

# A CAMEL MODEL ANALYSIS OF SARVA HARYANA GRAMIN BANK

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## ABSTRACT

*The Regional Rural Banks are entrusted with the role to provide credit to the needy persons and entrepreneurs in rural areas. There is only one Regional Rural Bank operating in Haryana namely Sarva Haryana Gramin Bank to fulfil this social objective. This paper endeavours to analyse the performance of Sarva Haryana Gramin Bank for a period of nine years ranges between 2005 and 2014 using the CAMEL Model. CAMEL Model is an acronym given to five parameters namely Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity. The findings of the study indicated that sample bank performed best in the parameter of capital adequacy followed by management quality.*

**Keyword:** CAMEL Model, RRBs, Gramin Bank, Deposits

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## INTRODUCTION

The Regional Rural Banks in Haryana has their existence from the inception of first five Regional Rural Banks in 1975, under the promulgation of Regional Rural Banks Act, 1976. In the list of first five Regional Rural Banks, one bank also opened in Haryana named as Haryana Kshetriya Gramin Bank with its head office in Bhiwani and sponsored by the Punjab National Bank. In 1976, Gurgaon Gramin Bank as another Regional Rural Bank in the state came into force sponsored by the Syndicate Bank with its head office in Gurgaon.

With the pace of the rapid expansion of the Regional Rural Banks in the country, two another Regional Rural Banks were also established in Haryana. These Banks were the Hisar Kshetrya Gramin Bank with head office in Hisar and Ambala Kurukshetra Gramin Bank with head office in Ambala both sponsored by the Punjab National Bank established in the year of 1984 and 1985 respectively. All the four banks in the state worked independently till the starting of restructuring of Regional Rural Banks in 2005. With the effort of amalgamation, they had to be merged into a single entity.

### The First Phase of Amalgamation

As per the first phase of amalgamation of Regional Rural Banks in India started in September 2005, the Regional Rural Banks which fall under a sponsor bank had to be merged to form a single entity within a state. By following this phase, as per the notification issued by the Government of India on 21<sup>st</sup> December 2005 under the provision of Regional Rural Banks Act 1976, the three Regional Rural Banks in Haryana naming Haryana Kshetriya Gramin Bank, Hisar Kshetiya Gramin Bank and Ambala Kurukshetra Gramin Bank sponsored by the Punjab National Bank merged into a new entity "Haryana Gramin Bank". At that moment, the state had two Regional Rural Banks namely Haryana Gramin Bank and the other one

Gurgaon Gramin Bank working independently. The banks worked in isolation till the commencement of the second phase of the amalgamation process of Regional Rural Banks.

### **Second Phase of Amalgamation**

As per the second phase of the amalgamation of Regional Rural Banks in India started in 2012, the Regional Rural Banks across the sponsor bank within a state had to be merged into single entities to form one RRB for a state. To follow this, on 29 November 2013, the Haryana Gramin Bank and the Gurgaon Gramin Bank were amalgamated and the “Sarva Haryana Gramin Bank” came into subsistence.

### **The Sarva Haryana Gramin Bank**

The Sarva Haryana Gramin Bank came into force on 29 November, 2013 with the amalgamation of Haryana Gramin Bank and Gurgaon Gramin Bank. At present this bank is the single Regional Rural Bank operating in Haryana throughout the state. It covers all the 21 districts of Haryana and has a network of 554 branches and total business of Rs. 14921.77 crores as on 30 June 2014.

