

COMMERCIAL BANK LENDING IN INDIA

AN ANALYTICAL STUDY

S U M M A R Y

of the thesis submitted to the
M. S. University of Baroda for the
Degree of Doctor of philosophy
in Banking and Business Finance

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RATIONALE AND RESEARCH DESIGN

Rationale

The prime function of a banking system in any country is to mobilise the public savings in the form of deposits and channalise them into productive sectors of economy in the form of credit. In doing so, the banks provide safety to the depositors for the monies deposited by them and carry upon themselves the risks inherent in lending the funds to the needy sectors. A major portion of the profits of the banks accrued from the interest margins they earn in this process as a compensation for carrying the risks.

The role of banks in the economic development of a country assumes significance due to the fact that they provide one of the essential inputs, namely finance, for the growth of various segments of the economy. In a developing country like ours, where the scarcity of financial resources is admittedly one of the constraints for accelerating the pace of economic growth, an efficient and responsive banking system is of

utmost importance. Further, our country has adopted a system of planning which seeks to attain social justice and equitable distribution of wealth alongwith economic development. Judicial allocation of the scarce financial resources between the various segments of economy is one of the means by which social justice can be attained and hence the banking system in our country is required to subordinate the 'commercial approach' in its lending policies partially to subserve the national priorities set by the Government.

The importance of the banking system in subserving the plans for economic development in India was first recognised in the first five year plan document in which it was emphasised that the banking system should be fitted into the scheme of development to make the process of saving and their utilisation 'socially purposive'. In confirmity with this, steps were taken albeit slowly. Expansion of branches by the then Imperial Bank of India in the fifties and subsequently its conversion into the State Bank of India, and shifts in the loans portfolio of Commercial banks to take care of the financial needs of small scale industries, agriculture, etc., are a few landmarks in the process of integrating banking with the needs of national development during 1960s. Subsequently, the introduction of social control over banks, followed by the nationalisation of 14 largest commercial banks in 1969 and of another 6 banks in 1980, were other developments demonstrating the Government's Commitment to reshape the banking system to meet progressively and

serve better the needs of development of the economy in conformity with national policy and objectives'.

Ever since the nationalisation of major scheduled commercial banks, banking policy has been continuously re-oriented, encompassing the socio-economic objectives laid down in the successive five year plans. These measures have been taken to achieve reduction in inequality of incomes, prevention of concentration of economic power and reduction of inter-regional disparities. In the process, the promotional role of commercial banks has gained prominence and there has been a gradual shift from the Real Bills Doctrine of commercial banking to Shiftability Theory and also been conspicuous from elite banking to mass banking. One important measure taken in this context was the branch expansion policy with relatively greater thrust on expansion of branches in rural and semi-urban areas. Further, credit policy was also geared to encourage the flow of credit to priority sectors such as agriculture, small-scale industry, etc., which did not receive adequate attention in the pre-nationalisation period. Targets for advances to priority sectors as a whole and also for the weaker sections thereof have been laid down. Targets have also been set for the credit deposit (CD) ratio in respect of rural and semi-urban branches to ensure that deposits mobilised by the branches in these areas were not siphoned off to urban / metropolitan areas.

This changing scenario of the commercial banking sector in India has adversely affected the profitability of commercial banks especially in view of the high servicing costs, the relatively low earning rates on advances to the priority sectors, and the additional costs involved in opening of new branches in remote rural areas. Also, the potential of lending at commercial rates of interest has been reduced to a relatively small proportion of banks resources by the statutory and other regulatory measures, such as the cash reserve ratio (CRR), the statutory liquidity ratio (SLR) and the lendings to the priority sectors. Thus, as a result of these policy measures, while there has been an unprecedented growth in practically all the important banking parameters, it is felt that there have been certain adverse effects also on the quality of certain parameters and the overall operational efficiency of the commercial banking system. At this juncture, it may be appropriate to first of all understand the changes in the scenario of commercial banking in India during the post-nationalisation period, as given in Table - I.1.

Table - I.1

PROGRESS OF COMMERCIAL BANKING IN INDIA
DURING POST- NATIONALISATION PERIOD

Item	June 1969	June 1979	June 1980	June 1981	June 1986
1) Number of offices in India	8262	30202	32419	35707	53287
a) Rural	1833	13337	15105	17656	29703
b) Semi-urban	3342	7889	8122	8471	10585
c) Urban	1584	5037	5178	5454	7209
d) Metropolitan	1503	3939	4014	4126	5790
2) Population per office (in thousands)	64	22	21	19	14
3) Deposits of scheduled commercial banks in India (Rs. crores)	4646	28671	33377	40549	91454
4) Credit of scheduled commercial banks in India (Rs. crores)	3599	19116	22068	26551	57025
5) Scheduled commercial banks advances to priority sector (Rs. crores)	504	5906	7278	9444	22844
6) Share of priority sector advances in total credit of scheduled commercial banks (percent)	15.0	36.6	37.0	38.8	45.0
7) Deposits as percentage of National income (at current prices)	15.5	33.3	35.8	35.9	44.8
8) Per Capita deposits of scheduled commercial banks (Rs.)	88	434	494	587	1194
9) Per capita credit of scheduled commercial banks (Rs)	68	290	327	385	744

