ABSTRACT: Banks would have adopted the effective, practical and competitive strategies to survive in the high tech tech banking environment.

Cost-benefit analysis is a standard tool for determining the efficiency of planned projects. However, one of the major difficulties in risk mitigation investments is that benefits are by nature uncertain. In this context, the standard approach relying on the average value of benefits may provide an incomplete picture of the efficiency of the risk mitigation project under consideration. It measures risk of the benefit-cost ratio, thus providing the decision maker with a more complete risk analysis of the net benefits of the project.

But for the efficient management of funds, banks should be given full autonomy and they should set their benchmark for each type of portfolio separately according to the market conditions. He has most successful banks are those that combine visionary technology and very competitive pricing with strong relationships and brands build on trust with previous in-depth experience of the client business.

Key-words: Cost-Benefit Analysis

INTRODUCTION

OVER VIEW OF BANKING INDUSTRY

In the economic development of a nation banks occupy in important place. Banking institutions from an important part of the money market and are indispensable in a modern and are indispensable in a modern developing society. Banking is the life blood of modern economic. It may truly be said that modern commerce is so dependent upon banking that any cessation of banking activity, even for a day or two, would completely parlay the economic life of a nation.

From its original narrow scope and modest purpose of taking care of other people’s money and lending a part it. Banking has developed to such an extent that, in countries likes England, France and the U.S.A.

CURRENT SCENARIO OF BANKING INDUSTRY IN INDIA

Today, it is known to almost everybody that the recession period has crawled in and that too in almost every part of the world.

Presently, in India also almost all the sectors such as IT sector, automobile industry and share market are also not in a very good condition. But, quite interestingly, the banking sector of India is booming day-by-day and that too even in the period of global crisis.

With the advent of high-tech communication and information technology numerous factors have facilitated the growth of the banking sector such as the Indian Internet banking, ATM Network, electronically transfer of funds and fast dissemination of information between different different branches. With the entry of more and more foreign banks and private sector banks, the lean and agile footed structure, became the story of past and such factors have escalated the growth potentials in the banking sector of India.

BANK’S PROFILE:

✓ BANK OF INDIA :

Bank of India was founded on 7th September, 1906 by a group of eminent businessmen from Mumbai. The Bank was under private ownership and control till July 1969 when it was nationalized along with 13 other banks.

Beginning with one office in Mumbai, with a paid-up capital of Rs.50 lakh and 50 employees, the Bank has made a rapid growth over the years and blossomed into a mighty institution with a strong national presence and sizable international operations. In business volume, the Bank occupies a premier position among the nationalized bank.

The Bank has 3101 branches in India spread over all states/ union territories including 141 specialised branches. These branches are controlled through 48 Zonal Offices. There are 29 branches/ offices (including three representative offices) abroad.

✓ BANK OF BARODA :

Bank of Baroda (BoB) is the third largest Public Sector bank in India, after State Bank of India and Punjab National Bank. BoB has total assets in excess of Rs. 2.27 lakh crores, or Rs. 2,274 billion, a network of over 3000 branches and offices, and about 1100+ ATMs. It offers a wide range of banking products and financial services to corporate and retail customers through a variety of delivery channels and through its specialised subsidiaries and affiliates in the areas of investment banking, credit cards and asset management.

Maharajah of Baroda Sir Sayajirao Gaekwad III founded the bank on July 20, 1908 in the princely state of Baroda,
in Gujarat. The bank, along with 13 other major commercial banks of India, was nationalised on 19 July 1969, by the Government of India. As of August 2010, the bank has 78 branches abroad and by the end of FY11 this number should climb to 90. In 2010, BOB opened a branch in Auckland, New Zealand, and its tenth branch in the United Kingdom. The bank also plans to open five branches in Africa. Besides branches, BoB plans to open three outlets in the Persian Gulf region that will consist of ATMs with a couple of people.

 ✓ **DENA BANK:**

Dena Bank was established in the year 1938 on the 26th of May. It was set up by the family of renowned Devkaran Nanjee. The initial name of the bank was Devkaran Nanjee Banking Company Ltd. In the month of December in 1939, the bank became a Public Company and changed its name to Dena Bank Ltd. It was in the year 1969, that Dena Bank was made a national bank and the term Ltd was dropped from the name. Dena Bank is one of the well known banks in the country and has a very good market share. Today, the bank has around 240 branches and around 150 ATMs across the country. The bank has already provided around 1.8 lakh debit cards to the account holders.

