

## “BANK OF BARODA” BALANCED MEASUREMENT WITH INTANGIBLES

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### **ABSTRACT**

*The objective of this paper is to evaluate the significance of intangible aspects as a tool for performance measurement in the Indian banking sector. This is in light of the fact that tangible aspects, generally measured through the financial indicators such as the net profits or the growth rate of profit, the volume of nonperforming assets or capital adequacy ratio are not sufficient to evaluate the performance of commercial banks in a comprehensive manner.*

*As the banking sector in India widens its horizons, the scope of bank evaluation using the intangible aspects is immense. The existing methods of performance evaluation of banks include only analysis of financial indicators. Invariably, these methods overlook the intangible aspects of organizational performance. However, this does not yield a very effective strategy since organizational performance interlinks financial indicators with other invisible indicators. This is all the more applicable for a bank, where financial performance is the translation of many intangible business processes and performance indicators. Subsequently, banks find it difficult to design a comprehensive strategy for long-term growth. Various techniques have been adopted in business organizations to incorporate both tangible and intangible assets that can help in performance evaluation. Banking organizations can also adopt such techniques to overcome the limitations of the prevalent evaluation methods, for the purpose of a more comprehensive strategic planning.*

*Thus this paper is based on the hypothesis that intangible performance indicators enhance the evaluation process of bank performance in India. The effort is made to show that these indicators can prove to be better than the existing techniques for performance measurement based on tangible aspects alone, and also help in superior evaluation and strategic planning for future growth and development of the banks in the wake of changing requirements of this sector.*

*Journey towards inclusion of intangible aspects in organizational performance evaluation has been only gradual. Various measures have been evolved over a period of time for the purpose of performance appraisal. However, most of these measures concentrate on only one of the facets of the organization. It is recognized that while an organization might be*

performing well in one area, it might be ill-performing in some other area. Consequently, balanced sustainable development of the organization becomes a difficult objective. One of the more comprehensive techniques in this field is the concept of Balanced Scorecard, developed by Robert Kaplan and David Norton in 1992. It attempts to overcome the limitations of the traditional techniques of performance evaluation. A Balanced Scorecard brings together, in a single management report, many of the seemingly disparate elements of a company's competitive agenda. It provides an organization the necessary tools for performance measurement and monitoring, directly addressing multiple aspects that support the overall vision and strategy by developing indicators for different factors.

The benefits of such analytical tools are profound. Realizing this, many organizations have already started accepting this mechanism, as it is surely a much more comprehensive and effective tool involving the entire array of employees of the organization. Even many service organizations have also been thinking in this direction. However, its spread in India is quite limited, with only a few large industrial firms adopting it only recently. Especially the banks have been reluctant in adopting this approach. Whereas, being service providing organizations, this approach can provide an important insight into the intangible aspects that may define their performance. In fact it needs to be understood that such evaluation techniques as the balanced scorecard can put together financial performance of the bank, customer preferences for banking services, benefits of the evolution of various products and banking procedures, and the role of modern technology to design the future strategy for rapid growth of the organization.

To understand this, there is also a need to develop an alternative approach to the analysis of apparently financial indicators of bank performance. The picture of the financial health of a bank like Bank of Baroda, which emerges from the basic financial indicators like the growth rate of profits, the proportion of nonperforming assets to total assets and capital adequacy ratio is not sufficient to give a clear idea of the performance of the bank in other related areas. This becomes clear when 16 other ratios relating to the bank performance are analyzed for a period of ten years from 1997 to 2006. All these ratios are standard performance indicators published by the Reserve Bank of India on an annual basis. Although they appear to be financial in nature, these ratios essentially reflect the non-financial performance of the bank as well. The following observations can be made in particular:

Out of 19 indicators, 10 reflect financial performance of the bank, while nine reflect intangible aspects.

In all 12 indicators suggest superior performance on part of the BOB as compared to all Indian commercial banks, and 7 indicators suggest inferior performance.

The performance of BOB is significantly different from all commercial banks in case of nine indicators.

Out of these nine indicators, the performance of BOB is negative in case of five indicators.

Out of the five indicators for which the bank shows negative performance, one is a financial indicator, while the remaining four indicators reflect intangible aspects. These include the ratios of priority sector advances to total advances, term loans to total advances, wage bill to intermediation cost and wage bill to total expenses.