Source : Basics statistical Returns on Banking Statistics,

Vol.-II, Reserve Bank of India, June 1987

It may be observed that in the post-nationalisation period :

- 1) The number of bank branches increased from 8262 in 1969 to 53,267 in June, 1986, at a compound growth rate of 11.6 per cent. The average population served per branch declined sharply from 64,000 in 1969 to about 14,000 in 1986, as a result of the opening of the new branches at a faster pace in the hitherto unbanked centres;
- 2) branches in the rural and the semi-urban areas as percentage of the total bank branches increased from about 63 per cent in 1969 to about 76 per cent in 1986. Rural branches alone accounted for about 57 per cent of the total number of branches in 1986, as against 22 per cent in 1969;
- 3) the deposits of commercial banks increased from Rs. 4646 crores in 1969 to Rs. 91,454 crores in 1986 showing a compound growth rate of 17.7 per cent only, during the same period; and
- 4) the share of priority sector advances in total bank credit increased from 15 per cent to about 45 per cent in 1986.

While the quantitative expression of growth in certain important banking parameters highlight the structure-functional transformation of commercial banking, according to the authors of the National Banking

Plan , Indian banking after the nationalisation of 14 major commercial banks has emerged to be a vital and growing segment of the economy, requiring immediate attention on certain weak areas, such as

1. housekeeping, non-performing assets and recovery;
2. adherence to established credit-appraisal norms and follow-up and monitoring of advances, and
3. managerial control systems.

While the authors of the National Banking Plan have identified the strengths and weaknesses of the commercial banking system during the post-nationalisation period, and the quantitative expression in the growth of certain banking parameters as given in Table-I.1 appear impressive, they all have failed to highlight certain qualitatively critical factors which are crucial not only for the survival and growth of commercial banks but also in their achieving the real goal of contributing their share in the socio-economic transformation of the society at large. In terms of their intermediation function, commercial banks have not only to meet the targets of expansion but have to do so efficiently. Lending efficiency emerges in this context as the most critical factor in the evaluation of their performance. While various researchers such as Singh, Varde and Singh, Sharma, Faye, and various other scholars have examined the problems of bank lending in the Indian context; they have confined their scope either to the philosophy of lending or thought or to economic and profitability analysis, or to the lending procedures. Of late some of these Indian Researchers

have tried to examine the financial management aspect, or costs and margins aspects of bank lending also.

However, these researches and the available literature on bank lending in the context of Indian socio-economic environment leave a large gap of knowledge and scope for further researches in the area. To meet this need, an attempt is being made in this exercise to take an integrated and more comprehensive view in understanding and evaluating the bank lending system in India especially during the post-nationalisation period, and in the context of the officially assigned roles and goals.

Main Objectives

The main objectives identified to be achieved through this exercise are to :

1. ascertain the relational behaviour between bank lending and overall banking development in the country as a whole and across the regions ;
2. evaluate the distributional / allocational lending efficiency of banks on regional and sectoral basis;
3. evaluate the efficiency of different groups of banks in the performance of lending function ;
4. ascertain the quality of bank loans and advances in terms of recovery of loans and recycling of funds, and determine the factors affecting the quality of bank lending and its effect on the health of banks;

5. ascertain the servicing costs of resources / deposits and lending;
6. ascertain the profitability in bank lending - over all and in terms of per loan account;
7. evaluate the impact of socially oriented bank lending programmes;
8. suggest appropriate models for achieving higher level of efficiency in bank lending.

Hypotheses

This exercise is both exploratory as well as analytical. Hypothesisation is not considered essential in certain areas, especially in the analysis of lending costs and margins, and the analysis of distribution of bank credit across the regions and sectors. However, the following hypotheses have been formulated for testing :

1. The growth in commercial bank lending has lagged behind the growth in the number of branches, volume of deposits, and working funds/business of banks :
2. The regional imbalances in bank lending are higher compared to the imbalance in the overall commercial banking development ;
3. The variances in lending performance across the different bank groups is significant and have increased over the time, during post-nationalisation period;

4. The lending efficiency of banks is uniformly poor across all the sectors and has deteriorated during the post-nationalisation period in terms of recovery of advances;
5. The profit margins in bank lending have declined over time, during the post nationalisation period;
6. Lending costs have been adversely affected by 'overheads', and
7. Socially oriented lending programmes have failed to achieve their objectives.

Scope and coverage

The study is confined to the analysis of commercial bank lending in India only and as such the performance of the preview of this exercise.

The temporal coverage is confined to the period 1969 to 1986 for the analysis of growth in advances and for regional and sectorial distributional analysis. In certain cases, due to data constraints a few analysis have been done for the period 1972 to 1985. For the purpose of a detailed analysis of the distributional efficiency as well as for evaluating the relative efficiency of different bank groups, i.e., for inter-stratum analysis and for analysis of advances over rural, semi-urban, urban and metropolitan centres, temporal coverage is confined from 1981 to 1986. The qualitative

analysis covers a still shorter span of time and the analysis is cross-sectional in costs and margins analysis and both cross-sectional and time series in the valuation of certain identified socially oriented schemes of bank lending.

