

Efficient Management of Assets and Capital by Banks for Competitive Advantage

Given the autonomy to banks to determine interest rates on deposits, loans and advances, the efficiency lies in financial performance of individual banks to take competitive advantage and capture increased market share. There are several factors which influence competitive advantage position of a bank such as, quality of customer service, efficiency in business operations, implementation of total quality management (TQM) system, attitudinal and behavioral aspects, extent of banking technology adopted by a bank, the pricing of services etc. In today's tough competitive environment, aggressive pricing strategies assume much significance as advancement in technology has overtaken other aspects to a larger extent. The pricing strategies of individual banks very much depend on financial performance of bank. The financial performance of individual banks is again influenced by many other factors. Among others, the risk associated with the assets and capital structure largely impact the profitability of the banks. The level of capital also depends on the extent of risk weighted assets. Shah (1979) in his study analyzed that the banks profitability is linked to financial performance of an individual banks among others. There are also good numbers of research studies to evidence this.

There are different thoughts over gaining competitive advantage one, some banks feel that the banks with lower Risk Weighted Assets (RWAs) could benefit from an undue competitive advantage in view of the lower capital requirements. This provides an edge to adopt aggressive pricing power and thus

ABSTRACT

The more aggressive Basel III norms for maintaining capital standards are real challenge to banks as it will not only increase the level of capital but also impact the cost of capital. In the competitive environment where banks are operating today, the success of individual banks is directly linked to the extent competitive advantage one bank has over the others. The efficiency in cost structure and thus gaining the superior financial performance are the keys which facilitate a bank to adopt better pricing policies for their products and services. The efficiency in pricing will pave the way for success of a bank by gaining competitive position and increased market share. However efficient management of assets and capital structure which contributes to the cost efficiency and higher profitability is a serious task for the banks. This study analyses the impact of risk weighted assets on capital and other key performance parameters of a bank.

Key words: capital structure, risk weighted assets, financial performance, ROA, ROI

capture larger market share. However, On the other hand, Berger and Boumman (2009) in their study on Bank capital, survival and performance observed "higher capital enables banks of all size classes to improve their market share during banking crisis and those banks are generally able to maintain their improved share afterwards. They also found that during normal times, between crises, most of relative benefits of the higher capital are experienced only by small banks". There are other studies on similar lines which indicate that the capital structure affects the way banks compete with each other. There is also a feeling that Indian banks are well placed to meet the higher capital requirements and strengthen their competitive position.

In view of the above, this study is an attempt to examine the influence of risk weighted assets and level of capital on financial performance of the banks.

Objective of the Study:

The objectives of the study have been kept limited but to focus;

- a) To assess the impact of higher capital on the financial performance of individual banks and
- b) To examine whether lower extent of risk weighted assets impact the financial performance of a bank.

Towards the above goals, we have presumed the following hypothesis.

Hypothesis 1: The banks with higher level of capital are better place to take competitive advantage

Hypothesis 2: The banks with lower capital are cost effective and have competitive advantage due to better pricing strategies.

Methodology:

We have defined the following parameters to assess the impact on financial performance of a bank.

1. CRAR- the maintenance of capital by individual banks based on capital to risk weighted assets ratio as determined by the Reserve Bank of India. This has been treated as dependent variable as the level of capital directly depends on the extent of risk weighted assets.
2. NPA: The non performing assets are the indicators of extent of risk in the asset composition. The provisioning also depends on the nature of NPA and extent of NPA. Therefore NPA is the most crucial variable which affects the level of capital.
3. Return on Investments (ROI): it is the function of profits earned and investments made by a bank. The extent of risk weighted assets has direct impact on erosion of income and thus impacts the profits earning capacity of a bank. The extent of provisions on account of risk weighted assets also depends on the volume of non-performing assets in a bank and availability of security. The profits earned directly impact the return on investments.

According to study undertaken by CRISIL, the overall provisioning cost levels increased in 2011-12 owing to higher regulatory provisioning requirements and are expected to remain at fairly high levels in 2012-13 as well, owing to likely increase in NPAs and higher prudential provisioning.

4. Return on assets (ROA): ROA is also impacted by the level of profits.

Since the above variables have direct impact on the financial performance, we have analyzed relative impact. The data is analyzed for public sector banks, private sector banks and foreign banks as a group and also for selected individual banks under each category.

