

Research Paper

Finance

Capital Adequacy Determinants and Profitability of Selected Indian Commercial Banks

J.Kumar Research Scholar, Sathyabama University, Chennai 600 119.

Dr. R. Thamil
Research Supervisor at Sathyabama University

Research Supervisor and Associate Professor, Faculty of Management studies, Sathyabama University, Chennai 600 119.

ABSTRACT

Banking institutions in our country have been assigned a significant role in financing the process of planned economic growth. In 1969, 14 banks were nationalized with the objective of extending credit facilities to all segments of the economy and also to mitigate seasonal imbalances in their availability. The study aims at identify the impact of capital

adequacy and profitability of commercial bank in India from April 1, 2009 to March 31, 2014. The data are taken for the study are Capital Adequacy, Debt Equity, Advances to Assets and Government Securities to Investment and Earning Quality in which, Spread to Total Assets, Net Profit to Average Assets, Non-interest Income to Total income are been evaluated. The result and findings are discussed in this paper.

KEYWORDS: Capital Adequacy, Debt-Equity, Advances to Assets, Commercial banks, Spread, Interest income and Non-interest income.

INTRODUCTION

A commercial bank is basically a collection of investment capital in search of a good return. The bank – the building, people, processes and services – is a mechanism for drawing in more capital and allocating in a way that the management and board believe will offer the best return. By allocating capital efficiently, and to provide good service to its customers and good returns to its investors to continue to be successful. The Commercial banks are in the business of providing banking services to individuals, small businesses and large organizations. While the banking sector has been consolidating, it is worth noting that far more people are employed in the commercial banking sector than any other part of the financial services industry.

The capital adequacy requirement affects the monetary transmission mechanism. If some firms are bank dependent, their responsiveness of loan supply to change in monetary policy determines the strength of the transmission mechanism. The adequate capital was regarded as the amount of capital that can effectively discharge the primary capital function of preventing bank failure by absorbing losses. Basel committee appointed by BIS formulated rules and relation for effective supervision of the central banks. It is prescribed international norms to be followed by the central banks. This committee prescribed norms in order to protect the inters of the customer. Profitability is the ability to make profit from all the business activities of an organization, company, firm, or and enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. It measuring the profitability of a bank, bank regulators and analysts have used Return On Assets and Return on Equity to asses in industry performance and forecast trends in market structure as inputs in statistical models to predict bank failure and failures and mergers and for a variety of other purposes where a measure of profitability is desired.

OBJECTIVES OF THE STUDY

- 1. To find the impact of Capital Adequacy method and
- 2. To evaluate the relative profitability of selected Indian commercial banks.

METHODOLOGY

It is an evaluatory type of research relates with capital adequacy and earning capacity model. There are eight top leading banks of public sector and private sector banks, based on the Total Assets. The State Bank of India, Bank of Baroda, Industrial credit and Investment corporation of India Bank, Punjab National Bank, Bank of Baroda, Canara Bank, Development Finance Corporation Bank and Axis Bank for the period from April 1, 2008 to March 31, 2014. The data has been collected from the various banks annual reports and RBI website.

