



## AN ANALYSIS OF THE PERFORMANCE OF CANARA BANK USING CAMEL APPROACH

### Commerce

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### ABSTRACT

The banking industry acts as the catalyst for development of country's economy. Performance evaluation is diagnostic process of x-raying the financial position of an institution to the stakeholders. Sound banking system is a prelude for better economic development as banking system helps in capital formation. In this article, an attempt is made to gauge out financial soundness of Canara bank as a financial intermediary through the application of CAMEL model. The data for research work is secondary and collected from annual reports of Canara bank over a period of five years. For analysing the performance of the bank various ratios and their mean, standard deviation and two tailed one sample t test are conducted. The results of the study show that Canara Bank has to strengthen its asset quality, improve its management soundness as means to enhance earnings.

### KEYWORDS

CAME model, Capital adequacy, Asset quality, Management soundness, Earning and Liquidity

### INTRODUCTION

Well being of an economy depends upon well being of its financial system. A banking sector plays a linchpin role in the financial system of the economy as it helps in channelizing the monetary resources from surplus units to the deficit units. It is widely held opinion among the academicians and practitioners engaged in banking sector that the ultimate successes of the banking business hinges upon Capital Adequacy; Asset Quality; Management Capability; Earnings and Profitability; and Liquidity. This phenomenon remains valid be it be a public sector bank, private sector bank or a foreign bank. Canara Bank is one of the oldest public sector banks owned by Government of India, having its head headquarter in Bengaluru was established at Mangalore in 1906. Since past five years the bank is facing challenges of various dimensions. In this backdrop, the authors of this paper aim to make sincere research effort to evaluate the performance of Canara Bank. For this purpose, researcher intends to adopt widely accepted model of performance evaluation i.e. CAMEL model. this article tries to put its fingers on every pie of performance evaluation of the Canara bank using five important parameters as envisaged in the CAMEL model.

CAMEL model was first developed in the 1970s by the three federal banking supervisors of the U.S, and afterwards its use has been extended, being considered as a useful tool for the supervisor authorities from different countries in order to assess the soundness of the financial institution. The banks are judged on five different dimensions under the acronym C-A-M-E-L: C – Capital Adequacy- it is the statutory minimum reserve of owner's capital which a bank or other financial institution must have maintained to absorb sudden loss; A – Asset Quality- it is the degree of financial strength and risk in a bank's assets; M – Management Soundness-it is the ability of the management to manage all parameters of the bank; E – Earnings Capacity- it refers to group of indicators which give sufficient clues ability to absorb losses without any impact on capital; and L – Liquidity- it measures banks' resilience to cash flow shocks.

### OBJECTIVES OF THE STUDY

The objectives of the study are set as follows.

1. To appraise capital adequacy of Canara Bank during the period under study.
2. To evaluate the Asset quality of Canara Bank during the period under study
3. To analysis the profitability of Canara Bank during the period under the study
4. To evaluate the liquidity position of Canra Bank during the period under study.

### HYPOTHESES

- Ho<sub>1</sub>- There is no significant difference in the mean value of CRAR  
 Ho<sub>2</sub>- There is no significant difference in the mean value of Net NPA ratio  
 Ho<sub>3</sub>- There is no significant difference in the mean value of profitability ratios

### METHODOLOGY OF THE STUDY

The present study aims to throw flood of light on various performance indicators of Canara Bank through the application of CAMEL model. The present study is entirely based on secondary data collected from annual reports of Canara bank, RBI guidelines, books, journals and websites. It aims to evaluate performance of Canara bank over a study period of five years (i.e., 2012-13 to 2016-17). The collected data is systematically classified, tabulated, analysed and interpreted. Various statistical tools like mean and standard deviations are used. For the purpose of hypothesis testing, one sample t test is used. The value of one sample t test computed through Excel software.

### RESULTS AND DISCUSSION

The researcher has applied the below mentioned chronology for results and discussion:-

- Capital adequacy analysis
- Asset quality analysis
- Management soundness analysis
- Earnings and profitability analysis; and
- Liquidity analysis.

