amalgamation era. The main hypothesis of the study is that only amalgamation process, not enough for strengthening the financial performance of RRBs.

Objectives of the Study

The main objectives of the present study are:

- To have an understanding of the concept and need of amalgamation in the banking sector.
- To study the impact of amalgamation on the performance of Kashi Gomti Summit Gramin Bank in particular and on amalgamated RRBs in general.
- To compare the performance of the Prathma Bank as standalone RRB and Kashi Gomti Summit Gramin Bank as amalgamated RRB.
- To analyze the position of capital adequacy in the amalgamated and stand alone RRBs.
- To analyze and compare the assets quality and earnings in the amalgamated and stand alone RRBs.
- To analyze the management efficiency and liquidity position of amalgamated and stand alone RRBs.

Hypotheses of the Study

The Null hypotheses pertaining to various parameters which are being examined in this study are:

- H_{01} . There is no significant difference between capital adequacy of selected standalone and amalgamated regional rural banks.
- H_{02} . There is no significant difference between asset quality of selected standalone and amalgamated regional rural banks.
- H_{03} . There is no significant difference between management efficiency of selected standalone and amalgamated regional rural banks.
- H_{04} . There is no significant difference between the earning efficiency of selected standalone and amalgamated regional rural banks.
- H_{05} . There is no significant difference between liquidity of selected standalone and amalgamated regional rural banks.
- H_{06} . There is no significant difference between system & control of selected standalone and amalgamated regional rural banks.

Research Methodology

The present study adopts descriptive and analytical research design.

Sources of Data

The basic data for the present study is collected from the annual reports published by the selected banks. Relevant secondary data have also been collected, mainly from published reports of NABARD, different annual reports of RRBs, NABARD statistical reports, RBI monthly bulletin.

Study Period

The present research work covers a time span of eight years, i.e. from 2006-2007 to 2015-2016.

Scope of Research

The present study mainly confined to RRBs of Uttar Pradesh. As on 31st March, 2016 there are seven working RRBs in the state of Uttar Pradesh out of which one is standalone and another six are amalgamated. A sample of two RRBs, Prathma Bank as a standalone RRB and Kashi Gomti Summit Gramin Bank (KGSG Bank) as an amalgamated RRB are selected for the purpose of study. Prathma Bank, which was established in 2nd October, 1975 is an only standalone RRB of U.P. KGSG Bank is an amalgamated RRBs of U.P., which amalgamated on 12th September, 2005 and there is no further merger in it. So, for better consistency of these two data, banks have been selected.

Tools and Techniques

CAMELS, which is basically a ratio based model has been used for evaluating the financial performance of selected banks. It is a quantitative assessment tool that measures Capital Adequacy, Assets Quality, Management, Efficiency, Quality of Earnings, Liquidity and System & Control of financial institutions. Fourteen financial ratios related to CAMELS model are used in the study while for analyzing and interpreting the results, the statistical tools such as the arithmetic mean, coefficient of variance, t-test has been used. The statistical package, namely MS Excel has also been used

for analyses of data. For better presentation of the data and to make it interesting and understandable, tables have been used.

Financial Ratios

Table 1

Sl. No.	Ratio	Calculation	Interpretation
1.	Capital to Risk Weighted Assets Ratio (CRAR)	Capital (Tier-I+Tier-II) / RWA	A Higher ratio indicates high safety against bankruptcy
2.	Government Securities To Total Investments	Government Securities/ Total Investment	A Higher ratio indicates the lowest risk.
3.	Net NPA to Net Advances	Net NPA / Net Advances	A Higher ratio indicates the higher credit risk.
4.	Standard Advances to Total Advances	Std. Advance / Total Advance	A higher ratio means the bank has high performing assets.
5.	Total Advances To Total Deposits	Total Advance / Total Deposit	A higher ratio shows the ability of management to convert deposits into higher earning advances.
6.	Business Per Branch	Total Business / Total No. of Branches	A higher ratio shows better performance of the bank.
7.	Operating Profit to Total Assets	Operating Profit / Total Asset	A higher ratio shows better performance of the bank.
8.	Net Profit to Total Assets	Net Profit / Total Assets	A higher ratio indicates better earnings potential.
9.	Liquid Assets to Total Assets	Liquid Assets / Total Assets	The higher the ratio, the better for the bank.
10.	Liquid Assets to Demand Deposits	Liquid Assets / Demand Deposits	The higher the ratio, the better for the bank.
11.	Priority Sector Lending Ratio	Priority Sector Advances / Total Advances	A higher ratio shows appropriate steps for regulatory norms.
12.	Burden to Interest Income Ratio	Burden / Interest Income	A low ratio shows better control over non-interest expenses.

