

PART VII

FINDINGS AND SUGGESTIONS

Section 1 Findings

Section 2 Suggestions

PART VII : FINDINGS AND SUGGESTIONS

Section 1 Findings

The main findings of the study are summarised below :

- 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. *of the no for e's security - 9 due restrictions*
- 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. *in some states, 70% for this*
- 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. *why? could be checked up*
- 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. *What is the correlation between ?*
- 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.

is related to
cost of
credit.

9) for
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 metropoliton 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

overheads' they accounted 60% of total costs, which prima ~~faci~~ appears reasonably high. Further, 'Overheads' were the major cost factors, irrespective of the locations.

19) *Bank Banks* 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 per centage 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.

Can happen

(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 ^{re} 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 ~~beneficiaries~~ ^{beneficiaries} 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 ^{outstanding} ~~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.

Section VII.2 Suggestions

Forecasting and Bank Planning Bank Credit

Forecasting Models

Forecasting of bank credit of commercial banks in country is considered as important inputs for policy formulation. These data are also useful for carrying out a number of research studies in the areas of money, output and prices. While such a forecasting exercise can be attempted either by a behaviouristic approach or by a time series approach in a recent study. Ray and Datta (1) have preferred time series approach and attempted to evaluate the comparative performance of two models, namely, (i) Box - Jenkins and (ii) Bilinear. The Box - Jenkins model is linear, while the other one is non-linear. No doubt, the linear time series model is quite capable of explaining many physical processes with a reasonably good success. But, some time it fails to do so if

the inherent dynamic laws which govern the process are too complicated. Perhaps, such a process cannot be explained effectively by a linear time series model. In these circumstances, one has more potentialities of explaining the complexity of the process. One such model is Bilinear Time Series model. The two models are given below.

* The bilinear model was first introduced by Granger and Anderson (1978) who studied stationarity and invertibility conditions of a simple bylinear model. Subba Rao and Gabr (1984) considered the general bilinear model and suggested an estimation procedure of parameters. This model is designed below :

Bilinear Model :

A stationary process $(W(t), t = 0 + 1 + 2 \dots)$ follows a bilinear model of order p, p, m and n , if it satisfied the different equation :

$$W(t) + \sum_{i=1}^p a_i W(t-i) = e(t) + \sum_{j=1}^q c_j e(t-j) + \sum_{i=1}^m \sum_{j=1}^n b_{ij} W(t-i) e(t-j),$$

There (1) $e(t)$ is an independent and indentially distributed zero mean process with finite moments upto fourth order

(2) $a_i, i = 1, 2, \dots, p; c_j, j = 1, 1, \dots, q;$

$b_{ij}, i = 1, 2, \dots, n, j = 1, 2, \dots, n$ are parameters.

BJ Model

Given a stationary time series $W(1), W(2), \dots, W(N)$, one can develop a seasonal Box-Jenkins model of the form

$$F_1(B) F_2(B) W(t) = G_1(B) G_2(B) e(t) \quad (4)$$

Where (1) $F_1(B) = 1 - a_{11}B - a_{12}B^2 - \dots - a_{1p}B^p$,

$$F_2(B) = 1 - a_{21}B^S - a_{22}B^{2S} - \dots - a_{2p}B^{pS}$$

$$G_1(B) = 1 - b_{11}B - b_{12}B^2 - \dots - b_{1q}B^q$$

$$G_2(B) = 1 - b_{21}B^S - b_{22}B^{2S} - \dots - b_{2Q}B^{QS}$$

(2) B is the back shift operator which means

$$B^k W(t) = W(t-k), \quad k = 0, 1, 2, \dots$$

(3) $e(t)$ is the white noise process with mean zero and variance b .

(4) S is the period of seasonality,

(5) p, P, q and Q are the order of autoregressive and moving average operators of the process,

$$(6) a_{11}, a_{12}, \dots, a_{1p}; a_{21}, a_{22}, \dots, a_{2p}$$

$$b_{11}, b_{12}, \dots, b_{1q} \text{ and } b_{21}, b_{22}, \dots, b_{2Q} \text{ are}$$

parameters.

