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SOME ASPECTS OF FARM LOANS BY COMMERCIAL BANKS

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Commercial banks have been compelled to set up their branches in the rural areas and provide credit facilities to agriculturists. Notwithstanding the fact that they granted not more than 10.8 per cent of their total advances to the farm sector,¹ their emergence in the rural sector has affected the movements of funds generated in the sector. An attempt has been made in this paper to shed some light on the aspects relating to (i) the flow of funds; (ii) forms of farm loans; and (iii) factors affecting them.

DESIGN

A random selection of 30 sample villages was stratified on the basis of population and the number of branches of scheduled commercial banks. While selecting the sample villages from two adjoining districts, *viz.*, Coimbatore and Salem of Tamil Nadu having somewhat similar topographic and climatic conditions, the village level parameters of cropping pattern, occupational pattern and value of total annual production, as per revenue records, have been taken into account. The distribution of sample villages is presented in Table I.

TABLE I—DISTRIBUTION OF SAMPLE VILLAGES

Group	Number of sample villages	Number of branches of commercial banks			Number of selected branches
		Public*	Nationalised	Non-nationalised	
1. One-bank villages ..	10	—	5	5	10
2. Two-bank villages ..	10	—	10	10	20
3. Three-bank villages ..	10	10	10	10	30
Total	30	10	25	25	60

* Include branches of the SBI and its Subsidiaries.

Out of the sample villages, 8 have a population of less than 4,500, 12 have less than 6,000, while the remaining sample villages have less than 8,500. Thus, all the branches of commercial banks in these villages are well within the meaning of the term rural branch. Out of 60 branches, 28 branches have been operating since 1971. In subsequent years a number of branches were set up in the sample villages as a consequence of the policy of the Reserve Bank of India. However, only 4 branches in the sample villages were set up lately, *i.e.*, in 1976. The data were collected from these branches through a structured questionnaire. The names of villages and banks' branches are deliberately not disclosed here because of the condition placed by them while sending the replies to the questionnaires. In this manner, the scope is limited

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1. Vide Report on Currency and Finance, 1976-77, Volume I—Economic Review, Reserve Bank of India, Bombay, 1977.

to (a) the period of five years, *i.e.*, from 1973 to 1977; (b) branches of scheduled commercial banks in sample villages; and (c) agricultural advances, irrespective of mode and method.

TECHNIQUE

Flow of Funds

Ordinarily, in a rural branch, funds flow in by way of deposits and flow out by way of disbursement of loans, obligatory dispensation of funds to the central office of the concerned commercial bank, and statutory maintenance of cash reserves and investment in Government securities. The size of loanable funds is, therefore, dependent upon cash reserve ratio as well as statutory reserve ratio, on the one hand, and upon the policy of the bank, on the other. Since the latter should not override the national policy, it is not taken into consideration, while formulating the following relationship.

$$n_t = (1 - S_t), \text{ and}$$

$$a_t = \frac{AC_t}{TD_t}.$$

Therefore,

$$V_{xt} = \frac{n_t - a_t}{n_t}.$$

Again,

$$e_t = \frac{AC_t}{WF_t}, \text{ where } WF_t = TD_t + ES_t.$$

$$\therefore V_{yt} = \frac{m_t - e_t}{m_t}$$

where

TD = total deposits;

WF = working fund;

ES = external sources;

AC = agricultural loans;

n = normal credit-deposit ratio;

m = normal advance-fund ratio;

a = actual credit-deposit ratio;

e = actual advance-fund ratio;

(subscript 't' refers to period.)

While variance V_{xt} signifies variance between the ratio of agricultural credit to total deposits and normal credit-deposit ratio, V_{yt} throws light upon the gap existing between m_t and e_t . The relationship between a_t and e_t , as explained below, would also disclose inflow and outflow of funds to and from a rural branch.

$$AC_t = TD_t \cdot a_t$$

Then

$$e_t = \frac{TD_t \cdot a_t}{TD_t + ES_t} \quad \text{and therefore}$$

$$\frac{e_t}{a_t} = \frac{TD_t}{TD_t + ES} < 1.$$

In the wake of inflow of funds in a rural branch by way of either borrowings or refinance, the ratio e_t/a_t tends to decline, and hence used to unfold the direction of flows.