RESULTS & DISCUSSIONS

Various financial ratios measuring under capital adequacy, asset quality, management efficiency, earnings quality and liquidity have been tested as follows:

CAPITAL ADEQUACY

It is important for a bank to maintain depositors' confidence and preventing the bank from going bankrupt. It reflects the overall financial condition of banks, and also the ability of management to meet the need for additional capital. The following ratios measure capital adequacy:

Capital to Risk Weighted Assets Ratio (CRAR)

The capital adequacy ratio is developed to ensure that banks can absorb a reasonable level of losses occurred due to operating losses and determine the capacity of the bank in meeting the losses. The higher the ratio, the more will be the protection of investors. The banks are required to maintain the capital to risk weighted assets ratio (CRAR) as specified by RBI from time to time. As per the latest RBI norms, the banks should have a CRAR of 9 per cent.

Government Securities to Total Investments (G-Sec/Inv)

It is an important indicator showing the risk-taking ability of the bank. It is a bank's strategy to have high profits, high risk or low profits, low risk. It also gives a view as to the availability of alternative investment opportunities.

Table 1: Capital Adequacy Ratios for the Period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
CRAR (%)	Prathma Bank	20.26	12.35	-0.984	0.338
	KGSG Bank	21.91	19.93		
G-Sec/ Inv (%)	Prathma Bank	86.08	5.77	-0.62	0.538
	KGSG Bank	87.58	5.91		

Source: Secondary data available from annual reports of the banks compiled by MS-Excel.

It is clear from Table-1; that both banks have maintained their CRAR above the regulatory norms; however KGSG Bank is more successful in CRAR position with an average CRAR of 21.92 percent in comparison of Prathma Bank. The C.V. of KGSG Bank is 19.93 percent which is quit more than Prathma Bank shows less consistency in CRAR of KGSGB. The t-value between the banks is -0.984 with p-value 0.338 i.e. the mean difference in CRAR is not statistically significant during the study period.

It is observed from above Table-1 that, Prathma Bank and KGSG Bank have maintained the average Government Securities to Total Investment ratio around 86.08 percent and 87.58 percent respectively, during 2006-07 and 2015-16. The high ratio of Prathma Bank indicates lower risk due to investing in other risky and high return securities. The t statistics at the 5 percent level of significance is -0.62 with p-value 0.538 which is more than 0.05. Hence the mean differences in Government Securities to Total Investment ratio of two banks at 5 percent level of significance are statistically insignificant ($t=0.39$; $p>0.05$). Thus, it is clear that there is no significant difference between government securities to total investment ratios of selected standalone and amalgamated RRBs.

Thus, from the above analysis, it is observed that the first null hypothesis of the study, i.e. there is no significant difference between capital adequacies of sample banks is accepted.

Assets Quality

The quality of assets is an important parameter to measure the strength of a bank. The prime motto behind measuring the asset quality is to ascertain the component of non-performing assets as a percentage of the total assets. This indicates what types of advances the bank has made to generate interest income. The ratios necessary to assess the asset quality are:

Net NPA to Net Advances (NPNAs/NA)

It is the most standard measure of asset quality, measuring the net non-performing assets as a percentage of net advances. Net non-performing assets are gross non-performing assets minus net of provisions for Non-performing assets and interest in suspense account.

Standard Advances to Total Advances (Std. Adv. /TAdv)

This ratio indicates the proportion of standard advances to total advances of a bank. Standard advances are the net of total advances and gross

NPAs. A higher ratio means that the bank has high performing assets which results in higher earnings

Table 2: Asset Quality Ratios for the Period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
NNPA / NADV (%)	Prathma Bank	0.73	104.47	-3.15	0.005
	KGSG Bank	10.64	88.29		
Std. Adv. / TAdv. (%)	Prathma Bank	97.09	1.01	4.44	0.000
	KGSG Bank	82.99	11.41		

Source: Secondary data available in the annual reports of the banks compiled by MS-Excel.

