

## **GROWTH PERFORMANCE ANALYSIS OF STATE BANK OF INDIA**

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### **Abstract:**

The objective of the present paper is to measure the growth performance of SBI (State Bank of India) over a period of ten years (2005-2006 to 2014-2015) using secondary data with the application of descriptive methods of statistical analysis including correlation and multiple regression. The parameters tested for measuring the growth performance of SBI are Reserve and Surplus growth (RES), Advance growth (ADV), Investment growth (INV), Interest Earned growth (IE), Operating Expenses growth (OE), Equity Dividend growth (ED), Net profit growth (NP) and EPS growth (EPS). The results reveal that the growth performance of SBI is satisfactory in the study period. This performance can be attributed to the adoption of modern technology, banking reforms, and good recovery mechanisms in the bank.

**Keywords:** SBI, Growth Performance, Descriptive Statistics, Correlation, Regression.

### **The Concept:**

The performance of an economy is very much connected with the performance of the financial sector of that economy. Financial sector comprise a very important ingredient in any economy. The financial sector of India is gaining strength over the years and its contribution to growth is overwhelming. Banks are considered the main component of Indian Financial Sector. A good performance of banking sector itself indicates the overall good performance of the sector, which ultimately leads to improved performance of economy. India has witnessed exceptional revolution in the banking sector in the last two decades. Banking today has been redefined and re-engineered with liberalization of interest rates and credit allocation policy. Traditionally, banks were involved in accepting deposits from public at a lower rate and issuing loans at a higher rate and thereby making profit on interest margin. Banking sector reforms aimed at, introduction of new indirect monetary policy, strengthening prudential regulation, opening the financial sector to foreign financial institutions and promotion of the capital market.

Therefore, the need to identify the determinants of growth performance of banks in the India as well as other country context has gained importance. Researchers have tried to analyze bank performance based on external and internal variables in various country contexts (Gizyeki, 2001). External variables include rate of economic growth, industry-wide developments, inflation, money supply, economies of scale and scope, dynamics of bank competition, global presence of financial

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conglomerates, disintermediation in banking activities and other macroeconomic factors; while bank specific internal variables mean an increase in the business over a period of time in the areas of Reserve and Surplus growth (RES), Advance growth (ADV), Investment growth (INV), Interest Earned growth (IE), Operating Expenses growth (OE), Equity Dividend growth (ED), Net profit growth (NP) and EPS growth (EPS) of the current year in comparison to previous year (Pathak,2011).

The performance of the Indian economy is one of the strongest drivers for the banking industry's growth and vice versa and the average GDP growth of 8.1 per cent expected over 2011-16 will smooth the progress of the growth of the banking sector (IBEF, 2011). The growth of the banking sector is directly associated to the economy than possibly that of any other sector. The growth of the Indian economy is expected to have decelerated notably from 8.39 percent in the year 2011-12 to 6.88 percent in the year 2012-13 because of ongoing crisis in Europe and economic decelerate in the United States disturbing foreign investments coming into India, policy paralysis considering the government's lethargy on diverse policy issues and reforms, fiscal deficit, high inflation leading to high interest rate and rupee depreciation that additionally weakens the current account deficit (KPMG report, 2013, p.3). However, the Indian banks observed a mixed trend in their profitability in 2012-13. Despite the fact that the average pre-tax profit of the banks increased by 16.46 percent, the private sector banks significantly outperformed their public sector counterparts (28.38 percent vs. 9.85 percent). In this way, the net interest margin for most of the banks declined apart from SBI and HDFC because of higher cost of bulk deposits and a slowdown in the credit growth (KPMG report, 2013, p.6). Keeping in view of this, the present research work examines and evaluated the growth of SBI and HDFC bank as a factor accountable for these banks play an important role in mobilizing the financial savings and deployment of those to the sectors of production.

### **Literature Review:**

Diversification has been one of the most frequently researched areas in strategic management literature and to some extent in finance. Many studies have been conducted on factors influencing performance of banks. The internal determinants originate from the financial report of the bank concerned and are often termed as micro or bank-specific determinants of profitability. The external determinants are those forces that reflect the economic environment which conditions the operation and performance of financial institutions.