*This analysis points towards the importance of measurement of intangible assets and integration of contingencies in performance evaluation of banks. The need for adoption of new performance evaluation techniques such as balanced scorecard is established in this manner. Certainly when it comes to long-term strategic planning, such a technique can prove to be a strong foundation. However, the critical evaluation of incorporating intangible aspects in the performance measurement of a banking organization suggests that the implementation of such techniques is quite difficult due to several problems. Mainly these problems relate to the issues involved in measurement of the attributes associated with the intangible assets, complexity of the interrelations among these indicators, differences in the significance assigned to various indicators within the organization and difficulty in linking the reward mechanism to performance. This implies that modern mechanisms of performance measurement and evaluation also have a scope for more refinement.*

## I. INTRODUCTION:

Significance of performance evaluation in any organization, for sustainable growth and development, has been recognized since long. This calls for a system that first measures and evaluates the performance, and then brings out the strengths and weaknesses of the organization for the purpose of further improvement. Efficient performance evaluation system encompasses all aspects of an organization. With the advances in computational tools, such systems have evolved over a period of time from single-aspect systems to more comprehensive systems covering all aspects of an organization.

The Balanced Scorecard is one such tool. With emphasis on four perspectives, namely financial, customer, internal business process and learning & growth, it can be an efficient technique for long-term strategic planning especially in service sector organizations like banks. The purpose of this paper is to understand how some of the apparently financial indicators also help in measurement of intangible assets of a banking organization, and how these can be used for performance evaluation of such an organization.

The paper is divided into five sections. Section II, through a brief literature review, explains the significance of intangible assets in performance evaluation of Indian banks. Section III discusses how performance of a public sector bank like Bank of Baroda can give a different picture when analysis of profits is coupled with other indicators reported by the Reserve Bank of India. Section IV elaborates upon some problems faced by such performance evaluation systems, and why these are not final, but only an intermediate solution to performance evaluation; and section V concludes.

## II. PERFORMANCE EVALUATION OF BANKS THROUGH INTANGIBLE ASSETS:

In the contemporary economic environment, factors like employee knowledge, relationship with the customers and the culture of innovation and changes generates success for an organization. Thus, the intangible assets are the key to long-term success in today's world. The power of intangibles manifest in the valuations is quite visible in modern organizations. In the past two decades, the share of intangible assets has virtually doubled from 38 per cent.

Following this, Kaplan and Norton (1992) recommended broadening the scope of the performance evaluation measures to include four areas of an organizational functioning. Apparently the BSC system addresses the shortcomings in financially oriented performance measurement systems. It also provides a number of mechanisms for linking long-term strategic objectives with short-term actions:

- Consensus on firm's vision & strategy
- Communication of the firm's strategy throughout the organization
- Allocate resources to & set priorities for long-term strategic objectives
- Monitoring & modification of strategies to prevent an organizational downturn
- Integration of the lagging indicators, with the leading indicators

For banks, studying financial indicators in isolation does not yield a very effective strategy since their performance interlinks financial indicators with other invisible indicators. In fact, financial performance is the translation of many intangible business processes and performance indicators. Subsequently, banks find it difficult to design a comprehensive strategy for long-term growth. This is where more comprehensive techniques such as the BSC can be incorporated. Indian banking sector can also adopt such a technique to overcome the limitations of the existing evaluation methods. (Lipe&Salterio, 1998a, 1998b, 2000)

However, banks tend to focus upon financial aspects alone and concentrate on return on equity (ROE) or marketing of products with the volume and growth of credit and deposits as the central objective. The risk-adjusted capital adequacy guidelines, poor profitability over long-term, and conceptual and practical failure of the measures such as asset growth, often lead bank management to focus on ROE as the ultimate performance scorecard. (Karr, 2005)

Such framework brings about many changes in performance measurement as well as in the management processes used to plan, operate and control the bank; but it does not present the entire picture of bank performance measurement and evaluation.

A more comprehensive alternative is the CAMEL, i.e., Capital adequacy, Assets quality, Management, Earning quality and Liquidity. It includes financial performance indicators as well as managerial aspects of organizational performance. It has been implemented as an improvement over annual financial inspection introduced by the RBI in 1992. As the Indian banks comply with the Basle II Accord from March 2007, and get ready for integration with the global financial markets after 2009, they need to rethink on the lines of capital requirements, supervisory review and market discipline. (Tandon, 2006) This may lead to further improvements and adoption of more modern systems such as the BSC, which incorporate the correlation between technology and customer relationship management as well as the correlation between technology and human resources.