In their exercise Pay and Dalta () considered only two Indian economic series, namely, (i) Series 1 : aggregate deposits of all scheduled commercial banks, and (ii) Series

2: bank credit of all scheduled commercial banks, which exclusively analysed and modelled by Box-Jenkins and Bilinear methods. They covered the period from January 1970 to December 1985. In this context, they felt that though bank credit is highly dependent on aggregate deposits, they did not deploy this dependency in their analysis. Instead they attempted to develop models separately for the individual series and generated forecasts.

For the series on bank credit, the forecast values obtained by Bilinear model came out to be decidedly more superior and closer to the actual values as compared to BJ model's forecast values.

It is, therefore, suggested that on account of its forecasting over BJ model, the Bilinear Model should be used in the forecast of bank credit.

Monitoring of Credit ✓

In view of the miserable recovery of advances position, it is essential that measures to improve the advances monitoring and recovery system in Banks should be taken at the earliest. For the same, the following suggestions are offered.

1. Credit delivery system at the branch level must be improved through the :

- i) Preparation of activity-wise checklist in order to form the basis for asking information from the proposed borrowers.

*intending
applicant*

- ii) Supply of application forms, annexures and list of the documents required at the first instance to the prospective borrower.
 - iii) Assigning of the joint responsibility to the credit officer and the branch manager for sanctioning a loan proposal. The credit officer would be a recommending and the branch manager would be a sanctioning authority.
 - iv) Introduction of the system of standardised pre-sanction and post-sanction inspection reports each for loans upto Rs. 25000/- and above Rs. 25000/-.
 - v) Linking the margin and the rate of interest with the type of security offered and the repayment period.
 - vi) Fixation of the instalment on the basis of compound value tables and would include interest and other charges viz., inspection charges, guarantee fees etc.
 - vii) Provision of the remission in the payment of instalments in lieu of penal charges.
 - viii) Introduction of the passbook system to all types of advances conveying all terms and conditions.
2. The credit control/monitoring system may be improved by replacing the numerous credit control registers by the advances profile register and the advances control

register. These registers should be handy and must form the basis of submission of various information to the higher management. The design of advances profile register should be such that it should include the following columns for every advance account :

Permanent account number, name, address of borrower, name addresses of guarantors purpose, sanction limit, date of sanction, name of sanctioning officer, designation of the sanctioning officer, deposit account number, rate of interest, margin, category or class of the borrower, community of the borrower, a brief description of the asset financed, cost of the asset financed, name of the collateral security, marketable value at the time of sanction of loan as per the valuation report, type of charge created over securities, authority with which the charge is registered, assured ammount, due date of assurance policy, name of the document obtained, date of the execution of document, due date of the expiry of document, due date of the review or renewal of proposal, follow up action for renewal of proposal, date of balance confirmation or acknowledgement of debt obtained, disbursement schedule, date of actual disbursement made, date of commencement of repayment, repayment schedule, quarterly drawing limits over the repayment period, date of refinance availed, name of the refinancing institution, name of the guarantee

insurance corporation, total amount repaid, amount overdue and remarks.

First few pages would record due dates of documents, due dates of insurance policies, due dates maturities of paper securities, due dates review and renewal proposals. Against each of the above mentioned permanent account number of the advances a separate page should be mentioned for listing the information suggested.

The design of "Advances Control Register" would include the following columns :

Permanent account number, date of inspection and position of assets financed as on the date of inspection recommended action of the inspection officer follow-up of action taken, date of filing suit / RRC suit number, the amount, the reason for filing the suit next date of hearing, date of decree, date of commencement of execution proceedings, present position of the execution proceedings, date of filing DICGC/ECGC claim, amount of claim field, amount of claim received, terms of compromise proposals, remission received and remarks.

3. To improve the credit monitoring system allotment of advances accounts of Health Code 1 to 4 among the staff according to the size of the credit limit for periodical inspection is essential. The top 20 accounts could go to the branch manager, the advances upto sanction limit of Rs. 10,000/- could be with the

clerical staff and the remaining could be with the officer's cadre. If a number of advances accounts is small then the clerical staff need not be allotted with any of the accounts. The fixation of the time interval for inspection of advances upto Rs. 5,000 Rs. 5,001 to Rs. 25,000 Rs. 25,001 to Rs.10 lakhs and above Rs. 10 lakhs, could be fixed at 6 months, 3 months, 2 months and a month respectively.