The spatial coverage is all India for the growth and distributional/allocational analysis while for evaluation of credit schemes, the exercise is confined to a few selected locations only.

The institutional coverage is confined to all the scheduled commercial banks except in cases of evaluation of schemes, analysis of computation of costs and margins, and certain other aspects of qualitative analysis, where only public sector banks have been covered.

Data

Data for analysis have been drawn from various issues of Financial Analysis of Banks, published by Indian Banks' Associations, basic statistical returns, and statistical tables relating to banks in India, published by the Reserve Bank of India. Necessary data for relational analysis have been drawn from the basic statistics relating to Indian Economy, published by the Centre for Monitoring Indian Economy. The detailed data for the analysis of the cost of funds, cost of lending and margins have been collected from selected large nationalised banks. Data for evaluation of certain identified schemes have been partly collected through field survey and have partly been drawn from various evaluation studies conducted by some of the banks.

ANALYTICAL TECHNIQUES FOR

Growth and Distributional Analysis

It is proposed to go for factor analysis taking all the identified indicators together as well as for each group of indicators separately. In factor analysis the factor scores are proposed to be computed by,

Considering a set of variables X_1, X_2, \dots, X_k , and the corresponding standardised variables, i.e., deviations of the X s from the mean values divided by standard deviations, called Z_1, Z_2, \dots, Z_k . We may then replace these standardised variables by principal factors, which are linear combination of the Z s.

$$\begin{aligned} F_1 &= a_{11} Z_1 + a_{12} Z_2 + \dots + a_{1k} Z_k \\ F_2 &= a_{21} Z_1 + a_{22} Z_2 + \dots + a_{2k} Z_k \\ &\vdots \\ F_k &= a_{k1} Z_1 + a_{k2} Z_2 + \dots + a_{kk} Z_k \end{aligned}$$

or in matrix notation, we may write as $(F) = (A) (Z)$.

The problem is to estimate the co-efficients a_{ij} 's, called factor loading ; Let R be the correlation matrix between Z_i s.

$$(R) = \begin{matrix} & \begin{matrix} 1 \\ 2 \\ \vdots \\ k \end{matrix} \\ \begin{matrix} 1 \\ 2 \\ \vdots \\ k \end{matrix} & \begin{bmatrix} 1 & r_{12} & \dots & r_{1k} \\ r_{21} & 1 & \dots & r_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ r_{k1} & r_{k2} & \dots & 1 \end{bmatrix} \end{matrix}$$

The system of linear equations which yields the first and largest component is $(R) (A) = (\lambda A)$
or $(R - \lambda) (A) = 0$

The system of linear homogeneous equations can have nontrivial solutions only if the determinant equation becomes zero,

i.e if $(R - \lambda/I) = 0$

Let $-\lambda$, to be the largest root. Corresponding to this largest root (called as eigen value or latent root of characteristic root) the associated vector representing the factor loadings may be derived. Similarly, for the next largest root, the corresponding factor loading vector can be worked out. Generally it will suffice to work out two latent roots which will explain a major part of the variance of the explanatory variables. The percentage contribution of each principal factor in total variance of the standardised X is given by $1/k$ where k is the number of variables. The standardised variables matrix multiplied by factor loading matrix will give the factor scores' (10).

For measuring the overall concentration and dispersion of various characteristics, the Herfindahl Index is used which can be written as,

$$HI = \frac{\sum_j^m E_j^2}{(\sum_j E_j)^2} \quad (j = 1, \dots, m)$$

The value of H lies between 1 and $1/m$ which may be derived and given by,

$$O = \frac{1 * E * (X_j^2 - X)^2}{m} > 0$$

$$= \frac{1 * E * (X_j^2 - X)^2}{m} > 0$$

$$= 1 * E * X_j^2 - \frac{E * X_j}{m} \times \frac{E * X_j}{m} > 0$$

$$\text{i.e. } \frac{1 * E * X_j^2}{m} - \frac{(E * X_j)^2}{m^2}$$

$$\text{OR } \frac{E * X_j^2}{(E * X_j)^2} > \frac{1}{m}$$

$$\text{Further, } (E * X_j)^2 = E * X_j^2 + E * E * X_i * X_j * X_i * X_j, X_j \neq 0$$

$$\text{i.e. } (E * X_j)^2 > E * X_j^2$$

$$\text{OR } \frac{E * X_j^2}{(E * X_j)^2} < 1$$

$$\text{Thus, } \frac{1}{m} < H < 1$$

The value of unity depicts complete concentration and $1/m$ complete dispersion. A decline in the coefficient of variation of each of the indicators among the states in the

two years 1969 and 1986 will give an idea of the deduction in the imbalances in respect of each indicator over the years.

