



## **COST-BENEFIT ANALYSIS: A STUDY OF SELECT PUBLIC AND PRIVATE BANKS IN INDIA**

**Mr. Karthik Reddy<sup>1</sup>, Dr. Subramanyam M<sup>2</sup>, Dr. Lokanadha Reddy M<sup>3</sup>**

<sup>1,2,3</sup> School of Commerce and Management Studies, REVA University, Bangalore-64 India.

### **ABSTRACT**

*The banking sector in India is the strength of economy. Banking has been defined as 'Taking Deposits and lending it', this process is known as financial intermediation. Banking facilitates business, they provide liquidity and are core of financial markets. Therefore it is significant to understand income and expenses of a bank since people pay attention to its profitability. Hence Cost-benefit analysis is a standard tool for defining the performance efficiency of banks. It deals with the relationship between cost & return of funds providing the decision maker analysis of the net benefits. If return on advances and investments exceeds cost of deposits & borrowings, it is generally considered to be good performance indicator. Banks always strive for growth by retaining and adding new customers for its endurance, in this encounter of expenses against revenue opportunities is significant. But achieving that growth is a difficult challenge. The objective of this paper is to judge the ability of banks to repay its debts. It is the process of identifying the strength and weaknesses of banks by properly establishing the relationship between the cost of funds (Liability) and Return of funds (Asset) items of balance sheet. It provides the decision-maker the ability to assess the solvency, trend of business, efficiency of management and earning capacity of the banks.*

**Keywords:** Cost of deposits, Returns, solvency, earning capacity etc.

### **INTRODUCTION**

Low cost deposits play a major role in banks profitability. Interest paid by the banks divided by its deposits amount provides cost of deposit. Cost of Funds refers to the interest cost that banks

pay for the customers deposits accepted, usually expressed as an annual percentage. The difference between the cost of deposits including bank borrowings and the interest rate paid by the borrowers of short & long term loans including return on investments is one of the main sources of profit. Cost of funds is one of the major factor which affect the lending rates which banks set. Out of total deposits funding of bank there has been a marked shift towards term deposits, which pay higher interest rates than other forms of deposits. A bank can increase its net interest margin when it pays less interest on borrowed funds and also deposits when compared to other banks. This is one of the key factor that directly improves bank profitability spread.

Cost- Benefit analysis of bank helps decision-maker to employ its funds more profitability, by improving credit growth and low cost funding. Banks charge higher rate of interest on Advances to cover its cost of deposits. Advances mainly in the form of overdraft, cash credit, and billpurchase and discounting etc. provides the most profitable avenue for deployment of funds by a bank. The banks in order to improve its profitability it should limit its investments in premises, furniture & fixtures, etc. only to the extent required for its business since no returns are expected out of it or earn comparatively low return when compared to return on advances. The profitability ultimately depends on overhead costs, risk cost, and the miscellaneous income. With the break up analysis of costs & return of funds decision-maker gets a fair idea of the past performance of the bank. Analyzing past performance, bank can look into its future concert, devise strategies for its future progress. As a strategy of profit planning, banks should ensure for costs reduction, revenue maximization and optimal utilization of all its resources including the human resources.

### **INDIAN BANKING SECTOR- An Overview**

A sound and effective banking system is essential for healthy economy. Banking boundaries is not only confined to metro cities but it has extended its arm to remote rural areas also. Upliftment of poorer and underprivileged sections through various schemes of the government is directed through the banking sector. It caters to the credit needs of all sections of the society by reaching to corners of the country. Earlier banks were known as Money Lenders, today banking is one of the biggest service sector in India. More the customer acquisition bank focuses on customer retention. With the advent of information technology in the banking sector, the customer of bank can access and operate his bank accounts without visiting the bank premises. The Customer of bank is treated with couple of services viz., ATM's, Credit/Debit Card,

telebanking, internet banking, mobile banking etc. The quality services delivered by the bank are vital for the well-being of the economy. Banking payment services like online payment of various bills like telephone, water, electricity, income tax, donations etc. are praiseworthy. Indian Banking Sector 80% of control is by Public-Sector banks, its private peers have smaller share. To have competitive edge, banking sector lays prominence on providing improved services to their clients.