**Panda and Lall (1991)** had identified certain factors which influence the profitability improvement of banks to the great extent. They argued that branch expansion is one of those factors which can impact on profitability.

**Rammohan and Ray (2004)** concluded that with regard to the revenue maximizing efficiency, public sector banks are significantly better than private banks but they found no significant difference between public and foreign banks on this parameter.

**Kumar (2006)** observed that the bank nationalization in India marked a paradigm shift in the focus of banking as it was intended to shift the focus from class banking to mass banking and efforts are also being made internationally to study causes of financial inclusion and designing strategies to ensure financial inclusion of the poor disadvantaged. He argued that the banks also

need to redesign their business strategies to incorporate specific plans to promote financial inclusion of low income group treating it both a business opportunity as well as a corporate social responsibilities and financial inclusion can emerge as commercial profitable business.

**Venkatesan (2007)** viewed that the net interest margin has come down over the last one decade with increased competition in the banking industry. He viewed that banks will look for fee based income to fill the gap in interest income.

**Bennaceur and Goaid (2008)** examined factors affecting profitability for the period 1980-2000 and suggested that capital and overhead expenses are positively related to profitability level.

**Kosmidou (2008)** findings suggest that the more profitable banks have higher level of capital and lower cost to income ratio.

**Kumar Sunil & Gulati Rachita (2009)** examined the interbank differentials in income generating efficiency. The study covers 28 Public Sector Banks operating in India during the financial year 2006-2007. The technique of Data Envelopment Analysis has been used to compute the efficiency scores for individual Public Sector Banks. The empirical findings reveal that Public Sector Banks are generating net-interest and non-interest incomes with high level of efficiency which is reflected by the mean efficiency score of 0.918. The study suggests that for improving their performance, the inefficient Public Sector Banks should concentrate more on generating noninterest income from the off-balance sheet activities rather than interest income from the traditional activities like advancing loans and investments in other earning assets.

**Manoj (2010)** argued that enhanced profitability and efficiency has become vital for survival and growth of the banks in the era of globalization and significantly affected by asset quality, capital adequacy and liquidity of the banks.

**Ghosh (2010)** examines the interplay between credit growth bank soundness and financial fragility in Indian banks. The soundness of banks is measured by their distance to default. Loan growth is often directly associated with soundness but an extension could weaken bank soundness.

**Kodian Narander, Kumar Shalinder & Kodan Anand Singh (2010)** in article analyzed the trends of growth of banking Industry in India. The study has highlighted the trends relating to infrastructure development, expansion of total credits and deposits, expansion of rural credit by Scheduled Commercial Banks, investment in government securities, non-performing assets.

**Anjum and Deepika (2012)** made a comparative study of the profitability of the Indian Banking Sector and the impact of technological investment on the profitability of the Public and Private Sector Banks. They argued that Indian Banking Industry in technological advancement is still in gestation phase and RBI has to take various steps so that the Public Sector Banks (Nationalized and SBI & its Associates) becomes able to manage their profitability by striking the balance between technological Investments (Expenditures) and Incomes.

**Ayyappan and Sakthivadivel (2012)** found that compound growth rate of the private sector banks is comparatively higher than that of the public sector banks. The banks were grouped into two categories: i.e., Public Sector Banks Group (22 banks) and Private Banks Group (15 banks). Their study predicted that at the current rate of growth the private sector banks can pose a challenge in the market place and may even overtake the public sector banks in the longer period of time. The study does not provide any idea regarding the growth of any individual or frontline public and private sector commercial banks but the growth picture at macro level.

A significant number of studies on performance of banks have already been undertaken. Though profitability and efficiency of the banks have become most fascinating area for study but with the view of growth in economy, the importance of financial performance in banking sector cannot be ignored. The analysis of growth performance of SBI before and after the world economic crisis of 2008 at bank level is an area which has not yet explored.

The Banking industry occupies a unique place in a nation's economy. A well-developed banking system is a necessary precondition for economic development in a modern economy. Keeping in view, the importance of banks in nation's development, the very objective of the study is to evaluate the overall growth performance of giant bank in India – SBI over a period of 10 years , i.e., 2005-06 to 2014-15.

### **Methodology of the Study:**

Sources of Data: The study is based on secondary data collected from the annual reports of the SBI and websites related to the subject.