There could be a due provision for the information with respect to the state of activity, current values of the existing, primary and collateral securities, and the borrowers' plans to repay the dues, in the inspection reports. Half yearly visits could be made by the task force from the Regional Office, Zonal Office and Head Office in those cases where advances were sanctioned by them or sent to them by the branch for the advice on the final course of action such as the sale of securities, compromise, filing a suit/RCC/criminal complaint, filing guarantee claims, appointing factoring agency, write offs, or a package for nursing back the defaulting accounts.

4. To improve the quality of existing credit portfolio, ABC approach should be introduced. ABC approach measures the significance of each item of inventory on the cost scale. The high value items are classified as "A" items and are under tight leash while "C" items represent low value and are put under simple control, "B" items fall

in between and require reasonable but not close attention of the management.

5. To control the overdue position of credit portfolios the following steps consistent with the ABC analysis could be evolved:

- i) Classification of branches according to the size of the overdue amount and a number of overdue accounts.
- ii) Segregation of the overdue credit accounts based on the application of the ABC analysis.
- iii) Stock taking of the situation with respect to the overdue accounts.
- iv) Devising of the time-bound action programme.

Branches should be classified according to overdue amount and number of overdue accounts. To ascertain the situation in the branches with respect to the number of overdue accounts and the value of overdue amount the branches should be classified according to the size of the overdues, as for the overdues a) exceeding 50 lakhs, b) between 10 lakhs and 50 lakhs and, c) below 10 lakhs. The list of branches having overdue accounts exceeding 1500, between 501 to 1500 and upto 500 would also have to be prepared. The final list of the branches would be prepared as in Table 1.

Table 1

Class	Particulars of overdue ranges and their accounts

A	Branches having overdues over Rs.50 lakhs and/or number of overdue accounts over 1500.

- B Branches having overdues between 10 lakhs to 50 lakhs and/or number of overdue accounts between 501 to 1500.,
- C Branches having overdues below 10 lakhs and/or overdue accounts upto 500.
-

The cut off point of the overdue amount and accounts for the classification of branches could be readjusted as per the specific situation in the region.

6. Overdue credit accounts should be segregated by amounts and for application of ABC analysis the regional and higher offices would be required to build up a data base of all the existing accounts with the exact position of the sanctioned limit, amount disbursed, overdue, amount, total repayment made by the borrower etc. Based on this data base, classification of credit accounts by the overdue amounts exceeding Rs. 50,000 between Rs.10,000 to Rs.50,000 and upto Rs. 10,000/- would have to be carried out. The cut off point could be lowered or raised depending upon the specific situation in a branch.
7. The situation of overdue accounts and overdues in branches must be received on an on going basis. The probing of actual situation would have to be with the branches and accounts classified as "A", and in the next stage branches and advances accounts in the class "B" would be covered. A profile of credit portfolio of the branches under class "A" would cover the quality and quantity of overdue accounts.

The information regarding overdue advances under class "A" would have to be prepared. It would cover the limit sanctioned, the amount disbursed, total amount repaid, overdue amount, age of the overdues, whereabouts of the borrowers and guarantors and their marketable values, likely chances of a compromise, present state of business/activity, state of documents and their legal position, date, stage and likely time in deciding the suit and the chances of a recovery, date of decree and stage of execution and likely realisation.

Designing time-bound action programme

The branches which have been identified under class "A" and which after excluding the overdue accounts under class "A" still remain in this class would require a special attention and treatment. The action programme would involve:

- (i) ~~Transfer of total staff who possibly would have built up vested intrests.~~
- (ii) Posting of freshly recruited clerical and subordinate staff.
- (iii) Posting of branch manager with a wide experience handling credit accounts and having a legal background.
- (iv) Creation of a credit management department by posting of young field officers and trained clerk (to be provided with a motor cycle).
- (v) Provision of the time limits for ascertainment of the position of advances accounts and the recommendation of

actions.

For these advances accounts thus identified under class "A" the action programme would include the following :

Ascertainment of the existence of the Borrower (B), Guarantors (G), Asset(A), Income from business/activity (I), Repayment performance (R), Documents validity (D).