### **REVIEW OF THE LITERATURE**

Bose (2005) found that Regional Rural Banks were more concerned about outreach rather than viability and focused on the priority sector lending in the initial years of establishment. Pal and Sura (2006) conducted a study to analyse the performance of Regional Rural Banks in India and found that the performance of Regional Rural Banks was not so encouraging between 1975 and 2005. Reddy (2006) emphasised the need to open more bank branches in low banking density areas. To avail the benefit of economies of scale, there is a need for merger and enlargement of assets base and number of branches of Regional Rural Banks. Misra (2006) suggested that the sponsor bank come ahead to revive the loss making RRBs and if that does not work in a specified time than the sponsor bank of loss making RRB should be changed as per the recommendation of Sardesai Committee (2005). Kumar (2008) presented a negative view on the amalgamation of Regional Rural Banks by Government of India by examining the working of 28 Regional Rural Banks, which were amalgamated in 2005, for the period of 2001-05. Ibrahim (2010) found a positive impact of merger on the performance of RRBs as post merger period performance was significantly differing from the pre merger performance. Aspal and Malhotra (2013) conducted a study to analyse the performance of 19 public sector banks for the period of 2006-2011. The study found that, as per the ANOVA results; the performance of all the 19 banks is significantly different. Ahmed (2013) conducted an empirical analysis of the Meghalaya Rural Bank for the period of 2000-01 to 2010-11 and concluded that the volume of the business and profitability of the bank was not correlated significantly. Ahmed (2013) studied the performance of Indian rural banks for the period of 2000-01 to 2010-11. And observed that the Reform measures had a good positive impact on deposits and advances of RRBs but both deposits and advances were not at the pace of commercial banks. The CD ratio was also significantly low during the study period. Tripathi *et al.* (2014) conducted a study to evaluate the performance of private banks in India by taking the data of two sample bank viz. Axis Bank and Kotak Mahindra Bank for the period of 2003 to 2013 and concluded that the performance of Axis Bank is slightly better than the performance of Kotak Mahindra Bank. Mohinder (2014) analysed the impact of banking sector reforms, initiated by government of India in the year of 1991-92 to 1998-99, on the working of Regional Rural Banks with the help of CAMEL Model and found a positive impact of reforms on the performance of Regional Rural Banks in India. Milan and

Yadav (2015) made a comparative analysis of Aryavart Gramin Bank of Lucknow and Kshetriya Kisan Gramin Bank of Mainpuri in U.P. for the period of 2007-2012. The study found that business per employee and spread played a significant role, nonperforming assets played no role and priority sector lending played a very little role in the working of both the banks. Amuthan (2015) studied the merger impact of Regional Rural Banks on their performance for the period between 2008 and 2013. The study found that the merger of Regional Rural Banks proved beneficial because there was a significant difference between the pre and post merger performance of Regional Rural Banks in India. Jain (2016) studies the role of Regional Rural Banks in the development of India on the basis of primary as well as secondary data. The study documented the role played by these banks in the development of India, and made an attempt to describe the challenges faced by the banks and suggested some steps to overcome these difficulties.

### **OBJECTIVES OF THE STUDY**

The review of literature witnessed that no study has been conducted yet in the state of Haryana. So, the objective of this paper is to evaluate the performance of Regional Rural Banks in Haryana using CAMEL Model for the period ranges between 2005 and 2014.

### **RESEARCH METHODOLOGY**

The research is descriptive in nature and secondary data is used for the period of 2005 to 2014. The data is collected from the annual reports of Sarva Haryana Gramin Bank. The study uses the CAMEL Model which is a ratio based Model for rating the performance of banks. This model was developed in the U.S. in 1979-80 as a uniform supervisory rating system for financial institutions. The Model measures the performance of financial institutions with the help of various types of ratios calculated from financial statements. The CAMEL is an acronym name given to the five parameters as below:-

- Capital Adequacy
- Assets Quality
- Management Efficiency
- Earning Quality
- Liquidity

All the above five parameters are used to ascertain the rating of the banks. In India, the supervisory function on the banks is carried out by Reserve Bank of India as per the power provided to it by the RBI Act, 1934. In 1995, the RBI accepted the recommendations of S. Padmanabhan Committee to rate the banks in India according to the CAMEL Model. The banks are rated as per the CAMEL Model in India now.

