# Evaluating Financial Performance of SBI Through Financial Ratios

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## Abstract

**The objective of the present paper is to analyze the financial performance of SBI (State Bank of India) over a period of eleven years (2002-2012). For this purpose, financial ratio analysis has been used. With the help of this analysis, it was inferred that in the public sector banks, SBI is the top ranking bank in India, with its performance in terms of financial soundness being the best. For this analysis, investment valuation ratio, profitability ratio, management efficiency ratio, balance sheet ratio, and cash flow indicators were used. Results indicate that the performance of SBI in the study period has been excellent. SBI's excellent performance can be attributed to the adoption of modern technology, banking reforms, and good recovery mechanisms. 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.**

***Keywords:*** **financial performance, public sector bank, financial ratios, investment, profitability, management efficiency, balance sheet, cash flow**

**JEL Classification: M4, G10, G17, G19, G32, G39**

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A sound financial system is indispensable for the growth of a healthy and vibrant economy. Performance of the banking sector is an effective measure and indicator to check the performance of any economy to a large extent. In 1969, fourteen 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. Since nationalization, the banking system in India has witnessed structural and dimensional changes. A number of steps were taken in close succession, enabling the nationalized banks to play an active role in the economic development. The second step of nationalizing banks was taken in 1980, when six other major banks were nationalized. The stage of development of the banking industry is a good reflection of the development of the economy. Evaluation of the financial performance of the banking sector is an effective measure and indicator to check the soundness of economic activities of the country.

More than two decades have elapsed since the initiation of banking sector reforms in India. Over this period, the Indian banking sector has experienced a paradigm shift. Hence, it is a high time to make a performance appraisal of this sector. Among the financial entities, commercial banks are the predominant financial intermediaries, and it is well recognized that the SBI (State Bank of India) has been instrumental in shaping the economic destiny of our country. Therefore, SBI is considered as one of the most important nerve centres of the economy and finance of India. Due to the globalization of the financial markets, banking institutions today face a fast paced, dynamic, and competitive environment at the global scale. In such a competitive environment, financial institutions are forced to examine their performance due the dynamic economics of the 21st century, and their survival depends upon their productive efficiencies. With this view, in the present paper, the financial performance of SBI has been analyzed.

Various approaches can be adopted to examine financial performance, and ratio analysis is one of them. Ratio Analysis is the basic tool of financial analysis, which is an important part of any business planning process such as SWOT (Strength, Weakness, Opportunity, and Threats). Being a basic tool of strategic analysis, SWOT plays a vital role in a business planning process. Further, no SWOT analysis would be complete without analyzing a company's financial position. In this way, ratio analysis is a very important part of the strategic planning. In this paper, to evaluate

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the financial performance of SBI, five key financial ratios have been used. With the help of these ratios, the financial soundness of SBI can be judged. The five key financial ratios considered are - **(a)** investment valuation ratios, **(b)** profitability ratios, **(c)** management efficiency ratios, **(d)** balance sheet ratios, and **(e)** cash flow indicator ratios.

## Review of Literature

The conceptual framework of application of ratio analysis is built on the following literature:
Godse (1996) examined the application of CAMEL (Capital adequacy, Assets quality, Management efficiency, Earning quality, and Liquidity) model for evaluating the performance of banks. Parsuna (2004) analyzed the performance of Indian banking by adopting the CAMEL model. In his paper, the performance of 65 banks was studied for the year 2003-04. It was concluded that there was high competition, and consumers benefited from it by getting better service quality, innovative products, and better bargains. Veni (2004) studied the capital adequacy requirement of banks and the measures adopted by them to strengthen their capital ratios. As per the author, capital adequacy is considered as the key element of bank ratings. Satish, Juture, and Surendra (2005) adopted the CAMEL model to assess the performance of 55 Indian banks for the year 2004-05. They reported that the Indian banking system looks sound and information technology will help the banking system grow in strength while going into the future. Bodla and Verma (2006) studied the performance of SBI and ICICI through the CAMEL model for the period from 2000-2005. The study concluded that the liquidity position of both banks is sound and did not differ significantly. Bhayani (2006) analyzed the performance of new private sector banks including ICICI, HDFC, UTI, and IDBI using the CAMEL model. The findings of the study revealed that the aggregate performance of IDBI is best among all the banks. Choudhary and Tandon (2010) analyzed the financial performance of public sector banks in India. The study is based upon secondary data covering the period from 1997-2007. From the analysis, it was concluded that public sector banks should try to upgrade the technology and should formulate customer friendly policies to face competition at the the national and international level. Chaudhary and Sharma (2011) made a comparative analysis of services of public sector banks and private sector banks. The paper made an attempt to analyze how efficiently public and private sector banks have been managing NPA.

