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Policy Implications of Financial Intermediation  
Costs in Bangladesh

by

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POLICY IMPLICATIONS OF FINANCIAL  
INTERMEDIATION COSTS IN BANGLADESH

INTRODUCTION

The issue of bank viability has emerged in recent years as more and more countries have been forced into a critical examination of their strategy to develop banking systems, especially in rural areas. A number of issues have been identified: Are the margins authorized for financial institutions sufficient to cover costs? Are the level of subsidies required to support institutions too large to be sustained by poor, debt-ridden governments? Do policies aimed at cross-subsidization (profitable lines of business subsidize unprofitable ones) provide adequate incentives to stimulate the expansion of financial services in rural areas? Are there economies of scale in financial intermediation in developing countries? Should financial institutions expand deposits, loans, or both to take advantage of economies of scale and scope? Are loan loss reserves and interest margins adequate to cover projected loan losses?

Several factors contribute to high financial intermediation costs in developing countries. Rural infrastructure is poor so transportation and communication costs are high for financial institutions, for depositors, and for borrowers. Often times, supporting systems and institutions are weak or nonexistent so information costs are high when lenders seek to determine land ownership, verify financial statements, ascertain credit worthi-

ness, etc. Lending risks are also high because agricultural price policies, input supplies and marketing systems are underdeveloped for farmer borrowers. Deposit and loan sizes are frequently small so it is difficult to achieve the productivity of large account volumes per bank officer.

In addition to these characteristics of developing countries which contribute to high intermediation costs, policies such as reserve requirements, interest rate controls, and credit allocations that are designed to achieve certain financial objectives can also increase intermediation costs. Therefore, policies must be analyzed not only in terms of whether or not they meet their intended objectives but also in terms of their impact on intermediation costs. An important objective for the financial sector should be a steady decline in the costs of financial intermediation so returns to savers can be increased while the costs to borrowers are decreased.

The purpose of this paper is to stimulate discussion on intermediation costs in Bangladesh by presenting some research results obtained from a study of banking costs in a sample of rural bank branches, and by discussing some of the policy issues that are implied by these results. Although these results do not tell the whole story about the economics of rural banking in Bangladesh, they raise important issues that demand attention and future research. If the results are substantiated by more comprehensive research, they will signal the need for fundamental changes in banking operations and policies regarding rural banking.

The paper begins with a brief discussion of some of the key policies influencing rural banking in Bangladesh. The second section summarizes some of the initial empirical results of our research on rural financial intermediation costs. The third section summarizes the impact of the loan recovery problem on rural banking, and the final section identifies some policy issues which arise from this research.

#### RURAL BANKING IN BANGLADESH

Since Liberation in 1971, the financial system in Bangladesh has undergone important changes (Khalily). One of the important early developments, of course, was the bank nationalization order promulgated in March 1972 and the creation of six nationalized commercial banks (NCB's), later reduced to four when two NCBs were privatized. These banks along with the Bangladesh Krishi Bank dominate the rural financial system by holding the largest share of rural loans and deposits.

A number of policies have been employed to shape the direction of the financial system, control its activities, and influence the allocation of its resources. The emphasis in this paper is on those policies that appear to have the greatest influence on the rural operations of the NCBs and BKB. This approach has limitations, of course, in a national banking system because the performance of rural branches can be influenced by urban branches, and vice versa.

### Branching Policy

The branching policies of the Bangladesh Bank are probably the single most important factor affecting access to financial services in rural areas. In 1977, a "two-for-one" branching policy was put into effect which required scheduled banks to open two new rural branches for each new urban branch licensed. Deposit potential and level of banking competition appear to have been important factors in determining the licensing of specific branches. From one point of view, this policy can be interpreted as having been successful. Rural bank branches totaled just over 1,100 in 1977, but grew to almost 3,000 by 1982. As a result, rural branches represented 55 percent of the total bank network in 1977, but 65 percent by 1982 (Khalily).