### 1. CAPITAL ADEQUACY ANALYSIS

Capital Adequacy Ratio (CAR) is a ratio of capital fund to risk weighted assets expressed in percentage terms. The bank capital fund has two tiers Tier-I and Tier-II. While Tier-I capital (known as core capital or going-concern capital) provides the most permanent and readily available for the bank against unexpected losses. Tier-II capital also known as Gone-concern capital is the capital which will absorb losses only in a situation of liquidation of the bank. The banks are required to maintain capital adequacy ratio as specified by RBI from time to time. As per the latest RBI norms, the banks in India should have 9% to risk weighted assets (RWA) on an ongoing basis, out of which the Tier-1 capital must be at least 7% to RWA on ongoing basis. Higher the capital adequacy ratio, stronger is considered a bank; as it ensures high safety against bankrupt. The Capital adequacy ratio of the Canara Bank under the study period is given in the table 1

**Table 1: Year wise analysis of Trends in CRAR**

Amt. in Rs. Crore

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17	Mean	S.D
Risk-weighted Assets	2,43,348	3,12,226	3,42,248	3,33,869	3,38,999	3,14,138	41,269
Tier I Capital	23776	23991	27459	29372	33122	27,544	3,914
Tier-I (%)	9.77	7.68	8.02	8.80	9.77	8.81	0.97
Tier –II Capital	6388	9205	8678	7633	10,472	8,475	1,551
Tier-II (%)	2.63	2.95	2.54	2.28	3.09	2.70	0.32
Total Capital	30,164	33,196	36,137	37,005	43,594	3,60,19	5,015
CRAR%	12.40	10.63	10.56	11.08	12.86	11.51	1.06

Source: Annual Reports of CANARA bank

The table no-1 reveals the year wise information about capital to risk weighted assets ratio of Canara bank during the study period. It is clear from the about table that, there is socialisation in the CRAR found under study. According to RBI guidelines every Indian banking entity has to maintain a CRAR above 9% to reflect better risk coverage. Viewed from this angle Canara bank capital adequacy is found satisfactory as its CRAR is greater than stipulated norms all the years under study. Further, it is noticed that there is a downward trend in the initial study period of years (2012-13-12.40%; 2013-14-10.63% and 2014-15- 10.56%). Thereafter, there is an upward movement in this ratio, during the later years of the study period (i.e.2015-16-11.08% and 2016-17-12.86%). This may be ascribed to the infusion of equity capital in the later years. In the ultimate analysis, it can infer that banks risk absorbing capacity is better due to higher CRAR.

Ho<sub>1</sub>- There is no significant difference in the mean value of CRAR**Test results**

Calculated t value	Critical t value	Accept / Reject
24.320	2.776	Reject

Level of significance 0.05,

Results of the hypothesis testing revealed that calculated t value is greater than critical t value (24.320 > 2.776). Hence, null hypothesis is rejected. Therefore, there is significant difference in mean value of CRAR.

**2. ASSETS QUALITY ANALYSIS**

Asset quality which is concerned to the left-hand side of the bank balance sheet reflects the quality of credit risk associated with a particular asset. It is one of the most critical areas in determining the overall condition of a bank. The primary factor affecting overall asset quality is the quality of the loan portfolio and the credit administration programme. Loans typically comprise a majority of bank assets and carry the greatest amount of risk to their capital. NPA ratio is the one of the most important tool to measure the quality of the asset of a bank. The NPA amount and its ratio to advance outstanding of the Canara Bank under the study period is given in the table 2

**Table 2: NPA Movement Analysis**

Amt. in Rs. Crore

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17	Mean	S.D
Gross NPA	6,260	10,574	13,040	31,638	34,202	19,143	12,841
Gross NPA Ratio To advance o/s (%)	2.57	2.49	3.89	9.40	9.63	5.60	3.62
Net NPA	5,278	7,556	8740	20833	21649	12,811	7801
Net NPA Ratio to advance o/s (%)	2.18	1.98	2.65	6.42	6.33	3.91	2.26

Source: Annual Reports of CANARA bank

Table 2 provides the year wise information about NPA movements of Canara Bank during the study period. It is clear from the above table that, there is continues increase in NPA amount found during the study period. The Net NPA of the bank was Rs.5,278 crore in the year 2012-13 grown highest to Rs.20,833 crore in the year 2016-17; which contributes 6.33% to its advance outstanding is not a good sign for the bank.

