

Chapter - I

INTRODUCTION

1.1 Objective of The Study

The commercial banking industry works as catalytic agent in the process of economic development by building financial infrastructure, mobilising savings and allocating scarce resources to alternate uses. The leverage of monetary policy is also transmitted to other sectors of the economy through the banking sector. It also works as an agent of promoting social welfare in the economy by spreading its net through branch expansion to far off and unbanked areas and extending credit facilities to the weaker sections of the society.

The decade of seventies has, in the Indian Banking industry, witnessed the emergence of what may be called 'mass banking' from 'class banking'. This is because after nationalisation of major banks in India, branch expansion has been very fast, particularly in rural areas and also an increased emphasis has been placed on the social responsibilities of the banks in terms of priority sector lendings, concessional bank credit to weaker and under privileged sections of the rural community, etc. Table 1.1 presents data on the expansion of different types of branches and different types of advances over the period 1969 to 1979.

Table 1.1 : Progress of Indian Banking Between 1969 and 1979.

Particulars	State Bank Group		14 Nationalized Banks		Other Scheduled Commercial Banks		All Commercial Banks	
	1969	1979	1969	1979	1969	1979	1969	1979
Rural Branches	819 (32.6)	3246 (45.2)	686 (16.6)	5615 (39.2)	265 (20.1)	2290 (30.1)	1770 (22.4)	11191 (40.6)
Semi-Urban Branches	1170 (47.5)	2264 (31.1)	1452 (35.1)	3621 (25.3)	595 (45.1)	1749 (29.1)	3217 (40.6)	7634 (27.7)
Urban Branches	242 (10.1)	963 (13.2)	923 (22.5)	2526 (15.1)	231 (17.5)	1003 (13.0)	1407 (17.8)	4634 (16.8)
Metropolitan Branches	225 (10.3)	763 (10.5)	1063 (25.0)	2405 (17.4)	223 (17.5)	686 (14.9)	1521 (19.2)	4134 (15.0)
Total Number of Branches	2462 (100.0)	7276 (100.0)	4134 (100.0)	14309 (100.0)	1391 (100.0)	6002 (100.0)	7915 (100.0)	27593 (100.0)
Deposits (Crores of Rs.)	1325	7553	2750	14767	316	3233	4599	25353
Advances (Crores of Rs.)	1657	4309*	1946	7977*	205	1387*	3202	13673*
Priority Sector Advances (Crores of Rs.)	N.A.	N.A.	440.97 (14.6)	4001.15 (26.7)	63.0 (10.5)	400.00 (17.2)	504.89 (14.0)	4491.25 (25.3)

Source: Annual Report on Trend and Progress of Banking in India, Reserve Bank of India,

Note: 1) Figures in brackets show percentage of particular category of branches to total number of branches.

ii) Data for advances are for the year 1977.

iii) Branch Classification

Rural	Population Less than 10000
Semi-urban	10000 to 1 lakh
Urban	1 lakh to 10 lakhs
Metropolitan	Above 10 lakhs

The impact of such a large expansion, (particularly in rural areas) on the profitability and unit cost of banking services has raised apprehensions.^a

It is in this context, a systematic analysis of costs and operational efficiency of branches, and relating this to size of the branch and composition of business, etc., become very relevant.

Although such empirical work has been done at macro-level, the effort to investigate empirical size-cost and size-earning relationship at micro level, particularly in India, has been relatively less. This study attempts to contribute to the understanding of factors influencing costs, earnings and efficiency of banking services at branch level.

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- ^a 1. J.R. Seshadri, "An Econometric Analysis of Profitability in Commercial Banks", Pragyan, July-Sept. 1980, Vol.IX, No.3.
 2. Singh, Sampat P. and Varde, V.S. - "Profitability : The Inter-Bank Comparison", Pragyan, April-July 1981, Vol.X, No.2.
 3. Singh, Sampat P. and Varde, V.S. - "Towards an Analytical Framework for Profit Management in Banks", The Chartered Accountant, June 1980.
 3. M.Raghupathy, "Profit Planning in Commercial Banks", Pragyan, October-December 1979, Vol.VIII, No.4.
 4. Banks Since Nationalisation, Birla Institute of Scientific and Economic Research, New Delhi, 1981, pp.40-52.
 5. Sareya Committee Report, Banking Commission Report, Reserve Bank of India, 1972, pp.272-316.

Main objectives of the study are :

(i) To empirically examine the relationship between size and cost at branch level and to examine whether economies of scale operate at branch level;

(ii) To investigate the relationship between size and earning of the branches and other factors influencing earnings at branch level;

(iii) To examine the efficiency of the branches in terms of certain social objectives such as priority sector lending, mobilisation of savings from agricultural community, etc.;

(iv) And to bring out clearly the impact of rural/urban environment on operational efficiency and efficiency in relation to social objectives.

