CHAPTER VIII
FINDINGS AND SUGGESTIONS

Economic liberation measures introduced by the Government of India in 1991, coupled with a trend for globalization, have brought about sea changes in the banking sector of Indian economy. With globalization, the commercial banks in India are exposed to competition not only at the micro level, i.e. at the country level but also at the macro level, i.e. at the global level. Foreign banks are allowed to enter into and operate in the Indian economy. Entry is made easy by removing the hurdles. New private sector banks have been permitted to transact the banking business. Even non-banking financial companies have also emerged as new modes of financing. They have been able to take away a part of the market share, which was being enjoyed by the commercial banks prior to the introduction of Banking Sector Reforms in India. As a result of this, the market share of the commercial banks has been shrinking over the period. Banks, like their global counterparts, are expected to re-engineer their banking operations by innovation and introducing new financial products and services so as to succeed and survive in market-driven economy on a sustainable basis. In order to have a competitive advantage in the midst of competitive complex banking scenario, technological up gradation has been sine quo non-for improvement in operational and managerial efficiency of the banks. The banks have to re-orient their management philosophy in the direction of strategic management philosophy in each functional areas like
credit management, risk management, deposit management, operations management, etc.

As the global competition has become order of the day, the banks are expected to operate to achieve sustainable growth through the process of improving financial productivity by providing innovative services needed by the cliental. On the one hand, the bank operations are to be governed by the market-driven principle; and, on the other hand, such banking operations have to bring in a fair return on the services rendered. In other words, customers' satisfaction and bank's survival must be the guiding principles of its operations. In view of this, the banks' performance, now-a-days, needs to be evaluated not in the terms of the volume of deposits mobilized and credit expanded but in terms of new parameters like, ratio of net profit to working funds, return on assets, return on equity, EVA added, MVA added by the bank, etc. Banks, per se, are not charitable institutions. They have to meet out the expectations of stakeholders like borrowers, depositors, government, shareholders, society, etc. The banks have to struggle hard for improving or even maintaining the market share in the total volume of banking business transacted by the whole banking system which has been declining with an adverse impact on spreads. Besides witnessing a declining trend in spread, the banks have been experiencing a rising trend in the operating expenses.

Banks function not because of equity capital, but on the strength of deposits mobilized from the public. Hence, interest obligation cannot be avoided. At the same time, the credit operations of the bank have become more risky because of degraded value system of the borrowers. In spite of this, the
bank credit policy is to be governed by the principle of profitability. Hence, trade-off between risk and return has become the essence of a bank now-a-days. Viewed from this angle, measurement of bank's financial productivity which signifies the relationship between bank's output (i.e. inflows to the bank) and input of the bank (i.e. outflows from the bank) assumes a special significance in the modern competitive world. The present study is a modest attempt in that direction. It deals with an analysis of financial productivity of the syndicate bank, which is one of the leading commercial banks in the country with multifarious achievements and awards to its credit, based on the data collected from several sources for more than half-a-decade period i.e. 2002-03 to 2007-08.

**Major Findings:**

The major findings, which have emerged from data processing are as follows :-

**(A) Analysis of ROI:**

a) Testing of the hypothesis relating to financial productivity based on the total assets approach or gross capital employed reveals that there is no statistically significant difference between the ROTA of the syndicate bank and that of the public sector banks in India.

b) Testing of the hypothesis relating to financial productivity based on earnings assets approach reveals that there is no statistically significant difference between the ROEA of the syndicate bank and that of the public sector banking system.
c) Testing of hypothesis relating to ROA (Return on Advances) reveals that there is no significant difference between the ROA of the syndicate bank and that of the public sector banking system.

d) Testing of hypothesis relating to ROI (Return on Investments) reveals that there is no significant difference between ROI of the syndicate bank and that of the public sector banking system.

e) Testing of hypothesis relating to average cost of funds raised (Ko) reveals that there is no significant difference between the average cost of funds raised by the syndicate bank and that of the funds raised by the public sector banks.