### **RESULTS AND DISCUSSION**

#### **Capital Adequacy Ratios**

This parameter is related to the minimum of capital expected to be maintained as against the risk exposure of the bank. It measures the adequacy of capital of the bank to absorb the potential losses occurred by the operation of a bank. It provides the safeguard to the bank against the credit risk, market risk and operational risk. The main ratio to measure this

parameter is the capital adequacy ratio or capital to risk (weighted) assets ratio (CRAR). For this study, the following three ratios are computed under the parameter of Capital Adequacy.

### **Capital to Risk Assets Ratio (CRAR)**

Reserve Bank of India required every bank of the country to maintain a minimum of 9 percent of CRAR every year. The Sarva Haryana Gramin Bank has been maintaining the CRAR above the statutory requirement successfully during the study period except in the year of 2009-10 and 2010-11. The maximum achieved ratio was 18.19 in 2013-14 due to the amalgamation of Haryana Gramin Bank with the Gurgaon Gramin Bank in the same year.

### **Advances to Total Assets Ratio**

This ratio indicates the aggressive lending operation of a bank to earn interest by mobilizing its funds in the form of advances to the public. Higher the ratio is preferred. In 2005-06, this ratio was at a good level of 71.87 percent which declined to 60.29 percent in the next year. The ratio showed an increasing trend again and increased to 71.23 in 2010-11. But it again declined and reached to the level of only 42.70 percent in 2013-14. For the nine years period, the average was 61.33 percent.

### **Govt. Securities to Total Assets**

Higher the ratio is preferred. It was 19.25 percent in 2005-06 and declined to 16.58 percent in 2013-14. The ratio showed an almost declining trend with an average of 18.04 for the nine years period.

### **Composite Result of Capital Adequacy Parameter**

The composite result of the three ratios under this parameter is that bank maintained the required level of CRAR, total advances to total assets ratio was almost declining for whole the study period and the government securities to total assets ratio was almost constant for whole the study period.

### **Assets Quality Ratios**

The second parameter of the model is the assets quality of a bank. It measures the quality of loans provided by the bank. This quality can be measured with the help of the position of nonperforming assets (NPA) of any bank. If the NPA of a bank is showing increasing trend, it means that the quality of loans provided by the bank is very poor or vice versa. The reason behind the calculation of these ratios is that the diminishing quality of the loan assets reduces the profit of a bank in the form of reducing interest on loans. The following ratios are computed for this study under the assets quality parameter:

### **Net NPA to Advances**

It shows that how much of the amount of total advances is tied in the form of non performing assets. Lesser the ratio is preferred. In 2005-06, it was 2.36 percent and declined continually up to 2010-11. It decreased to zero level in 2009-10. The bank maintained it to zero in the next year. But it arose again and reached to 3.10 percent in 2013-14. The average was 1.13 percent for the nine years period. Except 2013-14, the NPA management of the bank was good for the study period.