How can indicators other than the net profit and the growth rate in it, point towards the performance of a bank? Especially, when measurement of intangible indicators appears to be difficult? However, several seemingly financial indicators also point towards the performance of intangible assets of a bank. For instance, growth rate of deposits is a

significant indicator of customer confidence in the bank. Similarly, growth rate of credit / advances is a significant indicator of customer preference for the services of a specific bank. The significance of such ratios and indicators is recognized by the Reserve Bank of India, and that is the reason behind the definition of many such ratios for the commercial banks in India. However, not many banks make an attempt to analyze the underpinnings of such ratios and utilize the trend observations to evaluate their own performance.

Majority of the banks use growth rate of the net profits as the sole indicator of the health of their organization. Of course this has changed lately, especially after implementation of Basel norms regarding the capital adequacy. Since 1996, when the Basel Accord I was implemented by the RBI for Indian commercial banks, the banks have started utilizing capital adequacy ratio as another major indicator of the financial health of the organization. Many more financial indicators can be utilized for the purpose. Moreover, customer behavior can also be analyzed by using certain apparently financial indicators, as mentioned above. Performance of a bank like Bank of Baroda can be evaluated in a much more effective manner by using such indicators. This helps in understanding questions like:

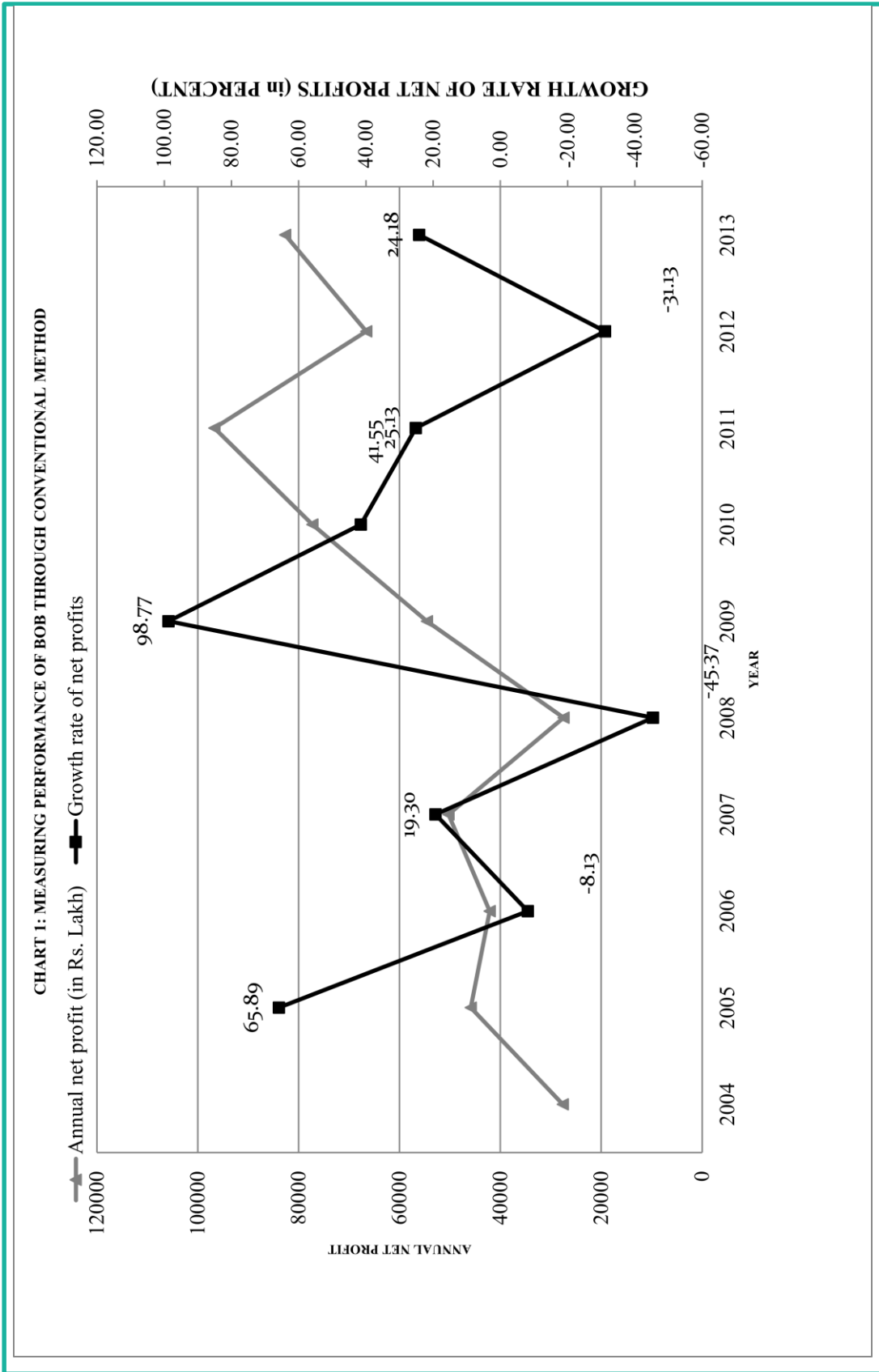
- Why does a bank report certain type of financial position, such as low or high growth in profit?
- Why has a bank been able to achieve sufficient capital adequacy norms?
- Why does a bank seem to focus more on satisfying customers, in spite of lesser growth in profits?
- Why does a bank continue to operate in apparently non-profit making products?