### **Performance Indicators:**

In the present study, Reserve and Surplus growth (RES), Advance growth (ADV), Investment growth (INV), Interest Earned growth (IE), Operating Expenses growth (OE), Equity Dividend growth (ED), Net profit growth(NP)and EPS growth(EPS) have been taken as the parameters for measuring the growth performance of the bank. EPS growth is taken as dependent variable and seven main variables that affect the growth performance have been taken as independent variables for the present study.

### **Statistical Tools Applied:**

For the purpose of analysis descriptive statistics, correlation statistics and multiple regression statistics have been applied with the help of SPSS.

### **Limitations of the Study:**

- This study is confined to only 10 years period.
- The study measures only a total of eight performance indicators.
- The growth of sales, expansion of the business, risk of the business, deposits mobilization, net interest margin, non-interest income are not considered in the present study.

**Analysis:**

Descriptive statistics:

**Table 1. Descriptive Statistics on Various growth performance indicators of SBI.**

	RES	ADV	INV	IE	OE	ED	NP	EPS
Mean	.1522	.1611	.1078	.1467	.1178	.1067	.0878	-.7778
Median	.1500	.1600	.1100	.1200	.1100	.1200	.1700	.0300
Maximum	.36	.23	.31	.24	.27	.46	.37	.33
Minimum	.00	.07	-.09	.09	-.08	-.27	-.30	-7.31
Std. Dev.	.10183	.04910	.11966	.05766	.09615	.20310	.23726	2.46103
C.V. (%)	66.91	30.48	111.00	39.30	81.62	190.35	270.23	-316.41
Skewness	.720	-.338	.118	.895	-.664	-.149	-.620	-2.947
Kurtosis	1.961	.289	-.041	-1.013	2.048	1.194	-.769	8.761

To make the analysis and interpretation more precise and accurate, the values of S.D., C.V., maximum, minimum, Skewness and Kurtosis have been computed from the ratios. In the case of management of growth performance in the area of Reserve, Advance, Investment, Equity Dividend, Net Profit and EPS, C.V. of SBI indicate not satisfactory performance.

**Correlation Analysis:**

Generally, correlation analysis attempts to determine the degree and direction of relationship between two variables under study. In a bivariate distribution, if the variables have the cause and effect relationship, they have high degree of correlation between them. The co-efficient of correlation is denoted by "r". The correlation is studied using Karl Pearson's correlation formula.

$$r = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}}$$

Spearman's correlation analysis is used to see the relationship between financial performance and profitability. If efficient financial performance increases profitability, one should expect a negative relationship between the measures of working capital management and profitability variable. Table 3 & 4 demonstrates result of correlation coefficients and t-values are listed accordingly.

**Table 2. Correlation Statistics on Various performance indicators of SBI.**

	RES	ADV	INV	IE	OE	ED	NP	EPS
RES	1.000							
ADV	.237	1.000						
INV	.341	.003	1.000					
IE	.542	.235	.511	1.000				
OE	.331	.056	.173	.050	1.000			
ED	.606*	.262	.486	.582	-.075	1.000		
NP	.633*	.111	.396	.624*	.170	.871**	1.000	
EPS	.314	.715*	-.260	.296	.164	.056	-.036	1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Correlation statistics in tables 3 identify that Reserve, Advance, Interest Earned, Operating Expenses and Equity Dividend are positively correlated with EPS and Investment as well as Net Profit are negatively related with EPS in case of SBI during the period under study.

#### Multiple Regression Analysis:

Most sophisticated multiple regression techniques have been applied to study the joint influence of all the selected ratios indicating growth performance and performance on the EPS and the regression coefficients have been tested with the help of the most popular 't' test. With the intention of observe the association between the dependent variable EPS growth (EPS) and seven independent variables of Reserve and Surplus growth (RES), Advance growth (ADV), Investment growth (INV), Interest Earned growth (IE), Operating Expenses growth (OE), Equity Dividend growth (ED), Net profit growth (NP) have been used to measure the performance of SBI.