It is observed from above Table-2 that, Prathma Bank and KGSG Bank have maintained the average Net NPAs to Net Advances ratio around 0.74 percent and 10.64 percent respectively, during 2006-07 and 2015-16. The ratio shows that Prathma Bank is in a much better position than KGSG Bank due to better advance and NPA management. The coefficient of variation between the two banks is 104.47 percent and 88.29 percent shows more fluctuation in Prathma Bank. The t-statistics at the 5 percent level of significance is -3.15 with p-value 0.005. Hence, the mean difference between Net NPA to Net Advances ratio of two banks at 5 percent level of significance is statistically significant ($t=-3.15$; $p<0.05$). The above Table-2 shows that, Prathma Bank and KGSG Bank have maintained the average ratio of standard advances to total advances around 97.09 percent and 82.99 percent respectively during 2006-07 and 2015-16. This indicates that assets of Prathma Bank are much sounder in comparison of KGSG Bank. A higher ratio of performing assets also leads to better profitability. The t-statistics at the 5 percent level of significance is 4.44 with p-value 0.000, which is less than 0.05. Hence, the mean difference in standard advances to total advances ratio of two banks at 5 percent level of significance is statistically significant ($t=4.44$; $p<0.05$). Thus, it is clear that second null hypothesis, i.e. there is no significant difference between asset quality of sample banks is rejected.

Management Efficiency

Management efficiency is another important element of the CAMEL Model. The ratio in this segment involves subjective analysis to measure the efficiency and effectiveness of management. The management of the bank takes crucial decisions depending on its risk perception. The ratios used to evaluate the management efficiency are described as:

Total Advances to Total Deposits (TA/TD)

This ratio measures the efficiency and ability of the bank's management in converting the deposits available with the bank excluding other funds like equity capital, etc. into high earning advances. Total deposits include demand deposits, savings deposits, term deposits and deposits of other banks, total advances include the receivables.

Business Per Branch (BPB)

Business per Branch is arrived by dividing total business with total number of branches. It is directly proportional to productivity and profitability and thus, this ratio is indicative of managerial ability in generating business and enhanced profitability for the bank.

Table 3: Management Efficient Ratios for the Period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
Total Adv. / Total Dep. (%)	Prathma Bank	79.86	7.62	24.36	0.000
	KGSG Bank	29.70	3.57		
BPB (in Crore)	Prathma Bank	23.44	24.79	2.23	0.039
	KGSG Bank	17.72	28.56		

Source: Secondary data available in the annual reports of the banks compiled by MS-Excel.

The above Table-3 reveals that, average total advances to total deposits of Prathma Bank and KGSG Bank are 79.86 and 29.70, respectively. Prathma Bank has much higher advances to deposits ratio in comparison of KGSG Bank. The higher ratio of Prathma Bank indicates better management efficiency to convert deposits into advances. The mean difference in total advances in total deposits ratio of two banks at 5 percent level of significance is statistically significant ($t=24.36$; $p<0.05$). It is also observed from above Table-3 that, Prathma Bank and KGSG Bank have maintained the average business per branch (Rs. in Crore) around 23.44 and 17.72 respectively. This shows that Prathma Bank has the better management efficiency to generate more business per branch in comparison of KGSG Bank. The value of t at 5 percent level of significance is 2.23 with p-value 0.039. Hence the mean difference between Business per Branch of two banks at 5 percent level of significance is statistically significant ($t=2.23$; $p<0.05$).

Thus, it is clear that null hypothesis, i.e. there is no significant difference between management efficiency of sample banks is rejected.

Earning Efficiency

Earning is a very important criterion that determines the ability of a bank to earn consistently. It basically determines the profitability of banks and explains its sustainability and growth in earnings in future. The following ratios explain the earning quality:

Operating Profit to Total Assets (OP/TA)

This ratio indicates how much a bank can perform its operations, net of the operating expenses for every rupee spent on total assets. This is arrived at by dividing the operating profits of total assets. The higher the ratio, the better it is. This ratio determines the Total operating profit generated from total assets employed. The better utilization of assets will result in higher operating profits. Banks, which use their assets efficiently, will tend to have a better average than the industry average.

Net Profit to Total Assets (NP/TA)

This ratio measures return on assets employed or the efficiency in utilization of Total Asset. A higher ratio indicates the better income generating capacity of the assets and better efficiency of management. It is arrived at by dividing the net profit by total assets.

Table 4: Earnings Efficiency Ratios for the period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
OP/TA (%)	Prathma Bank	1.98	37.70	2.67	0.015
	KGSG Bank	1.20	37.41		
NP/TA (%)	Prathma Bank	1.45	25.20	5.13	0.000
	KGSG Bank	0.59	58.38		

Source: Secondary data available in the annual reports of the banks compiled by MS-Excel.

It is observed from the Table-4 that, average operating profit to total assets of Prathma Bank and KGSG Bank are 1.98 percent and 1.20 percent respectively. The 't'-value 2.67 and 'p' value 0.015. Therefore, the performance of sample banks differed significantly ($t=2.67$; $p<0.05$). Similarly, in terms of net profit to total assets the Prathma Bank outperformed the KGSG Bank. The 't'-value at 5 percent level of significant is 5.13 and 'p' value 0.000 i.e. mean difference between net profit to total assets ratio of the two banks is statistically significant ($t=5.13$; $p<0.05$).