Doubts exist, however, as to whether or not the rural branches are optimally located and economically viable (World Bank). The issue of viability is complicated to analyze. It is possible that a rural branch, although uneconomical in its own operations, becomes profitable to the bank because of the income earned from a more lucrative urban branch authorized under the "two-for-one" policy. If this is true, it is possible that the demand for rural branches will fall once the choicest urban locations are exhausted. The slow down in expansion of rural branches after the termination of the "two-for-one" policy in 1981 suggests that this may have occurred. The transfer of some NCB rural branches to the BKB in recent years may have represen-

ted an attempt by banks to rid themselves of the unprofitable operations that emerged because of this policy.

### Interest Rate Policy

Both deposit and lending rates are set by the Bangladesh Bank and have undergone major changes only four times (1974, 1976, 1980 and 1983) since nationalization. Although the deposit rate has been slightly higher in rural branches than urban branches, much of the time the weighted average deposit rate has been negative in real terms (i.e. the rate of inflation is greater than the nominal deposit rate). Furthermore, the interest rate authorized for rural loans has often been set lower than the rate authorized for loans to other sectors. With higher deposit rates and lower loan rates, the spread between deposit and lending rates is generally less favorable for rural than urban branches.

There are two implications of this interest rate structure. The first is that this rate structure should be a disincentive for banks to aggressively mobilize rural deposits for rural lending. There should be a tendency for rural deposits to flow through the banks to urban loans. Secondly, if this rate structure does not cover operating costs of rural branches, banks must subsidize rural operations with more profitable urban operations.

### Refinance Policy

The Bangladesh Bank has made active use of refinance policies. The objectives are reported to be: a) subsidize the losses of public enterprises, b) provide financial resources to specialized institutions such as the BKB, c) accommodate seasonal fluctuations in credit, and d) provide funds to NCBs so they can profitably lend to preferential sectors (World Bank). Rural credit is one of the categories of loans that has benefited from this policy. Perhaps this policy was intended to offset the disincentives of higher deposit rates on rural deposits and lower lending rates on rural loans.

During the early 1980s, rural credit could be refinanced at 50 percent at an interest rate of 6 percent with a maximum lending rate of 12 percent. At the same time, the weighted average bank interest rate on all deposits was 7 to 7.5 percent. In 1983, the interest rate structure was modified to increase the cost of refinance funds so that deposit mobilization would be a more attractive source of loan funds, and to raise the lending rate on rural loans so there would be more incentives to lenders for rural lending. Prior to this change, it was logical for banks to mobilize rural deposits for urban lending and use refinance funds rather than deposits for rural lending.

### Loan Targeting

Loan targeting is a common practice in Bangladesh, in part because of the large number of international agencies providing foreign aid. Each donor and/or project identifies a specific

target group and/or loan purpose and a special credit line is created for each with specified loan amounts and conditions. Each of these projects requires some type of reporting mechanism to satisfy the sponsors and/or the government. Furthermore, the government desires information on the progress of lending for certain crops or purposes.

These information needs result in the demand for large amounts of data which must be collected and processed by banks and bank branches. This reporting system can impose large costs on banks. One bank, for example, developed a reporting form with 150 separate rows to account for the individual credit lines that were available. The apparently "cheap" funds available from international sources have turned out to be expensive for financial institutions to administer in several other countries. This may also be the case in Bangladesh.

#### INTERMEDIATION COSTS IN BANGLADESH

Although there are a few studies concerning rural borrowing costs in Bangladesh, there appear to be almost none concerning rural intermediation costs of financial institutions. Presumably there are studies and information available in the Bangladesh Bank and in the head offices of individual banks which are not widely circulated. Therefore, we undertook a study of bank branches in collaboration with R. R. Nathan Associates as part of the AID Rural Finance Project. The primary objective was to estimate a cost function for use in analyzing margins and

economies of scale and scope. We expected to find that intermediation costs would be high, that these costs can be reduced by expanding average branch size, and that scope economies can be realized through multi-purpose rather than specialized institutions.

The approach used in this research was to estimate a translog cost function for a sample of branches in which costs are assumed to be dependent on output levels and input prices.<sup>1/</sup> From this cost function, economically important properties can be derived, such as economies of scale and scope, and average costs and marginal costs of deposit mobilization and lending.