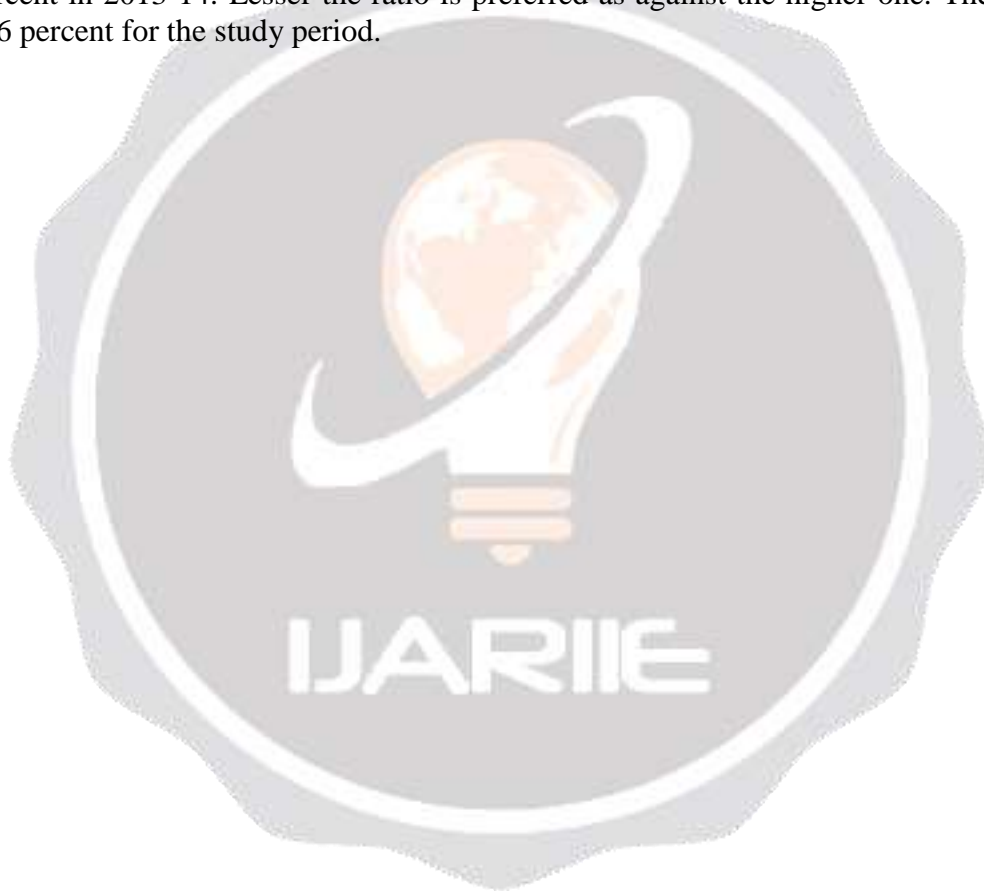


**Investment to Total Assets**

This ratio indicates about the conservative policy regarding the lending operation of any bank. Lesser the ratio is preferred. More the funds tied in the investment, fewer funds will be available to grant fresh loans and advances to the needy persons. Hence, higher the level of this ratio more will be the conservatism in the lending operation. The ratio was 20.46 percent in 2005-06 and declined slightly to 19.22 percent in 2013-14. It was almost constant with an average of 18.97 percent during the nine years period.

**Net NPA to Total Assets**

This ratio shows that what percentage of the total assets is in the form of NPA. Same as in the case of net NPA to total advances, this ratio was also showing a declining trend and reached to the level to zero in 2009-10 and 2010-11. But after 2010-11, it arose again and reached to 1.33 percent in 2013-14. Lesser the ratio is preferred as against the higher one. The average was 0.66 percent for the study period.



