

# Profitability Analysis of Selected Public and Private Sector Banks in India

S. Ayyappan<sup>1</sup> and M. Sakthivadivel<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Management Studies, Sakthi Institute of Information and Management Studies, Pollachi - 641 001, Coimbatore, India

<sup>2</sup>Assistant Professor, Department of Information Technology, Dr. Mahalingam College of Engineering and Technology, Pollachi - 641 001, Coimbatore, India

Email: sapacet@gmail.com, sakthivadivelm@gmail.com

(Received on 12 February 2013 and accepted on 18 April 2013)

**Abstract** – The banking is one of the backbone industries of the country which is contributing significantly to the growth of the economy. In the globalised environment the introduction of new private banks and other factors made banking industry more competitive. So it is very essential to analyse the performance of the banks for improving their profitability by knowing where they are lacking. The financial variables only decide the wealth of the banking sector. In this present study 26 financial variables were selected and their ups and downs during the study period is measured with the help of the balance sheet and the data available in RBI and suitable statistical tools are also applied to identify its impact on profitability.

**Keywords:** Banking Industry Globalised Environment, Profitability, Financial Variables, Balance Sheet, RBI

## I. INTRODUCTION

The banking system, which constitutes the core of the financial sector, plays a crucial role in transmitting monetary policy impulses to the entire economic system. Its efficiency and development, therefore, are vital for enhancing the growth and improving the chances for price stability.

Banks also play a prominent role in discharging social responsibilities i.e., poverty eradication, employment generation, development of industry and agriculture, redistribution of wealth and balanced regional development. In the industrial field, banks serve as a friend, philosopher and guide to industrial units. They nurse a large number of sick units with a view to enabling them to continue their production. Through their merchant banking division several banks have entered into the field of industrial finance, taking up underwriting of capital issues. Hence, any successful plan of a nation requires a substantial expansion along with

qualitative improvements in the operations of the banking system in those areas, which are in priority sector and on which the future development of a country rests.

The concentrated economic growth and development of a nation is vested in the hands of commercial banks by providing credit to different sectors of the economy. The gross bank credit of scheduled commercial banks in India got increased by 17.20% (Rs.58,806 crore) in 1999-2000 as compared with an increase of 13.90% (Rs.41,729 crore) in 1998-99. The sharp increase in bank credit resulted from 52.80% increase in food credit (accounting for 6.40% of gross bank credit on March 2000) and a 15.40% increase in non-food gross bank credit (accounting for 93.60% of gross bank credit on March 2000). This increase was brought about primarily by increases in credit to medium and large industry, the wholesale sector and other sectors (constituting the non-priority sector). Credit to priority sector increased by 15.0%, which was marginally lower than 15.2% in the previous year. Within the priority sector, credit to agriculture and small-scale industry showed a rise of 12.00% and 8.90% respectively while credit to other priority sectors accelerated. Among the non-priority sectors, credit to medium and large industry, wholesale trade and other sectors increased by 12.90% , 20.40% and 19.80% respectively.

If one takes the country as a whole, only 10% of the branches of the public sector banks are fully computerized and 22% of them are partly computerized. The introduction of virtual banking has fetched massive developments in the banking industry. Such virtual banking services are Automated Teller Machines (ATMs), Shared ATM Networks, Electronic Fund Transfer at Point of sale (EFTPos), Smart

Cards, Stored-value Cards, Phone-banking, Internet and Intranet banking.

The renewed focus on the banking sector has been driven by two major considerations. At first, the growing universalisation and internationalization of banking operations, driven by a combination of factors, such as the continuing deregulation, heightened competition and technological advancements, have altered the face of banks from one of mere intermediary to one of provider of quick, efficient and consumer-centric services. In the process, the potential for risks has also increased. Secondly, the widespread banking problems that have plagued large areas of the globe have raised a gamut of questions relating to the linkage between banking reforms and reforms of other segments of the financial sector, the extent of exposures to sectors, which are characterized by asymmetric information problems and the 'contagion' effect. It has, therefore, become necessary to promote robust financial practices and policies especially in respect of banks, in order to sustain financial stability.

## II. STATEMENT OF THE PROBLEM

In recent years, the Profitability performance of scheduled commercial banks in India has become a novel topic for discussion. There is ample evidence to show the declining profitability of the banking industry. With the change in the social and economic objectives of Commercial Banks, particularly of the scheduled commercial banks in India, it becomes extremely essential to assess their profitability performance. However, in most of the studies covering the recent period, 'profit' has been used as one of the many indicators of their performance appraisal. This dilutes the importance of profits to a large extent. Despite the change in thrust, banks remain commercial organizations and profit factor cannot be ignored without endangering viability of banks and continuity of their operations. In fact, the approach of policy-makers towards profitability too has changed, with the result that low profits have become a fact of life. Therefore, it is high time to concentrate efforts on analyzing the profits and profitability position of scheduled commercial banks, so that the confidence of the public in the soundness of the banking system remains unimpaired and the social objectives of banks do not necessarily dilute.