The data used in this study were obtained from semi-annual income-expense statements of bank branches for the two years of 1983 and 1984. Quarterly data on loans and deposits for these branches were obtained from the Bangladesh Bank data tape of the reports submitted by the branches. The branches included in the study are part of the sample compiled by the R. R. Nathan team and include the following number of branches for each bank: Agrani - 40, BKB - 42, Janata - 43, Rupali - 19 and Sonali - 46.<sup>2/</sup> Most branches fall within the category of "rural" as defined by the Bangladesh Bank.

Total costs were defined to include all operating/administrative expenses net of depreciation and bad debt reserves. Two alternative definitions of bank output were used: number and value of deposits and loans outstanding. Loan and deposit sizes were introduced to control for heterogeneity of transactions.

The input categories were defined as labor and capital. The unit cost of labor was measured as total personnel costs including benefits divided by the total number of employees. The unit price of capital was obtained by summing the major capital expenses such as rent and depreciation, and dividing by the value of deposit and loan balances outstanding at the end of the period.

The results of the econometric model are not presented here. Suffice to say that the values for the system  $R^2$  were reasonably high (usually above 0.50), most estimates have the sign predicted by theory and are statistically significant.

The data in Table 1 report the means of the variables used to estimate the cost functions. There are some interesting patterns in these data, many of which seem consistent with general knowledge and impressions about rural bank branches. Labor represents a far greater share of total costs than capital. The average size of a branch (measured by adding loans and deposits together) is largest for BKB and Sonali compared to the other three, but the combination of assets and liabilities is quite different among the banks. Loans exceed deposits by a wide margin in BKB, they are roughly equal in Sonali, but deposits exceed loans in the remaining NCBs. Average deposit size is particularly small for BKB compared to the other banks, while average loan size is fairly similar for the banks except for Agrani Bank.

Caution is required in drawing many inferences from these data. The results are obviously related to the choice of branches included in the sample and the age of the branches selected. Costs are probably high during the start-up phase of a new branch and decline as deposit and loan volumes increase. Furthermore, these are mean values and the distribution of branches around the mean may be different among the banks.

Tables 2 through 6 report the preliminary results obtained from the model for intermediation costs and related costs concepts using alternative definitions of output. A number of consistent patterns emerge:

1. Deposit mobilization costs represent a large share of total costs for Agrani, Janata and Rupali, a smaller share for Sonali and an even smaller share for BKB. These results suggest that the three NCB's put proportionately more effort into deposit mobilization than do Sonali and BKB. BKB does not have as strong a tradition of deposit mobilization as the others, and Sonali has preferred access to some deposits because of its treasury role.
2. The average and marginal costs per loan account are higher for all banks than the average and marginal costs per deposit account. This finding is consistent with the data in Table 1 that show average loan size is greater than average size of deposit account. Marginal lending costs are always below average lending costs so

there is an opportunity for these branches to reduce costs by expanding loans. Lending costs are lowest for BKB, followed by Sonali, then the other three banks.

3. Marginal costs of deposit mobilization are always lower than average costs. Deposit mobilization costs are lowest for Sonali, followed by BKB, and the other three banks.
4. Consistent with the above results, the overall marginal costs for intermediation are less than average costs indicating that these branches on average are located on the declining portion of a U-shaped cost curve. Average costs per taka of deposits and loan balances vary from 3.2 to 7.1 percent. Sonali and BKB appear to have similarly low costs followed by the other three banks.
5. The estimates of economies of scale indicate either constant returns to scale, i.e., the estimate is not significantly different than one for Agrani and Rupali, or increasing returns to scale, i.e. the estimate is less than one for BKB, Janata and Sonali. These results indicate that the mean level of branch activity is in the constant or the decreasing portion of the cost curve.
6. The estimates of the partial economies of scale (percentage increase in costs associated with a one percent increase in one of the bank services) indicate

increasing returns to both lending and deposit mobilization, but the economies of one are relatively more pronounced compared to the other depending on the bank. They are lowest for loans in Agrani, Janata, and Rupali, whereas they are lowest for deposits in BKB and Sonali. This implies that the most efficient branch expansion strategy for the former is to increase loans, while for the latter two institutions it is to increase deposits.