**INTRODUCTION OF COST BENEFIT ANALYSIS**

A process by which you weigh expected costs against expected benefits to determine the best (or most profitable) course of action.

When it comes to goal setting or deciding on the best plan of attack, working up a cost-benefits analysis will help you decide just which route would be best for you. And a cost-benefit analysis doesn't have to be complicated. You simply draw a line down the middle of a piece of paper to create two columns. On the left, list the benefits of achieving a given goal. On the right, list what it will cost you to get there.

Once you’ve done that, you can simply add up the benefits and costs columns and see which has more, or assign weighted scores to each entry and total them at the bottom. Of course, you may not want to let this quick and easy analysis make the final decision for you. And it may sometimes be the nearest thing to a tossup. But even a simple cost-benefit analysis can give you an idea of whether a given goal is worth investigating further.

An example is a sales director who needs to decide whether to implement a new computer-based contact management and sales processing system. The sales department currently has only a few computers, and its salespeople aren’t computer savvy. Any system upgrade would require extensive employee training. The company is likely to experience a drop in sales during the transition period.

❖ **Cost-Benefit Analysis in Nationalized Banks:**

The nationalized banks mobilize a major part of their funds through deposits and borrowings, with deposits having a dominating share. These funds are disbursed in investments and advances to get returns in the form of interest and dividends.

The present aspect deals with cost-benefit analysis of bank funds and concludes that nationalized banks are the beneficiary to mobilize funds through borrowings rather than go for public deposits as the cost of borrowings is almost half the cost of deposits.

Similarly, in the case of utilization of these funds, the public sector banks are the beneficiary if they concentrate more on investments in different instruments rather than disburse loans to their customers as return on investments is higher, but foreign banks and private sector banks get more returns on advances; hence, they are at an advantage if they disburse loans rather than invest elsewhere...

**LITERATURE REVIEW**

❖ **R K Uppal and Rimpi Kaur (2009):** Today's major problem of all the banks is how best to utilize their funds to earn maximum income with the reduction in costs so as to compete and survive in the emerging global competitive environment. The commercial banks mobilize a major part of their funds through deposits and borrowings, with deposits having a dominating share. The nationalized banks mobilize a major part of their funds through deposits and borrowings, with deposits having a dominating share. The Icfai Universe Journal of Bank Management Vol. No’s, 3 & 4, 2009

❖ **Andrew Holder:** “Cost Benefit Analysis Workshop, 14 – 15 July 2005: Monetary & Financial Statistics September 2005: Cost-benefit analysis is well-developed topic and most authors agree in the question how it should be performed. For example, Boardman (Boardman etal., 1996) in the first chapters identify nine different steps that are crucial for CBA. Later he expands these steps and discusses different pitfalls and complications. The Bank of England’s Monetary and Financial Statistics Division (MFSD) hosted a workshop on Cost Benefit Analysis (CBA) of statistics, attended by representatives from a range of central banks and statistical institutions. This article reports on the presentations and discussion at the workshop. Overall, however, the uncertainty around estimates of costs and (especially) benefits meant that CBA was likely to inform decisions rather than offer a simple decision-making rule.

❖ **Charles Bean, Chief Economist and Executive Director for Monetary Policy, Bank of England.** Monetary and financial data contribute to meeting the inflation target, maintaining financial stability and understanding the behavior of the UK economy. The Cost-benefit analysis project has developed ways of assessing the costs and
benefits of these data. Monetary valuation of both costs and benefits has proved elusive, but estimation of relative costs and benefits has been more tractable.

RESEARCH METHODOLOGY
IDENTIFICATION OF RESEARCH TOPIC
The topic for the research is “A STUDY OF COST-BENEFIT ANALYSIS IN NATIONALISED BANK”. This research is basically a descriptive research study.

OBJECTIVES:
The objectives of the study are to:
• Study and analyze the cost of funds to get the cheapest source of funds;
• Study and analyze the returns from funds invested to identify the highest beneficial investment;
• Compare the cost of funds with the returns to find out the most profitable investment; and
• Suggest suitable strategies for the efficient management of funds.

Research Design:
✓ SAMPLING DESIGN
The type of sample design which is selected by the researcher is Random Sampling. It is done for the selection of the banks.