### A. Objectives of The Study

The study is conducted with the following objectives of identifying the best bank group and to find out the crucial factors responsible for the profitability of selected commercial banks in India.

1. To assess the financial parameters which determine the profitability of the selected commercial banks in India.
2. To measure the factors influencing the profitability of the bank on the ratio of return on total assets.

### B. Scope of the study

The scope of the study is wider in nature. It covers all the selected commercial banks in India, which were under the control of the Reserve Bank of India.

## III. RESEARCH METHODOLOGY

### A. Sampling Design

Keeping in view the problem and the scope of the study, the researcher has decided to include both public and private sector banks after the merger and acquisition 1999.

The data for the study have been collected mainly from the secondary sources comprising various books, periodicals, journals, etc. Further, for the purpose of analysis, detailed information are collected mainly from the various volumes of the "Statistical Tables Relating to Banks in India" covering the period from 2001-2010 which was published by the Statistical Department of Reserve Bank of India, Mumbai. The concepts and definitions of certain variables were gathered from the Report on "Trend and Progress of Banks in India" various issues covering the period from 2001-2010 which were published by the Statistical Department of RBI, Mumbai, RBI Bulletins (Monthly), Bombay Stock Exchange Official Directory and So on.

### B. Statistical Tools Used for Analysis: Path Analysis

The technique of path analysis is based on a series of multiple regression analyses with the added assumption of casual relationship between independent and dependent variables. The main principle of path analysis is that any correlation coefficient between two variables or a gross or overall measure of empirical relationship can be decomposed into a series of parts: separate paths of influence leading through chronologically intermediate variable to which

both correlated variables have links. The direct and indirect effect of independent variables on the dependent variable is calculated for selected period of 10 years of commercial banks in India from 2000-01 to 2009-10.

The following factors / variables have been adopted in the multivariate technique. For our analysis the variable Y is dependent variable and the variables  $X_1$  to  $X_{26}$  are independent variables.

**III. DATA ANALYSIS AND INTERPRETATION**

From the Table II the ICICI Bank Ltd for the period of 2000-01 to 2009-10, the following independent factors have significant correlation co-efficient with the ratio of return on total assets;  $X_9$ -Return on Advances (.960),  $X_{25}$ -Investments to Advances (-0.473), and other variables have contributed directly towards the ratio of return on total assets whereas it is also indirectly reasonable when the respective variable is combined with other indirect effects but it is found to be statistically not significant. Finally, an insight this reveals that the variables  $X_9$  contributes towards increase the financial position and  $X_{25}$  reduces the financial position of the bank. The HDFC Bank Ltd for the study period, the following independent factors have significant correlation co-efficient with the ratio of return on total assets;  $X_5$ -Credit Deposit Ratio (0.972),  $X_{21}$ -Deposits to Total Assets (0.144).

TABLE I VARIABLES USED FOR THE ANALYSIS

V.NO	VARIABLE USED	V.NO	VARIABLE USED
Y	Return on total assets	$X_{14}$	Interest Expended to Total Expenses
$X_1$	Advances to Assets	$X_{15}$	Interest expended to interest earned
$X_2$	Debt - Equity Ratio	$X_{16}$	Spread to Working Fund
$X_3$	Investments to Total Assets	$X_{17}$	Burden to Working Fund
$X_4$	Other Assets to Total Assets	$X_{18}$	Interest Income to Total Income
$X_5$	Credit Deposit Ratio	$X_{19}$	Non-Interest Income to Working Fund
$X_6$	Investments Deposit Ratio	$X_{20}$	Non Operating Expenses to Total Assets
$X_7$	Credit + Investments Deposit Ratio	$X_{21}$	deposits to Total Assets
$X_8$	Fixed Assets to Total Assets	$X_{22}$	Liquid Assets to Total Assets
$X_9$	Return on Advances	$X_{23}$	Provision & Contingencies to Total Assets
$X_{10}$	Interest Income to Total Assets	$X_{24}$	Cash Deposit Ratio
$X_{11}$	Other Liabilities to Total Assets	$X_{25}$	Investments to Advances
$X_{12}$	Return on Net worth	$X_{26}$	Interest cover
$X_{13}$	Operating Expenses to Total Income		

TABLE II DIRECT AND INDIRECT EFFECTS OF INDEPENDENT VARIABLE ON RETURN ON TOTAL ASSET

NAME OF THE BANK	RATIOS	STANDARDIZED COEFFICIENTS - BETA
ICICI BANK	$X_9$	.960
	$X_{25}$	-.473
HDFC BANK	$X_5$	0.972
	$X_{21}$	0.144
UNION BANK OF INDIA	$X_{12}$	1.064
	$X_{24}$	0.207
ORIENTAL BANK OF COMMERCE	$X_1$	.377
	$X_2$	-.057
	$X_9$	1.231
STATE BANK OF INDIA	$X_4$	-0.087
	$X_{11}$	-0.09
	$X_{20}$	0.663
	$X_{26}$	1.581
BANK OF INDIA	$X_1$	.204
	$X_9$	.957
	$X_{10}$	.051
BANK OF BARODA	$X_7$	.252
	$X_{12}$	.837
PUNJAB NATIONAL BANK	$X_4$	-.790
	$X_{12}$	.483