Analysis of Costs and Margins

A Number of scholars have examined the problem of costs and margins in commercial banking during the last two to three decades, mainly in USA, UK, Germany and Australia. Of late, some scholars have devoted their attention to this aspect of Bank Lending. While most of the scholars abroad and also a few Indian Economists who have considered the cost aspects of banking, have done so to examine the economies of Scale in Banking. Varde and Singh (11), and Sharma (8) have dealt with the problem from the view point of bank management. The methodology for computation of cost of funds suggested by Varde and Singh has gained a wide acceptance in the context of Indian banking. Sharma (8) has used a modified methodology of computing the 'cost of lending' and 'margins' in bank lending. In this study, it is proposed to apply the Varde and Singh (11) methodology for computing the cost of funds for lending and use the adapted version of Asset Utilisation Model of Sharma (8) to compute the weighted yield from various types of advances. The 'margin' in bank lending then would be ascertained by deducting the adjusted cost of funds from the weighted yield on lending under different forms and schemes. Thus we propose to deal with the problem of computing costs and margins in bank lending in the following manner:

Sample

In view of the branch banking system in India, with each bank having a large number of branches located all over the country from metropolition to remote rural centres, the primary data has been drawn from a sample of branches and administrative/controlling offices of selected large Indian banks in the public sector. The sample branches have been identified through cluster analysis techniques and data for each year has been collected in a phased manner drawing information from 1/12th of the cluster-wise sample branches every month. All the costs in this exercise have been computed by adopting FAC (Full Absorption Costing) approach with analytical estimation technique. The cost of each fund-based activity has been presented as a percentage of balance/turnover in the commercial activity.

Computation Model

The cost of funds will be computed by,

$$C = \sum_{i=1}^2 C \dots\dots\dots (1)$$

Where, C_1 is the 'interest cost', and C_2 is the 'servicing cost'. The interest cost will be arrived at by,

$$C = \sum_{i=1}^5 \frac{I_i}{AF_i} * W_i \dots (2)$$

Where,

'I' is the actual amount of interest paid during the period;

'AF' is the average amount of funds held during the period; and

'W' is the weight of each subscribed funds in the total funds.

Subscript

i = 1, denotes current account of deposits, except call and overdue deposits;

i = 2, denotes savings account deposits, including debit balances, if any,

i = 3, denotes all types of term deposits consisting of all types of deposits not classified as current or savings,

i = 4, denotes other borrowings, and

i = 5, denotes owned funds.

To compute the servicing cost of each type of funds (Sc) five cost components have been identified, viz.,

(1) Supervisory cost at the branch level

- (2) Other staff cost at the branch level
- (3) Overhead cost at the branch level
- (4) Staff cost, at the controlling offices, and
- (5) Overheads at the controlling offices.

The following equation will be used :

$$Sc = \sum_{t=1}^5 Sc \quad \dots\dots (3)$$

Where,

Sc = servicing cost of each type of funds;

'S' = cost components, and

Subscript-t represents the individual cost heads from (1) to (5) defined above.

After computing the cost of each type of funds separately, the weighted servicing cost of funds (CD) will be computed by,

$$CD_2 = \sum_{i=1}^5 \frac{Sc_i * W_i}{AD_i} \quad \dots\dots (4)$$

Where,

Sc_i = servicing cost for i th type of funds

W_i = weight i th type of fund in the total funds;

and

Subscript :

i = 1 is for current deposits,

- i = 2 is for savings deposits and
- i = 3 is for fixed deposits
- i = 4 is for other borrowings, and
- i = 5 is for owned funds.

The cost of lending (CL) will be computed by,

Where,
$$CL = C_F + C_A \dots\dots\dots (5)$$

C_F is the cost of funds, and
 C_A is the servicing cost of average total advances(weighted) calculated by,

$$C_A = \sum_{j=1}^5 \frac{C_j}{AA_j} * W_j \dots\dots\dots (6)$$

Where,
 C_j is the servicing cost of J th type of advances;
 AA_j is the average balance of the J th type of advances,
 and
 W_j is the weight of J th type of advances in the total advances.

Subscript

- j = 1 denotes small scale industry advances (SSI),
- j = 2 denotes agricultural advances,
- j = 3 denotes other priority sector advances

j = 4 denotes commercial and industrial advances
j = 5 denotes all other advances, not covered under
J=1 to J=4.

The servicing cost of each type of advances has been computed by,

$$C_j = \sum_{t=1}^5 S_t \quad \dots\dots\dots (7)$$

Where,

'S' represents the cost components, and

't' indicates the individual cost heads as defined in equation (3)

To ascertain the profit margin (PM) on lending, earnings on funds deployed in different assets will be calculated. For the purpose, funded assets have been classified into :

- (1) cash balances,
- (2) variable cash reserves required to be kept with the Reserve Bank of India, classified into Basis CRR and additional CRR,
- (3) Investment in banking assets, and
- (4) advances (j=1 to j=5)

Assets (1) to (3) are called liquid assets and their ratio in total banking assets is governed by statutory and regulatory controls. Advances, j = 1 to j = 3, are called Priority Sector Advances and j=4 to j=5 are Non-Priority Sector

Advances. The basic computational model for determining of earning power of liquid assets as a whole (EL) is given as,

$$EL = EC + ER + EI$$

$$= \left(\frac{ic}{Wc} * 100 + \left(\frac{i1}{WR1} * W1 + \frac{i2}{2} * W2 + \left(\sum_{j=1}^n \frac{ij * Wj}{j} \right) \right) \right) \dots (8)$$

Where,

'ic' is interest earned on cash balances,
'i1' is interest earned on basic CRR, 'i2' is interest earned on additional CRR, and 'ij' is the interest earned on j th type of investment.