7. The estimates of cost complementarity are fairly close to zero in all cases, except Rupali, although of negative sign in most cases, suggesting that these banks enjoy reduced costs by engaging in both lending and deposit mobilization rather than by specializing in one or the other banking function.

Some general conclusions emerge from this analysis. First, there is quite a wide range among banks (and among branches of the same bank) in overall intermediation costs. In an earlier paper, we reported that the average gross interest rate spreads ranged from 3.1 to 5.1 percent for the sample branches in four of these banks for 1983 and 1984 (Srinivasan and Meyer, 1987a).<sup>3/</sup> Therefore, none of the rural banks can cover the average operational costs of their rural branches with these interest spreads. Furthermore, as will be discussed in the next section, these data make no allowance for loan losses. These results suggest that the profitability of rural branches is much less than the 5 to 6

percent margin between weighted average deposit and lending rates reported for scheduled banks in 1983 and 1984.<sup>4/</sup>

Second, all branches operating at less than the mean level of operations for the respective bank would benefit from an expansion in scale of operations. This expansion would be profitable until reaching the average level of operation in those banks with constant returns to scale (Agrani and Rupali), and even beyond that level for those with increasing returns (BKB, Janata and Sonali).

Third, the expansion in scale of branch operations should be unbalanced, i.e. the results suggest that BKB and Sonali should expand deposits relatively more than loans, while the other three banks should expand loans relatively more than deposits. Such expansion could lead to an increase in intrabank flow of funds. This analysis cannot predict, of course, whether or not this expansion can easily occur with the current number and geographic distribution of bank branches in rural areas.

Fourth, the banking policies pursued by the government have resulted in an expansion of branches, deposits mobilized and rural lending. Much remains to be done, however, to assure the profitability of these branches. It appears that the scale of operation of many branches is small and this contributes to the relatively high cost of financial intermediation. For reasons discussed below, it is not clear if there are too many branches for the volume of banking business available, if the geographic distribution of branches is inappropriate, if the branches are

poorly managed, or if the banks are not aggressive enough in pursuing more business.

Fifth, these results suggest significant differences between banks but the reasons for such differences are not well understood, and can only be clarified through more detailed analysis. Improvement in bank performance requires an identification of those efficiencies that can be achieved by improved management and resource use in a specific branch, and those that require a streamlining of the operations of an entire bank. Some analysis is also required of the market potential and competitive conditions within each local banking area.

#### THE IMPORTANT ISSUE OF LOAN RECOVERY

Because of the seriousness of rural loan delinquency that we discussed in our December seminar, we must evaluate how the loan recovery problem relates to the results of this paper. Two points are important to remember in this methodology. First, the resource costs (labor, capital, materials) incurred by bank branches in all aspects of loan monitoring, loan collection, legal processes to recover bad debts, etc. are included as costs as long as they are accounted for in the branch income-expense reports. Therefore, the cost of loan recovery is included in the estimates presented above. Second, no adjustments are made in the cost estimates for future loan losses so it is implicitly assumed that all loans made are recovered. The implication is that bank branches would just break-even if the interest spreads

actually covered the transaction costs reported above, and all loans were repaid.

Unfortunately, many loans made by rural branches are not repaid in Bangladesh so the transaction costs estimates reported above represent the lower bound for the minimum interest spread required to cover costs. To obtain a more realistic estimate of the minimum interest spread required for unsubsidized operations, appropriate provisions must be made for bad debts. A casual review of bank financial statements suggests that reserves for bad debts must be too low unless very optimistic estimates are made about improvements in loan recovery.

Some important research results on loan delinquency were reported in our earlier seminar in papers by Cookson, and Gregory and Adams. A consensus emerged that the repayment situation of loans made by rural branches was bad, and getting worse.

An important issue discussed at that time concerned the concept of loan recovery profile, and whether or not that profile had actually shifted downward in recent years.<sup>5/</sup> That issue is related to, but somewhat distinct, from the issue of loan recovery rate for an entire loan portfolio. The concept of a loan recovery profile refers to the percent of loan principal repaid at various points in time after payment due date. A comparison of the loan recovery profile for loans made in various years will show if a lender is more or less successful in

collecting loans made in one year versus another. This comparison will also suggest whether or not there is a change in borrower behavior regarding loan repayment.