Banking sector in India is growing rapidly, it is probable that it will be the fifth largest banking industry in the world by 2020. With 26 public sector banks, 20 private sector banks and 43 foreign banks along with 61 regional rural banks (RRBs) and more than 90,000 credit cooperatives. Approximately, the Contribution of the banking sector to GDP is about 7.7% of GDP. Banking sector has generated employment in the economy for about 1.5 million people. Most of the banks viz HDFC, ICICI etc. to name a few are exploring the option to launch contact-less credit and debit cards in the market shortly. The cards, which use near field communication (NFC) mechanism, will allow customers to transact without having to insert or swipe. Today the role of banks are important in the economic development of the country, but it is even more important in the future.

## LITERATURE REVIEW

**Ganesan, P. (2001)** Opines that banks accept deposits and also borrow money for converting into profit earning assets. According to him, bank as a financial institution is viewed as an economic unit whose ultimate aim is to maximize profits. He concludes that there is a positive correlation between banks profitability and market share.

**Ganesan, P. (2003)** analyzed in his study the impact of priority sector advances on profitability. The study revealed that the quantum of estimated interest income loss to all public sector banks was high due to lower interest rates, high rate of subsidy and larger quantum of credit outstanding.

**Paul R. Portney (2008)** opines that costs and benefits are actually flip sides of the same coin. If one wants to decide an alternative choice, decision can be made after deciding on benefits expected from that action compared to its costs. It is required to engage in a form of cost-benefit analysis to ascertain the net profit of the business. Measuring income or expenses is important.

**Harish Kumar Singla (2008)** reveals that in his research the profitability position was reasonable. Position of the bank's profitability was moderate as measured by return on

investment. The company was able to cover its interest charges and had ability to meet the interest obligations.

**JyotiSaluja et.al. (2010)** explains that profitability is the main motive for the sustained existence of an organization. They opines that main source of operating income of a commercial bank are interest and discount received, commission, exchange and brokerage, profit from sale of assets etc. The main expenditure is interest paid on deposits, borrowings, employee cost, and other charges

**Bodla, B. S., & Verma, Anbar(2011)** examines that asset size and non-interest income have a positive and significant effect on bank profitability.

**G L Meena (2016)** measured the financial performance of select Indian banks by camel model concluded that the profit per employee, debt equity ratio, total advances-to-total deposits ratio, net NPA's-to-total advances ratio are the major factors impacting the financial performance of the banks

## **OBJECTIVES**

- To estimate the cost of funds of selected banks.
- To evaluate the returns from funds of selected banks.
- To narrate the relationship between cost and returns of funds of selected banks.

## **Hypothesis Study**

- **H 1:** There is noteworthy relationship between the cost of deposits and return on advances.
- **H 2:** There is noteworthy relationship between the cost of deposits and return on investments.
- **H 3:** There is noteworthy relationship between the cost of borrowings and return on deposits.
- **H 4:** There is noteworthy relationship between the cost of borrowings and return on investments.

## **RESEARCH DESIGN**

### **Sampling Design**

The present study is descriptive in nature. For this study the researcher selected **Convenience Random Sampling method**. It is done for the selection of the banks.

### **Sources of Data**

The secondary data are those which have been previously collected by somebody. Secondary data collection methods are used for research. Data collected from bank annual reports are used.

### **Plan of Analysis**

Following banks are selected for the Study:

1. State bank of India (SBI)
2. Bank of India (BOI)
3. HDFC Bank
4. ICICI Bank.

From the above mentioned banks annual reports of past 5 years i.e from 2011-12 to 2015-16. The total amount of deposits, total amount of loans and advances, total amount of investments are taken for study for analyzing, figures are tabulated, and then suggestions are drawn for the study.

### **Parameters for the Cost-Benefit Analysis**

For the cost-benefit analysis, the following ratios have been examined:

- ✓ Cost of Deposits (Interest on Deposits as Percentage of Total Deposits);
- ✓ Cost of Borrowing Funds (Interest on Borrowing Funds as percentage of Total Borrowing funds)
- ✓ Return on Advances ( Interest on Advances as Percentage of Total Advances )
- ✓ Return on Investments' (Interest on Investments as Percentage of Total Investments)

## **LIMITATIONS OF STUDY**

- The study is vast but narrowed to two public sector and two private sector banks.
- The method discussed pertains only to banks performance evaluation only not applicable for firms.