POSITION OF
ACCOUNTS

ACTION

- | | |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) -B-G-A-I-R-D | Stop charging interest File claim with <u>DICGC</u> . Write off the balance amount. |
| 2) +B+G+A+I+R+D | Stop charging interest file the claim with <u>DICGC</u> , For unabjusted amount write off the balance. |
| 3) +B+G+A+I-R-D | Obtain <u>linkage</u> letter, persuade borrower to compromise. Alternatively file civil suit against guarantor or a criminal suit, file a claim with DICGC, write off the balance. |
| 4) -B+G+A-I-R-D | Obtain fresh documents from legal heirs. Reschedule loans, alternatively auction the assets with the consent, file DICGC claim, write off the balance amount. |

5) +B+G+A-I-R+D Obtain fresh documents from legal heirs and reschedule loans or sell the asset with the consent or compromise or file a suit and file a claim with the DICGC. Write off the balance amount.

6) +B+G+A+I+R+D Obtain fresh documents for the replacement of loan/nursing programme.

(vi) Consitiution of three types of permanent task force at the Regional and Zonal offices levels, this would require officers at Regional/Zonal offices with requisite qualifications and expertise for the respective category of advances accounts agricultural officers, for industrial advances MBAs/CAs/BEs/Credit Officers, etc. Likewise one clerk should be posted in each task force with appropriate experience and knowledge. All three task forces would be headed by personnel of senior management cadre.

(a) The task force would visit branches as well as the site of business/activity before deciding the final course of action.

(b) They would be mobile ~~for~~ at least three days in a week

(c) They would visit ~~branches~~ and/or sites of business/activities.

(d) The course of action may be on the lines in table 2

where (-) denotes absence or expired (+) denotes presence.

The task force should decide the final course of action and recommend to the Regional Managers/Zonal Manager the course to be pursued. After deciding the final course of action on class "A" advances the task force would take up "B" class advances for due action. Those branches under class "B" would have to be strengthened by giving them a credit officer with a motor cycle in order to improve their existing credit portfolio as per the action shown under point (B).

In the case of those overdue advances upto Rs.10,000/- in "C" class, with negligible chances of recovery, the branch would have to be advised to file recovery certificates under State Recovery Act. and a claim with the DICGC in a time bound manner.

Model for Recovery Planning

For having recovery as an integral part of planning system, some assumptions have to be mentioned. In almost all the banks, performance budgeting exercise is in vogue in one form or the other. The same system constitutes the basis for the proposed model.

It is also assumed that the projections under Annual Action Plan as a part of District Credit Planning is systematically done by bank branches. The last assumption is more attitudinal than systematic. It is assumed that operational

bankers prefer to be vaguely right than precisely wrong, and hence they go in for pro-active planning exercises.

The assumptions are simplistic and should, in no way form a road-block in operationalising the proposed model. The following is a start, which is to be a part of performance budget of any bank branch.

Credit Activity Matrix
Market Segmentwise
Loans Rs.in 000
Accounts Amounts.

- a) Previous year's outstanding as per
 general ledger or Control Book.
- b) Projected Disbursement during the
 budget year.
- c) Projected debits on account of interest
 and other changes.
- d) Gross Outstanding at the end of budget year
 (A+B+C)
- e) Projected Recovery during the budget year.
- f) Projected outstanding at the end of the
 budget year (D-E)
- x) Current Dues in aggregate during the
 budget year.
- y) Recovery as percentage of amount dues
 E as % of X

Comments

- A) The data for this row is readily available since branches are required to maintain segmentwise ledgers, which give these data.

- B) The projected disbursements under priority sector advance can be obtained from the Annual Action Plan, even though the Plan periods for Performance Budget and Annual Action Plan are different. As regards advances to non-priority sector, past trends, proposals in pipeline as also subjective judgement of the branch manager can facilitate the estimating.
- C) The assumption of constancy of interest rate can be made for estimation of interest debits. Besides the average yield on advances for past years, likely interest income on proposed increase can be considered while estimating the debits on account of interest and other charges.
- D) The figure in row D is a derivative obtained after addition of three rows i.e. A, B & C.
- E) The recovery performance of past years, overall situation on agriculture, industry and trade in the branch's operational area and amounts receivable from guarantee corporations would be the determinants of this figure. The symptoms of sickness of larger loan accounts can be visualised at this stage.
- F) This is a derivative figure, obtained by subtraction of E from D.

The last row i.e, recovery as percentage of dues is really the decision area, where the policymakers can put thrust on

improvement. The system on operationalising for a year can be made more elaborative, by

- a) extending the same to working capital accounts like cash credit, overdraft, bills purchased/discounted, etc.
- b) Introducing the number of accounts alongwith the amount in the credit activity matrix.
- c) specifically mentioning in sub-rows suit-filed/litigated accounts as also bad/doubtful debts, separately, since on interest in charged.