Ho<sub>2</sub>- There is no significant difference in the mean value of Net NPA ratio**Test results**

Calculated t value	Critical t value	Accept / Reject
3.867	2.776	Reject

Level of significance 0.05,

Results of the hypothesis testing revealed that calculated t value is greater than critical t value (3.867 > 2.776). Hence, null hypothesis is rejected. Therefore, there is significant difference in mean value of Net NPA ratio.

**Table 3:NPA COMPOSITION**

Amt. in Rs. Crore

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17	Mean	S.D
Gross Advances	2,42,435	3,03,431	3,34,947	3,36,548	3,55,303	3,14,533	44,399
Sub-Standard	4,279	3,436	7,076	17,390	8016	8,039	5561
Doubtful	1,932	4,134	5,964	14,248	26,186	10,493	9,932
Loss	49.83	NIL	NIL	NIL	586.80	NA	NA
Provision coverage ratio (%)	61.35	60.11	57.29	50.11	55.62	56.62	4.42

Source: Annual Reports and financial highlights of CANARA bank

It is noticed from the NPA composition table that there is increasing trend experienced by substandard and doubtful assets during the study period. This phenomenon may be due to poor recovery management. Consequent to this, the bank's provisioning coverage ratio stood at 56.62 during the five years of the study period. It is also observed from the above table that there is continuous slippage of sub standard assets to doubtful assets from year to year during the study period.

**Table 4:SECTOR-WISE NPA OUTSTANDING**

Amt. in Rs. Crore

Year	2013-14		2014-15		2015-16		2016-17		Mean	S.D
Sector	Amou nt	%	Amo nt	%	Amo nt	%	Amo nt	%	In %	
Micro & Small Ent.	1,727	23%	3,048	23%	4,663	15%	5,558	16%	3000	4.43
Agriculture	979	13%	1,410	11%	2,159	7%	2,757	8%	1,826	2.75
Other priority sector	250	3%	380	3%	588	2%	555	2%	443	0.58
Medium industries	389	5%	829	6%	1,483	5%	1,336	4%	1,009	0.82
Large industries	3,279	43%	5,815	45%	18,037	57%	18,286	53%	11,354	6.61
Other Non priority	946	12%	1558	12%	4,708	15%	5,710	17%	3,231	2.45
Total	7,570	100%	13,040	100%	31,638	100%	34,202	100%	21,612	15.54

Source: Annual Reports of CANARA bank

The table no.4 crystallises the year wise composition of gross NPA period under reference. It is clear from the above table that there is decreasing trend experienced in relation to Micro & Small Entrepreneurs', agriculture and other priority sector; whereas, increasing trend is noticed in relation to Large industries and other non priority sector over the study period. The major chunk of NPA hails from loans extended to large industry sector and other non priority sector. This may probably partly due to mismatch between cash generation pattern of the large unit and size and date of repayment

scheduled fixed by the bank and partly due to inclusion of rescheduled accounts.

### 3. MANAGEMENT SOUNDNESS ANALYSIS

Sound management is one of the most important factors behind financial institutions' performance. The Canara bank is having various committees in order to manage its business. The following are key committees:

- Risk Management Committee
- Management Committee
- Audit Committee
- Credit Approval Committee
- Operational Risk Management Committee
- Asset Liability Management Committee

The bank has setup a Customer complaints Management system for redressal of customer complaints. It is found that bank had satisfactorily redressed during the study period. The Bank is taking several measures to improve customer service by bringing in diversified products/services, updated technology, staff training and responding to customer queries and redressal of customer complaints.

### 4. EARNINGS AND PROFITABILITY ANALYSIS

The financial key ratios of the bank i.e. yield on advances, Net Interest Margin (NIM), Return on Average Assets and Return on equity, which are indicating the financial health of the company are showing decreasing trend from the last five years. This is because of the poor scaling up of business, large provisioning during the study period for NPA and problems in recovering delinquent portfolio.