Prasad and Reddy (2012) examined the economic sustainability of all public sector banks in India using the CAMEL model for the period from 2006-2010. Results indicated that on an average, Andhra Bank was at the top position followed by Bank of Baroda and Indian Bank. Mishra, Harsha, Anand, and Dhruva (2012) analyzed the performance of 12 public and private sector banks over a period of eleven years (2000-2011). For this purpose, the CAMEL approach had been used, and it was established that the private sector banks are at the top of the list, with their performances in terms of soundness being the best. Looking at the trend, the researchers revealed that private banks are growing at a faster pace than public sector banks and will head towards convergence faster than the PSBs. Singh, Anurag, and Tandon (2012) examined the financial performance of two major banks, that is, SBI and ICICI. The study was conducted to compare the financial performance of the two banks on the basis of ratios such as credit deposit, net profit margin, and so forth, for the period from 2007-2012. The study found that SBI was performing well, and was financially sound than ICICI Bank, but in the context of deposits and expenditure, it was found that ICICI bank was better in managing efficiency than SBI. Guruswamy (2012) evaluated the performance of SBI and its associates, and five profitability ratios were considered. On the basis of analysis of profitability ratios, a fluctuating trend was observed during the study period from 1996-2008 for all the banks.

## Research Methodology

In this paper, to analyze the financial soundness, and to infer about convergence of the State Bank of India, a very simplified approach was used through ratio analysis. For this analysis, financial data were derived directly from the annual reports, and financial ratios were employed for evaluating the performance of financial soundness of SBI for the last eleven financial years. The present study adopts an analytical and descriptive research design. The data of the sample bank, that is, SBI for a period from 2002-2012 were collected from the annual reports published by the banks, publicly available information published by the Reserve Bank of India (2012) and Moneycontrol.com (2012). Nineteen variables related to financial ratios were used in this study. These are: (1) operating profit, (2) net operating profit, (3) earning per share, (4) dividend per share, (5) free reserves, (6) adjusted cash margin, (7) net profit margin, (8) return on long term fund, (9) return on net worth, (10) adjusted return on net worth, (11) interest income on total

funds, (12) non-interest income on total funds, (13) interest expended on total funds, (14) net interest income on total funds, (15) capital adequacy ratio, (16) debt-equity ratio, (17) dividend payout ratio, (18) earning retention ratio, and (19) adjusted cash flow.

## Analysis and Findings

For the analysis of financial performance of SBI, five ratios were studied. These ratios are **(a)** Investment Valuation Ratios, **(b)** Profitability Ratios, **(c)** Management Efficiency Ratios, **(d)** Balance Sheet Ratios, and **(e)** Cash Flow Indicator Ratios. All the data shown in the tables and figures are those of at the end of the financial year, for example, March 2012 corresponds to the March month of the financial year 2011-12. The required raw data for the financial ratios shown in the Tables 1-5 were collected from the annual reports (2002-2012) of SBI (Moneycontrol.com, 2012). After analyzing each ratio, the results were calculated. These results are analyzed using the following two normalized ratios, R1 and R2.

- **R1 = (Value in 2012 - Value in 2002) / Value in 2002**
- **R2 = (Value in 2012 - Value in 2011) / Value in 2011**

Analysis and findings based on these 5 ratios are described one by one in following sections :

**1) Investment Valuation Ratios :** Investment valuation ratio is used by investors to evaluate the investment attractiveness. It attempts to simplify the evaluation process by comparing the relevant data, which helps users to gain an estimate of valuation. It measures the investors' response to owning a company's stock and also the cost of the issuing the stock. The said are concerned with the return on investment for shareholders, and with the relationship between return and the value of an investment in company's shares. This ratio is analyzed by the following 5 parameters :

- **Operating Profit** is a measure of a bank's profit that excludes interest and income tax expenses. It is the difference between operating revenues and operating expenses, that is,

  Operating profit = Operating revenues - Operating expenses

- **Net Operating Profit:** As banks have non-operating income also, in such cases, net operating profit or earnings before interest and tax (EBIT) is calculated as follows :

  Net operating profit = Operating profit + Non-operating income

- **Earnings per share (EPS)** is the amount of income that the common stockholders are entitled to receive per share (of stock owned). This income may be paid out in the form of dividends, retained and reinvested by the company, or a combination of both.

- **Dividend per Share** is the part of the EPS that the company pays to the common stockholders.