Implications

For operationalising the model, recovery shall have to be made one of the business parameters in planning exercise, since the recovery amount would be an important determinant of budget year's level of outstanding advances. Corporate and Zonal/Circle Policy guidelines need to include a specific direction about top management's expectations about recovery from branches, preferably segmentwise, It may entail even prescribing that unless a particular recovery percentages is not achieved, defaulters may be charged at a penal rate of interest (transfer price) for funds lent by Head Office or the branches will obtain lesser interest from Head Office on deposits kept with it by the concerned branches. If these and like measures are initiated recovery would be a manageable proposition.

The Credit Activity Matrix is a facilitator for recovery management, budgeting and control. It primarily accepts the principle that recovery cannot be assumed, it has to be managed. Recovery is managerial function of a banker. For the purpose of this managerial function, no new management information system is required. An additional worksheet on Credit Activity Matrix as a part of performance budget is the only information need of the model. All the information necessary for the worksheet is readily available at branches. What is really attempted is to put together the information in a more systematic and purposeful manner.

The suggested model can pave way for uniform monitoring and control in banks. Instead of talking about only recovery percentages, the loaning activity itself would come up for planning and monitoring. The valuation of branch performance in loaning operation, through facets' like disbursements, interest earnings and recovery would be possible through the suggested model. As a by-product, the model would also hasten the process of integrating performance budgeting system and annual action plan under Lead Bank Scheme.

The purpose of suggesting the model is not obviously only to put up a quantitative table for inclusion in the performance budget formats. What is necessary is to work out the backward and forward linkages of the quantitative estimations/commitments made in the format. Supposing, we take a case of large sick account. Alternatively, if it is to be settled with a compromise proposal estimation of likely

sacrifice would entail the estimation. The likely expenditure on legal and maintenance costs of such larger accounts can also be budgeted though the model. For smaller accounts like under tertiary or agriculture sector, strategy for lodgement of claims with the guarantee organisation can be visualised and implemented through the suggested model. The significance of the model is as such more in working out backward and forward linkages and planning pro-actively to provide for these envisaged linkages.

Limitations

The suggested model is not free from limitations. Some of the likely limitations are listed below:

- i) Estimation of working capital credit outstandings and the interest debits and recovery therein is a difficult task. These are transactional accounts and the estimation of interest thereupon depends on the extent of utilisation.
- ii) The paper work involved in the exercise is likely to be resisted by branch level functionaries. However, adequate support from the top management can mitigate the resistance.
- iii) Most of the banks have re-moulded their performance budgeting system to correspond with operational plan exercise (and quarterly monitoring thereunder) initiated by the Reserve Bank of India. An inclusion of similar format in operational plan can strengthen the systems at operational level.

Despite these limitations, the model deserves consideration due to the attainable benefits.

Conclusion

The model suggested is desirable and operationally feasible. Introduction of the model for loans under priority sector advances in the initial stages can be useful for the model to take necessary shape. In a phased manner, the model can be refined and made applicable to all types of advances for all market segments.

In any case, the model accepts the fact that recovery is not merely an operational issue, it is an important managerial function at the strategic and policy levels. The acceptance of the model could certainly pave way for managing, budgeting and controlling recovery as an important business parameter.

Measurement and Monitoring of Lending Efficiency:

Lending is an important function at the commercial bank level. It contributes roughly upto 85% to the total earnings. Since commercial banks are intermediaries between savers and investors, the interests of both the parties should always be looked after by them. Another element added to the banks task today is their large involvement in the priority sectors lending. Therefore, banks have not only to fulfill their corporate goal of profitability of operations and recovery of credit but also to improve the customer services and achieve the stipulated target for social lending. As a consequence,

they must strike an ideal balance between their social responsibilities in the provision of credit and their corporate goal of maximisation of operational profitability.

It is in this context that the concept of lending efficiency should be understood. For the purpose of quantification and measurement of lending efficiency in commercial banks, an attempt has been made here to develop a Bank Lending Efficiency Model (BLE model).