Thus fourth hypothesis, i.e. there is no significant difference between the earning efficiency of selected standalone and amalgamated regional rural banks is rejected.

Liquidity

The bank has to take a proper care to hedge the liquidity risk; at the same time ensuring good percentage of funds are invested in high return generating securities, so that it is in a position to generate profit with provide liquidity to the depositors. The following ratios are used to measure the liquidity under the CAMELS Model.

Liquid Assets to Total Assets (LA/TA)

It measures the overall liquidity position of the bank. The liquid asset includes cash in hand, balance with institutions and money at call and short notice. The total assets include the revaluation of all the assets.

Liquid Assets to Demand Deposits (LA/DD)

This ratio measures the ability of banks to meet the demand from depositors in a particular year. To offer higher liquidity for them, the bank has to invest these funds in the highly liquid form.

Table 5: Liquidity Ratios for the Period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
LA/TA (%)	Prathma Bank	23.58	24.41	-11.87	0.000
	KGSG Bank	48.32	5.04		
LA/DD (%)	Prathma Bank	53.70	35.10	-4.96	0.000
	KGSG Bank	85.97	5.82		

Source: Secondary data available in the annual reports of the banks compiled by MS-Excel.

Table-5 indicates that the average liquid assets to total assets of Prathma Bank and KGSG Bank are 23.58 and 48.32, respectively. Prathma Bank with low ratio and high C.V show weak liquidity position in comparison of KGSG Bank. The 't'-value of two sample banks is -11.87 and 'p' value 0.000. Hence the mean differences in liquid assets to total assets ratio of two banks at 5 percent level of significance are statistically significant ($t=-11.87$; $p<0.05$).

The Table-5 also shows that, Prathma Bank and KGSG Bank have maintained the average ratio of liquid assets to demand deposits around 53.70 percent and 85.97 percent respectively, during 2006-07 and 2015-16. KGSG Bank has a sound ratio and low C.V.; which shows better liquidity position in comparison of Prathma Bank. The t-statistics at the 5 percent level of significance is -4.96 with p-value 0.000. Hence the mean difference between liquid assets to demand deposits ratio of two banks at 5 percent level of significance is statistically significant ($t=-4.96$; $p<0.05$).

Thus the fifth hypothesis of the study, i.e. there is no significant difference between liquidity of sample banks is rejected.

System & Control

The 'S' component of CAMELS focuses on a bank's ability to identify, monitor, manage and control its market risk, and provides a clear and focused indication of supervisory concerns in this area for bank's management. The importance of managing operational risks, which arises out of deficiencies in internal systems and controls, system failures and non-adherence to prescribed procedures, cannot be ignored.

Priority Sector Lending Ratio

As per RBI's guidelines all RRBs in India have to extend a minimum 60 percent of their net bank credit to priority sector with sub-target set for lending to various sub-sectors. Even though such agreements are in place, banks are urged to take appropriate steps to increase the flow of credit to the priority sector for the purpose of inclusive growth of financial inclusion.

Burden to Interest Income Ratio

The burden is defined as the difference between non-interest expenses (comprising establishment expenses and other expenses of current and non-current nature) and non-interest income (consisting of commission, exchange brokerage and other miscellaneous receipts) of banks. A burden, which is to be met out of spread used to influence considerably the profit of the bank. Hence, proper management of burden is highly essential if a bank wants to enhance its profitability volume. The ratio of burden as a percentage of interest income is calculated by taking the difference between non-interest expenditure and non-interest income as a percentage of interest income.

Table 6: System and Control Ratios for the Period 2007-16

Ratio	Bank Name	Mean	C.V.	t-Value	p-Value
Priority Sector Lending (In percent)	Prathma Bank	91.87	1.38	9.48	0.000
	KGSG Bank	74.60	7.12		
Burden of Interest Income (In percent)	Prathma Bank	29.59	17.03	-2.50	0.022
	KGSG Bank	35.17	12.54		

Source: Secondary data available in the annual reports of the banks compiled by MS-Excel.