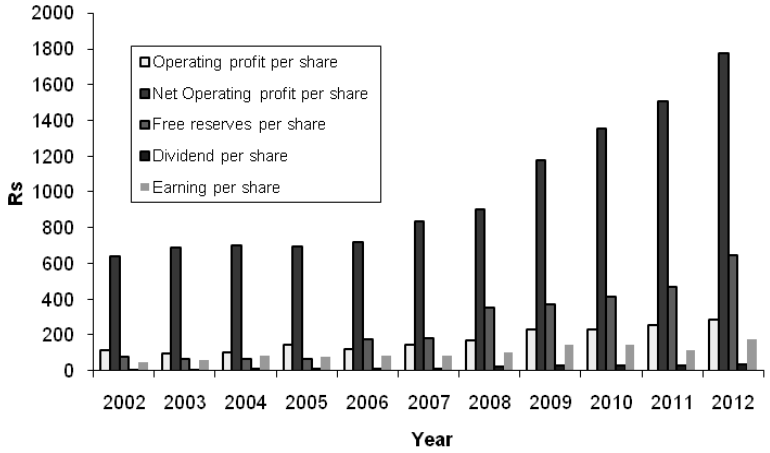
- **Free Reserves** is the extra cash a bank keeps in liquid assets (i.e. what it does not loan out) beyond its legal requirement, minus what it must repay.

**Table 1. Investment Valuation Ratios for the Period from 2002-2012**

| MARCH | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating profit per share (₹) | 118.16 | 95.07 | 104.33 | 148.5 | 124.77 | 147.72 | 173.61 | 230.04 | 229.63 | 255.39 | 289.44 |
| Net operating profit per share (₹) | 640.96 | 686.95 | 703.13 | 692.96 | 719.54 | 833.38 | 899.83 | 1179.45 | 1353.15 | 1504.34 | 1776.47 |
| Free reserves per share (₹) | 80.47 | 68.67 | 68.67 | 68.67 | 178.33 | 184.43 | 356.61 | 373.99 | 412.36 | 468.29 | 645.05 |
| Dividend per share (₹) | 6 | 8.5 | 11 | 12.5 | 14 | 14 | 21.5 | 29 | 30 | 30 | 35 |
| EPS (₹) | 46.2 | 59 | 83.2 | 81.79 | 83.73 | 86.29 | 106.56 | 143.67 | 144.37 | 116.07 | 174.15 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 1. Variation in 5 Parameters of the Investment Valuation Ratio (2002-2012)**




Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

The Table 1 shows the values of these 5 parameters in the last 11 financial years (2002-2012), which are further shown in the Figure 1, indicating the variation in these parameters in the form of bar charts. It can be observed from the Table 1 and Figure 1, that in general, all the 5 parameters increased year on year due to inflation. It can be observed from the data that SBI's financial position has been improving consistently. Furthermore, when the operating profit is compared with the net operating profit, it can be inferred that the total income consists of a big proportion of non-operating income. Every year, almost 85 % of the total income was generated from the non-operating income. With the help of EBIT (net operating profit) and EPS analysis, investors are able to zero in on the stocks in which they can invest their surplus money. It is clear from the Table 1 that investors can think of investing their surplus money in SBI's stocks. EBIT was rapidly increasing and due to that, EPS was strong. Due to financial soundness, the bank was capable to pay the dividend every year without any interruption. Also, from free reserve's point of view, SBI was in a strong position. So, overall, from the investment valuation ratio's point of view, SBI had a strong financial position. Investors were confident of investing their surplus money in SBI's stock because their money was invested in a good stock and they will get good returns every year as all the 5 parameters shown in the Table 1 and Figure 1 increased consistently year after year. The Table 1R shows the results of the data presented in the Table 1. It can be observed from the Table 1R that ratio R1 is quite high as compared to R2, which was as expected as R1 is based on the data for the year 2002, while R2 is based on the data for the year 2011.

**Table 1R. Values of R1 and R2 based on the Table 1**

| Ratios | R1 | R2 |
|---|---|---|
| Operating profit per share (₹) | 144.96% | 13.33 |
| Net Operating income per share (₹) | 177.16 | 18.09 |
| Free reserves per share (₹) | 701.60 | 37.75 |
| Dividend per share | 483.33 | 16.67 |
| EPS | 276.95 | 50.04 |