f) Testing of hypothesis relating to average cost of deposits (Kd) mobilised reveals that there is no significant difference between the Kd of the syndicate bank and Kd of the public sector banks.

g) Testing of hypothesis relating to the average cost of borrowing (Kb) reflects that there is no significant difference between the Kb of the syndicate bank and that of the public sector banks.

h) Analysis of Return on Equity (ROE) shows that the ROE has witnessed ups and downs in the study period. Hence, it is inferred that there is no consistency in the ROE over the period.
i) Decomposition of ROE indicates that ROE witnessed ups and downs mainly because of downward trend in the percentage change in the net income during the study period.

j) Analysis of Return on Total Assets (ROA) indicates that the financial productivity of each rupee invested in assets ranges from 0.86% to 1.03% and, therefore, it is very poor.

k) Decomposition of ROA reflects that declining trend in the ROA is due to mismatch between the rate of increase in the incremental income and the rate of increase in the incremental investment. Hence, it indicates that increase in investment is not guided by a fair rate of return on investment.

l) Analysis of combined effect of ROA and EM on ROE reveals that inspite of low ROA, ROE has increased mainly due to a high level of EM.

m) Ratio of Net profit to Total Income indicates a declining trend in the net profit, mainly due to lack of magnifying effect of banking business on net profit.

n) Asset utilisation ratio reveals a declining trend, due to more than proportionate increase in the total assets over the study period.

o) Analysis of combined effect of PM and AU on ROA reveals that declining trend in ROA is due to downward trend in both the PM and AU.
p) Analysis of financial productivity through output (total income) and input (total expenses) reveals a declining trend mainly due to percentage increase in total expenses is more than the percentage increase in the total income.

q) AR exhibits a declining trend; whereas AC exhibits a rising trend. Hence, it is inferred that AR did not keep pace with AC and vice versa.

B Analysis of Asset-Mix

The following findings have emerged from an analysis of the asset-mix of the bank.

a) Analysis of the ratio of earning assets to total assets exhibits that the share of earning assets in the total assets has been more than that of non-earning assets. At the same time, it also indicates that there has been a declining trend in the share of earning assets in total assets over the study period; with an adverse impact on the size of total income.

b) Analysis of percentage change in earning assets and percentage change in the total assets reveals that earning assets have increased at less than proportionate change in total assets. Hence, total earning capacity has been adversely affected. At the same time, it has attracted a high level of operating risk due to successive increase in fixed and other assets.

c) Analysis of the composition of revenue earning assets exhibits the preponderance of advances in the total earning
assets. Further, it also reveals an increasing trend in the relative share of advances over the period.

d) Analysis of provisions for depreciation in the market value investments shows a declining trend over the period, indicating thereby that the bank has been investing more and more in quality oriented securities over the period.

e) Analysis of gross NPAs as a percentage of total assets indicates that there has been a declining trend over the study period. However, such a declining trend has been due to higher doses of investments in the total assets or fixed assets over the period.

f) Analysis of gross NPAs as a percentage of that advances exhibits a declining trend. However, such a declining trend has been due to more than proportionate increase in net assets i.e. due to excess of rising effect of advances over that of gross NPAs.

g) Analysis of Net NPAs as a percentage of net advances indicates a declining trend over the period, mainly because of substantial decline in NPAs, though net advances increased over the period. This implies that net NPAs have gone down over the period.

h) Analysis of movements in gross NPAs reveals that there has been a low recovery rate and a high rate of addition of new accounts to the category of NPA accounts.

i) Analysis of movements in net NPAs exhibits ups and downs in the additions of credit accounts in the pool of NPAs. The percentage of reductions has been far less than the percentage of beginning NPAs to total NPAs at the end of the year.
j) Analysis of provisions as a percentage of gross NPAs indicates a high share. Further, it also reveals that such share has increased over the period.

k) Analysis of Net NPAs as a percentage of Total assets reveals that there is share has been very meager over the period.

l) Analysis of Net NPAs as a percentage of total equity indicates a declining trend mainly due to higher rate of increase in equity rather than decline in the level of NPAs.

m) Analysis of exposure to real estate market reveals that advances real estates has increased over the period.

n) Analysis of exposure to capital market reveals that the bank’s exposure to capital market also has increased over the period.

o) Composition of total assets held in and outside India reflects relatively high level of assets held in India. Further, it also reveals that there has been a declining trend in the level of assets held outside India.