- **1. Capital Adequacy Model:** Capital adequacy determine how well financial institutions can cope with shocks to their Balance sheets. It is useful to track capital adequacy ratios that take into account the most important financial risks.
- 1. Capital adequacy ratio: It is a measure of the financial strength of a bank. The ratio of total capital as a share of total Assets reelects the ability of a bank to absorb the unanticipated losses .This ratio is positively related to the financial soundness of the bank, thus it is negatively related with a possible failure. Capital Adequacy Ratio=Tier One Capital + Tier Two Capital/ Risk Weighted Asset x100.lt is clear that ICICI Bank has the most favored capital adequacy ratio i.e 18.74% in the year 2012-2013 and the same bank for 2013 -14 the ratio is 17.70 % compared to other various banks. All the commercial banks maintained the RBI requirements norms of 10%. The higher ratio indicates the good position of the banks.
- 2) **Debt Equity Ratio**: This ratio indicates the degree of leverage of a bank. It is how much of the bank business is financed through debt and how much through equity. It is the proportion of total outside liability to net worth. Debt Equity Ratio= Debt (Borrowings + Total Deposits)/Equity x 100. The higher ratios indicate less protection for the creditors and depositors in the banking system. The Bank of India and Bank of Baroda are most expanding business i.e. 15.9 % and 15.94 in 2013-14. The ICICI Bank is lower debt i.e 4.53% in 2013-14 and the several years and the lower debt ratio is good for sign for a bank
- **3) Advances to Assets :**This ratio indicates banks aggressive in lending which ultimately results in better profitability. Higher ratio of Advances/Deposits including receivables is preferred to a lower one. Advances to Assets Ratio= Total Advances/ Total Assets x 100. It shows that ratio is highest i.e. 67.50% of State Bank of India for the year 2013-14. State Bank of India is better profitability. The lowest at 2007-08 i.e. 48.90% of ICICI Bank below the Bank average.
- **4) Government Securities to Investment:** The government securities are considered as the safest instrument, which as results carries the lowest return. It shows the risk taking ability of a bank. Government Sec toTotal Investment= Government Securities/ Total Investment x100. It is very clear that all the banks had more than 55% of their investment as Government securities. The Banks strategy to have high profit, high risk or low profits, low risk. The ICICI bank lowest ration in 2013-14 i.e. 56.12% it implies the major part of its funds were diverted. The Bank of India in 2013-14 highest ratio 87.10% and several years.
- **2. Earning Quality:** This parameter lays importance on how a bank earns its profits. It also explains the sustainability and growth in earn-

ings in future. Some of the ratio to assess the earning capacity of the banks were spread to Total Assets, Net Profit to Average Assets, Interest Income to Total Income and Non-Interest Income to Total Income.

- **1. Spread to total Assets:** The higher are banks profit margins and more stable in the banking sector. The interest income includes dividend income and interest expended includes interest paid on deposits, loan from the RBI, and other short term and long term loans. Spread to Total Assets= Spread/ Total Assets x 100. The HDFC Bank in 2013-14 and other year higher spread indicates better earning capacity of the bank i.e. 3.76%.A higher ratio points towards better earning quality to the given total assets. The lowest ratio of Bank of Baroda in 2013-14 i.e. 1.81% compared to other banks. The management has taken care of the capital structure of the banks as they depend more on the cheaper form of debt.
- 2. **Net Profit to Average Assets Ratio**: This ratios measures return on assets employed or the efficiency in utilization of assets. It is arrived by dividing the net profits and by average assets.Net Profit to Average Assets=Net Profit/ Average Assets x100.

It is clear that the HDFC Bank higher ratio shows the earnings capacity of the assets in the year 2013-14 i.e. 1.72%. The Canara Bank lowest ratio of 0.50% in 2013-14. It indicates inefficient and incompetent performance of the bank.

- **3. Interest Income to Total Income:** This ratio shows the bank's ability in generating income from its lending activities. The ability of the bank in generating income from its lending activities. Interest Income to Total Income= Interest Income/ Total Income x100.The Canara Bank is the highest as the bank income i.e 90.96% for the year 2013-14. The measure the income from lending operations as a percentage of the total income generated. The lowest percentage ratio of Axis Bank for the year 2013-14 i.e. 80.54%. All the banks are maintained the good level of revenues.
- **4. Non-Interest Income to Total Income:**The Non-Interest income to total income, net profit on sale of land, building and other assets and net profit(loss) on exchange transaction and other miscellaneous incomes etc. Non-Interest Income to Total Income= Non-Interest Income/ Total Income x100. The Axis Bank the higher percentage ratio i.e. 19.42% for the year 2013-14. It helps to determine the ability of the bank to earn revenue from other than the core activities of banks. The lowest ratio of Punjab National Bank in 2013-14 i.e. 9.04% compared to the other banks it would become a burden for the banks

