Financial Performance Evaluation of Private And Public Sector Banks With Reference To Capital Adequacy Ratio

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ABSTRACT

After implementation of BASEL – I and BASEL – II norms and being prepared for BASEL – III, it is very important for any banking system to understand and analyze the financial performance with respect to capital adequacy ratio. In this research paper researchers are analyzing capital adequacy of private and public sector banks of India by taking financial ratios of two parameters indicating capital adequacy of commercial banks. It includes capital adequacy ratio (Tier – I) and capital adequacy ratio (Tier – II). Analysis of data indicates that there is significance difference in financial performance with respect to capital adequacy ratio in four types of banks i. e. SBI and it's associates banks, nationalized banks, old private and new private sector banks.

KEYWORDS	BASEL norms, Capital adequacy ratio, Private banks, Public banks, Financial performance.

INTRODUCTION

For analyzing the financial performance of private and public sector banks with reference to capital adequacy ratio two basic parameters has been selected for comparing and analyzing the same. These parameters are capital adequacy ratio (Tier - I) and capital adequacy ratio (Tier – II). In financial year 2012 -13 all private sector banks (20) include old private sector banks (13) and new private sector banks (7) as well as all public sector banks (26) include SBI and its' associates (6) and nationalized banks (20) will be taken into consideration for analysis. For analysis purpose all 46 banks has been primarily divided into two parts i. e. private sector banks and public sector banks, which has been further divided into four parts i.e. Old private sector banks, New Private sector banks, SBI and it's associates and nationalized banks.

LITERATURE REVIEW

Jain (2006), in his article titled, "Ratio Analysis: An Effective Tool for Performance Analysis in Banks" discussed various ratios relating to profitability of the banks. The author classified the various ratios under three categories, viz. Costing Ratio, Returns / Yield Ratio and Spread Ratios.

Arora and Kaur (2006) made an attempt to review the performance of banking sector in India during the post-reforms period. Banking sector being an integral part of Indian financial system has undergone dramatic changes reflecting the ongoing economic and financial sector reforms.

Gajera & Pithadia (2013) in their article titled "A Comparative Financial Analysis of Indian Banking Sector In Context of NPA Management" attempt to analyze and compare the financial performance of private, public and foreign sector banks.

Gajera & Pithadia (2014) in their article titled "Employees efficiency analysis of private & public sector banks of India" attempt to analyze and compare the financial performance of private and public sector banks.

OBJECTIVES

Analysis of this research paper has been carried out with following objectives.

- To analyze the capital adequacy with the help of selected parameters of private & public sector banks
- To compare capital adequacy of private & public sector

banks by further dividing public sector banks into SBI and it's associates and nationalized banks & public sector banks into old private sector banks and new private sector banks.

HYPOTHESIS OF THE STUDY

Analysis of this research paper has been done with the help of below mention statistical hypothesis.

H_o = There is no significance difference in the mean value of selected two parameters of capital adequacy in between four types of banks during selected time period. ($\mu_1 = \mu_2 = \mu_3 = \mu_4$)

H_o = There is no significance difference in the mean yearly value of selected two parameters during ten different years of four types of banks. ($\mu_1 = \mu_2 = \mu_3 = \ldots\ldots = \mu_{12}$)

RESEARCH DESIGN

The Sample

The universe of the study consist all the public and private sector banks. For this research paper all public and private sector banks has been taken into consideration which are divided into four main categories.

1. Public sector banks

 - SBI and it's Associates banks

 - Nationalized banks

2. Private sector banks

 - Old Private Sector banks

 - New Private Sector banks

The Data Collection and period of the Study

To attain mention objectives from time period 2001-02 to 2012-13 has been collected from RBI and DBIE website for selected capital adequacy parameters.

Tools and Techniques

For analyzing capital adequacy ratio analysis tool of accounting has been used.

For comparing capital adequacy between different sector banks one of the tools of inferential statistics, Anova F – test

has been used for analyzing difference in performance.