Forms of Farm Loans

Rural branches grant loans for farm inputs (short-term), provisions (medium-term), and projects (long-term). Normally, an advance profile, which is the mix of termwise component tilts in favour of short-term loans granted for both agricultural inputs as well as for non-agricultural business. Since the sample villages did not have much industrial as well as commercial activities, it was taken for granted that all short-term loans had been granted for agricultural activities. The termwise form of loan portfolio was studied by simply working out the respective proportions of loan outstanding under each category as shown below:

$$X_{it} = a S_{it} + b M_{it} + c L_{it}$$

where

X_{it} = aggregate advances outstanding in the branch at the period;

S_{it} = size of short-term loans;

M_{it} = size of medium-term loans;

L_{it} = size of long-term loans.

(a, b and c represent the respective coefficients.)

Inputs loans, usually termed as working capital loan, are granted on the basis of need and not much on security, whereas medium and long-term loans, known as development loans, are, notwithstanding the fact, provided on the basis of security. That being so, a large number of cultivators have been denied development loans, which ultimately results in low pace of development.

Factors Affecting Farm Loans

Financial needs of farm business are fast expanding. The rise in prices, the change in the character of inputs, and the increase in the intake of inputs, have been multiplying the credit need especially when the farmer's capacity to earn and retain surplus has been on the wane. It is so because the consumer price indices in the rural areas are higher than in the urban areas. In

view of these circumstances, even banks and other financing agencies amend their norms and scale of finance more frequently in respect of short-term loans than loans for farm provisions and projects. On account of frequent revisions or changes in short-term needs, this study is confined to throw light upon the short-term credit needs in respect of few primary inputs, *viz.*, seeds, fertilizers, pesticides and manual labour. The impact of credit has been measured by employing the concept of elasticity as outlined below:

(i) Price elasticity of credit demand

$$C_p = \frac{P_{it}}{C_{it}} \times \frac{dC_{it4}}{dP_{it4}} \cdot \begin{matrix} P_{it} = \text{price of } i\text{th input in } t\text{th period.} \\ C_{it} = \text{credit needs for } i\text{th input in } t\text{th period.} \end{matrix}$$

(ii) Quantum elasticity of credit demand

$$C_q = \frac{Q_{it}}{C_{it}} \times \frac{dC_{it4}}{dQ_{it4}} \cdot \begin{matrix} Q_{it} = \text{quantity of } i\text{th input in } t\text{th period.} \\ d = \text{change over the period, } i.e., t \dots t_4. \end{matrix}$$

Average monthly rural market prices during a particular crop season have been taken into account. However, while determining the requisite quantity of an input it was borne in mind that it should not be due to change either in farm sizes or technology. Those borrowers whose credit requirements are enhanced by reason of the aforesaid changes have been excluded from the study. Thus, about 20 borrowers from each sample branches have been selected for the purpose of the present study.

RESULTS AND CONCLUSIONS

Table II patently shows that the variance ratio V_{xt} has been considerably high though it has been descending sluggishly. Moreover, it is highest in the one-bank villages and lowest in the three-bank villages where competition among banks are in existence. Thus, while vying with each other, the rural branches, in order to improve their profitability, appear to be under-

TABLE II—AVERAGE VARIANCE RATIO

(per cent)

Group	Year ending on December 31				
	1973	1974	1975	1976	1977
One-bank villages					
1. V_{xt}	67.48	66.34	65.12	61.34	58.26
2. V_{yt}	64.31	63.67	63.47	60.14	55.10
3. c_t/a_t	0.9535	0.9530	0.9621	0.9520	0.9200
Two-bank villages					
1. V_{xt}	65.48	63.12	60.45	55.12	47.65
2. V_{yt}	63.31	60.08	56.42	51.37	41.30
3. c_t/a_t	0.8932	0.8565	0.8237	0.8050	0.8000
Three-bank villages					
1. V_{xt}	60.18	56.42	51.10	43.46	38.26
2. V_{yt}	58.62	51.27	44.22	39.67	35.75
3. c_t/a_t	0.8010	0.7825	0.7525	0.7050	0.7100

taking more risk in financing agriculture. The variance ratio in respect of branches in the villages of the first group exceeded 50 per cent, which is indicative of outflow of funds from the rural branches. As against this, in three-bank villages, the ratio fell below 50 per cent, as early as in 1974, thereby showing that the funds are flowing into the rural branches from the urban centres. These observations lead to the conclusion that competition among commercial banks in the rural areas augments the flow of funds for agricultural purposes.