✓ METHODS OF DATA COLLECTION
The secondary data are those which have already been collected by someone else and which have already been passed through the statistical process. As the research study is totally dependent for the study would be secondary data collection method. The data on the subject is collected from various sources such as annual reports of the banks, bank’s balance sheets and profit and loss statements, Journal of Banking studies, IUP Journals, Journal of Accounting and Finance and ICFAI Journals. Internet has been an important source of secondary data. Here the researcher is taken three banks from nationalized banks.

• NATIONALIZED BANKS: -
  1. BANK OF INDIA
  2. BANK OF BARODA
  3. DENA BANK

➢ HYPOTHESES STUDY
$H_01$: There is no significant correlation between the cost of deposits and return on advances and investments.
$H_02$: There is no significant correlation between the cost of borrowing funds and return on advances and investments.

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);
• Total Deposits as Percentage of Total Liabilities;
• Total Credit as Percentage of Total Deposits;
• Total Investments as Percentage of Total Deposits’ and
• Credit + Investments as Percentage of Total Deposits. Statistical Returns of Bank of India, Bank of Baroda, and Dena Bank (2005-06 to 2009-10) formed the database for this study.

ANALYSIS AND INTERPRETATION
Table 1: Cost of Deposits (Interest on Deposits as Percentage of Total Deposits)

<table>
<thead>
<tr>
<th>Years</th>
<th>BOB</th>
<th>BOI</th>
<th>Dena Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>4.14</td>
<td>4.68</td>
<td>4.39</td>
</tr>
<tr>
<td>2009-10</td>
<td>4.34</td>
<td>4.79</td>
<td>4.56</td>
</tr>
<tr>
<td>2010-11</td>
<td>5.20</td>
<td>5.42</td>
<td>5.35</td>
</tr>
<tr>
<td>2011-12</td>
<td>5.18</td>
<td>5.72</td>
<td>5.53</td>
</tr>
<tr>
<td>2012-13</td>
<td>4.46</td>
<td>5.27</td>
<td>5.67</td>
</tr>
<tr>
<td>Overall Growth</td>
<td>7.73</td>
<td>12.61</td>
<td>29.16</td>
</tr>
<tr>
<td>Average</td>
<td>5.17</td>
<td>6.41</td>
<td>9.11</td>
</tr>
<tr>
<td>SD</td>
<td>0.49</td>
<td>0.44</td>
<td>0.58</td>
</tr>
<tr>
<td>CV</td>
<td>9.54</td>
<td>6.79</td>
<td>6.42</td>
</tr>
</tbody>
</table>

Table 2: Cost of Borrowings (X2) (in %)

<table>
<thead>
<tr>
<th>Years</th>
<th>BOB</th>
<th>BOI</th>
<th>Dena Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>1.13</td>
<td>6.14</td>
<td>1.74</td>
</tr>
<tr>
<td>2009-10</td>
<td>1.38</td>
<td>8.21</td>
<td>1.37</td>
</tr>
<tr>
<td>2010-11</td>
<td>2.69</td>
<td>7.84</td>
<td>1.86</td>
</tr>
<tr>
<td>2011-12</td>
<td>2.28</td>
<td>4.81</td>
<td>1.17</td>
</tr>
<tr>
<td>2012-13</td>
<td>2.19</td>
<td>2.41</td>
<td>3.26</td>
</tr>
<tr>
<td>Overall Growth</td>
<td>93.81</td>
<td>60.75</td>
<td>87.36</td>
</tr>
<tr>
<td>Average</td>
<td>17.25</td>
<td>5.22</td>
<td>16.13</td>
</tr>
<tr>
<td>SD</td>
<td>0.65</td>
<td>2.37</td>
<td>0.82</td>
</tr>
<tr>
<td>CV</td>
<td>3.79</td>
<td>45.43</td>
<td>5.08</td>
</tr>
</tbody>
</table>

The above table shows that all three banks there are increasing trend in their cost of deposit during the period. On an average, it is highest in Dena Bank with 9.11% followed by Bank of India with 6.41%, but it is the least in Bank of Baroda with 5.17%.
From the above banks the highest overall increasing of 29.16% in the cost of deposit BOI shows 12.61% increase and BOB shows the 7.73% increase in the cost of deposit. Bank of Baroda shows the highest variation in terms of 9.54% CV that consist the competitive environment.