DATA ANALYSIS & INTERPRETATION
Capital adequacy ratio (Tier – I)

Table – 1 Capital adequacy ratio (Tier – I)

Year	Public Sector Banks		Private Sector Banks	
	SBI & Its Associate Banks	Nationalized Banks	Old Private Sector Banks	New Private Sector Banks
2012-13	9.043	9.109	12.341	11.907
2011-12	9.383	9.045	12.458	12.079
2010-11	8.708	9.037	15.352	12.270
2009-10	8.572	8.217	13.782	12.614
2008-09	7.943	8.087	14.542	10.923
2007-08	7.432	7.511	14.005	10.567
2006-07	7.763	8.150	11.820	7.903
2005-06	8.575	9.070	10.172	7.677
2004-05	7.985	7.812	9.477	8.303
2003-04	8.090	8.100	9.873	8.420
2002-03	8.170	8.465	9.909	8.459
2001-02	8.293	9.135	9.722	7.799

Sector to sector difference

H_0 = There is no significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – I). ($\mu_1 = \mu_2 = \mu_3 = \mu_4$)

H_1 = There is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – I). ($\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$)

Year to year difference

H_0 = There is no significance difference in the financial performance of SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – I). ($\mu_1 = \mu_2 = \mu_3 \dots = \mu_{12}$)

H_1 = There is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – I). ($\mu_1 \neq \mu_2 \neq \mu_3 \dots \neq \mu_{12}$)

Table – 2 Anova Analysis

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Years	49.08870917	11	4.462609925	2.92377	0.00837246	2.093254
Types of Banks	101.907897	3	33.96929901	22.2557	4.5905E-08	2.891563
Error	50.36851877	33	1.526318751			
Total	201.365125	47				

Interpretation

F value (22.255) is higher than F critical value (2.891) indicate that there is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – I).

F value (2.923) is higher than F critical value (2.093) indicate that there is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – I).

Capital adequacy ratio (Tier – II)

Table – 3 Capital adequacy ratio (Tier – II)

Year	Public Sector Banks		Private Sector Banks	
	SBI & Its Associate Banks	Nationalized Banks	Old Private Sector Banks	New Private Sector Banks
2012-13	4.052	4.101	1.781	4.123
2011-12	3.880	3.849	1.725	4.119
2010-11	4.228	4.458	1.729	4.011
2009-10	4.930	4.971	2.279	4.783
2008-09	5.377	5.051	1.735	4.416
2007-08	5.438	4.331	1.877	3.906
2006-07	4.448	4.132	2.196	4.733
2005-06	3.463	3.230	2.493	4.126
2004-05	4.370	5.036	3.389	4.081
2003-04	4.118	6.543	3.130	4.266
2002-03	4.070	4.657	3.151	4.107
2001-02	4.453	4.409	2.982	4.169

Sector to sector difference

H_0 = There is no significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – II). ($\mu_1 = \mu_2 = \mu_3 = \mu_4$)

H_1 = There is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – II). ($\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$)

Year to year difference

H_0 = There is no significance difference in the financial performance of SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – II). ($\mu_1 = \mu_2 = \mu_3 \dots = \mu_{12}$)

H_1 = There is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – II). ($\mu_1 \neq \mu_2 \neq \mu_3 \dots \neq \mu_{12}$)

Table – 4 Anova Analysis

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Year	5.977138	11	0.543376	1.714818	0.113369	2.093254
Types of Banks	37.67926	3	12.55975	39.63679	4.79E-11	2.891563
Error	10.45675	33	0.316871			
Total	54.11314	47				

Interpretation

F value (39.636) is higher than F critical value (2.891) indicate that there is significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks in capital adequacy ratio (Tier – II).

F value (1.714) is lower than F critical value (2.093) indicate that there is no significance difference in the financial performance between SBI & its associates, nationalized, old private and new private sector banks over years (2001-02 to 2012-13) in capital adequacy ratio (Tier – II).

FINDINGS

With the help of above data analysis we reach at following findings

As per the data analysis of first parameter, capital adequacy ratio (Tier – I), there is significance difference in the financial performance of four types of banks.

As per the data analysis of first parameter, capital adequacy ratio (Tier – I), there is significance difference in the financial performance of four types of banks from year to year which suggest that capital adequacy ratio (Tier – I) of all sector banks are improving over the years.

As per the data analysis of second parameter, capital adequacy ratio (Tier – II), there is significance difference in the financial performance of four types of banks.

As per the data analysis of second parameter, capital adequacy ratio (Tier – II), there is no significance difference in the financial performance of four types of banks from year to year which suggest that capital adequacy ratio (Tier – II) of all sector banks are not improving over the years.

CONCLUSION

In this research paper we try to analyze and compare the capital adequacy of four different banking sectors. After data analysis we came to know that there is significance in the financial performance in respect of capital adequacy ratio among four different types of banks. According to above data analysis new private sector banks are performing better in both parameters compare to other sector banks. From the data analysis we also came to know that over the years all four sector banks performance are improving in terms of capital adequacy ratios.

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