1.2 Scope and Methodology of the Study

We have chosen 221 branches of Bank of Baroda for our study. Bank of Baroda is one of the big five public sector banks today in terms of branches, deposits and advances. In 1991 the number of branches of the Bank were 1536, out of which 712 (46%) were in rural area. Aggregate deposits and advances were Rs.3711 crores and Rs.2035 crores respectively.

The priority sector advances were Rs. 501 crores. In terms of deposits, it tops the nationalised banks. It accounts for about six per cent of the Indian Banking System.

Out of 436 branches in Gujarat in 1979, we have confined our study to 141 rural and 90 urban branches of the Bank in Baroda zone. The Bank of Baroda works as 'lead bank' in all the districts of Baroda zone, namely Baroda, Dahanu, Panchmahals, Surat, Bulsar and Dangs. 'Lead bank' scheme was originally initiated with a view to increasing the involvement of banks in the development process at the district level by meeting the credit needs of the area. For evaluating the efficiency of banking services in terms of certain social objectives, such as priority sector lending, mobilisation of savings from agricultural community, lead district branches serve better purpose.

To understand size-cost and size-earning relationship, inter-branch comparison, measurement of economies of scale in banking industry, it is a branch rather than a bank which is an appropriate unit of study. Hence, we have selected branch as unit for our study.

To bring out clearly, the impact of rural and urban environment on economic and social efficiency of the branches, rural/urban dichotomy has been adopted throughout the study.

Semi-urban branches are clubbed with urban branches. Wherever necessary, for comparing the performance of rural and urban branches, we have divided branches into four size-groups :

- (i) Very small branches - having volume of business less than Rs.10 lakh.
- (ii) Medium size branches - having volume of business between Rs.10 lakhs to 5 crore.
- (iii) Large branches - having volume of business between Rs.5 crores to 10 crores.
- (iv) Exceptionally large branches - having volume of business more than Rs.10 crore.

Since size is an important variable affecting costs, earnings and efficiency of banking services, we have considered size variable throughout our analysis.

For examining factors affecting costs, earnings and efficiency at branch level, cross sectional analysis has been resorted to. Statistical techniques, like regression analysis and principal component method, etc., have been appropriately used to discuss various empirical relationships.

1.3 The Data Base

The study is based on branch-wise data on details

of costs, earnings, deposits, lendings and other characteristics. These data were obtained from the regional offices of the Bank, namely Baroda region, Broach and Panchmahals region, Surat region and Bulsar-Nagda region. Since data prior to 1973 were not available at the regional offices, latest-available data for the year 1975 and 1979 were obtained. The data collected were compiled and classified in different size-groups in rural, urban and all branches, namely branches having volume of business less than Rs.10 lakh, Rs.10 lakh to 50 lakh, Rs.50 lakh to 1 crore, Rs.1 crore to 5 crore, Rs.5 crore to 10 crore, and more than Rs.10 crore. Moreover, individual branch data were processed through computer for analysis. The number of branches in different size-groups in rural, urban and all branches are shown in Table 1.2. (on next page)

The non-availability of data of service-wise cost and lack of appropriate method for apportioning overhead costs, e.g., head office cost, insurance cost, director's fees, and other administrative costs to different services at the branch level, imposed a limitation on the understanding of the relationship between size and total operating cost.

Table 1.2 : Number of Branches in Different Size-Groups.

Size-Group of Branches (Volume of Business in lakh-crore of Rs.)	Rural Branches		Urban Branches		All Branches	
	1973	1979	1973	1979	1973	1979
Less than 10 lakh	34	19	-	-	34	19
10 to 50 lakh	40	61	14	6	54	67
50 to 1 crore	35	32	13	15	48	47
5 to 10 crore	-	-	3	6	3	6
Above 10 crore	-	-	4	5	4	5
All branches	128	141	79	80	205	221

Note : In rural branches, there are no branches having volume of business more than 5.5 crore. Similarly, in Urban branches, there are no branches having volume of business less than Rs.10 lakh.

1.4 Chapter Scheme

Chapter II deals with the conceptual framework of the study. It discusses the concept of size and scale and measurement of output in banks. It also reviews the literature on economies of scale, and in that light discusses the appropriate level for measuring economies of scale in banking at branch level.

Chapter III examines empirically with the help of regression technique, the relationship between size and cost at branch level and in this context tests the hypothesis of economies of scale in banking at branch level.

Chapter IV explores the empirical relationship between size and earning at branch level with the help of regression analysis.

Chapter V examines the influence of other factors on costs and earnings along with size. Such other factors are the loan-portfolio, deposit-mix, assets structure, relative share of different income, head office interest. Multiple regression technique has been employed to examine the influence of other factors on costs and earnings of the branches.

Chapter VI examines the relative efficiency of rural and urban branches in relation to social objectives, such as priority sector lending, mobilisation of deposits from rural community, etc. For measuring social efficiency of the branches, the technique of principal component analysis has been resorted to.

Summary, conclusions and policy implications of the study are discussed in Chapter VII.