Table 2: Cost of Borrowing Funds (Interest on Borrowing Funds as percentage of Total Borrowing Funds)

<table>
<thead>
<tr>
<th>Years</th>
<th>BOB</th>
<th>BOI</th>
<th>Dena Bank (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>1.31</td>
<td>6.14</td>
<td>1.74</td>
</tr>
<tr>
<td>2009-10</td>
<td>1.38</td>
<td>8.21</td>
<td>1.37</td>
</tr>
<tr>
<td>2010-11</td>
<td>2.60</td>
<td>7.84</td>
<td>1.86</td>
</tr>
<tr>
<td>2011-12</td>
<td>2.28</td>
<td>4.81</td>
<td>1.17</td>
</tr>
<tr>
<td>2012-13</td>
<td>2.19</td>
<td>2.41</td>
<td>3.26</td>
</tr>
<tr>
<td>Overall Growth</td>
<td>93.81</td>
<td>-60.75</td>
<td>87.36</td>
</tr>
<tr>
<td>Average</td>
<td>17.25</td>
<td>5.22</td>
<td>16.13</td>
</tr>
<tr>
<td>SD</td>
<td>0.65</td>
<td>2.37</td>
<td>0.82</td>
</tr>
<tr>
<td>CV</td>
<td>3.79</td>
<td>45.43</td>
<td>5.08</td>
</tr>
</tbody>
</table>

The above table shows that there is increasing trend in Bank of Baroda and Dena Bank during the study period with the highest inc. in BOB with 93.81% and 87.36% but decreasing in BOI with 60.75%.

On an average, cost of borrowing funds is the least in Bank of India i.e., 5.22% and the highest in the Bank of Baroda i.e., 17.25%.

Table 3: Return on Advances (Interest on Advances as Percentage of Total Advances)

<table>
<thead>
<tr>
<th>Years</th>
<th>BOB</th>
<th>BOI</th>
<th>Dena Bank (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>11.85</td>
<td>10.78</td>
<td>12.36</td>
</tr>
<tr>
<td>2009-10</td>
<td>11.02</td>
<td>10.81</td>
<td>11.57</td>
</tr>
<tr>
<td>2010-11</td>
<td>11.07</td>
<td>10.86</td>
<td>11.77</td>
</tr>
<tr>
<td>2011-12</td>
<td>10.48</td>
<td>11.44</td>
<td>11.94</td>
</tr>
<tr>
<td>2012-13</td>
<td>9.54</td>
<td>10.61</td>
<td>11.31</td>
</tr>
<tr>
<td>Overall Growth</td>
<td>-19.49</td>
<td>-5.38</td>
<td>-8.50</td>
</tr>
<tr>
<td>Average</td>
<td>5.74</td>
<td>8.82</td>
<td>8.41</td>
</tr>
<tr>
<td>SD</td>
<td>0.85</td>
<td>0.32</td>
<td>0.40</td>
</tr>
<tr>
<td>CV</td>
<td>14.86</td>
<td>3.58</td>
<td>4.71</td>
</tr>
</tbody>
</table>

The above table shows a declining trend in return on advance in above three banks during study period. Bank of Baroda shows the highest decline of 19.49% in their returns; where it is least in Bank of India i.e., 1.58%.

The decline is not a sign of sound system of credit control. On an average, return on advance is the highest in Bank of India, in Dena Bank and BOB with 8.41 and 5.74% respectively.

Table 4: Return on Investments (Interest on Investments as Percentage of Total Investments)

<table>
<thead>
<tr>
<th>Years</th>
<th>BOB</th>
<th>BOI</th>
<th>Dena Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>20.21</td>
<td>22.11</td>
<td>20.54</td>
</tr>
<tr>
<td>2009-10</td>
<td>26.36</td>
<td>25.86</td>
<td>22.93</td>
</tr>
<tr>
<td>2010-11</td>
<td>26.93</td>
<td>29.56</td>
<td>26.36</td>
</tr>
<tr>
<td>2011-12</td>
<td>28.77</td>
<td>31.07</td>
<td>27.63</td>
</tr>
<tr>
<td>2012-13</td>
<td>27.29</td>
<td>26.05</td>
<td>25.55</td>
</tr>
<tr>
<td>Overall Growth</td>
<td>35.03</td>
<td>26.53</td>
<td>24.39</td>
</tr>
<tr>
<td>Average</td>
<td>27.43</td>
<td>25.96</td>
<td>24.57</td>
</tr>
<tr>
<td>SD</td>
<td>3.31</td>
<td>3.48</td>
<td>2.85</td>
</tr>
<tr>
<td>CV</td>
<td>12.07</td>
<td>13.40</td>
<td>11.59</td>
</tr>
</tbody>
</table>

The above table shows that there increasing trend in return on investment in all three banks. The highest increasing rate shows in Bank of Baroda, followed by Dena bank with 24.39% and in BOI with 20.53%.