Data Analysis and Findings:

Table: 1 Regression Analysis**CAR as Dependent Variable and ROA, ROI and NPA as Independent variable**

Bank-wise	R	R Square	Adjusted R Square	Std Error	ANOVA Sig.
Nationalized Bank	.658	.433	-1.267	.8928	.858
Public Sector Bank	.939	.881	.524	.3366	.430
Old Private Sector Bank	.999	.998	.990	.1131	.063
New Private Sector Bank	1.000	1.000	.998	9.952E-02	.027
Private Sector Bank	1.000	1.000	.998	8.985E-02	.027
Foreign Banks	1.000	1.000	.999	8.103E-02	.024
All Scheduled Commercial Bank	.578	.334	-1.665	1.3278	.908

If we consider the above results and test the null hypothesis that the level of CAR is not impacted by the NPA, ROA and ROI, the value is non significant for all SCBs, Public sector banks, Nationalized banks and old private sector banks. However the results are significant in case of new private sector banks and foreign banks. Though there is strong positive correlation but multiple effect is not scene in case of new

private sector banks and foreign banks. Thus the null hypothesis is rejected and alternate hypothesis is accepted and it can be concluded that the level of CAR is certainly affected by the risk weighted assets. Since the major banking business is handled by the public sector banks and they have the higher level of NPAs as compared to the new private sector banks and foreign banks, this becomes more pertinent.

Table: 2 Regression of Individual banks as banks wise**CAR as Dependent Variable and ROA, ROI and NPA as Independent variable**

Bank Wise	Individual Banks	R	R Square	Adjusted R Square	Std Error	ANOVA Sig.
Public Sector Bank	Allahabad Bank	.998	.977	.906	.1889	.194
Public Sector Bank	Andhra Bank	.913	.834	.335	1.1154	.504
Public Sector Bank	Bank of Baroda	.996	.992	.969	.2011	.111
Public Sector Bank	Bank of India	.996	.993	.972	9.463E-02	.107
Public Sector Bank	Bank of Maharashtra	.984	.967	.870	.3386	.229
Private Sector Bank	Axis Bank	.590	.348	-1.609	2.5318	.902
Private Sector Bank	HDFC Bank	1.000	1.000	1.000	2.776E-02	.010
Private Sector Bank	ICICI Bank	.997	.994	.976	.5367	.099
Foreign Bank	Deutsche Bank	.984	.967	.869	.8086	.229
Foreign Bank	JP Morgan Chase Bank	.889	.791	.163	3.4350	.561

When we analyze the cases of selected individual banks under the each group, we find the similar results. In all the cases except that of the HDFC Bank, the analytical results

are insignificant which further confirms the alternative hypothesis. In case of HDFC Bank, CAR is relatively higher and ratio of NPAs to net advances is lower.

Table: 3 Correlation between NPA and CAR of bank wise sector

Bank wise	Pearson correlation	N	Sig. Value
Nationalized Bank	.647	5	.238
Public Sector Bank	.136	5	.827
Old Private Sector Bank	.453	5	.444
New Private Sector Bank	.172	5	.781
Private Sector Bank	.209	5	.736
Foreign Banks	.402	5	.502
All Scheduled Commercial Bank	.215	5	.729

The NPAs and CAR have positive correlation and results are insignificant to indicate that

they are not co-related. This is applicable in all categories of banks.

Table: 4 Correlation of CAR and NPA of Individual Banks

Individual Banks	Pearson correlation	N	Sig. Value
Allahabad Bank	.564	5	.322
Andhra Bank	.652	5	.234
Bank of Baroda	.963	5	.008
Bank of India	.651	5	.234
Bank of Maharashtra	.694	5	.193
Axis Bank	.510	5	.380
HDFC Bank	.394	5	.512
ICICI Bank	.337	5	.579
Deutsche Bank	.711	5	.178
JP Morgan Chase	.623	5	.234

While we analyze the cases of individual banks as regards relationship between NPAs and level CAR, they are positively correlated. But the results are significant in case of Bank of Baroda.

Findings:

An analysis of the available data on key performance indicators (as annexed) on

financial performance of various banks, reveal the following:

- a) Though the level of CAR is directly related to the volume of risk weighted assets, the banks in India have been maintaining higher level of capital than the mandatory requirements. The cost of capital of individual banks is also an important factor which impacts the

- cost of capital. The banks which are cost effective have competitive advantage.
- b) The higher capital provides competitive advantage. This is evident in case of few new private sector banks and foreign banks where CAR is more than 16 per cent and ROI are relatively higher as compared to other banks.
 - c) The ROI and the level of net NPAs to net advances also assume significance. It is observed banks with lower level of net NPAs to net advances ratio are in a better position and yield higher ROI.
 - d) There are also evidences where banks with lower capital base and lower ratio of net NPAs to net advances are in a better position to yield higher ROI.
 - e) The ROA depends on the extent of risk weighted assets. It is observed that in case of banks where ratio of net NPAs to net advances is higher, ROA is comparatively lower as compared to other banks.
 - f) In all, it can be inferred that the level of NPAs as compared to net advances in individual banks certainly impacts the CAR, ROI and ROA and thus the competitive advantage.
 - g) The cost effective banks are in a better position to price their products and services.
 - h) Finally, we can conclude that the both banks i.e. the banks with higher level of capital as well lower level of capital are in a position to take competitive advantage only if they are able to manage their assets efficiently and maintain the level of net NPAs to advance to the minimum.