C **Analysis of Liability-mix**

Scanning of liability-mix of the bank has revealed the following:

a) Analysis of composition of liabilities indicates that the bank has generated highest share of funds from the deposits, followed by other liabilities, borrowings, etc.

b) Analysis of composition of total liabilities shows that interest-bearing liabilities constitute a major portion of total liabilities during all the years of study period. Further, it reveals that share of such liabilities has gone up over the period. It implies higher level of bank’s financial risk.
c) Analysis of Deposit-mix indicates preponderance of term deposits, which carry relatively high rate of interest. This implies that the high level of financial risk has been due to major share of deposits in the interest-bearing liabilities.

d) Debt-Equity ratio indicates that the relative share of debt has been more throughout the study period. This has been responsible for high level of financial risk.

e) Analysis of break up of total liabilities reveals that the bank owes more obligations in home country rather than foreign countries.

f) Analysis of maturity pattern of interest-earning assets reveals that more funds are deployed in the assets maturing over five years, followed by the assets maturing between one and three years. This holds good even in respect of maturity pattern of both loans and advances and investments.

g) Analysis of maturity pattern of interest-bearing liabilities exhibits that major portion of the interest-bearing liabilities mature during the period of one to three years, followed by the liabilities maturing during the time bucket of over five years. This holds good even in respect of maturity pattern of both borrowings in respect of assets and liabilities actual meaning beyond three years and deposits.

h) Analysis of maturity gap between RSAs and RSLs classified under eight different time buckets reveals that the maturity gap has been negative in respect of assets and liabilities placed under the time bucket of 3 years and positive in respect of assets and liabilities maturing beyond 3 years.

i) Analysis of percentages of mismatches as percentages to outflows in respect of different maturing time buckets of the RSAs and RSLs indicates that more and more mismatches
have been pronounced in respect of RSAs and RSLs maturing within shorter time buckets and more and more positive mismatches have been in respect of RSAs and RSLs maturing within the time buckets of longer durations.

j) Analysis of maturity pattern of assets held outside India indicates that bank's exposure to foreign exchange market is relatively low in respect of assets maturing with time buckets of more than one year.

k) Analysis of maturity pattern of liabilities owed outside India indicates that major portion of liabilities mature within the time buckets of one or less than a year. The bank's exposure to risk arising from liabilities maturing during longer time buckets of five years is zero.

l) Analysis of maturity gap between the assets and liabilities held outside India reveals that overall gap has been positive and, hence, the bank's exposure to foreign exchange risk is relatively less.

D Analysis of Operating Cost and Efficiency

a) Testing of the hypothesis relating to spread of the syndicate bank and that of public sector banking system in India indicates that there is no significant difference between the spread percentage of the sample bank and that of the banking system.

b) Analysis of spread reveals that it has been positive all along the period of study. Hence, it implies excess of interest income over the interest expenses for all the years of study.

c) Analysis of the percentage changes in both interest income and interest expenses indicates that the percentage increase in interest income has been less than the percentage increase in interest cost except in 2003-04 and 2005-06. This implies
that high cost funds are not being judiciously deployed to maximise the return.

d) Analysis of composition of interest expenses exhibits that the relative of interest on deposits is more than that of borrowings.

e) Analysis of the percentage changes of interest expense and interest-bearing liabilities reflects that the incremental cost of financing has gone up except in two years. This is evident from relatively higher percentage in interest cost than that in interest-bearing liabilities.

f) Break-up of interest income reveals that interest on advances is constituting a lion's share, followed by the interest on investments.