## ANALYSIS AND INTERPRETATION

**Table 1: Cost of Deposits (Interest on Deposits as Percentage of Total Deposits) (X<sub>1</sub>)**

Year	SBI	BOI	ICICI	HDFC
2011- 2012	5.33	5.66	5.6	5.14
2012-2013	5.61	5.32	5.77	5.51
2013-2014	5.6	4.98	5.38	5.18
2014-2015	5.65	5.44	5.61	5.21
2015-2016	5.71	5.25	5.11	5.34
<b>Average</b>	<b>5.58</b>	<b>5.33</b>	<b>5.494</b>	<b>5.276</b>
<b>SD</b>	<b>0.146287</b>	<b>0.2500000</b>	<b>0.255597</b>	<b>0.150765</b>
<b>CGR</b>	<b>0.017366</b>	<b>-0.018623</b>	<b>-0.02263</b>	<b>0.009589</b>
<b>CV</b>	<b>2.621638</b>	<b>4.6904315</b>	<b>4.6523</b>	<b>2.857557</b>

**Source:** Annual Reports from 2011-12 to 2015-16

From the above table, it is evident that there is an increasing trend in their cost of deposit for SBI and HDFC. But the other two banks have slight decrease in their cost of deposits in the year 2015-2016 compared towards past years. On an average in study period it is to be marked that SBI is uppermost in its cost of deposits i.e., 5.58% followed by 5.49% ICICI, but it is the minimum in HDFC with 5.28%. Bank of India shows the highest discrepancy in terms of 4.69% CV which clearly indicates company should have a patterned financing & administrative cost in relation to its return for its better profitability and to have edge in competition.

**Table 2: Cost of Borrowings (Borrowings funds as Percentage of Total Borrowings) (X<sub>2</sub>)**

Year	SBI	BOI	ICICI	HDFC
2011- 2012	3.05	3.57	1.05	9.45
2012-2013	2.44	4.21	1.44	8.75
2013-2014	2.81	3.79	1.39	8.97
2014-2015	1.94	4.03	0.73	5.48
2015-2016	1.85	3.75	0.63	6.35
<b>Average</b>	<b>2.418</b>	<b>3.87</b>	<b>1.048</b>	<b>7.8</b>
<b>SD</b>	<b>0.525519</b>	<b>0.250998</b>	<b>0.369621</b>	<b>1.766267</b>
<b>CGR</b>	<b>-0.11749</b>	<b>0.0123735</b>	<b>-0.11989</b>	<b>-0.09461</b>
<b>CV</b>	<b>21.73361</b>	<b>6.4857366</b>	<b>35.26922</b>	<b>22.64445</b>

**Source:** Annual Reports from 2011-12 to 2015-16

From the above table, it is evident that, SBI and ICICI have managed to reduce their cost of borrowings in each succeeding year during the study period, followed by BOI but there is a slight increase in their cost of borrowings during the year 2014-2015. It is important to note that HDFC has failed to decrease its cost of borrowings in the year 2015-2016 compared to earlier

years. Cost of borrowing funds is minimum in ICICI i.e. on an average 1.04% and the highest in the BOI i.e., on an average 3.87%

**Table 3: Return on Advances (Interest on Advances as Percentage of Total Advances) (X<sub>3</sub>)**

Year	SBI	BOI	ICICI	HDFC
2011- 2012	9.34	8.17	8.72	10.51
2012-2013	8.66	8.04	9.42	11.19
2013-2014	8.47	7.31	9.28	10.46
2014-2015	8.64	7.88	9.19	10.17
2015-2016	7.9	8.45	8.95	9.65
<b>Average</b>	<b>8.602</b>	<b>7.97</b>	<b>9.112</b>	<b>10.396</b>
<b>SD</b>	<b>0.514704</b>	<b>0.4239693</b>	<b>0.277975</b>	<b>0.560161</b>
<b>CGR</b>	<b>-0.041</b>	<b>0.00846</b>	<b>0.00653</b>	<b>-0.02112</b>
<b>CV</b>	<b>5.983536</b>	<b>5.3195651</b>	<b>3.050646</b>	<b>5.388233</b>

**Source:** Annual Reports from 2011-12 to 2015-16

From the above table, it is evident that there is a diminishing trend in returns of SBI, ICICI & HDFC. However BOI added highest return during study period. To conclude out of four banks, there is notable decline in returns of HDFC each year, where in Bank of India is uppermost in returns maximization. The decrease in returns maximization will adversely affect banks profitability if actions are not taken to earn more and pay less. Bank has to concentrate on fees it charge for its services and also the interest that it earns on its assets with less cost of funding.