The Union bank of India for the period of 2000-01 to 2009-10, the following independent factors have significant correlation co-efficient with the ratio of return on total assets,  $X_{12}$ -Return on Net worth (1.064) and  $X_{24}$ -Cash Deposit Ratio (0.207). In the oriental bank of commerce the factors  $X_1$ -Advances to Assets (0.377),  $X_2$ -Debt - Equity Ratio (-0.057), and  $X_9$ -Return on Advances (1.231) contributes for the growth of bank.

The Table II also reveals that the State Bank of India for the study period, the following independent factors have significant correlation.  $X_4$ -Other Assets to Total Assets (-.087),  $X_{11}$ -Other Liabilities to Total Assets (-.089),  $X_{20}$ -Non Operating Expenses to Total Assets (0.663) and  $X_{26}$ -Interest cover (1.581) and other variables have contributed directly towards the ratio of return on total assets whereas it is also indirectly reasonable when the respective variable is combined with other indirect effects but it is found to be statistically not significant. Finally, an insight this reveals that the variables  $X_{20}$ ,  $X_{26}$  contributes towards increase the financial position and  $X_4$ ,  $X_{11}$  reduces the financial position of the company.

In The Bank of India during the study period ,the independent factors,  $X_1$ -Return on Investment Ratio (0.204),  $X_9$ - Current liabilities to total liabilities ratio (0.957) and  $X_{10}$ - Selling and administration ratio (0.051). The bank of Baroda for the period of 2000-01 to 2009-10 the factors,  $X_7$ -Credit + Investments Deposit Ratio (0.252), and  $X_{12}$ -Return on Net worth(837).

Finally the Punjab National Bank have the following independent factors have significant correlation co-efficient with the ratio of return on total assets,  $X_4$  -Other Assets to Total Assets (-.790) and  $X_{12}$ -Return on Net worth(.483).

#### IV. CONCLUSION

In this present study eight public sector banks have been analyzed by using the key profitability variables and the path analysis identified the positive and negative contribution of selected variables during the study period. So the bankers should concentrate on the facts which are influencing negatively which will improve the profitability in the global competition.

#### REFERENCES

- [1] Basel Committee on Banking Supervision, "International Convergence of Capital Measurement and Capital Standards", Bank for International Settlements, Basel, Switzerland, 1988.
- [2] J. F. Sinkey, and M. B. Greenwalt, "Loan-Loss Experience and Risk-Taking Behavior at Large Commercial Banks." *Journal of Financial Services Research*, Vol.5, pp.43-59, 1991.
- [3] C. Kent, and Patrick D'Arcy, 'Cyclical prudence - credit cycles in Australia', BIS Papers No 1, 2000.
- [4] S.B. Bratanovic, and V. H. Greuning, "Analyzing Banking Risk", Working Paper the World Bank, D.C. Washington, 2000.
- [5] J. Santos, "Bank Capital Regulation in Contemporary Banking Theory: A review of the Literature" BIS working Papers, pp.90, 2000.
- [6] Bank for international settlement, Report, "The Joint Forum for Risk Management Practices and Regulatory Capital Cross-Sectoral Comparison," pp 1- 120, 2001.
- [7] G. Jimenez and J. Saurina, "Credit cycles, credit risk and prudential regulation", *International Journal of Central banking*, vol.2, No. 2, pp. 65-98, 2006.
- [8] A. Anbar, "Credit Risk Management in the Turkish Banking Sector: A Survey Study", *ElektronikSosyalBilimlerDergisi*, Vol.17, pp.10-24, 2006.
- [9] K. Al-Zubi, et al, "Capital Adequacy, Risk Profiles and bank Behaviour: Empirical evidence from Jordan", *Jordan Journal of Business Administration*, Vol.4, pp. 89 – 105, 2008.
- [10] M K. Karunakar, et al. "Are non-performing assets gloomy or greedy from Indian perspective?" *Research Journal of Social Sciences*, Vol.3, pp. 4 – 12, 2008.
- [11] C.F. Ho, and N. Yusoff, "A preliminary study on credit risk management strategies of selected financial institutions in Malaysia", *Journal Pengurusan*, Vol. 28, pp. 45 – 65, 2009.
- [12] Q. Aman, and K. Zaman, "Credit Risk Performance of Private, State Owned and Foreign Banks on the Economy of Pakistan (Econometric Approach)", *International Research Journal of Finance and Economics*, Vol. 57, pp. 47 – 58, 2010.