g) Analysis of ratio of burden to spread reveals that there has been a declining trend in it. This implies that the bank's operating cost management has been effective, other things being equal. However, when the percentage change in burden is compared with that of spread over the period of study, it indicates that both burden and spread have not moved in the same direction and by the same extent. During 2002-03 and 2003-04, burden declined inspite of increasing in spread. During 2004-05 and 2005-06, the burden increased at an increasing rate. It declined further during 2006-07 and 2007-08 at an increasing rate.

h) Analysis of operating efficiency ratio reveals that there has been decline in the ratio mainly due to more increase in net interest income and non-interest income.

i) Break-up of operating expenses reveals that Manpower cost has a major share in the total and that other expenses have
increased at increasing rate when compared with the increases in Manpower cost.

j) Burden as a percentage of volume of banking business reveals that the incidence of burden per rupee of banking business has registered a downward trend.

k) Manpower costs as a percentage of volume of banking business reveals that the incidence of Manpower cost per rupee of banking business has registered a downward trend.

l) Advances per employee, deposit per employee and average credit per employee have witnessed an increasing trend and, therefore, speak of improvement in employee productivity in the respective years.

m) Comparison of spread per employee, operating cost per employee and net income per employee reveals that major portion of each rupee of spread is consumed by the operating cost.

n) Segment wise analysis of operating profit as a percentage of total revenue indicates that declining trend in the revenue from treasury operations was responsible for the overall decline in the operating profit during the first five years of study period. During 2007-08, retail banking business contributed more towards increase in the operating profit.

o) Analysis of operating profit as a percentage of networth of the respective segments indicates that treasury operations, other banking operations and retail banking operations contributed relatively more during the first two years, the next three years and the last year of the study period respectively.
**Suggestions**

In the light of major findings emerged from data analysis, the following suggestions are made for improving the financial productivity of the bank understudy in particular and that of the similar banks in the country in general:

1. **Capital Restructuring**

   Financial productivity, when viewed from angle of ROTA, of the bank under study sounds to be very poor. Even ROE has oscillated over the period. Hence, there is a need for capital structuring by the bank. Relative shares of different sources of finance have been realigned in such a way that the average cost of each rupee raised by the bank would be the minimum and capital structure would be optimum. The financial decisions relating to how much is to be raised, from what source the amount is to be raised, at what rate it is to be raised, etc., must be taken in the light of investment decisions relating to how much can be invested in interest-bearing assets or liquid assets or at what rate of return the funds can be deployed, etc.

2. **Risk-Return Trade-off**

   As there is no proper linkage between the bank's risk (in the form of interest expenses) and return (in the form of interest incomes), the financial productivity of the bank has been adversely affected. Hence, it is imperative on the part of the bank to structure its financial decisions viz, deposit decision, deposit-mix decision, credit decision, credit-mix decision, decision relating to real estate market exposure, capital market exposure and foreign exchange
market, etc on the basis of financial prudence, i.e. risk-return trade-off.

3. **Perfect matching between RSAs and RSLs**

   It is found in the study that maturity gaps are negative in respect of assets and liabilities maturing in maturity time buckets of short durations and positive in respect of assets and liabilities maturing in the time buckets of longer durations. Such mismatches would pose liquidity problems, with a drain on financial productivity ultimately. Hence, it is suggested that the bank has to ensure to perfect matching between RSAs and RSLs so as to maintain the maturity gap at zero level. This is possible when the investment policy of the bank is perfectly linked with the financing policy. One-sided approach in either of the two decisions would lead to imbalance between liquidity and profitability or risk and return. As a result of this, bank shareholders’ wealth cannot be maximized.

4. **Diversified investment portfolio**

   The bank under study is highly levered. Financial risk is heavy. Hence, the only alternative to ensure a fair level of financial productivity from the viewpoint of ultimate owners of the bank is to see that the investment portfolio would bring in maximum return. Besides diversification of core banking portfolio, bank’s service portfolio needs to be revisited so as to augment the size of ancillary income. Such a diversified policy would minimise the level of NPAs, the level of credit risk, etc. New investment outlets are to be explored. New creditworthy customers are to be identified. Credit information bank may be started so as to make the investment portfolio quality-oriented, market-
oriented, need-based, return-oriented, and credit-risk-free oriented.