The variance ratio V_{yt} moves in sympathy with V_{xt} . The former has been slightly lower than the latter, which clearly implies that the rural branches are dormant in tapping up non-deposit resources. The banks have not been much inclined to supplement their resources perchance because they assume that giving loan is as good as giving a dole. This fact is again evidenced by high e_t/a_t ratio which is rising at a snails pace.

As regards the pattern of advances, it may be seen from Table III that the magnitude of short and medium-term loans has been comparatively higher than long-term loans in the sample villages where only one branch of a commercial bank is in existence. However, this pattern changes a little in favour of long-term loan in respect of two-bank villages. It is interesting to note that the short and long-term loans have been the major components in the three-bank villages. A further probe into the matter unfolds the fact that competition among banks compels them to seek such avenues of credit deployment which will ensure their endurance in a village economy. This will not be possible by limiting their advances for working capital.

TABLE III—AVERAGE TERMWISE PATTERN OF ADVANCES

Year	One-bank-villages			Two-bank villages			Three-bank villages		
	S _{it}	M _{it}	L _{it}	S _{it}	M _{it}	L _{it}	S _{it}	M _{it}	L _{it}
1973	0.46	0.48	0.06	0.31	0.41	0.28	0.39	0.21	0.40
1974	0.45	0.52	0.03	0.37	0.46	0.17	0.41	0.22	0.37
1975	0.40	0.55	0.05	0.38	0.52	0.10	0.45	0.24	0.31
1976	0.38	0.58	0.04	0.40	0.40	0.20	0.46	0.16	0.38
1977	0.48	0.50	0.02	0.42	0.35	0.23	0.36	0.21	0.43

It may also be seen that the share of long-term loans has been rising spasmodically if not gradually in the three-bank villages. As against this, in the one-bank villages the share of long-term loans has been declining substantially. Nevertheless, the working capital needs are more pronounced than the development needs in the case of all villages if observed from the aggregate viewpoint.

The rhyme or reason for the dominance of short-term loans or advances in the loan portfolio of a rural commercial branch is the unceasing increase in the prices as well as the quantity of agricultural inputs. The short-term

loans are normally granted for the purchase of inputs like fertilizers, seeds, pesticides, hired manual labour, etc. Table IV, which presents data regarding price and quantity elasticities of credit requirements for these inputs, discloses that fertilizers and pesticides have higher price elasticities than seeds and manual labour. In other words, changes in the prices of these inputs have a greater bearing on the credit requirements than those in the prices of seeds and manual labour which has the lowest elasticity.

TABLE IV—PRICE AND QUANTITY ELASTICITIES OF CREDIT

Year	Price elasticities				Quantity elasticities			
	Ferti- lizers	Seeds	Pesti- cides	Manual labour	Ferti- lizers	Seeds	Pesti- cides	Manual labour
1973	·6731	·2122	·3456	·1876	·3216	·1213	·1875	·4112
1974	·6948	·2234	·3718	·1845	·3612	·1327	·2212	·4067
1975	·7487	·2718	·4077	·1749	·4028	·1005	·2461	·4412
1976	·7768	·2211	·4118	·1435	·4217	·1267	·2614	·4628
1977	·7784	·2348	·4165	·1672	·4284	·1134	·2510	·4618

The quantity of fertilizers and manual labour (*i.e.*, in terms of man-days) do seem to have significant impact on the size of loans. The quantity elasticity of the latter is somewhat greater than that of the former. Yet these two basic inputs bring about a significant change in the magnitude of credit needs.

In sum, it may be inferred that (a) funds have been flowing out of villages where competition amongst banks is non-existent. (b) Commercial banks are not much inclined in directing and channelising the non-deposit resources obtaining in the urban centres. (c) Competition among bank themselves has a positive impact on a village economy. (d) They are confining their lending activities mostly to short-term requirements. And (e) credit needs are enhancing steadily due to increasing doses of inputs and their prices.

SOME BASIC CONFLICTS IN RURAL CREDIT (WITH REFERENCE TO FARMERS' SERVICE CO-OPERATIVE SOCIETIES)

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The Report of the Banking Commission (1972) had noted that there were very large credit gaps especially in institutional arrangements in respect of small, marginal and sub-marginal farmers and other rural producers which called for a different approach. The Report recommended the formation of Rural Banks for dispensing rural credit. Three years later, the National Commission on Agriculture had occasion to comment that both the co-ope-

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