Variable	Allahabad bank					Andhra Bank				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Return on investments	7.43	7.57	6.97	5.71	6.54	7.34	8.27	6.91	6.29	6.83
Return on assets	1.26	1.32	0.9	1.16	1.11	1.31	1.16	1.09	1.39	1.36
Capital adequacy ratio	12.52	11.99	13.11	13.62	12.96	11.33	11.61	13.22	13.93	14.38
Ratio of net NPA to net advances	1.07	0.8	0.72	0.66	0.79	0.17	0.15	0.18	0.17	0.38

Variable	Bank of Baroda					Bank of India				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Return on investments	7.12	7.45	6.87	6.43	7.21	6.53	6.83	7.14	7.46	6.76
Return on assets	0.80	0.89	1.09	1.21	1.33	0.88	1.25	1.49	0.70	0.79
Capital adequacy ratio	11.80	12.94	14.05	14.36	14.52	11.75	12.04	13.01	12.94	12.17
Ratio of net NPA to net advances	0.60	0.47	0.31	0.34	0.35	0.95	0.52	1.03	1.31	0.91

Variable	Bank of Maharashtra				
	2007	2008	2009	2010	2011
Return on investments	7.41	8.34	6.46	6.54	6.94
Return on assets	0.76	0.75	0.72	0.70	0.47
Capital adequacy ratio	12.06	10.85	12.05	12.78	13.35
Ratio of net NPA to net advances	1.21	0.87	0.79	1.64	1.32

Variable	Axis Bank					HDFC Bank				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Return on investments	6.12	6.89	7.63	6.70	6.94	5.67	6.15	7.41	6.78	7.22
Return on assets	1.1	1.24	1.44	1.67	1.68	1.33	1.32	1.28	1.53	1.58
Capital adequacy ratio	11.57	13.73	13.69	15.80	12.65	13.08	13.60	15.69	17.44	16.22
Ratio of net NPA to net advances	0.72	0.42	0.4	0.40	0.29	0.43	0.47	0.63	0.31	0.19

Variable	ICICI Bank				
	2007	2008	2009	2010	2011
Return on investments	7.66	8.39	6.90	5.77	6.19
Return on assets	1.09	1.12	0.98	1.13	1.35
Capital adequacy ratio	11.69	13.96	15.53	19.41	19.54
Ratio of net NPA to net advances	1.02	1.55	2.09	2.12	1.11

Variable	Bank of Baroda					Bank of India				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Return on investments	7.12	7.45	6.87	6.43	7.21	6.53	6.83	7.14	7.46	6.76
Return on assets	0.80	0.89	1.09	1.21	1.33	0.88	1.25	1.49	0.70	0.79
Capital adequacy ratio	11.80	12.94	14.05	14.36	14.52	11.75	12.04	13.01	12.94	12.17
Ratio of net NPA to net advances	0.60	0.47	0.31	0.34	0.35	0.95	0.52	1.03	1.31	0.91

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Return on assets	1.1	1.24	1.44	1.67	1.68	1.33	1.32	1.28	1.53	1.58
Capital adequacy ratio	11.57	13.73	13.7	15.80	12.65	13.08	13.60	15.69	17.44	16.22
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Return on assets	1.09	1.12	0.98	1.13	1.35
Capital adequacy ratio	11.69	13.96	15.53	19.41	19.54
Ratio of net NPA to net advances	1.02	1.55	2.09	2.12	1.11

Variable	Deutsche Bank					JP Morgan Chase Bank				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Return on investments	0	5.77	6.99	7.00	7.11	0.00	0.00	4.02	4.15	6.31
Return on assets	1.23	1.56	1.75	1.73	1.95	1.71	3.07	4.21	0.09	3.56
Capital adequacy ratio	10.62	15.05	15.3	16.45	15.03	16.14	17.72	15.90	23.63	22.99
Ratio of net NPA to net advances	0.01	0.22	0.88	0.79	0.23	2.17	2.12	1.27	2.88	0.00