Source: Data in Table 1

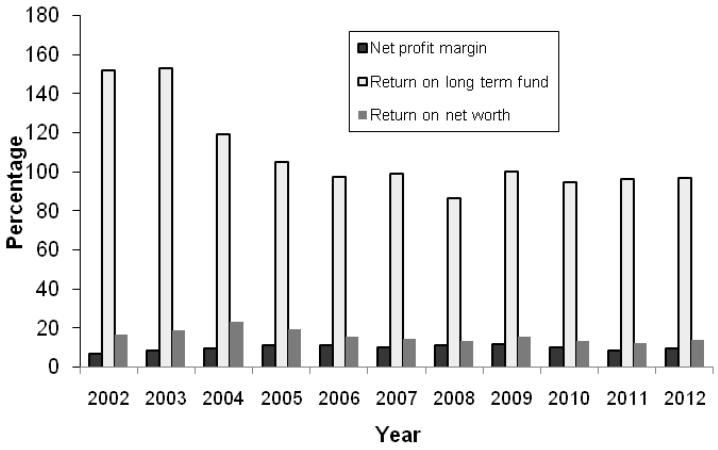
**2) Profitability Ratios :** Most of the investors want to invest in banks that are going to be profitable into the future. Highly profitable banks translate into a higher return on investment through share price appreciation or a higher dividend yield. As such, there are several popular ratios that measure a firm's profitability. These include net profit margin, return on net worth, and return on long term funds. Profitability ratios measure the efficiency of business operations with the help of profits. It is quite a useful tool to understand the efficiencies or inefficiencies of a business, and thereby assist management and owners to take corrective actions. Profitability ratios are the tools for financial analysis which communicate about the final goal (that is profit) of a business. The different stakeholders (owners, the

**Table 2. Profitability Ratios for the Period from 2002-2012**

| MARCH | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Adjusted cash margin (%) | 8.36 | 9.88 | 13.5 | 14.54 | 13.06 | 11.43 | 12.81 | 13.04 | 11.62 | 9.6 | 10.59 |
| Net profit margin (%) | 7.15 | 8.52 | 9.79 | 11.56 | 11.21 | 10.12 | 11.65 | 12.03 | 10.54 | 8.55 | 9.73 |
| Return on long term fund (%) | 152.03 | 153.32 | 119.61 | 105.35 | 97.89 | 99.2 | 86.83 | 100.35 | 95.02 | 96.73 | 96.84 |
| Return on net worth (%) | 16.95 | 19.15 | 23.39 | 19.43 | 15.94 | 14.5 | 13.72 | 15.74 | 13.89 | 12.71 | 13.97 |
| Adjusted return on net worth (%) | 15.87 | 18.05 | 21.64 | 19.35 | 15.93 | 14.47 | 13.7 | 15.74 | 13.91 | 12.74 | 13.97 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 2. Variation in 3 Key Parameters of the Profitability Ratio (2002-2012)**




Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

management, creditors, and lenders) of a business are interested in the profitability ratios for different purposes. These ratios show a bank's overall efficiency and performance. It can be divided into two types - margins and returns. Ratios that show margins represent the bank's ability to gain profits. Ratios that show returns represent the bank's ability to measure the overall efficiency of the bank in generating returns for its shareholders. The Table 2 shows the variation in the 5 parameters of the profitability ratio for the last eleven years (2002-2012). Further, 3 key parameters are described in detail and are depicted in the Figure 2.

↳ **Net Profit Margin** is a key financial indicator used to assess the profitability of a bank. It is an indicator of how efficiently and how well a bank controls its costs. The higher the margin, the more effective the bank is in converting revenue into actual profits. As per the Table 2, in 2012, the net profit margin was 9.73%. It measures profitability after consideration of all expenses, including taxes, interest, and depreciation. The net profit margin is calculated by using the following formula :

Net Profit Margin = (Net Operating Profit (after tax)/Net Sales) x100

Both terms of this equation come from the income statement. It is also a good time-series analysis measure, whereby bank owners can look at data for their own bank across different time periods to see how the net profit margin is trending.

↳ **Return on Long Term Funds Ratio** establishes the relationship between net profit and the long term funds. The term 'long term funds' refers to the total investment made in a business for a long term. It is calculated by dividing earnings before interest and tax (EBIT) by the total long term funds. Return on long term funds is calculated on the basis of the following formula :

Return on Long Term Funds = (Net Operating Profit (EBIT)/ Long Term Funds) x 100

**Table 2R. Values of R1 and R2 based on the Table 2**

| Ratios/ Year | R1 | R2 |
|---|---|---|
| Net profit margin | 36.08 % | 13.80 % |
| Return on long term fund | -36.30% | .11% |
| Return on net worth | -17.58% | 9.91% |

Source: Data in Table 2

↳ **Return on Net Worth or Return on Equity Ratio** is perhaps the most important of all the financial ratios for investors. It measures the return on the money the investors have put into the company. This is the ratio potential investors look at when deciding whether or not to invest in the company.