5. **Adhering to Incremental principle**

Bank's incremental financing and incremental investment decisions should be governed by incremental or marginal principle. The incremental cost of incremental financing should be less than the incremental return from incremental investment. As per the principle of financial economics, the wealth would be maximised only when the marginal revenue (MR) is more than the marginal cost (MC). Hence, it is suggested that the bank has to decide the source of finance in the light of investment opportunity available or decide the nature of investments in the light of cost of funds required for such deployment. Hence, the deposit management and credit management aspects of the banker need to be financially professionalized.

6. **Regular Review of Incremental Cost & Incremental Investment**

In order to ensure a fair rate of accretion in the wealth of the shareholders, the bank has to undertake periodic review of cost of incremental financing and return from incremental investment so as to make suitable changes in the financing-mix for reducing the cost of capital or in the asset-mix for increasing the return on investment.

7. **Effective risk management through Financial Engineering**

In order to either eliminate the risk or to bear the lesser burden of interest risk load, the bank has to innovate the new tools of risk management like options, swaps, futures, forwards, etc. Hence, there is need for financial
engineering, which aims at designing or exploring new tools (i.e., products and services) for either shifting the risk or minimising the load of risk. Bank financial management operations, coupled with financial engineering offerings, would go a long way in eliminating or minimising the risk. Such an approach would definitely enable the bank to earn more return by investing in risky assets in view of its strength gained from the application of the principles of financial engineering in the field of risk management.

8. **Competitive Interest rates to maintain spread and bank's long-term viability**

Today, the commercial banks are expected to operate in the competitive financial environment not only at the national level but also at the global level. Hence, in order to enable the bank to have its operational viability and financial feasibility, the bank must be allowed to operate freely and fix its interest rates on deposits and borrowings in the light of competitive conditions prevalent in the financial markets. Such competitive interest rates should ensure positive rates of return in real terms not only to the depositors but also the bank. This would be having a favourable impact on bank's financial productivity.

9. **Integrating ALM framework with bank's business strategy**

As the bank under study is expected to operate in a competitive and complex environment, it has to formulate the business strategies in the spheres of credit management, deposit management, services management, operations management, human resource management,
cost management and risk management by closely integrating with the ALM management, which is a comprehensive and dynamic framework for measuring, monitoring and managing liquidity risk, interest rate risk and foreign exchange risk. Every business strategy affects expected cash inflows and cash outflows. Maturity pattern of expected cash inflows and outflows would throw light on liquidity risk and interest risk. Therefore, it is imperative on the part of the bank to evaluate each and every business strategy in terms of its liquidity risk and interest risk i.e. maturity gap analysis. Such a approach would enable the bank to select that strategy which would enable it to have a competitive advantage which is the best device of maximising the market share and net income.

10. Adoption of Strategic Cost Management Philosophy

Strategic cost management is concerned with management of cost with an emphasis on strategic options. It is a philosophy concerned with the cost expected to be incurred for performing a task, which would bring success to the bank in terms of risk and return. Each strategy is to be evaluated in terms of strategic cost and its impact on bank's ultimate profitability. As a result of this, cost of the services offered by the bank would be controlled well before its incurrence.

11. Introduction of Activity-based Costing (ABC) Technique

ABC is a cost management philosophy, which aims at exploring the relevant activities the drive the cost of operation. In order to arrest the operating cost, the bank has to classify its activities into two groups, viz., customer
value-adding activities and non-value adding activities. Activities, which do not increase the customer value or satisfaction need to be eliminated. This approach screens the causes behind the effects. Cost is the effect and the cause behind it is traced out by the ABC. Such cause-effect analysis would definitely reduce the operating cost and thereby would increase the net income of the bank.

12. **Periodic Review of Target Costs and Returns**

In order to make the management of operating cost to be more effective, the bank has to fix cost target and return target for each quarter or a month or a fortnight and has to review the same at the end of each selected time interval. Deviations between the targets and actual are to be measured and causative factors for such deviations are identified and corrective actions are to be taken for arresting the actual results during the succeeding time interval.