... And so on.

### III. UTILIZING TANGIBLE AND INTANGIBLE ASSETS IN PERFORMANCE EVALUATION OF BANK OF BARODA:

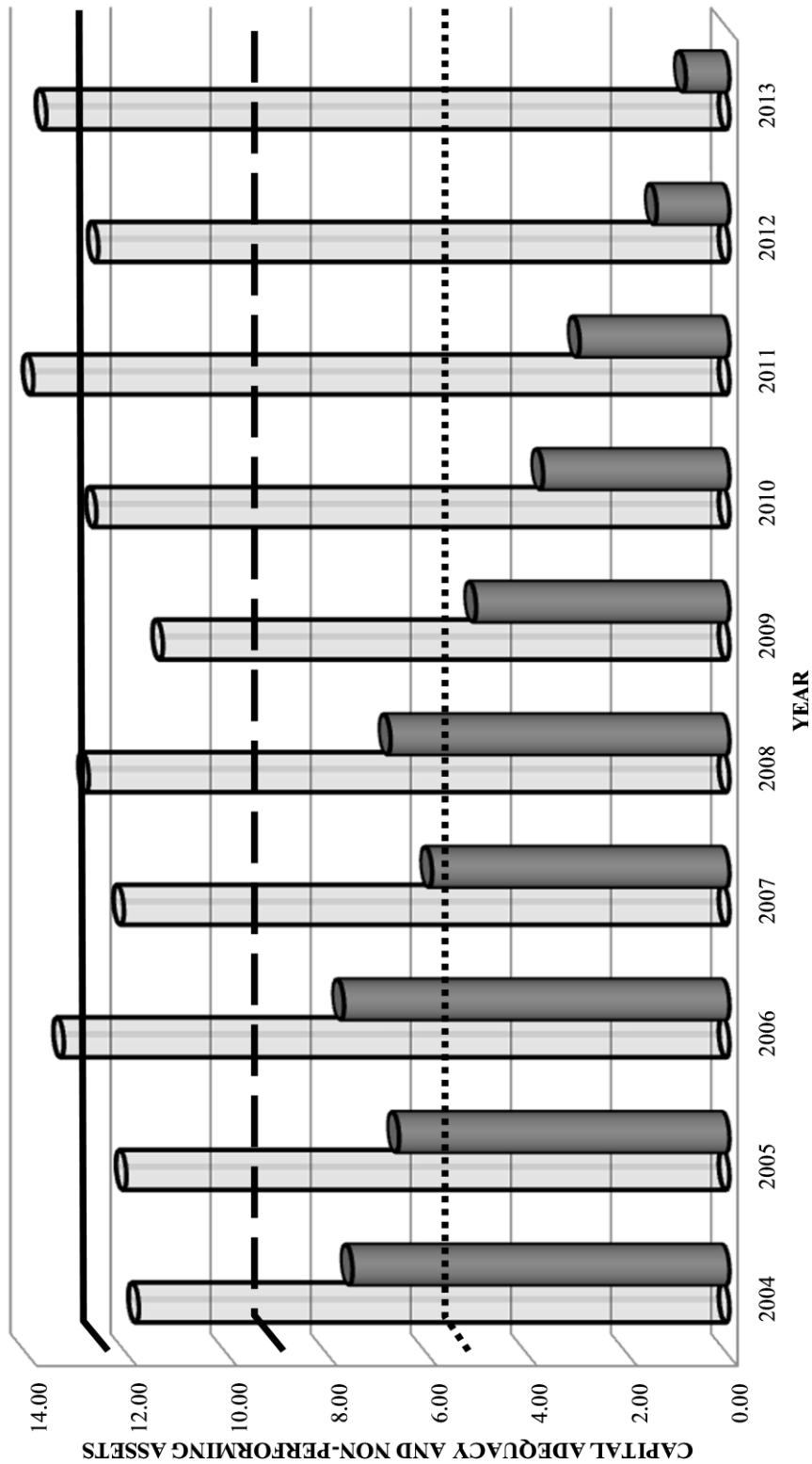
Conventionally, performance of any commercial organization is measured through the net profit and its growth rate. Following this, the progress of Bank of Baroda (BOB) can be assessed through chart 1 given below. The chart points to a quite erratic performance of the bank. The annual net profit of the bank increased consistently from 2001 to 2004. However, the growth rate of net profits shows wide fluctuations, with three years, viz., 1999, 2001 and 2005, showing negative growth rate, which indicates a decline in the annual net profit in absolute terms.