**Table 5: Trends in Key Financial Ratios**

Ratio%	2012-13	2013-14	2014-15	2015-16	2012-13	Mean	S.D
Yield on Advances	11.13	10.54	10.7	9.71	8.99	10.21	0.86
Yield on Investments	8.12	8.03	8.00	7.92	7.75	7.96	0.14
Net Interest Margin	2.40	2.27	2.25	2.19	2.23	2.27	0.08
Return on Average Assets	0.77	0.54	0.55	(0.52)	0.20	0.31	0.51
Return on Equity	14.04	10.59	11.06	(10.69)	4.15	5.83	9.91

Source: Annual Reports of CANARA bank

$H_0$  - There is no significant difference in the mean value of profitability ratios

#### Test results

Profitability ratios	Calculated t value	Critical t value	Accept / Reject
Yield on Advances	26.668	2.776	Reject
Yield on Investments	127.755	2.776	Reject
Net Interest Margin	63.792	2.776	Reject
Return on Average Assets	1.361	2.776	Accept
Return on Equity	1.315	2.776	Accept

Level of significance 0.05,

Results of the hypothesis testing revealed that calculated t value is greater than critical t value in the ratios of Yield on Advances, Yield on Investments, Net Interest Margin (26.668, 127.755, 63.792 > 2.776). Hence, null hypothesis is rejected and there is significant difference in mean value of these ratios, whereas, null hypothesis is accepted in case of ratios Return on Average Assets and Return on Equity as their values are less than the critical t values. Therefore, there is no significant difference in mean value of these ratios.

### 5 LIQUIDITY ANALYSIS

Measuring and managing liquidity needs are vital for effective operation of any commercial bank. Based on RBI directives, the Bank has set up an internal Asset Liability Management Committee (ALCO) headed by C&MD or ED of the Bank. The other members of the Committee include the Senior Executives of the Bank. The scope of ALCO functions is as follows:

- a) Liquidity risk management
- b) Management of market risk
- c) Trading risk management
- d) Funding and capital Planning
- e) Profit Planning & Growth Planning

The ALCO deliberates in detail over the liquidity position and the impact of changes in the interest rates of both assets and liabilities on the Net-Interest Income.

**Table 6: Statement of Structural Liquidity**

Amt. in Rs. Crore

Buckets	2013	2014	2015	2016
<b>Cash inflows A</b>				
1day	6558	11258.23	20947.2	20576
2-7day	9206.78	17646.28	15757.5	9672.98
8-14day	8941	12649.91	11701.17	11684.71
15-28day	13399.15	19132.42	51893.58	13745.7
29 days -3 months	38377.47	30659.36	44801.66	25618.7
3-6 months	27562.73	28857.13	29114.49	28554.2
6-1year	44135.67	50929.1	63135.6	41003
1-3year	74469.33	92522.8	105713	124565
<b>Cash outflows B</b>				
1day	7856.79	10105.9	6032.55	7298.67
2-7day	12886.34	32225.65	19036.53	25169.79
8-14day	8489.45	14250.9	15381.56	138492.9
15-28day	9552.03	15895.81	18863.63	19931.81
29 days -3 months	53480.36	51408.08	61274.66	33424.6
3-6 months	26685.38	261086.4	47661.08	54944.6
6-1year	83806.02	134862.3	143842.4	93971
1-3year	60572.21	140070	174866.2	201175.9
<b>GAP analysis A-B</b>				
1day	-1298.79	1152.33	14914.65	13277.33
2-7day	-3679.56	(14579.4)	(3279.03)	(15496.8)
8-14day	451.83	(1600.99)	(3680.5)	(2165.19)
15-28day	3847.12	3236.61	33029.95	(6186.1)
29 days -3 months	-15,102.89	(20748.72)	(16473)	(7805.9)
3-6 months	877.35	(232229.3)	(18546.59)	(26390.4)
6-1year	-39670.35	(83933.2)	(80706.8)	(52968)
1-3year	13897.12	(47547.12)	(69153.2)	26663

Source: Annual Reports of CANARA bank

The statement of Structural Liquidity of the bank clearly indicates that the bank maintained sufficient liquidity assets during the Three years. The negative figures in 2 to 7 days, 8 to 14days, 29 to 3 months and 3 to 6 months are due to allocation of core and volatile deposits in the buckets.