**Table 4: Return on Investment (Interest on investments as Percentage of Total investments) (X<sub>4</sub>)**

Year	SBI	BOI	ICICI	HDFC
2011- 2012	7.67	8.26	6.07	6.67
2012-2013	7.75	7.7	6.42	6.74
2013-2014	8.01	7.36	6.52	7.47
2014-2015	7.49	7.85	6.4	6.5
2015-2016	8.87	7.88	6.6	8.61
<b>Average</b>	<b>7.958</b>	<b>7.81</b>	<b>6.402</b>	<b>7.198</b>
<b>SD</b>	<b>0.543065</b>	<b>0.3254228</b>	<b>0.202287</b>	<b>0.872279</b>
<b>CGR</b>	<b>0.037008</b>	<b>-0.011705</b>	<b>0.021148</b>	<b>0.065907</b>
<b>CV</b>	<b>6.824144</b>	<b>4.1667452</b>	<b>3.159746</b>	<b>12.11835</b>

**Source:** Annual Reports from 2011-12 to 2015-16

From the above table, it is evident that all four banks in study have made better returns on their investments in 2015-2016 compared to earlier years. SBI is topmost with its returns among

others, followed by BOI. ICICI has achieved least returns on its investment compared with its peers. Banks with low returns should use a portion of their reserves to invest, be obligated to add to their profits. The principal means to earn money from its investments is from stock sales & from dividends out of its investments.

**Table 5: Comparative Correlation Analysis**

<b>Cor. Coef</b>	<b>SBI</b>	<b>BOI</b>	<b>ICICI</b>	<b>HDFC</b>
X <sub>1</sub> & X <sub>3</sub>	-0.90976	0.584948	0.336244	0.388739
X <sub>1</sub> & X <sub>4</sub>	0.480215	0.940008	-0.57994	0.1425
X <sub>2</sub> & X <sub>3</sub>	0.736192	-0.13015	0.536082	0.662856
X <sub>2</sub> & X <sub>4</sub>	-0.40341	-0.4236	-0.1183	-0.22979

**Source:** Researchers Compilation

From the above analysis it can be concluded that, there exists significant positive relationship between the cost of deposits (X<sub>1</sub>) and return on advances (X<sub>3</sub>) in case of BOI, ICICI & HDFC, wherein it is negative and insignificant in SBI.

There exists positive and significant relationship between Cost of Deposits (X<sub>1</sub>) and Return on Investments (X<sub>4</sub>) in case of SBI, BOI & HDFC, wherein it is negative and insignificant in ICICI.

It is observed that between cost of borrowing funds (X<sub>2</sub>) and return on advances (X<sub>3</sub>) there is positive and significant relationship in case of SBI, ICICI & HDFC wherein it is negative and insignificant in BOI.

Correlation between cost of borrowing funds (X<sub>2</sub>) and Return on Investments (X<sub>4</sub>) is negative in all banks which indicates there exists no noteworthy relationship between them.

## **FINDINGS AND SUGGESTIONS**

1. Public Sector banks have attracted more deposits than private sector banks, but have generated less returns on advances compared with private sector banks. Public sector banks have to increase their advances to heighten its returns with upswing in deposits growth.

2. Public Sector banks have captivated returns on investments compared to private sector banks, Private sector banks have to increase their investments in more profitable investments avenues to earn returns in the form of interest and dividend.
3. Private Sector Banks have good return on investments and are able to manage their cost of borrowing which is almost half of the cost of deposits.
4. From the above it can be conclude that, private banks are preferred by most of the people for their deposits reasons being there are nationalized banks and also people are forced to choose government banks because most of the government schemes are linked to government banks which attract huge mass so nationalized banks get their deposits at minimum cost compared to borrowing funds.

## CONCLUSION

The government should allow private banks to work like government banks. Government schemes should also to be linked with private banks. Public prefer nationalized banks because their hard earned money is safe. Also it is noteworthy that private sector banks charge more cash transaction fees and other charges compared to public sector banks. State Bank of India with its brand image remain miles ahead of the other competitors. Banks should not take unsecured loan decisions. Non-performing assets loans that turn into loss assets or bad debts are the problems of banking industry. Banks in order to meet deposits cost, borrowings cost, employee cost, building cost etc. have to make enough money by charging interest on the advances, charging fees for services and by trading financial instruments in the financial markets. Banks should also engage in inter-bank lending on a short-term basis. Banks should earn more in the form of interest from its customers and pay less to its depositors. The bank need to work out the cost of funds available to lend as advances and add a profit margin. It should also have sufficient money with it to pay those customers who withdraw their money at any time. To improve its profit margin banks should also borrow funds from the RBI to mobilize funds and invest the maximum share of their funds in the government securities as these are less risky with more returns.

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