**CHART 2: CAPITAL ADEQUACY RATIO FOR BOB**

■ Capital adequacy ratio ■ Ratio of net NPA to net advances



Similarly, chart 2 shows the capital adequacy ratio maintained by the bank as well as the ratio of net non-performing assets (NPA) to net advances of the bank, against the average of all commercial banks (indicated by solid and dashed lines). It is clear that BOB has maintained high capital adequacy ratio compared to the prescribed nine per cent (indicated through the dotted line) and its average of 12.62 is also significantly higher than the average of 11.84 maintained by all commercial banks.

On the other hand the ratio of net NPA to net advances appears to be quite high with an average of 4.86, and ranging from a high of 7.7 in 1999 to a low of 0.87 in 2006. However the mean value is lower than the average ratio observed for all commercial banks, which is 5.15 (indicated through the dotted line). This and the fact that the ratio has shown a continuously declining trend over the last six years indicates that the financial performance of the bank is improving. But this also gives a mixed picture, when combined with the growth rate of net profits, since this indicator shows more volatility. Moreover, the ratio of net NPA is not significantly lower than the ratio for all commercial banks. Unduly high capital adequacy maintenance, erratic profit growth and relatively high NPA indicate that the financial performance of the bank is not very strong and this is a cause for concern.

All the three indicators analyzed above are purely financial indicators and used by all commercial banks as well as the monetary authorities around the world to test the financial standing of the banks. However, when coupled with several other indicators the bank performance can be analyzed in a more effective manner. Following this, performance of BOB in case of 19 indicators from 1997 to 2006 is shown in table 1. These are the ratios derived by the Reserve Bank of India (the RBI) to evaluate performance of various commercial banks individually as well as the entire group. The mean and the variance in the first row of each indicator show the performance of BOB, while the same statistics in the second row indicate the performance of all commercial banks in general. The significance of the performance of BOB is measured through the distance of the mean values as well as the variance for each indicator. One-tail Z-test is more relevant since the performance of a specific bank can be superior or inferior as compared to all commercial banks depending upon whether the mean value for BOB is greater or lesser than that for all commercial banks.

Apart from the three purely financial indicators of bank performance, the table includes seven more indicators which can be used to measure performance of a bank directly. These include cash-deposit ratio, credit-deposit ratio, investment-deposit ratio, ratio of interest income to total assets, ratio of net interest margin to total assets, return on assets and return on equity. Since the bank deals with financial assets and financial products, these indicators are very useful in analyzing the financial management of the bank over and above its profitability. Interestingly, only two out of these seven ratios are statistically significant in case of BOB. These are cash-deposit ratio and credit-deposit ratio. Out of the previous three financial indicators, only capital adequacy ratio is significantly higher as compared to all commercial banks. It is interesting to note that the growth rate of net profits is not only erratic, but also quite less than the average growth rate of net profits observed in the banking sector. This is alarming for a large and established nationalized bank like BOB.