Accordingly, a Lending Efficiency Hypothesis (LEH) has been formulated as given below :

$$BLE = P(AE, TE, DE, RE, PE)$$

whereas, BLE = Bank Lending Efficiency

AE = Advances Efficiency

TE = Time Efficiency

DE = Disbursement Efficiency

RE = Recovery Efficiency

PE = Profit Efficiency

And what is this?

Some sub-hypotheses relating to the above mentioned components have been formulated. Accordingly components have been classified into quantitative and qualitative components.

Quantitative Components

a) Advances Efficiency

In actual practice, advances are divided into two parts viz., advances to additional sectors (i.e. commerce and industry) and advances to priority sectors. The advances efficiency is

therefore measured in terms of the percentage of advances to the priority sectors since generally bankers satisfy the requirement of the traditional sectors. As a consequence, any bank which is giving 40% of its total bank credit to the priority sectors is fulfilling the national credit allocation policy in India.

b) Recovery Efficiency

The recovery Efficiency is one of the most important determinant of Bank Lending Efficiency. In getting back their money, bankers increase their earnings through the interest paid on advances by borrowers and consequently the profit margin may also increase. On the contrary, if the borrowers do not repay their credit, then the profit margin will go down and this situation will effect adversely the profitability of the bank. The cases of the 'Progressive constructions' where Indian banks are facing a recovery problem of 200 million dollars and that of the 'Reliance Industries Ltd.' with a recovery problem Rs. 100 crores needs a serious consideration. In all these cases bankers are responsible to a great extent for the non-recovery due to their negligence in the follow-up and supervision of bank credit. In agriculture too the recovery is very poor. So is the case of small, medium and large industries. The Recovery Efficiency can be measured by two ratios, viz. the amount outstanding in sick industries and the non-recovery of advances properly speaking in traditional as well as in the priority sectors. Everything being the same, if two banks

have the same profit efficiency and the same advances efficiency, that one which has less amount outstanding in sick industrial units and a low non-recovery ratio is deemed to manage more efficiently its credit. Therefore the recovery efficiency should be the possible.

c) Profit Efficiency

Any organisation including a public sector bank has to necessarily make profit in order to survive may be the priority given to 'profit' differs in public and private sectors. In the private sector the main objective, among others, is the maximisation of profit, while in the public sector this objective is given a second priority.

Our problem in this study is not to determine arithmetically the profit, rather what we aim is, among the set of the selected ratios to know those which meaningfully correlated to the profit efficiency so as to formulate an appropriate model for forecasting the profit efficiency of banks. In this study, the profit efficiency (PE) is measured by the profit margin ratio. Since one ratio is not enough to make the correct judgment, it was felt to widen the scope and examine some other ratio also. The Credit manager, when determining the contribution of credit management in the profitability of his bank is mainly interested in the evolution of three ratio viz. Advanced/Working funds, interest earned on advances/total earnings and profit earnings.

The Advanced/Working funds ratio indicate the utilisation of bank funds. A bank which has high ratio is deploying maximum

of its working funds (i.e. deposits plus borrowing). Out of the ~~interests~~ to be paid on deposit and borrowings, the working funds should be utilised efficiently.

The interest and discount/total earnings ratio enable the bankers to know the contribution of advances in the total bank earnings. Roughly it is around 85 to 90%. If decline is an alarming signal and the credit manager should find the causes of its decline. In case two bank have the same advances/working funds ratio and everything being equal somewhere, the one which has the highest interest and discount total earnings ratio is operating more profitably. The profit/total earning ratio is another important determinant of profit efficiency. Everything being the same elsewhere, if two banks have the same advances-working funds ratio and the same interest and discount /total earnings ratios. The most profitable is the one which has the greatest profit-earning ratio. In other words, the one which has greatest profit margin; that is to say, the earning being the same, the one which has a greater control on its expenses. Therefore, the profit earning ratio can also be termed as Expenditure Control Ratio.

Our purpose in studying the Profit efficiency not to integrate all the determinants of profitability of a bank, rather it is a means to combine maximum utilisation of resources, earning from advances and the control on expenses and thereby to identify the banks which are managing efficiently their credit in terms of Profit Efficiency.