Wc is the cash balance, WR₁ is funds under basic CRR, WR₂ is funds under additional CRR, w_j is the amount of funds invested in j th type of securities.

W₁ is percentage of basic CRR to aggregate CRR, W₂ is percentage of additional CRR to the aggregate CRR, W_j is the percentage of j th type of investment in the total investment.

The earnings on advances have been computed by,

$$EAD = \sum_{j=1}^5 \frac{ij}{Aj} * W_j \dots (9)$$

Where,

EAD is the weighted average earning (interest) on aggregate advances;

i_j is the amount of interest earned on j th type of advance,

A_j is the average amount of j th type of advance, and

W_j is the weight of j th type of advance in total advances.

The profit on liquid assets (PL_A) will be computed by,

$$PL_A = EL - CD \quad \dots\dots(10)$$

Where,

EL is the average weighted yield on liquid assets, and

CD is the average weighted cost of aggregate deposits.

The profit on priority sector advances ($j=1$ to $j=3$) will be worked out by,

$$P_{pa} = WY_P - CL \quad \dots\dots(11)$$

Where,

P_{pa} is the profit on priority sector advances,

WY is weighted yield on priority sector
p
advances, and

CL is the cost of lending.

It is also proposed to analyse the servicing costs in lending for 5 or more nationalised banks for the years 1984 and 1986, mainly to test the cost related hypothesis, the servicing costs will be computed for ;

- (1) per 100 monetary units average balance/turnover;
- (2) per voucher, and
- (3) per loans and advances account.

The analysis will be carried out on a cross-sectional basis and on a comparative basis amongst different years.

Further, to measure the overall lending efficiency of banks, it is proposed to modify the CME model of Faye (3), which is given as

$$CME = F (Pe, Ac, Re, Te, De),$$

Where,

CME = Credit Management Efficiency

Pe = Profit Efficiency

Ae = Advances efficiency (regulation implementation)

Re = Recovery efficiency

Te = Time efficiency, and

De = Distributional efficiency

Faye (3) has not been able to fully demonstrate the credit management efficiency through his model due to data constraints. In this study a separate analytical/computational

model will be developed for measuring the lending efficiency of banks.

Evaluation of Identified Socially Oriented Lending Schemes

The success of massive development programmes, which are being implemented at the grass-roots level throughout the country depends much on (i) how effectively these are administered by the implementing agencies at various levels, and (ii) the extent to which the modus operandi of the Schemes is understood and accepted by the target group.

Accordingly, in this exercise, the identified schemes will be evaluated with the following specific objectives:

- (i) to assess the effectiveness of implementation,
- (ii) to study the impact of activities financed and the recovery position of loans, and
- (iii) to examine the policy implications of the study findings.

The impact of financing will be estimated by comparing the post-loan position of the sample beneficiaries with their pre-loan position.

MAIN FINDINGS

- 1) Advances have not grown in proportion to growth in deposits and resources available with the banking system have been diverted under policy constraints for

financing the government revenue deficits.

- 2) While PC ratio has improved during the period, the concentration of banking in a few states and in the urban - metropolitan centres is still of a very high magnitude.
- 3) The efficiency of the system measured in terms of CV reveals that the distributional efficiency over regions and rural urban centres has improved during the post-nationalization period.
- 4) Considering the performance index of the states with reference to indicators in 1986 alone, it is observed that there is considerable variation in the ranks of the states, when the groups of business indicators, spatial spread of bank branches and sectoral credit deployment are considered separately. When the group of business indicators in terms of deposits and credits are considered, the five states, viz., Maharashtra, West Bengal, Tamil Nadu, Karnataka and Uttar Pradesh get the first five ranks. As regards the spatial spread of bank branches, the four states, viz., Punjab, Kerala, Karnataka and Gujarat get top scores. With regard to the sectoral indicators, Punjab, Orissa, Andhra Pradesh and Rajasthan have the high ranks. When the composite scores are considered at the terminal year, Punjab, Karnataka, Andhra Pradesh and Rajasthan get the top ranks. At the other extreme, Kerala, West Bengal, Bihar and Assam get the lower ranks.
- 5) When scores are worked out according to growth rates,

the composite index shows that Orissa, Madhya Pradesh and Rajasthan emerge as important states, while Maharashtra and Gujarat are in lower rung. The high score in some of the backward states may be due to their low base in the initial period and relatively high pace of development in those states following emphasis on development of rural/semi-urban branches in these states. The low ranks in respect of states like Maharashtra and Gujarat may be due to the fact that the levels of various indicators were relatively high even in initial year, and as such growth rates did not show a significant rise.

