

## Chapter - VII

### BRIEF AND COMMISSION

The decade of seventies has, in the Indian Banking Industry, witnessed the emergence of 'mass banking' from 'class banking', as a result of which branch expansion has been very fast. Also an increased emphasis has been placed on the social responsibilities of banks in terms of priority sector lending and concessional bank credit to weaker and neglected sections of the community.

It is argued that the huge branch expansion in the post-nationalisation period particularly in rural areas may affect profitability and unit cost of banking services in the years to come. It is, therefore, necessary to analyse costs, earnings and operational efficiency of branches and relate this to size of the branch and composition of business.

The hypothesis of economies of scale has been studied in the present work in order to examine empirically the relationship between size and operating cost and size and earning. We have also examined the impact of rural and urban environment on operational efficiency and efficiency in relation to certain social objectives, such as priority sector lending, mobilisation of savings from rural community, etc.

For examining the factors affecting costs, earnings and efficiency at branch level, cross-sectional analysis has been resorted to. The study is based on branch-wise data on details of costs, earnings, deposits, lendings and other characteristics of 141 rural and 80 urban branches from six lead districts of Bank of Baroda, namely Baroda, Broach, Panchmahals, Surat, Bulsar and Dangs. The required data were collected for the years 1978 and 1979 from the respective regional offices of the Bank.

Summary of the findings and important conclusions emerging from the analysis are presented below.

As branch is an actual operational unit and the activities of branches differ substantially in terms of size, product-mix and environment, branch is selected as unit for studying economies of scale.

The problem of measurement of output is complex in view of the nature of banking products, i.e., services. Hence, deposits, advances, gross earnings, total assets, etc., are used as proxy for size in other studies. In order to find an appropriate measure for size at branch level, we have considered in all eight indicators, namely deposits, advances, volume of business, gross earnings, total assets, inland business, foreign business, inland plus foreign

business. Volume of business has a wider coverage than deposits or advances or any other indicator and also it represents major activities at branch level. It is highly correlated with other selected indicators. Therefore, it has finally been selected as proxy for size in the present study to test the hypothesis of economies of scale.

To empirically examine the relationship between size and operating/wage-salary cost, linear and double-log functions have been fitted, whereas linear, semi-logarithmic and double-log functions have been fitted for examining the relationship between size and earning.

Regression results show that there is negative relationship between size and operating/wage-salary cost and positive relationship between size and earning. Thus, the results substantiate the hypothesis of economies of scale at branch level. One interesting conclusion that emerges from the analysis is that economies of scale are more pronounced in rural branches than in urban branches, and that rural branches are operationally more efficient than urban branches. This is supported by the value of  $R^2$ , cost-elasticity, size-cost-curve and volume of business per employee in rural and urban branches.

The results also show that the source of scale economies is to be found mainly in wage-salary cost.

To find the influence of size along with the influence of other factors on costs and earnings, multiple regression analysis has been used. The other factors include (i) composition of assets by major types, i.e., loans, cash and other assets (ii) proportion of assets held in loans and break-up of loans by class of borrowers, namely agricultural loans, commercial and institutional loans, small industries and small business loans and individual loans (iii) proportions of deposits consisting of time, savings and demand deposits (iv) other services. For explaining variation in costs and earnings, linear, semi-logarithmic and double-log functions have been fitted. Linear, semi-logarithmic and double-log functions are found to be 'good fit' for explaining variation in operating cost, whereas semi-logarithmic function is found to be 'good fit' for explaining variation in earning.

Empirical findings show that, though size variable is significant, composition of business as reflected in other factors is also important in explaining the variation in operating cost and earning. However, the relative importance of the explanatory variables changes in rural and urban branches.

In rural branches, variables in deposit-mix, particularly ratio of time deposits to total deposits is found important in explaining variation in operating cost. It may be inferred

from this that rural branches may continue to enjoy economies of scale by increasing their volume of business, more particularly by increasing deposits, which are found to be lower than those in urban branches.

In urban branches, variables in loan-portfolio rather than deposit portfolio, more particularly ratio of interest and discount income to total income help much in explaining variation in operating cost. Therefore, urban branches may increase their volume of business by increasing loans to different market segments and increase their advance deposit-ratio which is found to be lower than that in rural branches in comparable size-groups.

Efficiency of rural and urban branches in terms of certain social objectives, namely lending to priority sector, mobilisation of savings from rural community, etc., have been examined with the help of principal component method. These aspects of efficiency do not necessarily get reflected in costs and earnings of rural and urban branches.

One interesting conclusion that emerges from the findings is that between rural and urban branches, on the whole, rural branches are found to be more efficient than urban branches in relation to social objectives. This may be ascribed to the fact that rural branches are more oriented towards agricultural

advances, whereas urban branches are more oriented towards commercial and institutional advances, even though they also advance to priority sector.

Rural branches have been more successful in mobilisation of agricultural deposits. This is supported by the positive relationship between this variable and social efficiency.

From the foregoing discussion it appears that the efficiency of rural branches over urban branches in terms of selected parameters support the policy of mass banking in the post-nationalisation period.