On an average, return on investment is the highest in Bank of Baroda with 27.43% and followed by Bank of India with 25.96%.

Correlation Coefficient

Here, X1= Cost of deposit and X3= Return on Advance
X2= Cost of borrowing and X4= Return in investment

The above table shows the rejection of the entire hypothesis that test the correlation coefficient among the cost of funds.

But the return there from is not significant hence, shows that cost and return of funds are significantly correlated with each other at different coefficients.

In case correlation between cost of deposit(X1) and return on advance (X3), it is negative and insignificant in BOB and Dena Bank but it is positive and significant in BOI. Correlation among cost of deposits (X1) and return on investment (X4) is positive in BOB. Correlation between cost of borrowing funds (X2) and return on advance (X3) is positive and significant in all banks.
Overall, it can be concluded that cost and returns and significantly correlated with each other, which shows that the increase in cost, return also increase because more funds are generated either through deposits or borrowing, the more will be the investment either on term credit or securities.

LIMITATION OF STUDY
- The study is limited to three banks.
- Time and resource constrains.
- The method discussed pertains only to banks though it can be used for performance evaluation of other financial institutions also.
- The study depends on the accuracy of secondary data, so the limitations of the secondary data are also applicable.
- The study is based on correlation coefficient aspect so that it can suggest proper guideline.
- It is difficult to decide, among all available instruments of funds, which is more profitable and risk-free.

FINDINGS
- Nationalized banks have attracted more funds of a short-term nature in the form of demand deposits because the business class is attracted towards better services of other banks
- Hence, they prefer to advance loans rather than invest in securities.
- From the whole discussion, it is clear that nationalized banks get their deposit at least cost as compared to borrowing funds because they themselves decide the interest rate of deposit and the deposit are more costly as compared to their borrowing funds.
- On the basis of the above analysis, it may be suggested that the nationalized banks benefit by mobilizing funds through borrowing rather go to public deposit as the cost of borrowing is almost half of the cost of deposits.
- The nationalized banks mobilize a major part of their funds through deposits and borrowings, with deposits having a dominating share.

CONCLUSION
In Nationalized banks prefer deposits as cheaper mode of funds mobilization and advances as more profitable utilization of funds, just because of their efficient marketing strategies and sophisticated risk management but, Nationalized and prefer borrowing funds i.e., 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.

But the main reason for more cost of deposit is because the fixed rules of the government bind them not to make deposits at flexible rates of interest according to the market situation.

But for the efficient management of funds, banks should be given full autonomy and they should set their benchmark for each type of portfolio separately according to the market conditions’ he has most successful banks are those that combine visionary technology and very competitive pricing with strong relationships and brands build on trust with previous in-depth experience of the client business.

Banks would have adopted the effective, practical and competitive strategies to survive in the high tech banking environment.

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Web-sites:
AUTHOR

Dr. Atul Bansal (born 1971) M.Com., LL.B., M.B.A., Ph.D., PM&IR, IFRS, FERM MIAA, MICA, MITC, MAICP, SM-IEDRC, Competent and diligent professional, offering exposure across Teaching, Research and Administration; currently spearheading as Professor of Finance & Accounting at Department of Management & Research, INTEGRAL University, Lucknow, Uttar Pradesh. He has consistently a brilliant academic career. He is a young academician, researcher and administrator with experience of more than 20 years. Dr. Bansal has to his credit publication of 04 Reference Books Nine Edited books. Dr. Bansal has published more than 62 research papers/articles published in peer-reviewed journal of international and national repute. He has published extensively on IFRS, Corporate Governance, Financial management etc. He has also presented large number of research papers in the international conferences/Seminars/ workshops. Dr. Bansal is also associated with numbers of professional bodies and Member of Panel / Editorial Board of International or National Level Journal like PROFICIENT – An International Journal of Management, INDIAN JOURNAL OF COMMERCE & MANAGEMENT STUDIES, INDIAN JOURNAL OF COMMERCE & MANAGEMENT STUDIES. His area of interest is Financial Management, IFRS, Income Tax and Banking.