The calculation is : (Net Income/Stockholder's Equity) x 100

Net income comes from the income statement, and stockholder's equity comes from the balance sheet. In general, the higher the percentage, the better it is, as it shows that the company is doing a good job using the investors' money.

It can be observed from the Table 2 and Figure 2 that the net profit margin ratio, return on long term fund ratio, return on net worth ratio, all the three ratios were fluctuating during the study period. In general, the overall net profit margin ratio increased year wise up to 2009. However, return on long term fund ratio and return on net worth ratio decreased up to 2008. For net profit margin, the numerator (net income) is affected by the bank's actions to reduce expenses, and the denominator (net sales) is affected by the bank's actions to increase sales revenue. Both actions will increase the net profit margin ratio. Due to inflation and economic fluctuations, these ratios were fluctuating, which translates into a low margin of safety. But after RBI's necessary action, the ratios started to increase. Profitability ratios provide clues to the bank's pricing policies, cost structure, and production efficiency.

Maheshwari and Biyani (2012) investigated the effects of inflation on the Indian economy. Analysis of data is provided in the Table 2, and the results of the same are provided in the Table 2R. It can be observed from the Table 2R that the net profit margin ratio shows that R1 is more than R2, which means that the incremental rate of R2 is less than it was for R1. But in case of return on long term fund and return on net worth, R2 is more than R1, which means that the financial soundness is increasing. After monitoring changes in these profitability ratios, it is clear that SBI needs to improve its operational strategy, only then can it attract more customers and investors. For sound financial health, it is required that the bank has to generate greater profit per rupee of sales, then only can these ratios become more efficient.

**3) Management Efficiency Ratios :** Management efficiency ratio reflects the growth and survival of a bank. Management efficiency means adherence with set norms, ability to plan and respond to changing environment, leadership and administrative capability of the bank. The ratios in this segment involved subject analysis to measure the efficiency and effectiveness of the management. With the help of this parameter, the bank is able to evaluate the efficiency and take the corrective action to improve the quality. 4 parameters used for the management efficiency ratios are described as:

↳ **Interest Income/Total Funds Interest income** is a basic source of revenue for the banks. Interest income to total funds indicates the ability of the bank in generating income from its lending operations. Interest income includes interest from loans, advances and investments, interest on deposits with the RBI, and dividend income.

↳ **Non-interest Income/Total Funds :** Non-interest income includes fee based income accounts (exchange commission, brokerage), gains on sale, revaluation of investments, fixed assets and profits from exchange transactions. SBI generated higher fee income through innovative products and by adopting latest technology for sustained service levels. This ratio measures the income from operations, other than lending of the total income. A higher ratio indicates the increasing proportion of fee-based income.

↳ **Interest Expended/Total Funds :** Interest expended/ total funds ratio means how much interest a bank is paying on borrowings. Lower ratio on interest expended/total funds indicates the decreasing proportions of interest paid by banks on borrowings.

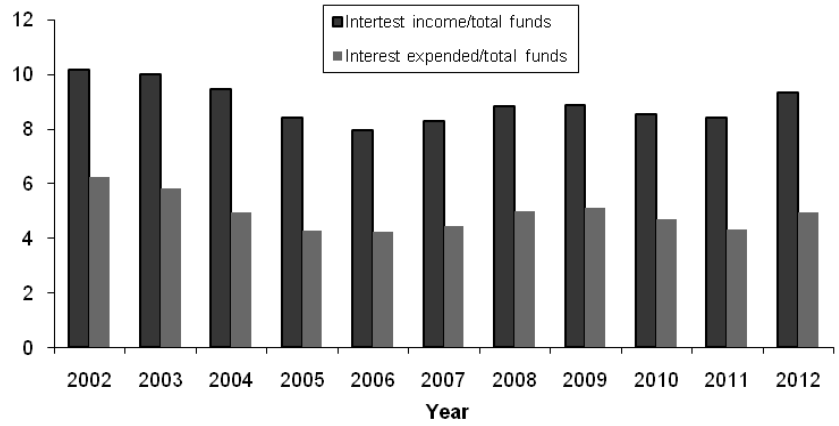
↳ **Net Interest Income/Total Funds :** Net interest income is defined as :