- 6) The states getting high scores based on the average ratios are having low ranks, when functional and spatial indicators with reference to growth rates are considered. When sectoral indicators are considered, there is high positive correlation.
- 7) There has been substantial reduction in coefficient of variation among the states, in the post-nationalisation period, when per capita deposits/credit and sectoral deployment of credit are considered. This will indicate that the imbalances among the states were narrowed down over the time period.
- 8) The various productivity ratios indicated a down trend. Further, the correlation coefficient between two variables in each productivity parameter had found 'significant' indicating high degree of relationship

between them. But the correlation coefficient of marginal increase between same variables has been 'not significant' indicating low productivity.

- 9) The profit ratios of banks during 1977 and the period between 1981 and 1983, showed a slightly better picture due to changes in the interest structure. Further, the correlation coefficient between two variables in profitability parameters showed close relationship. But at the same time, there had been absence of relationship regarding marginal increase of some variables, indicating low profitability.
- 10) Due to hike in cash reserve ratio and statutory liquidity ratio, the lendable resources of commercial banks have been considerably eroded, and a 40 percent deployment of aggregate advances in priority sector has adversely affected the profitability of funds.

Industrial advances as a percentage to gross bank credit during 1970 to 1985 period had reduced but after 1986 had showed a sign of improvement. Engineering, basic metal & metal products and textile industries had appeared as major borrowers and considerable amount of advances blocked in these industries.

- 11) Advances earned one to ten crores had increased (from 25% to 33%) while that of credit below one lakh had reduced (from 6% to 18%) among aggregate industrial advances and loans during 1980 to 1986 period respectively.

- 12) Outstanding credit per account to industry on the whole had declined from 1.38 lakhs to 0.94 lakh during the period 1980 to 1986. On the other hand, per account credit outstanding in rural areas had sharply reduced (from 0.27 lakhs to 10 thousands), while in metropolitan regions this had accelerated (from 4.24 lakhs to 6.51 lakhs).
- 13) The distribution of advances among states and union territories during 1975 to 1986 had showed a significant shift. In 1975, Maharashtra, Tamil Nadu and Uttar Pradesh states got first three ranks as far as credit outstanding was concerned, but by 1986, Maharashtra retained its position, while next two positions were replaced by West Bengal and Tamil Nadu states respectively.
- 14) The average annual growth rate of sick industries during 1980 to 1986 period was lowest for medium scale industries (4%) and highest for small scale industries (40%). However, growth rate of bank credit outstanding for the above two industries during 1980 to 1986 was 10% and 27% respectively.
- 15) It is clearly revealed that, with the increased emphasis on the deployment of credit to priority sector, the need, urgency, and importance of recycling of funds totally calls for any emphasis. The poor recovery of loans adversely affected the recycling of loanable funds and a huge amount of money is continuously blocked in overdues.

- 16) It is also evident from the field survey that, inadequate generation of income, poor follow-up by banks and diversion of funds were the main factors attributed to poor recovery of priority sector advances. It has also clearly emerged from the multidimensional interactions with the borrowers that bank officials failed in maintaining rapport with the borrowers and had never tried to solve or gave guidance to borrowers to overcome their operational difficulties while operating the schemes. SSI borrowers were of the opinion that the needed technical guidance was also not provided to them. It is also revealed that banks officials did not pay the required attention at the post-sanction stage which resulted in poor recovery.
- 17) Service costs of deposits and advances, together accounted for more than 61 percent of total operating costs of commercial banks.
- 18) Direct cost at the branch level were between 42% to 46% of the total costs and 'branch overheads' accounted for 40% to 44%. The 'Overheads' was significantly higher than 'Direct branch level cost' and if 'controlling office costs' are added to 'branch overheads' they accounted 60% of total costs, which prima facie appears reasonably high. Further, 'Overheads' were the major cost factors, irrespective of the locations.
- 19) The costs per hundred monetary units turnover were highly correlated across the regions in all the three

banks. Further, the cost per transaction showed strong correlation between urban and semi-urban regions in Bank-A, between urban and semi-urban regions in Bank-B, and between semi-urban and metropolitan regions in Bank-C. Moreover, correlations between service costs per transaction and per hundred monetary units turnover showed no relationship, uniformly for all the three banks.

- 20) The analysis of variance revealed that the costs per transaction the variance across the activities is statistically significant and for cost per 100 monetary units turnover, the variance is significant across the activities. However, in both the measures of cost per voucher and cost per 100 monetary units turnover, cost variance in regions was not significant.
- 21) The increasing trend in the yield on investment was mainly attributed to increase in coupon rates on central government securities to 11.5% during the period 1985-86 and also increase in rates of interest on state government securities and bonds and debentures of term lending institution 5% to 11%. Thus the present rate of net return on investment was just near the break-even stage. However, the present accounting system to calculate yield on investment does not include the loss due to depreciation on investments, the provision for which, in general, were not made by the banks. Thus, if provision for depreciation on investment is considered, the net return from such

deployment would be negative.