Table-6 shows that, Prathma Bank and KGSG Bank have maintained the average ratio of Priority Sector Advances to Total Advances around 91.87 percent and 74.60 percent respectively, during 2006-07 and 2015-16. Prathma Bank with a higher ratio and low C.V. Show its systematically soundness and better efficiency in comparison of KGSG

Bank. The value of t at 5 percent level of significance is 9.48 with p-value 0.000. Hence, the mean differences in Priority Sector Advances in Total Advances ratio of two sample banks at 5 percent level of significance are statistically significant ($t=9.48$; $p<0.05$). Thus, it is clear that there is a significant difference between Total Priority Sector Advances to Total Advances of selected standalone and amalgamated RRBs. Table-6 also indicates that Prathma Bank and KGSG Bank have maintained the average ratio of Burden of Interest Income around 29.59 percent and 35.17 percent respectively during 2006-07 and 2015-16. Prathma Bank with less burden ratio shows better control over non-interest expenses in comparison of KGSG Bank. The value of t at 5 percent level of significance is -2.50 with p-value 0.022. Hence the mean differences in Burden in Interest Income ratio of two sample banks at 5 percent level of significance are statistically significant ($t=-2.50$; $p<0.05$). Thus the sixth hypothesis of the study that there is no significant difference between system & control of selected banks is rejected.

CONCLUSIONS

'CAMELS' provides a measurement of banks current overall financial, managerial, and operational performance. Thus, the current study has been conducted to examine the overall performance of Prathma Bank and Kashi Gomti Summit Gramin Bank. The study revealed that, Prathma Bank as a standalone RRB excelled over Kashi Gomti Summit Gramin Bank, which is an amalgamated RRB in Asset quality, Management efficiency, Earning efficiency and System and Control. The two sample banks do not differ significantly in Capital to Risk Weighted Assets Ratio (CRAR) and G-Securities to Total Investment ratio during the study period. Prathma bank proved to be good in Asset Quality perspective. Kashi Gomti Summit Gramin bank outperformed Prathma bank in front of Liquidity position during the study period. Out of twelve variables measured in the study, eight variables shows that performance of Prathma Bank is better than Kashi Gomti Summit Gramin Bank. Only two variables are in favor of Kashi Gomti Summit Gramin Bank while two variables show there is no significant difference between both banks. Hence, it could be concluded from the study that, only an amalgamation of RRBs is not enough for strengthening the financial performance of the RRBs. Standalone bank is better performing, hence amalgamation is not the only way of improving the status of regional rural banks. Consolidation of banks with proper strategy is essential for their sound and viable financial performance.

REFERENCES

1. Ganesan P (2001), "Determinants of Profits and Profitability of Public Sector Banks in India: A Profit Function Approach", *Journal of Financial Management and Analysis*, ISSN: 0970-4205 Vol. 14, No.1, January to July, pp. 27-37.
2. Janaki Ramudu P and Durga Rao S, (2006) "A Fundamental analysis of Indian Banking Industry", *The IUP Journal of Bank Management*, 2006, ISSN: 0972-6918, vol. V, issue 4, pages 68-79.
3. Jha Dilip Kumar and Sarangi Durga Sankar (2011), "Performance of the new generation banks: A comparative study", *International journal of Research in Commerce and Management*, ISSN: 0976-2183 Vol. 2 No.1, pp. 85-89.
4. Pandey I.M., *Essentials of Financial Management*, Vikas Publishing House Limited (2004).
5. Chandra persona., *Financial Management*, Tata Mc Graw-Hill Publishing Company Limited (2008).

6. Prasad K.V.N. and Reddy D Maheshwara (2011), "Evaluating Performance of Regional Rural Banks: An Application of CAMEL Model", Journal of Arts, Science & Commerce, ISSN: 2231-4172, Vol. II, No.4, pp.61-67.
7. Prasad, K.V.N. and Ravinder, G. (2012), "A CAMEL Model Analysis of Nationalized Banks in India", Int. J. of Trade and Commerce-IIARTC, ISSN: 2277-5811, Vol. 1, No. 1, pp. 23-33.
8. Singh, Anoop Kumar (2014), "Performance and Growth of Regional Rural Banks in India" ZENITH Int. J. of Business Economics and Management Research, ISSN: 2249-8826, Vol. 4, No. 9, pp. 184-194.
9. Singh, Anoop Kumar (2014), "Financing of Solar Energy Generation by Regional Rural Bank (A Case Study of Aryawart Gramin Bank in Uttar Pradesh)", Int. J. of Scientific and Research Publications, ISSN: 2250-3153, Vol. 4, Issue 9.
10. Singh, Anoop Kumar (2015), "Role of RRBs in the Promotion of Self Help Groups in India (An Analytical Study)", Int. J. of Scientific and Research Publications, ISSN: 2250-3153, Vol. 5, No. 9.