**Table: CAMEL Model Ratios of Sarva Haryana Gramin Bank**

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Average
<b>Capital Adequacy ratios (%age)</b>										
CRAR	–	–	13.01	13.73	7.02	8.89	12.92	12.41	18.19	12.31
Advances to Total Assets	71.87	60.29	64.28	68.17	65.92	71.23	56.11	51.41	42.70	61.33
Govt. Securities to Total Assets	19.25	19.59	17.86	16.46	19.55	18.51	18.40	16.15	16.58	18.04
<b>Assets Quality Ratios (%age)</b>										
Net NPA to Advances	2.36	1.65	1.35	0.68	0.00	0.00	1.04	0.01	3.10	1.13
Investment to Total Assets	20.46	20.44	18.33	16.83	19.69	19.18	18.75	17.81	19.22	18.97
Net NPA to Total Assets	1.699	0.995	0.871	0.463	0.000	0.000	0.585	0.004	1.325	0.66
<b>Management Efficiency Ratios</b>										
Credit Deposits Ratio (%age)	92.09	77.57	85.29	89.61	81.41	94.45	87.62	80.92	64.59	83.73
Per Employee Profit (in lacs)	3.09	3.99	4.80	6.05	8.28	9.22	8.55	8.20	9.42	6.84
Per Branch Profit (in lacs)	13.04	16.40	19.23	23.57	29.66	33.19	34.14	33.56	42.87	27.30
Per Employee Business (in lacs)	232	272	331	421	1052	821	556	583	581	538.78
Per Branch Business (in lacs)	979	1117	1325	1641	3771	2955	2218	2384	2645	2115
<b>Earning Quality Ratios (%age)</b>										
Operating Profit to Total Asset	2.35	2.29	2.10	2.06	1.53	1.65	1.98	1.88	1.93	1.97
Net Profit to Total Asset	2.00	2.03	2.03	2.07	1.16	1.65	1.85	1.62	1.76	1.80
Interest income to total Income	96.33	95.61	95.58	95.60	96.48	96.16	95.91	97.31	97.38	96.26
Other Income to Total Income	3.67	4.39	3.42	4.40	3.52	3.84	4.09	2.67	2.62	3.62
Spread	4.28	3.99	3.54	3.25	2.30	2.90	3.22	3.10	3.26	3.32
<b>Liquidity Ratios (%age)</b>										
Liquid Asset to Total Assets	7.59	18.58	15.37	21.73	12.49	7.43	22.20	28.38	35.86	18.85
Liquid Assets to Deposits	9.72	23.90	20.39	28.56	15.42	9.86	34.66	44.67	54.24	26.82
liquid to Demand Deposits	309.56	795.72	661.02	991.72	550.19	319.48	1491.17	2573.11	2712.8	1156.09
Cash to Deposits	1.65	1.28	1.53	1.34	0.61	0.81	1.27	0.54	0.44	1.05
Cash to Demand Deposits	52.53	42.64	49.47	46.43	21.69	26.19	54.76	30.98	22.16	38.54

Source: Compiled from Annual Reports Sarva Haryana Gramin Bank

### **Composite Result of Assets Quality Parameters**

Under this parameter, net NPA to total advances and net NPA to total assets position were good for whole the study period except in the year of 2013-14. The bad performance in 2013-14 was mainly due to the amalgamation of Haryana Gramin Bank with Gurgaon Gramin Bank in the same year. Investment to total assets ratio was almost constant for whole the

### **Management Efficiency Ratios**

The next parameter is the efficiency of management. The management is mainly concerned with the decision making and the deployment of resources of a bank to achieve its policy objective. The main policy objective of an organisation is to earn a required rate of profit. It can be measured with the help of various ratios like the credit deposits ratio, profit per branch and employee and business per branch and employee. The higher the credit deposits ratio indicates that the bank is operating well and mobilizing the funds to generate interest. For this study, the following ratio is computed under this parameter:

#### **Credit Deposits Ratio**

This ratio reflects that how much of the deposits are advanced to the needy persons by the bank in the form of loans and advances. The ratio was 92.09 percent in 2005-06 indicating an aggressive lending operation by the bank. Hence, the bank was successfully mobilizing its resources. But it was showing a declining trend after 2005-06. It again reached to the highest level of 94.45 percent in 2010-11 for the nine years period. After that, it declined and reached to 64.59 percent in 2013-14. The average was 83.73 percent for the nine years period.

#### **Profit per Employee and Profit per Branch**

In case of per employee profit, the trend was increasing during the study period. Not a single year registered a decline in the profit per employee except the years of 2011-12 and 2012-113. It increased from Rs. 3.09 lacs in 2005-06 to Rs. 9.42 lacs in 2013-14. The average of profit per employee was Rs. 6.84 lacs. In case of profit per branch, the trend was also increasing during the study period except for the year of 2012-13 in which it declined slightly. The profit per branch was Rs. 13.04 lacs in 2005-06 and increased to Rs. 42.87 lacs in 2013-14. The average was Rs. 27.30 lacs.