- 22) Profitability of CRR operations indicated that overall net return from CRR balance was negative and profitability of credit deployment gave indication that, if full provision is to be made towards bad and doubtful debts which is essential to ensure the long term viability of the system, deployment of funds or credit also appeared to be non-profitable.
- 23) The aggregate deposits of the identified Bank as on 31st March, 1989 amounted to Rs. 620 crores registering a growth of 19.64% over the previous year. The advances increased by 28.94% and reached to Rs.299 crores as on 31st March, 1989. Net profit of the Bank was Rs. 0.33 lakhs at the end of first plan which jumped to Rs.125 lakhs as on 31st March, 1989.
- 24) The major part of the funds deployed by the Bank consists of advances. On an average, about 41% of the total funds deployed during the period in the form of advances. The liquid assets (cash at bank, balance with RBI and money at call and short notice) constituted 18%, on an average, of the funds deployed during the period.
- 25) In the year 1983 the total advances of the Bank were Rs. 149.83 crores out of which Rs. 102.84 crores was given to non-priority sector and Rs. 46.99 crores to priority sector. In the 15 months period of 1988-89, the total advances were Rs. 298.72 crores, containing

priority sector advances and general advances at Rs. 107.24 crores and Rs. 191.48 crores respectively.

- 26) The percentage of priority sector advances to total advances were 31.36, 35.66, 38.14, 38.37, 37.58 and 35.90 during the years 1983, 1984, 1985, 1986, 1987 and 1988-89 respectively. As such, it can be said that the Bank was unable to achieve the target of 40 percent of total advances, for the priority sector. Further, advances to small scale industries occupied the major share of total advances to priority sector during the period, which was 40.20%, 42.53%, 43.98%, 43.12%, 46.09% and 52.03% during the years 1983, 1984, 1985, 1986, 1987, 1988-89 respectively.
- 27) The second major priority sector taking advances from the bank was the agriculture sector. The percentage of advances to agriculture sector were 32.26, 31.41, 32.27, 31.71, 30.74 and 27.82 during the years 1983, 1984, 1985, 1986, 1987 and 1988-89 respectively. However during the period, the share of the weaker sector advances was in the range of 23.37 per cent to 29.25 per cent of total priority sector advances. And advances under IRDP scheme were in the range of 4.98 per cent to 6.15 per cent of total priority sector. Under the DRI scheme the amount of advances was about 2 per cent of total advances to priority sector during the each year of the period. In the year 1983, 1984, 1985, 1986, 1987 and 1988-89 the share of advances under DRI scheme was 1.45 per cent, 1.68 per cent, 1.82

- per cent, 1.94 per cent, 1.67 per cent and 1.38 per cent of total advances to priority sector respectively.
- 28) In the years 1983, 1984, 1985, 1986, 1987 and 1988-89, the percentages of advances to small and marginal farmers to total priority sector advances were 7.49, 6.80, 7.32, 7.56, 8.67 and 9.06 respectively and advances made to the cottage and village industries during the study period ranged between 0.56 per cent and 1.48 per cent of total priority sector advances.
- 29) The credit-deposit ratio of the Bank was 56.87 at the end of the year 1983 and this ratio decreased year by year and reached to 44.73 at the end of 1987. In the year 1988-89 there was a slight improvement in this ratio when it reached to 48.21 per cent as compared to 44.73 per cent in the previous year.
- 30) The percentage of Net Demand and Time liabilities maintained as the Statutory Liquidity Ratio (SLR) was increased by the RBI from time to time. At the beginning of the period the Bank had to maintain 35 per cent of DTL as SLR which was increased to 38 per cent at the end of March 31, 1989. The Bank fulfilled this statutory requirement by maintaining SLR at 38 per cent on March 31, 1989. And the percentage of Cash Reserve Ratio (CRR) to DTL was 8.50 at the end of the year 1983, which increased to 15.00 at the end of March 1989. The Bank fulfilled the requirement by maintaining CRR at 15 per cent on March 31, 1989.

- 31) The total demand in the priority sector in the beginning of the period was Rs. 31.11 crores out of which the recovery amounting to Rs. 6.53 crores only was made, thus leaving an amount of Rs. 6.58 crores overdue on 31st December, 1983. But the total demand was of Rs. 31.99 crores out of which only Rs. 13.17 crores were recovered, leaving an amount of Rs. 18.82 crores as overdue amount.
- 32) The percentage of recovery to total demand was 49.78 at the end of the year 1983, this percentage decreased to 41.16 at the end of the March, 1989 and the percentage of overdue amounts to demand was 50.22 in the beginning of the study period which increased to 58.84 at the end of the period. Further, the recovery of agriculture advances was in the range of 42.18% to 57.33% of total demand. In the beginning year of the study (1983) the recovery was 47.77% of total demand. Recovery position showed decreasing trend throughout the period (except the year 1985). At the end of the period the recovery was 42.81% in agriculture advances.
- 33) The recovery position of SSI advances, in first two years (1983 & 1984) of the period, was 50% and above. In the next three years, the percentage had decreased. At the end of 15 months period i.e. on March 31, 1989 the recovery position in SSI was quite better as it witnessed a 46.15 per cent recovery of total demand and the recovery position of other priority sector advances had continuously decreased

(except the year 1984) till the end of the period. So, it can be concluded that the recovery position of the priority sector advances was far from satisfactory and the balance of overdue amounts has increased from year to year.