**Table 3(a). Management Efficiency Ratios for the Period from 2002-2012**

| MARCH | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Interest income / total funds | 10.16 | 9.99 | 9.44 | 8.41 | 7.94 | 8.27 | 8.82 | 8.88 | 8.52 | 8.39 | 9.32 |
| Net interest income / total funds | 3.92 | 4.16 | 4.53 | 4.15 | 3.71 | 3.85 | 3.87 | 3.79 | 3.82 | 4.1 | 4.37 |
| Non-interest income / total funds | 0.07 | 0.07 | 0.15 | 0.17 | 0.3 | 0.19 | 0.14 | 0.11 | 0.1 | 0.09 | 0.08 |
| Interest expended / total funds | 6.24 | 5.83 | 4.92 | 4.26 | 4.23 | 4.42 | 4.96 | 5.09 | 4.69 | 4.29 | 4.94 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 3(a). Variation in 2 Key Parameters of the Management Efficiency Ratio (2002-2012)**



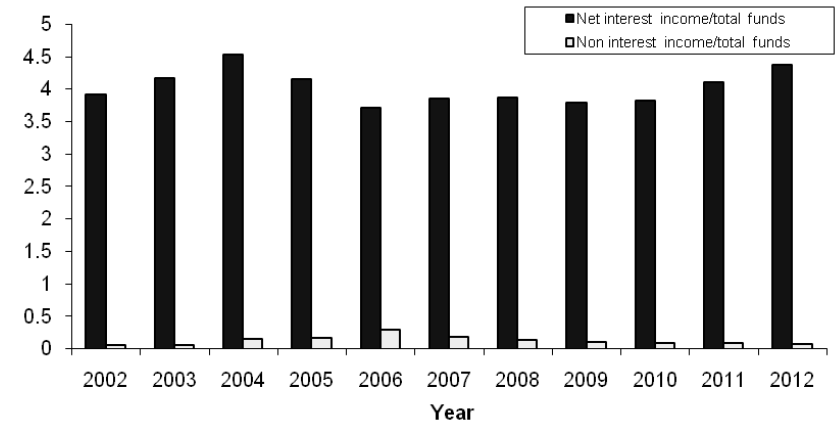

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Table 3(b). Ratio of Non- interest Income to Interest Income (in %)**

| 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|
| .68 | .69 | 1.56 | 1.98 | 3.64 | 2.25 | 1.56 | 1.22 | 1.16 | 1.06 | .85 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 3(b). Variation in 2 other Parameters of the Management Efficiency Ratio (2002-2012)**




Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

Net Interest Income = Interest Income + Non-interest Income - Interest Expanded

The variations in the aforementioned 4 parameters for the period from 2002-2012 are shown in the Table 3(a). There is no trend in variation; rather, the values fluctuated for different years. Furthermore, variation of interest income and interest expended is shown in the Figure 3(a), which indicates that the former is always greater than the latter. The

**Table 3R. Values of R1 and R2 based on Tables 3(a) and 3(b)**

| Ratios | R1 | R2 |
|---|---|---|
| Interest income/total funds | -8.27 | 11.08 |
| Interest expended/total funds | -20.83 | 15.15 |
| Non-interest income | 14.29 | -11.11 |
| Net interest income/total funds | 11.48 | 6.59 |

Source: Data in Table 3(a) and Table 3(b)

interest expended is about 50-60 % of the interest income. Furthermore, it can be observed that SBI's main source of income is interest income. Variation of net interest income with non interest income is shown in the Figure 3(b). It can be observed that the non interest income is just a fraction of the net interest income (about 1 to 2 %). For most of the years, the ratio - net interest income/total funds lay in the range of 4 to 4.5. Thus, large variations have not been observed in both these parameters as the years passed. The Table 3(b) and Figure 3(b) lists the ratios of non-interest income to the interest income in (%) for all the eleven years. It can be observed that this ratio was the highest (i.e. 3.64) in 2006 and was the lowest (i.e. 0.68) in 2002. Thus, the fluctuation in this ratio is quite significant. It is clear from the Table 3(a) that if the interest income increases, then the non-interest income decreases and vice-versa. Banks' growth depends on lending and borrowing transactions. These transactions depend upon the money market conditions. Due to economic fluctuations and inflation, till 2006, the interest income observed a downward trend. But after that, RBI's monetary and liquidity measures helped to control the interest income, and its effects are depicted in the Table 3(a). In 2010 and 2011, the interest income again decreased, but due to the strong control of RBI, in 2012, the interest income started to improve. The analysis of the data is presented in the Tables 3(a) and Table 3(b), and the results are depicted in the Table 3R. From the Table 3R, it is clear that as compared to 2002, in 2012, the interest income and interest expended declined. However, as compared to 2011, both the ratios increased. When interest income is in the negative direction, then the non-interest income is in positive direction and vice-versa. Due to inflation, there was a volatile condition in the money market, but still, SBI appeared to stand strong without any loss in profits.