Low profitability could be due to significantly lower credit-deposit ratio. This is because though the bank is able to mobilize large amount of deposits, it is not in a position to convert these deposits in revenue generating credit advances. The investment-deposit ratio of the bank is not significantly higher than the average of all commercial banks. This is one area where BOB can improve its performance. The performance of the bank with regard to both these revenue generating indicators is surprising since the bank maintains significantly lower cash-deposit ratio.

**TABLE 1: SIGNIFICANCE OF SELECTED PERFORMANCE INDICATORS**

	Indicator	Mean	Known Variance	Z [Hypothesized Mean Difference = 0]	P(Z<=z) one-tail [z Critical: 1.6448536]	P(Z<=z) two-tail [z Critical: 1.959964]
1	Growth rate of net profits	21.13 28.16	2060.79 1345.42	-0.36	0.36	0.72
2	<b>Capital adequacy ratio *</b>	<b>12.62</b> <b>11.84</b>	<b>0.69</b> <b>0.69</b>	<b>2.10</b>	<b>0.02</b>	<b>0.04</b>
3	Ratio of net NPA to net advances	4.86 5.15	6.16 6.18	-0.26	0.40	0.80
4	<b>Cash-deposit ratio *</b>	<b>6.25</b> <b>8.10</b>	<b>5.92</b> <b>3.31</b>	<b>-1.92</b>	<b>0.03</b>	<b>0.05</b>
5	<b>Credit-deposit ratio *</b>	<b>52.15</b> <b>57.16</b>	<b>23.20</b> <b>38.56</b>	<b>-2.02</b>	<b>0.02</b>	<b>0.04</b>
6	Investment-deposit ratio	39.59 38.49	36.52 8.02	0.52	0.30	0.60
7	Ratio of interest income to total assets	8.65 8.33	1.27 1.29	0.65	0.26	0.52
8	Ratio of net interest margin to total assets	3.09 3.07	0.03 0.04	0.16	0.44	0.87
9	Return on assets	0.84 0.78	0.04 0.05	0.71	0.24	0.48
10	Return on equity	15.02 13.73	12.08 16.86	0.76	0.22	0.45
11	<b>Ratio of deposits to total liabilities *</b>	<b>85.73</b> <b>79.73</b>	<b>1.89</b> <b>1.76</b>	<b>9.93</b>	<b>0.00</b>	<b>0.00</b>
12		66.05	4.72	4.34	0.00	0.00

Indicator	Mean	Known Variance	z [Hypothesized Mean Difference = 0]	P(Z<=z) one-tail [z Critical: 1.6448536]	P(Z<=z) two-tail [z Critical: 1.959964]
Ratio of term deposits to total deposits *	62.45	2.19			
13 Ratio of priority sector advances to total advances *	27.06	5.12	-5.15	0.00	0.00
14 Ratio of term loan to total advances *	32.67	6.18			
15 Ratio of wage bills to intermediation cost *	34.17	36.32	-2.32	0.01	0.02
16 Ratio of wage bills to total expense *	41.90	75.05			
17 Ratio of wage bills to total income	68.60	3.88	2.79	0.00	0.01
18 Business per employee (in Rs. lakh)	64.28	20.17			
19 Profit per employee (in Rs. lakh)	20.70	7.42	1.64	0.05	0.10
	19.15	1.50			
	16.14	1.82	0.56	0.29	0.58
	15.79	1.92			
	233.64	8034.45	0.57	0.28	0.57
	207.15	11505.68			
	1.47	0.32	0.23	0.41	0.82
	1.38	0.83			

\* Significant at 5 % level.

Note: Calculations based on data compiled from Statistical Tables Relating to Banks of India, Reserve Bank of India. Various issues.

The next question that arises is what is the quality of the assets generated by the bank? These assets mainly include the advances and investments made by the bank. This can be measured through the ratio of interest income to total assets. But, the bank also incurs interest expenditure on its deposit liabilities. So the ratio of net interest margin to total assets also gains importance. Though the mean values of both these ratios for BOB are higher than the respective mean values for all commercial banks, the difference is not at all significant. Subsequently, it can be concluded that the bank has not been able to generate significantly high amount of interest income. Two more indicators, return on assets and return on equity also show that though the mean values for BOB are higher, the difference is not significant. These two indicators show the profit earning ability of bank assets.