#### Conclusion;

The Canara bank assets and liabilities have been analysed in details under five parameters as propounded under CAMEL model to know the financial viability of the bank. The results of the analysis carried out by the researcher in the preceding pages reveals that the bank performance is found satisfactory in terms of capital adequacy and liquidity. But the performance of the bank is found not so encouraging in relation to asset quality, earnings and profitability and management ability. Hence, it is imperative for the bank to think strategically to initiate robust actions to handle delinquent portfolio. Though, the bank has managed its capital adequacy ratio well but it should not make it to feel complacent because it requires meticulous marshalling of asset quality to safeguard further deterioration in the asset quality. If the bank dwindles to do so it may face liquidity problems. The study also brought to the limelight that profitability position of the bank is found deteriorating during the study period as reflected by decreasing values of various profitability ratios. This may be due to multiple causative factors such as poor scaling up of business, large provisioning during

the period for NPA and problems in recovering delinquent portfolio. The bank has huge slippages in standard assets to doubtful and loss assets in the study period due to failure to detect and control the NPA by sensing the symptoms bit early. Therefore, the management of Canara Bank must pay special attention towards the NPA management and take appropriate steps to ligate the creation of new NPAs and making recoveries in the existing NPAs. It is better for Canara Bank to be adept to adopt to the changing banking business environments by initiating time warranting strategies.

#### References:

1. Master Circular on Basel III Capital Regulations, Part A: Guidelines on Minimum Capital Requirement by RBI  
<https://rbidocs.rbi.org.in/rdocs/content/pdfs/58BS300685FL.pdf>.
2. Jaspreet Kaur1, Manpreet Kaur2 and Dr. Simranjit Singh3., "Financial Performance Analysis of selected Public Sector Banks: A CAMEL model Approach. Online journal J A B E R, Vol. 13, No. 6 (2015): 4327-4348.
3. R. Shyam Prasad and R. Sreenath., " Performance analysis of three public sector Banks in India using Camel Model. International Journal of Advanced Scientific Research & Development. Vol.03, Spl. Iss. 03, Ver. I, Sep'2016, pp. 16 – 29.
4. Golam Mohiuddin, "Use of CAMEL Model: A Study on Financial Performance of Selected Commercial Banks in Bangladesh". Universal Journal of Accounting and Finance2(5): 151-160, 2014.
5. Rekha Rao Subraveti and Dr. Niranjana Reddy P. "An Analysis of the Performance of Selected Public Sector Banks using CAMEL Approach". Abhinav National Monthly Refereed Journal of Research in Commerce & Management Volume 4, Issue 10 (October, 2015)
6. B.Selvarajan & Dr. G. Vadivalagan, A Study on Management of Non Performing Assets in Priority Sector reference to Indian Bank and Public Sector Banks (PSBs). Global Journal of Management and Business Research, Volume 13 Issue 1 Version 1.0 Year 2013.
7. R Gandhi, D. S. Rawat and Munesh Khanna, "Growing NPAs in banks Efficacy of credit rating agencies". ASSOCHAM India, May 2014.
8. Angeela Roman and Alina Camelia Sargu, "Analysing the Financial Soundness of the Commercial Banks in Romania: An Approach Based on the Camels Framework" Procedia Economics and Finance 6 (2013) 703 – 712
9. Jonathan Golin, Philippe Delhaise, "The Bank Credit Analysis Handbook: A Guide for Analysts, Bankers and Investors"
10. Kaushal Bhatt, " Performance Evaluation of Commercial Banks Through Camel Approach "A Comparative study of selected Public, Private and Foreign banks working in India" 2012
11. Adam Geršl and Jaroslav Heřmánek, "Financial Stability Indicators: advantages and disadvantages of their use in the assessment in Financial Stability" FSR 2006
12. Annual Reports: Annual Reports of CANARA bank for the year 2014, 2015, 2016 and 2017.
13. Reports of Performance highlights of CANARA bank for the year 2014, 2015, 2016 and 2017.
14. Asset Quality (3/12), RMS Manual of examinations policies Federal Insurance Corporation.