Qualitative Components

They comprise of time efficiency and distribution or disbursement Efficiency.

a) Time Efficiency

It is a function of the time taken between the receipt of the loan application of borrowers, its sanction and the first disbursement. In other words :

$$TE = F(R, S, FD)$$

Where, TE = Time efficiency

R = Time of the receipt of loan application

S = Time of sanction, and

FD = First Disbursement

What for F in this

The time taken between R and FD is an important factor because if it is too long, borrowers will be frustrated and therefore it may mean that the customer services are deteriorating. Many units in fact face financial problems at the initial stage of the implementation of their project mainly due to the long time taken by banks in the post sanction. Therefore, this variable is an important determinant of Bank Lending Efficiency.

b) Disbursement Efficiency

The banker should disburse only the amount required for financing a borrower's project and be sure that the amount sanctioned/limit is fully utilised. Any under-utilisation of the sanctioned amount/limit means loss of interest on advances since these interests are calculated on the basis of

the utilised amount. In other words, under-utilisation of the credit facility means blockage of funds leading to lower profitability since these funds could have been profitably utilised by the bank.

Having understood the concept and scope of Lending Efficiency, the stage consists in quantifying it through the Index of Bank Lending Efficiency (BLEI):

Bank lending Efficiency Index (BLEI).

The BLEI may be computed as a composite index on the basis of the Index of Profit Efficiency (IPE), the Index of Advances Efficiency (IAE), Index of Recovery Efficiency (IRE), Index of Time Efficiency (ITE) and the Index of Disbursement Efficiency. In other words $BLEI = IPE + IAE + IRE + ITE + IOE$.

The data required for this analysis is not available to outsiders. However, banks have the required data with them. It is, therefore, suggested that commercial banks should analyse their lending programme at the end of every financial year by using this model. The BLEI will enable the banks to measure their performance in Lending area and in making an inter-bank comparison. The Government/Reserve Bank of India may use this model to monitor the lending efficiency profitability of commercial banks and also to take necessary measures for improvement.

But how to model

Models For Credit Planning

With the phenomenal credit expansion, realistic and efficient

credit planning has become a matter of utmost importance for banks. In spite of its enormous importance, credit planning, in most banks, has still remained a mere form-filling exercise. The need to study all the aspects of the credit plan in its totality and to estimate their impact on the bank's profitability rarely gets the due attention of the planner. An important reason for this lapse is the perplexing intricacy of the linkages between the business segments covered by the plan which makes it almost impossible to manually work out all the possible permutations and combinations.

For example, the calculation of loanable funds is itself highly complicated. Besides, taking into account the optimistic and pessimistic estimates of deposit growth, the obligatory cash reserves, the availability of refinance and rediscounting resources and the market borrowings must be worked out to arrive at the lendable resources. A fixed proportion of funds must go into food credit, export credit and priority sector credit which again determine the availability of refinance and rediscounting resources which in turn augment the lendable funds. From the remaining lendable funds, the demand from industrial and other credit must be met and if there is gap in the resources, the bank must resort to market borrowing on which again, obligatory cash and statutory reserves are required to be maintained which in turn, deplete the lendable funds. While deploying credit into the industrial sector, it must be remembered that

the priority sector credit must be proportionately increased to maintain its share at the required norms. The overall and sectoral credit-deposit ratio, the cost of internal and external funds, the interest earned on cash reserves and investments etc. all make proportionate impact on the profitability of the banks. In short, each parameter is linked with another in some way or the other and hence a change in the quantum of one parameter leads to changes in several others. The task of calculating all these changes manually becomes almost impossible. Quantitative management tools can come to the rescue of the planner to solve this complex problem. Computer-based simulation model techniques is one such tools. Simulation is a process in which a model of a system is used to aid assessment of responses of the system to specific inputs. In other words, a simulation model will reveal how the whole business structure of an organisation will be affected if the value of one of the parameters is changed.

The model is constructed in the following steps :

1. Identifications of variable :

- a) All sources and Users of funds are identified.
- b) All items of income and expenditure are identified.
- c) All additional variable such as obligatory CRR/SLR share of priority sectors, Credit - Deposit Ratio, estimated average rates of interest etc. are identified. The above mentioned variables are listed in Annexure 1, For estimation of average interest rates, historical data as well as latest policy changes are taken into account.