#### The regression model used in this analysis is:

$$EPS = \epsilon + \beta_1 RES + \beta_2 ADV + \beta_3 INV + \beta_4 IE + \beta_5 OE + \beta_6 ED + \beta_7 NP + \epsilon(\text{unexplained variables or error terms})$$

Where  $\epsilon$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ ,  $\beta_6$ ,  $\beta_7$  are the parameters of the EPS line.

With the aim of determine the reliability of the regression results, Durbin-Watson statistics has been used. The rule of thumb is that the observed D-W statistic should be between 1 and 4 for the dependability of the regression results and the absence of serial correlation. In order to examine the multi collinearity between the independent variables, variance inflation factor (VIF) has been used. According to modern statistics if the VIF of a variable does not exceed 5, it may be said that there are no multicollinearity problem with other independent variables.

First of all, seven independent variables of Reserve and Surplus growth (RES), Advance growth (ADV), Investment growth (INV), Interest Earned growth (IE), Operating Expenses growth (OE), Equity Dividend growth (ED), Net profit growth (NP) and EPS growth (EPS) has been used as

dependent variable. Using these seven independent variables as the determinants of EPS it has found that seven variables are correlated with each other.

It is also observed that insignificant association is found with a very high standard error for all the runs of the regression model. In order to reduce the multicollinearity problem and to obtain reliable results, next step of regressions under enter method with seven variables linear regression analyses run on the SPSS are performed.

**Table 3. Multiple Regression Test Results of SBI.**

Model		Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
		B	Std. Error			Tolerance	VIF
1	(Constant)	-8.153	3.715	-2.195	.159		
	RES	5.482	12.802	.428	.710	.443	2.255
	ADV	31.771	18.903	1.681	.235	.875	1.143
	INV	-8.791	9.286	-.947	.444	.610	1.639
	IE	16.639	20.766	.801	.507	.526	1.903
	OE	2.262	10.701	.211	.852	.712	1.405
	ED	-3.156	6.637	-.476	.681	.415	2.412
	R=0.867a	RSquare= 0.751	Adjusted R Square= 0.005	F Change=1.006	Durbin-Watson=1.483		

a. Predictors: (Constant), ADV, OE, INV, RES, IE, ED

b. Dependent Variable: EPS

c. Variable excluded: NP

It is observed from the table 5 that after removing NP, one unit increase in RES, IE and OE, EPS of the bank increased by 5.482 units, 16.639 units and 2.262 units respectively. However, when INV and ED increased by 1 unit, EPS of the bank decreased by 8.791 units and 3.156 units respectively. Again for one unit increase in ADV, the EPS of the bank increased by 31.771 units in the same way. It is evident from the table that ADV and IE have exceptionally high positive impact on EPS whereas INV has extremely high negative impact on EPS.

The multiple correlation coefficients (R) between the EPS and the independent variables taken together is 0.867. It may be said that EPS was significantly influenced by its independent variables. R<sup>2</sup> defines to what extent the variation in the response is explained by the regression. From the table it is observed that the value of R<sup>2</sup> is 0.751, which means 75% of the variation is explained by the regression. Adjusted R<sup>2</sup> 0.005 indicates the co-efficient of determination which is positively associated in the regression equation. The value of F Change is 1.006, which examines the significance of all the variables collectively in regression function. The observed R<sup>2</sup> and F statistics may thus be sufficient to draw an inference in the favour of goodness of the regression model to fit into the present task of identifying the factors influencing the EPS of the banks during the study period. Durbin-Watson static informs us whether the assumption of

independent errors is tenable. The closer to 2 the value is the better and for the data it was 1.483. VIF measures the multi collinearity problem, which is the inverse of tolerance value. Based on the value of VIF in tables, there is very low multi collinearity among the variables because VIF is less than 5.

### **Conclusion:**

The present study investigates the growth performance of SBI for the period from 2005-06 to 2014-15 using descriptive statistics, correlation and multiple regression analysis. The empirical results of descriptive statistics indicate that the growth performance of SBI is satisfactory during the period under study. In case of management of growth performance in the area of Reserves, Advances, Investment, Equity Dividend, Net Profit and EPS, C.V. of SBI is more satisfactory. However, SBI needs to improve its position with regards to a few parameters including debt-equity, operating profit, and non-interest income to total income. It can be concluded that the overall growth performance of SBI is quite satisfactory.

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