#### **Business per Employee and Business per Branch**

Business per employee was Rs. 232 lacs in 2005-06 and increased continually up to 2009-10. Thereafter, it shows a declining trend and declined to Rs. 821 lacs in 2010-11 and to Rs. 581 lacs in 2013-14. The cause of this decline in the business per branch can be attributed to the reason of less expansion in the total business as compared to the expansion in the staff level. The same trend can be seen in case of business per branch. The business per branch was Rs. 979 lacs in 2005-06 and increased to Rs. 3,771 lacs in 2009-10. Thereafter, same as in case of business per employee, it was declining and declined to Rs. 2,955 lacs in 2010-11 and to Rs. 2,645 lacs in 2013-14. The reason was that the growth in business was less than the expansion of branch network. The average business per employee was Rs. 538.78 lacs and average business per branch was Rs. 2,115 lacs for the nine years period.

### **Composite Result of Management Efficiency Parameter**

Under this parameter, bank maintained a good level of credit deposits ratio for whole the study period except in 2013-14. The bad performance in 2013-14 was mainly due to the amalgamation of Haryana Gramin Bank with the Gurgaon Gramin Bank. Both per employee profit and per branch profit were increasing during the study period. Both per branch business and per employee business position was showing a good trend.

### **Earning Quality ratios**

This parameter measures the earning quality of a bank. It determines that how much the bank is earning and from what operations the bank is earning its income. The core earning activity of a bank is the interest earned on loans advanced by it. Hence, the interest income is the core income of any bank. A bank should concentrate to increase its core income in the form of interest on the loans provided by it. This parameter includes the ratios such as the interest to total income, operating profit to total assets, net profit to total assets etc. Higher the proportion of interest income in the total income reflects a better operational performance of a bank. For this study, following ratios are computed:

#### **Operating Profit to Total Assets**

This ratio shows the operating profit of a bank as a percentage of total assets. The ratio shows an almost declining trend. This ratio was 2.35 percent in 2005-06 and declined consistently up to 2009-10. The remaining period had some signs of expansion in the ratio. But this ratio was 1.93 percent in 2013-14 which is less than the ratio of 2.35 percent in 2005-06.

#### **Net Profit to Total Assets Ratio**

This ratio reflects that how efficiently the bank is utilizing its total assets. This ratio was 2 percent in 2005-06 and increased continually up to 2008-09. Thereafter, it shows an almost declining trend. It decreased to 1.76 percent in 2013-14. The ratio had an average of 1.8 percent for the nine years period.

#### **Interest Income to Total Income**

The next component of the parameter of earning quality is the interest income as a percentage to the total income. The interest income reflects about the core operational income of any bank. The core operation of any bank is to lend money to the needy person and generate income as interest. During the study period, interest income dominates the total income of the bank. It had a major share of 96.33 percent in 2005-06 and increased to 97.38 percent in 2013-14. Hence, the bank was successfully earning its income from the core activity of lending operation.

#### **Other Income to Total Income**

The other income of any bank is in the form of fee, commissions, discounting of bills etc. The other income of Sarva Haryana Gramin Bank had a minor share in the total income. It was only 3.67 percent in 2005-06 and declined to only 2.62 percent in 2013-14. The average other income as percentage to total income was 3.32 percent for the study period.

#### **Spread (Net Interest Margin to Total Assets Ratio)**

Spread is the ratio of net interest margin to total assets of a bank. Net interest margin is the difference between the interest earned and the interest expended by a bank. As discussed earlier, the interest income is the core income of any bank; hence, the interest margin should



be positive to generate profits. Banks have to pay interest on deposits and borrowing and generate interest income on loans and advances and investments. Hence, higher rate of spread shows an efficient operation of any bank. As observed from table, the spread of Sarva Haryana Gramin Bank was 4.28 percent in 2005-06 and decreased persistently up to 2009-10. It means that the bank's profitability was declining. But it showed some signs of increase after 2009-10. It reached to the level of 3.26 percent in 2013-14. But it was still less than the level of 4.28 percent in 2005-06. The average was 3.32 percent for the nine years period.

### **Composite Result of Earning Quality Parameter**

After having discussed about all the ratios of earning quality of the Sarva Haryana Gramin Bank, it can be concluded that all the efficiency parameter i.e. operating profit to total assets, net profit to total assets and spread (net interest margin to total assets) had been declined from their value in the initial year of study period. Hence, the bank was not exploiting its total assets in a better way and losing its efficiency.