CONCLUSION

In the capital adequacy model that ICICI Bank has the most favored capital adequacy ratio compared to other various banks. All the commercial banks maintained the RBI requirements norms of 10%. The debt equity ratio is high the banking institution highly levered from other firms and fund coming from deposits. The higher ratio indicate less protection for the creditors and depositors in the banking system. The Bank of India and Bank of Baroda are most expanding business. The advances to Assets the State Bank of India is better profitability satisfactory. All the banks had more than 55% of their investment as Government securities. The ICICI bank lowest ratio implies the major part of its funds was diverted. The earning capacity method, Spread to Total Assets the HDFC Bank higher spread indicates better earning capacity of the bank. The Net Profit to Average Assets the HDFC Bank higher ratio shows the earnings capacity of the assets and Canara Bank the inefficient and incompetent performance of the bank. All the banks performance are satisfactory in their Interest Income to Total Income. The Non-Interest Income to Total Income Axis Bank the higher percentage ratio. It helps to determine the ability of the bank to earn revenue from other than the core activities of banks. We conclude that the commercial banks in India overall performing well.

ANNEXURE

Table 1.1 Showing Capital Adequacy Ratio

Capital Adequacy Ratio (%)									
Banks	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14			
SBI	14.25	13.39	11.98	13.86	12.92	12.96			

BOB	14.05	14.36	14.52	14.67	13.30	12.28
ICICI	15.33	19.41	19.54	18.52	18.74	17.70
PNB	14.30	14.16	12.42	12.63	12.72	12.29
BOI	13.01	12.94	12.17	11.95	11.02	10.76
CB	14.10	13.43	15.38	13.76	12.40	11.14
HDFC	15.69	17.44	16.22	16.52	16.80	16.10
AXIS	13.69	15.80	12.65	13.66	17.00	16.07

Source: Bank Annual Reports from 2008-09 to 2013-14

Debt Equity Ratio (%)							
Banks	2008-09	2009- 10	2010-11	2011-12	2012-13	2013-14	
SBI	12.81	12.19	14.37	12.43	12.16	11.79	
BOB	14.99	15.96	14.51	14.01	14.82	15.81	
ICICI	4.42	3.91	4.10	4.23	4.39	4.53	
PNB	2.89	1.33	1.49	3.82	5.01	12.58	
BOI	14.99	15.96	14.51	14.01	14.82	15.94	
CB	18.62	18.71	16.39	15.86	14.30	14.20	
HDFC	9.75	7.78	8.22	8.24	8.81	8.45	
AXIS	11.49	8.81	9.96	9.95	7.63	7.35	

Table.1.2 Showing Debt Equity Ratio

Source: Bank Annual Reports from 2008-09 to 2013-14

Table 1.3 Showing Advances to Assets

Advanc	Advances to Assets Ratio (%)									
Banks	2008- 09	2009-10	2010-11	2011- 12	2012-13	2012-13				
SBI	56.25	59.66	61.84	64.96	66.76	67.50				
BOB	63.32	62.89	63.81	64.24	59.98	60.20				
ICICI	57.56	49.86	53.26	53.57	48.90	56.96				
PNB	62.65	62.91	63.99	64.12	64.47	63.46				
BOI	63.37	61.28	60.68	64.71	63.93	63.00				
CB	62.93	63.96	63.22	62.14	58.73	60.13				
HDFC	53.95	56.56	57.68	57.83	59.88	61.64				
AXIS	55.21	57.76	58.67	59.43	57.84	60.03				