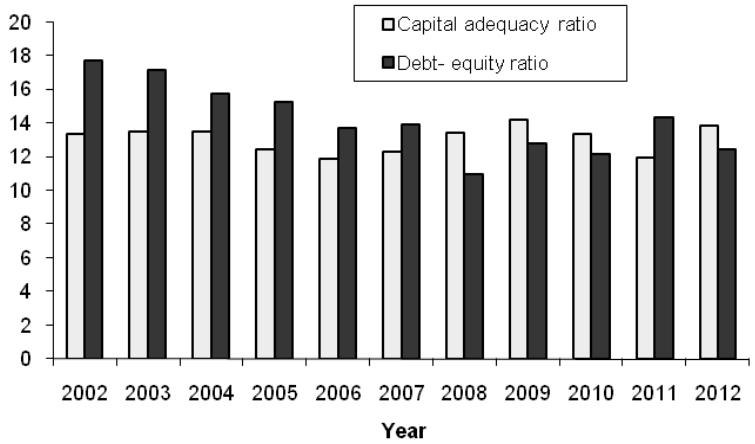
**4) Balance Sheet Ratios :** Balance Sheet Ratios are used for examining the financial condition of any organization.

**Table 4. Balance Sheet Ratios for the Period from 2002-2012**

| March | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Capital adequacy ratio | 13.35 | 13.5 | 13.53 | 12.45 | 11.88 | 12.34 | 13.47 | 14.25 | 13.39 | 11.98 | 13.86 |
| Debt- equity ratio | 17.77 | 17.21 | 15.75 | 15.25 | 13.75 | 13.92 | 10.96 | 12.81 | 12.19 | 14.37 | 12.43 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 4. Variation in 2 Key Parameters of Balance Sheet Ratio (2002-2012)**




Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

These ratios are based on data reported in the balance sheet. Certain ratios are particularly applicable to banks. The most important are the capital adequacy ratio and the debt-equity ratio.

↳ **Capital Adequacy Ratio (CAR)** is important for a bank to maintain the depositor's confidence and preventing the bank from going bankrupt. It reflects the overall financial condition of the bank, and also reveals the ability of the management to meet the need of additional capital. The CAR was developed to ensure that banks can absorb a reasonable level of losses occurred due to operational losses and can determine the capacity of the bank in meeting the losses. As per the latest RBI norms, the banks should have a CAR of 9 %. A higher CAR reveals the fact that the bank is safe against bankruptcy.

↳ The **Debt - Equity Ratio** shows how much proportion of the bank's business is financed through equity and how much is financed through debt. It is calculated by dividing total borrowings with shareholders' net worth. A higher ratio is an indication of less protection for the depositors and creditors and vice-versa.

The Table 4 shows the variation in the aforementioned 2 parameters for the last eleven years (2002-2012), which are also shown in the Figure 4. From the Table 4 and Figure 4, it can be observed that SBI's financial position is very strong. The average CAR in the period from 2002-2012 was 13.09%. This shows that SBI has maintained a higher CAR than the prescribed level. As per RBI's capital adequacy norms, the standard CAR is 9% and with this point of view, it was observed that the SBI is capable enough to maintain the capital adequacy ratio of 9%. Furthermore, the average debt-equity ratio of SBI for this period was 14.22%, which is an indication of less protection for the depositors and creditors. This is an area where SBI needs to improve.

### 5) Cash Flow Indicator Ratios

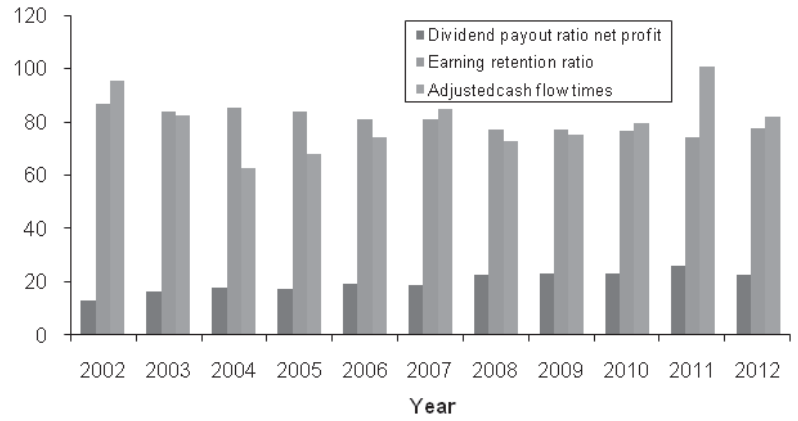
↳ **Dividend Payout Ratio** compares the dividends paid by an organization to its earnings. The relationship between dividends and earnings is important. The part of earnings that is not paid out in dividends is used for reinvestment and growth in future earnings. Investors who are interested in short term earnings prefer to invest in companies with high dividend payout ratio. On the other hand, investors who prefer to have capital growth like to invest in companies with