13. **Formulation of Market Development Strategy**

It is also one of the tools of increasing the bank's market share and thereby, the income-base of the bank. It is an act of offering the present deposit schemes or credit schemes or a financial service to a new set of customers through proper advertisement. Attraction of new customers would increase the volume of banking business and thereby bank's financial productivity.

14. **Formulation of Market Penetration Strategy**

Market penetration strategy is an act of increasing the volume of banking business in respect of existing products or services to existing customers by way of stimulating or counselling them. Present borrowers are to be counselled
so that there would be default-free borrowers. More and more credit ease to be provided to such borrowers. Similarly, existing depositors should also be motivated to keep more and more deposits by offering same services free of cost.

15. **Formulation of Product Development Strategy**

For the purpose of augmenting the income base, the bank has to increase its market share. Product development strategy, which is an act of introducing a new product to the existing customers, is a tool of increasing such market share. New deposit schemes, credit schemes, salary schemes, etc., are to be introduced in the light of customers behavioral studies. As a result of this, the market share increases; which, in turn, improves the financial productivity.

16. **Output-Input approach for product ( or service) profitability analysis**

In order to identify the cost ineffective operations which are eating the profits of other activities, the bank has to measure the profitability on the basis of output (i.e. benefit derived) and the input (i.e. the sacrifice made) of each and every product or service. As a result of this, the products or services which are found to be revenue centers rather than cost centers would be retained and nurtured. This approach would go a long way in improving the income base of the bank.

17. **Output-Input approach for evaluating customer or segment profitability**

As suggested for evaluating the product profitability, even the profitability of each borrower or operational segment is
to be measured on the basis of output received (i.e. return) and the input put into operation (i.e. the cost). This approach would definitely pinpoint the non-profitable customers or segments. Therefore, the bank has to measure profit by adopting micro rather than macro approach. This approach would eliminate the cost of operation, which would have been incurred in respect of loss-leading or cost-adding customer.

18. Preventive & Curative measures for controlling NPAs
NPAs pose a threat to the growth and survival of the banks, if they are not managed effectively. In fact, the credit operations of the banks are expected to be managed in such a way that no NPAs emerge and appear in the bank's balance sheet. If this is to be achieved, certain preventative measures like pre-sanction credit appraisal, credit audit soon after credit sanction, purpose-driven lending policy, etc. Whenever this sort of extremity is not achievable the NPAs will be there. In order to mitigate the problem of NPAs, the bank has to undertake some curative measures, like; follow-up of default cases with all modesty, creation of debt recovery tribunals, arranging for compromises and one-time settlements, upgrading the skills of executives responsible for credit management, etc.

19. Adoption of Defensive Strategies
For attaining success in new complex and competitive environment, the bank has to build environment-driven strategies, systems and structures in relation to their competitors. Hence, the bank has to adopt a set of defensive strategies to ensure that existing customers are not lost and to build-up more competitive strengths to
acquire new customers. Such competitive strategies need to be evaluated as new environmental factors emerge. The top management has to get it glued to the environment on continuous basis.

20. **Effecting a change in the mind-set of bank’s staff with respect to ALM.**

ALM has its ramifications in all the functional areas of bank management, viz., credit management, risk management, liquidity management, etc. It is going to affect the managerial planning and economic research activities also. It must be explained to all involved in the process of ALM management. The bank has to see that there is change in the mind-set of the employees about the implementation of ALM philosophy. An effective and efficient ALM would ensure an improvement in bank’s financial health.

To sum up, perfect co-ordination the bank’s asset-mix and the liability-mix in terms of volume, nature, rate of interest, maturity duration, etc., with a professional bent of mind upon asset-liability management, philosophy in the sphere of financial operations and adherence to strategic cost management philosophy in the sphere of operating cost would go a long way in improving the net financial return and the financial productivity of the bank under study, in particular; and of other similar banks operating else where in the country, in general.