2. Establishment of relationship between the parameters :
The relationships are expressed in the form of mathematical equations given below,

Equation	Explanation
1. $U01 = 0.15 (WF)$	CRR will be about 15% of working funds.
2. $U05 = 0.37 (WF)$	SLR will be 37% of working funds.
3. $U04 = 0.85 (U05)$	About 85% of the statutory liquidity will in the form of investments.
4. $I56 = 0.02 (WF)$	Other income will be about 0.2% of working funds.
5. $I55 = 0.06 (WF)$	Income by way of commission, exchange and brokerage will be 0.6% of working funds.
6. $E41 = 2.35 (WF) * 0.01$	Establishment Expenditure will be 2.35% of working funds.
7. $E42 = 0.80 (WF) * 0.01$	Operational Expenditure will be 0.80% of working funds.
8. $I01 = U01 * R (I01)$	Interest paid on balances with (Similarly for all items of RBI = Rate * amount. interest expenditure and interest income).

*What are these for
have for answer at
this is
How this is
your step?*

Vague!

9. $CDR = 0.01 * S04/U54$ Credit : Deposit Ratio.
10. $PSShare = 0.01 * U40 / (U54-S17)$ Share of priority Sectors.
11. $Share\ of\ Direct\ agri. = 0.01 * U20 / (U54-S17)$ Share of Direct Agriculture .

VARIABLES

Group A : Variables relating to liabilities and other sources of funds with their codes

Current Deposits (S01); Savings Deposits (S02); Time Deposits (S03); Total Deposits (S04); Other Demand and Time liabilities (S05); RBI Food Refinance (S06); RBI Export Refinance (S07); RBI Other Refinance (S08); IDBI Refinance (S09); Exim Refinance (S10); Nabard refinance (S11); Total Refinance (S12); RBI Rediscounts (S13); IDBI Rediscounts (S14); EXIM Rediscounts (S15); OFI Rediscounts (S16); Total Rediscounts (S17); Inter Bank Deposits (S18); Call and notice Market Borrowings (S19); Participation and certificates (S20); Total Market resources (S21); Total net Demand and Time Liabilities (S30); Total lendanbe Funds (S10); Total sources (S99).

Group B : Variables relating to Assets and other users of funds with their codes

Total Cash Reserves with RBI (U01); Cash on Hand (U02); Balances with Other Banks (U03); Total Statutory Reserves (U05); FCI Food Credits (U06); FCI Fertilizer Credits (U07); JCI Credit (U08); CCI Credit (U09); Other Consortium Credit (U10); Total Consortium Credit (U11); Direct Agriculture Credit (U20); Indirect Agriculture Credit (U21); Total Agriculture Credit (U22); SSI Credit (U23); OPS Credit (U24); Total Priority Sector Credit (U40); Credit to Small and Large Industry (U41); Total Credit to Industry (U50); Credit to Wholesale Trade (Other than Fertilizer, JCI, CCI) (U51); Total Credit to Wholesale Trade (U52); Unclassified Credit (U53); Total Credit (U54); Total used (U99).

Group C : Variables relating to sources and forms of Income Interest on Cash Reserve with RBI (I01); Interest of lendings to other banks (I03); Interest on

investments (I04); Interest on food credit (I06); Interest on JCI Credit (I08); Interest on CCI Credit (I09); Interest on other Consortium Credit (I10); Interest on direct agricultural credit (I20); Interest on indirect agricultural credit (I21); Interest on SSI Credit (I23); Interest on OPS Credit (I24); Interest on Credit to large and medium Industry (I41); Interest on Credit to Wholesale trade (I51); Interest on other credit (I53); Commission, Exchange, Brokerage (I55); Other incomes (I56); Total Income (I99).

Group D : Variables relating to expenditure

Interest on Saving Deposits (E02); Interest on Time Deposits (E03); Interest on RBI Food Refinance (E06); Interest on RBI Export Refinance (E07); Interest on IDBI Refinance (E08); Interest on EXIM Refinance (E10); Interest on NABARD Refinance (E11); Interest on RBI Rediscounts (E13); Interest on IDBI Rediscounts (E14); Interest on EXIM Rediscounts (E15); Interest on OFI Rediscounts (E16); Interest on Inter-bank Deposits (E18); Interest on Market Borrowing (E19); Interest on Participation Certificates (E20); Interest on Establishment Expenditure (E41); Operational Expenditure (E42); Total Expenditure (E99); Gross Profits (P).

Group E : Other Variables

Average Rate of Interest on item X, eg. R (I23) =
Average Rate of Interest on SS9 Credit (Rx); and
Credit Deposit Ratio (CDR)