**Table 5. Cash Flow Indicator Ratios for the Period from 2002-2012**

| MARCH | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dividend payout ratio net profit | 12.98 | 16.25 | 17.74 | 17.46 | 19.06 | 18.98 | 22.64 | 22.9 | 23.36 | 26.03 | 22.59 |
| Earning retention ratio | 86.94 | 83.75 | 85.09 | 83.88 | 80.93 | 80.97 | 77.33 | 77.11 | 76.67 | 74.03 | 77.45 |
| Adjusted cash flow | 95.21 | 82.28 | 62.75 | 67.82 | 74.03 | 84.87 | 72.64 | 75.05 | 79.54 | 100.71 | 81.94 |

Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

**Figure 5. Variation in 3 Key Parameters of Cash Flow Indicators (2002-2012)**




Source of Raw Data: Annual Reports (2002-2012) of SBI (Moneycontrol.com, 2012)

lower dividend payout ratio. Dividends are paid in cash; therefore, a high dividend payout ratio can have implications for the cash management and liquidity of the company.

↳ **Earning Retention Ratio** is also called as Plowback Ratio. It is the ratio that measures the amount of earnings retained after dividends have been paid out to the shareholders. The objective to calculate the earnings retention ratio is that the more the bank retains, the faster are its chances of growing its business. The growth of dividends and the stock price is dependent on the bank's growth. However, the earnings retention ratio is related to the bank's growth rate. It is the amount of earnings the company reinvests in its business rather than distributing it to the shareholders as a dividend. Since the sum of the retention rate and the dividend payout ratio equals unity, it follows that:

Earnings Retention Ratio = 1 – Dividend Payout Ratio = (Net Income - Dividends) / Net Income

↳ **Adjusted Cash Flow or Adjusted Net Income** represents a business's earnings after expenses. It shows the earnings before interest, depreciation and taxes, but it also includes additions or subtractions for such items as the owner's salary and discretionary, one-time, and non-cash expenses. It shows whether the business returns are positive, break-even, or a loss. The annual adjusted net cash flow provides a starting point to determine potential profits under a new owner and a new management style.

The Table 5 shows the variation in the abovementioned 3 parameters for the last eleven years (2002-2012), which are also shown in the Figure 5. It is observed from the Table 5 and Figure 5, that in general, the dividend payout ratio increased year-wise and reached the peak value in 2011, after which it decreased slightly. The value of earning retention ratio was almost stable, indicating that SBI's growth was increasing over time. Adjusted cash flow shows that the bank's returns were positive, and that the investors felt safe about their money as well as about their returns.

## Conclusion

The present paper has made an attempt to examine the financial performance of the largest public sector bank in India - the State Bank of India (SBI). The study is based on ratio analysis, and has brought out some interesting results, which are summarized as follows :

↳ Investment valuation ratios demonstrated that SBI has a strong financial position. Investors were confident about investing in SBI's stocks because they were confident that by investing in this stock, not only will their money be safe, but they will get good returns every year.

↳ The Profitability ratios indicated that return on long term funds and return on net worth clearly proved the financial soundness of SBI. But after monitoring the changes in these profitability ratios, it is clear that the bank has to improve its operational strategy ; only then it will be able to attract more customers and investors. For sound financial health, the bank needs to put in more effort to be efficient in generating greater profits per rupee of sale.

↳ The Management Efficiency ratio showed that the growth and survival prospects of SBI are excellent. As per this ratio, SBI succeeded in maintaining an optimum level of management efficiency.

↳ SBI had a CAR at a higher level than the prescribed level, and the dependence on debt capital decreased over the last 11 years.

↳ The cash flow indicators - that is, dividend payout, earning retention, and adjusted cash flow ratios showed the stable and strong position of SBI.

In the present paper, we aimed to evaluate the financial soundness of SBI, and financial ratios were employed for the same purpose. It can be inferred from the analysis that the adoption of modern technology, banking reforms, and recovery mechanism greatly aided in improving the performance of the bank. However, there are few areas where improvement is required, for example, in the areas of debt-equity, operating profit, and non-interest income to total income.

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