Source: Bank Annual Reports from 2008-09 to 2013-14

Table.1.4 Showing Government Securities to Investment

Governi	Government Securities to Investment Ratio (%)								
Banks	2008- 09	2009- 10	2010-11	2011-12	2012-13	2013-14			
SBI	83.95	81.68	80.80	84.99	79.13	82,40			
BOB	82.58	85.89	87.62	87.29	87.40	86.52			
ICICI	67.80	61.20	51.18	57.42	56.46	56.12			
PNB	86.87	85.66	84.39	82.26	83.87	79.49			
BOI	89.14	91.59	82.37	86.78	87.33	89.10			
CB	88.95	90.84	85.51	87.43	84.61	85.41			
HDFC	88.68	87.18	75.13	78.19	76.12	79.76			
AXIS	60.70	47.88	61.83	63.18	64.02	61.54			

Source: Bank Annual Reports from 2008-09 to 2013-1

Table. 2.1 Showing Spread to Total Assets

Spread	Spread to Total Assets Ratio (%)									
Banks	2008- 09	2009- 10	2010-11	2011-12	2012-13	2013-14				
SBI	2.16	2.25	2.66	3.24	2.83	2.75				
BOB	2.25	2.13	2.46	2.31	2.07	1.81				
ICICI	2.21	2.23	2.22	2.27	2.58	2.77				
PNB	2.85	2.87	3.12	2.93	3.10	2.93				
BOI	2.44	2.09	2.22	2.16	1.99	1.89				
CB	2.15	2.15	2.33	2.06	1.91	1.82				
HDFC	4.04	3.77	3.82	3.64	3.96	3.76				
AXIS	2.50	2.77	2.70	2.81	2.84	3.12				

Source: Bank Annual Reports from 2008-09 to 2013-14

Table.2.2Showing Net Profit to Average Assets

Net Pro						
Banks	2008- 09	2009-10	2010-11	2011-12	2012-13	2013-14
SBI	0.95	0.87	0.68	0.88	0.90	0.60
BOB	0.98	1.10	1.18	1.12	0.82	0.69
ICICI	0.99	1.11	1.27	1.36	1.55	1.65
PNB	1.25	1.32	1.17	1.07	0.99	0.61
BOI	1.33	0.63	0.71	0.70	0.61	0.48
CB	0.94	1.14	1.20	0.88	0.70	0.50
HDFC	1.23	1.33	1.45	1.53	1.69	1.72
AXIS	1.23	1.39	1.40	1.49	1.52	1.62

Source: Bank Annual Reports from 2008-09 to 2013-14

Table.2.3Showing Interest Income to Total Income

Interest Income to Total Income Ratio (%)								
Banks	2008- 09	2009-10	2010-11	2011- 12	2012-13	2013-14		
SBI	83.41	82.59	83.72	88.13	88.18	88.02		
BOB	84.55	85.61	88.62	89.66	90.65	89.72		
ICICI	80.35	77.47	79.62	81.72	82.76	80.90		
PNB	86.88	85.76	88.19	89.66	90.86	90.43		
BOI	84.22	87.23	89.17	89.56	89.44	89.83		
CB	88.11	86.78	89.51	91.33	91.53	90.96		
HDFC	83.23	80.94	82.13	83.88	83.65	83.86		
AXIS	78.90	74.68	76.59	80.23	80.58	80.54		

Source: Bank Annual Reports from 2008-09 to 2013-14

Table.2.4 Showing Non-Interest Income to Total Income

Non-Interest Income to Total Income ratio (%)								
Banks	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
SBI	16.59	17.41	16.28	11.87	11.82	11.98		
BOB	15.45	14.39	11.38	10.34	9.35	10.28		
ICICI	19.65	22.53	20.38	18.28	17.24	19.10		
PNB	13.12	14.24	11.81	10.34	09.11	09.57		
BOI	15.66	12.77	10.83	10.44	10,56	10.17		
CB	11.89	13.22	10.49	08.67	08.47	09.04		
HDFC	17.51	19.06	18.90	16.12	17.02	16.32		
AXIS	20.10	21.10	25.32	23.41	19.77	19.42		

Source: Bank Annual Reports from 2008-09 to 2013-14

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