This gives a gloomy picture of the financial performance of the bank. Can it be said that BOB is not efficient in its performance on the basis of these ten indicators? Apparently, this is a likely conclusion if no other performance indicator is taken into consideration. These financial ratios measure the tangible aspects of bank performance, and give a very strong basis for performance evaluation as well. However, a bank, like all other organizations, is not only about financial performance. There are many other intangible aspects relating to the customers and internal business processes, which also contribute to the efficient performance of the bank to a great extent. This is where the remaining nine indicators in table 1 can be utilized to draw more comprehensive conclusions regarding the performance of BOB. Such indicators can be included in construction of a more effective performance evaluation mechanism like balanced scorecard for a bank.

All these ratios seem to be dealing with the financial data. However, they reflect the performance of the bank from different perspectives. For instance, ratios like total deposits to total liabilities, term deposits to total deposits, priority sector advances to total advances and term loan to total advances reflect the behavior of the customers in relation with the products offered by the bank. Similarly, ratios relating to the wage bills, business per employee and profit per employee reflect the soundness of the internal business processes adopted by the bank to carry out its operations. All these indicators can be measured easily since they are in financial terms, but they largely display the performance of the bank as far as intangible aspects of bank performance are concerned.

Here, it is clear that the bank is capable of mobilizing huge amounts of deposits, since the ratio of term deposits to total liabilities is significantly greater than that of all commercial banks. Even the variance is quite low, showing that the customers put a lot of trust in the bank when they deposit their money with BOB. This can be due to the efficient management of deposits on part of the bank and an offer of higher rates of interest. This fact is supported by the previous analysis that the ratio of net interest margin to total assets is low, which is partially due to higher interest expenditure. Further, the ratio of term deposits to total deposits is also significantly higher, although the variance is slightly higher as well. But, this indicates that the customers have high degree of confidence in the bank and its performance over a long period of time as compared to other commercial banks in general. these are the advantages that the bank can utilize to its own favour to build up a strong deposit base for credit creation.

However, the bank has not been highly successful in converting large deposit base into larger credit expansion. This is evident from the ratios of priority sector advances to total advances and term loan to total advances. BOB shows inferior performance in case of both these ratios as compared to all commercial banks in general. In spite of being a nationalized bank, BOB grants relatively lesser credit to the priority sector. One of the reasons why the bank shies away from the priority sector could be the high risk element involved in it and its past experience which is reflected in relatively higher ratio of NPAs. Moreover, the proportion of term loans in total advances is also lesser, indicating that customers do not prefer to borrow long term loans from BOB. This could be due to relatively higher rates of interest on long term loans, which again supports the previous analysis that the interest income and net interest margin are relatively lower in case of BOB. The bank can hope to alter this situation by making its long term loans more attractive, and also by ensuring greater vigilance when granting credit to the priority sector rather than shying away from it.

When it comes to internal business processes, the cost and productivity of employees can be good indicators of performance. Following this logic, three ratios relating to the wage bills are included here. These are ratios of wage bills to intermediation cost, wage bills to total expenses and wage bills to total income. The first two are highly significant as compared to all commercial banks. The mean values are also higher, indicating that BOB spends more on the wage bills out of its operating cost as well as total cost of running banking operations. However, the ratio of wage bills to total income is not significantly higher, which points to the fact that the expenditure made on the employees is not able to generate more revenue for the bank. This clearly indicates inefficiency of the employees.

This is also reflected in the remaining two indicators, viz., business per employee and profit per employee. At first glance performance of BOB appears to be superior to all commercial banks since the mean values for both the indicators are higher for BOB. However, neither of the ratios is significantly high. This indicates that the average productivity measured by business per employee of BOB is not sufficiently high to show that the BOB employees generate more business for the bank. Similarly, profit per employee is also not significantly high, pointing towards lack of efficiency of the employees. When combined with erratic growth rate of profits, this raises apprehension about the performance of the bank in the wake of increasing competition from private sector banks. Again, the root cause can be in the fact that the bank does not utilize the opportunity to create more credit on the basis of deposits mobilized by it. If this is improved, along with reduction in the NPAs, both the productivity of employees as well as their profit earning capacity can be enhanced.