### **Liquidity Ratios**

The last parameter of the CAMEL Model is the liquidity position of any bank. A bank should have a reasonable level of liquidity to keep its operation in running condition. A poor liquidity position of a bank reflects a bad operation of the bank. This parameter measures the ability of a bank to pay its obligations and liabilities on time or when they matured. A good liquidity position of a bank indicates that the bank can pay to its depositor whenever they demand. A liquidity crunch can put a bank in a horrific condition. There are various ratios under this parameter. The following ratios are computed for this study.

#### **Liquid Assets to Total Assets**

The liquid assets include the cash in hand, balance with the RBI and balance with other banks. Liquid assets can be considered as equivalent to cash because these can be converted into cash within a short span of time. As per table, this ratio was 7.59 percent in 2005-06 and increased consistently up to 2008-09. Thereafter, it declined for next two consecutive years. Finally this ratio increased to the level of 35.86 percent in 2013-14. The average was 18.85 percent for the nine years period. The liquid assets position of the bank was good enough.

#### **Liquid Assets to Deposits**

This ratio shows the liquid assets as a percentage to the total deposits of the bank. A higher ratio indicates that the liability toward the depositors can be paid off whenever they demand withdrawn from their accounts. Initially, in 2005-06, the ratio was only 9.72 percent which cannot be considered as a good level. But the ratio was improving during the study period and finally reached from 44.67 percent in 2012-13 to 54.24 percent in 2013-14. The average was 26.82 percent. Hence, the bank reached to a good level of liquidity with regard to the liquid assets to deposits ratio.

#### **Liquid Assets to Demand Deposits**

Demand deposits of a bank have a very low maturity period. The amount of demand deposits can be withdrawn at any time without any prior notice by depositors. So, the bank has to maintain a high liquidity as against the demand deposits. As seen from table 4.37, Sarva Haryana Gramin Bank was successfully maintaining its liquidity as against the demand deposits. This ratio was 309.56 percent in 2005-06. This ratio was 2573.11 percent in 2012-

13 and increased to 2712.85 percent in 2013-14. The average ratio was 1156.09 percent for the nine years period.

### **Cash to Deposits**

A reasonable level of cash is also required to maintain the liquidity. As per table, this ratio was 1.65 percent in 2005-06 and thereafter, it was showing an almost declining trend during the study period. It decreased to only 0.54 percent in 2012-13 and again declined to only 0.44 percent in 2013-14. The average was 1.05 percent. The cash position of the bank was becoming bad during the study period.

### **Cash to Demand Deposits**

Initially, in 2005-06, the Sarva Haryana Gramin Bank had a good level of (52.53 percent) cash as against the demand deposits of the bank. But it then declined and reached to 26.19 percent in 2010-11. The ratio again increased to highest level of 54.76 percent in 2011-12. But it again declined to only 22.16 percent in 2013-14. The average was 38.54 percent for the nine years period.

### **Composite Result of Liquidity Parameter**

The inference of the above discussion about the liquidity parameter of the Sarva Haryana Gramin Bank is that the liquidity position was exhibiting a positive signs with regard to the liquid assets to total assets, liquid assets to total deposits and liquid assets to demand deposits ratio for the nine years period. But the cash position of the bank was not exhibiting a good trend as evidenced by the declining trend in the ration of cash to deposits and cash to demand deposits ratios.

### **SUMMARY AND CONCLUSIONS**

This paper attempts to analyse the performance of Sarva Haryana Gramin Bank using the Camel Model. 21 ratios are considered to analyse the performance of bank under consideration. Secondary data of 9 years period ranges from 2005 to 2014 has been collected from the annual reports of the sample bank. In a nutshell, Sarva Haryana Gramin Bank performed best in the parameter of capital adequacy followed by management quality. Third rank is given to the assets quality parameter of the bank. Liquidity parameter is at fourth rank. The bank was not performed well in the parameter of earning quality.

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