(34) More than 60 per cent of the respondents had no plan to take up self employment/business activities and were keen on paid jobs with security. They lacked financial resources, family support for investment in business/self - employment activities, and organised training and other guidance. In the absence of financial resources, the idea of pursuing their own business did occur to them. Most of them were then destined to continue in/take up some full-time, part-time job and/or fully or partly depend on the joint-family support to meet the bare minimum survival needs, below the poverty line level.

(35) The post-loan income of all the beneficiaries had increased over the pre-loan income irrespective of their social categories or sex. The average increase in the income was 56 percent. It may be noted that prior to the implementation of the programme more than 48 per cent beneficiaries were below the subsistence family income level of Rs.7200 per year. This percentage was reduced to 30 during the post - loan period.

(36) The repayment performance varied from region to region and activity wise also. The percentage of

beneficiaries paying the loan instalments varied from 20 to 70 in different regions. Although there was an increase in the income levels of all the beneficiaries, the increase was inadequate to service the debt, after meeting the essential consumption needs and emergencies. About 50 percent of the sample beneficiaries reported this as one of the principal reasons for repayment behaviour and eighty percent of the beneficiary respondents were motivated to take-up or expand the self-employment activity mainly on account of the availability of finance under the scheme, and the success of their friends/relatives in that regard.

(37) Before taking bank loans under the scheme, 43 per cent of the borrowers were unemployed and were trying to get some jobs; others were engaged in some casual activities. Moreover, the average per borrower investment in self-employment activities pursued by the respondents was Rs. 25,963. Of this amount, 76 per cent was financed from Bank loans. Forty nine per cent of the borrowers found loan amount inadequate. To meet the shortfall, a majority of the borrowers had to borrow from other sources while some of them reduced their scale of operation.

(38) Average gross income generated per borrower worked out to Rs. 2,860 per month. After deducting the average expenses of Rs.1,800, the average net income available

to the beneficiareis was only 70 per cent of the expected net income. The average pre-loan net income per month worked out to Rs.509 for the beneficiary-respondents. This income increased by 91 per cent in the post-loan period.

(39) The entrepreneurial activities taken up by the beneficiaries after taking loans generated additional employment of 52 man days per month on an average. 44 per cent of this was self-employment, 36 per cent for the hired labour, and the remaining 19 per cent for the family members.

(40) The respondents had repaid 51 per cent of the due amount as on 31st Dec. 1986. Average over-dues were only 34 per cent of the outstanding amount. 29 per cent of the borrowers repaid the entire amount of instalments and interest due, while 6 per cent did not repay at all. The repayment of loan behaviour of the borrowers was found to be greatly influenced by their levels of earnings from the activities financed. As many as 43.5 per cent of the borrowers with income of Rs. 1,000 per month had repaid the entire amount due as on 31st December 1986, whereas the corresponding percentage was only 22 for the borrowers with income below Rs. 1000 per month.

(41) Only 35 per cent of starters reported that participating in EDP has helped them in the selection of the activity. Average investment in the activity

worked out to 3.50 lakhs which was 14 per cent lower than their planned investment and investment of own funds and borrowing from friends and relatives was more than the planned investment from those sources. On an average, the starters received the first disbursement of the bank loan after 21 months of completing the EDP. And 40 per cent, of the average bank loan outstanding of Rs.2.13 lakhs, was overdue in the term loan account. Only about 20 per cent of the starters were regular in repayment. So, nearly fifty per cent of the starters maintained that they would have set up their units even without attending the EDP.

- (42) Of the sample non-starters, 70 per cent were employed while joining EDP. There was no major difference in the selected starters and non-starters in terms of their family and educational background. Although 58 per cent of the new starters found attending the EDP useful, they were not satisfied with the treatment they received from the Bank after the EDP. Further, at the time of survey, 25 per cent of the non-starters were working on salaried jobs in different offices. Another 72 per cent were engaged in various small business. Out of those who were employed, only 11 per cent expressed satisfaction with their present work.

- (43) The non-starters gave various reasons for not starting any industrial venture after the EDP. Thirty four per cent could not select products; 28 per cent

could get the loan sanctioned from various agencies, 7 per cent lacked technical competence in preparing projects and starting units. The main findings of the study clearly highlight that only 28 per cent. of the EDP participants could start their own industrial units. The weaknesses in designing and implementing the EDPs, the non-availability of sufficient finance on time, and the absence of inbuilt co-ordination amongst different agencies concerned with SSI were mainly responsible for the poor success of this programme.

SUGGESTIONS

A number of suggestions, based on the main findings of the study, have been given in the seventh part of the thesis.