#### IV. USE OF INTANGIBLE ASSETS – A WORD OF CAUTION:

The above analysis of several indicators of bank performance suggests that including intangible aspects can reveal a more complete picture of bank performance. Simple analysis based on basic financial indicators such as net profit, capital adequacy ratio or NPA alone is not sufficient for this purpose. In fact, it is necessary to combine these basic financial indicators with some more financial indicators as well as non-financial indicators to understand the performance of a banking organization and formulate a comprehensive, long term development strategy. However, though attractive and comprehensive, a performance measurement and evaluation system like the BSC has several limitations:

##### 1. Deriving a balanced set of measures & incorporating complex set of interrelations:

One difficulty in studying BSC is that the precise nature of an organization's scorecard is often not identified. There is a wide variation in the nature of Balanced Scorecard ranging from combinations of financial and non-financial measures to more comprehensive systems linking operations to various perspectives and to strategy (Ittner and Larcker 1998a; Hoque and James 2000; Ittner and Larcker 2003; Ittner et al. 2003). With a highly diverse set of measures managers must decide how they will spread their efforts over the different areas. So it is difficult for the manager to decide upon a balanced set of measures, which in turn makes designing a BSC difficult in practice.

In the situations of technological complexity, uncertainty and interdependence, it is possible to use probabilistic and subjective measures. However, some research works have shown that these softer measures tend to be manipulated by senior management. It may also happen that the range of measurement is compressed, which may lead to lesser differentiation in assessing the performance of the employees and an overall perception of unfairness (Predegast and Topel, 1993; Moers, 2005).

Ittner and Larcker (1998a) report that more than a third of respondents to a survey by the consulting firm Towers Perrin found it difficult to implant BSC for lower levels. In some organizations, complex hierarchical structures contribute to the difficulty of identifying as to how the implied business model translates across the organizational structure. Sufficiently open and flexible structures are needed for effective implementation of BSC to ensure that employees are empowered to search for alternatives to respond to strategic, uncertainties. Further, these need to be discussed regularly within the organization (Simon 1995, 2000).

## 2. Different weights to various indicators:

Even after the indicators have been identified, it is very difficult to assign appropriate weights to these indicators. It is not necessary that all indicators must be given equal weights. Normally the weights differ depending upon the importance of an indicator in realizing organizational objectives. Moreover, whether an indicator is significant in realizing the objectives is often subjective. While the top-level management may think that certain group of indicators is more important than the other, the employees may assign more relevance to a different group of objectives. Such differences in opinion are possible even within the same decision-making group.

## 3. Neglect of some leading indicators & hindrance in situation-specific evaluation:

Ittner et al. (2003) found that financial firms using a BSC to reward managers had the potential to counter many of the criticisms of short-term accounting-based reward system. However the weights assigned to each performance measure used in the BSC differed from manager to manager and organization to organization. While undertaking evaluations and awarding bonuses, some measures were neglected, although these measures were the leading indicators of the strategic objectives of financial performance and customer growth.

## 4. Difficulty in linking with reward:

Ittner and Larcker (1998a) report that scorecards assisted only a minority of managers in understanding goals and strategies or in relating their jobs to business objectives. They established that managers made little attempt to link non-financial performance measures to advance their chosen strategies. Most remarkably only 23 per cent of these managers were able to show that they built casual models and most of the managers could not validate the causal links. In an experimental study, Lipe and Salterio (2000) demonstrated that managers had



cognitive difficulties working with measures to evaluate performance that were specific to a situation.

### 5. Expensive to design & implement:

Moreover, Balanced Scorecard is expensive to design and implement. The size of the organization is an important factor that determines the extent to which the organization might have resources to experiment with the performance measurement systems. Moreover, in case of a bank, which is made up of many branches in different locations, coordination and compilation of data and a common analysis at the bank level is extremely difficult. This problem is aggravated due to the fact that all branches do not deal with the same products.

## V. CONCLUSION:

Though it is difficult to build a single BSC for a bank, it emerges to be an efficient and all-inclusive tool, encompassing various organizational aspects. With the financial reforms in full swing, and influx of private sector and multinational banks into the economy, it is necessary for the banks to adopt such a system of performance measurement if they aim at designing business strategy that ensures better performance in future. The fact that the RBI has initiated the process to collect data pertaining to many different performance indicators over the past decade can be considered to be a good progress in this direction.

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