Gregory conducted some recent analysis of rural loan recovery using the data collected by the R. R. Nathan team.<sup>6/</sup> Table 7 reports the distribution by bank and year of 5,270 short-term loans included in the sample of loans analyzed in the bank branch survey. These loans represent a subset of the total sample numbering approximately 9,000 loans. Long-term loans, overdrafts, and loans with incomplete data were eliminated to arrive at this subsample.

Figure 1 shows the loan recovery profile for these short-term loans. Several interesting features can be seen. The best total recovery is for loans made in 1979. After more than five years after due date, the cumulative proportion of principal repaid reached about 65 percent. The recovery profile for loans made in 1980, 1981, and 1982 is fairly similar. The speed of loan recovery as represented by the percent of principal recovered within the first two or three years after due date was actually higher than for 1979 loans. However, the recovery profile for these three years flattening out at a somewhat lower level so we might predict that as these loans surpass five years after due date the cumulative amount of principal recovered may reach 60 rather than 65 percent.

A sharp change in loan recovery profile appears to have occurred with loans made in 1983 and 1984. Three years after due

date, only 42 percent of the principal was recovered for loans made in 1983 compared to 50 to 58 percent for loans made in earlier years. Likewise, the loan recovery profile two years after due date is much worse for loans made in 1984 compared to loans made in other years. If these trends continue, the percent of principal eventually recovered after five years for 1983 and 1984 loans may be far less than 60 percent. These data show that loan recovery for short-term loans has clearly deteriorated over time for these sample bank branches. Perhaps the political uncertainty that emerged in Bangladesh about 1982 and the interest forgiveness programs that followed may have contributed to reducing loan recovery performance for all loans made before and after that date.

The implication of this loan recovery situation is clear. The future profitability of the bank branches surveyed will depend much more on loan recovery performance than on any fine-tuning of banking operations which reduces costs. It is impossible to raise interest margins enough to cover forty percent loan default. The costs of loan default swamp all other costs. The only way rural bank branches can remain operational is through huge subsidies provided to them either from the head offices of the banks or the government. At a minimum, these subsidies will equal 40 percent of the value of short-term loans made. The subsidies, in effect, will flow through the banking system to those borrowers who convert their loans into grants by defaulting. This raises two important social questions. Are the

persons who receive these grants the citizens that Bangladesh wants to subsidize in this way?]/ Is the magnitude of subsidy so large that it will sabotage the future expansion of rural banking and/or of rural lending?

#### POLICY IMPLICATIONS

The results reported in this paper are subject to modification as they are reviewed and analyzed in greater detail. Furthermore, we had to rely on the data as reported by the banks and have no independent means to assess its quality. We have no reason to believe, however, that there are serious problems in the data or the analysis so we are confident that the conclusions presented here are robust. The sample of bank branches was carefully drawn so the results should be fairly representative of the rural banking system. The impact of any changes made in rural banking after 1984 are not, of course, represented in this analysis. More comprehensive studies are needed to test these issues and incorporate the possible effects of recent changes into the analysis.

These findings suggest several implications for policy makers in Bangladesh:

1. Loan recovery is the number one rural finance challenge today. Failure to effectively improve recovery will require enormous bank subsidies that will probably sabotage the future expansion of efficient rural banking and rural lending.

2. Branches operating at a scale less than the mean level for their respective bank sample should expand operations to take advantage of economies of scale. The type of expansion which is most efficient (more loans versus more deposits) varies by bank.
3. Economies of scope imply that multi-purpose institutions that both mobilize deposits and make loans will likely be more efficient than specialized institutions that engage in providing just one type of financial service.
4. Interest margins must be adjusted so that the transaction costs of rural branches are covered by income. Interest rate levels should be determined by building from the bottom up, i.e. establish deposit rates which provide incentives to depositors, then add an interest margin sufficient to cover bank costs.
5. The current technology for managing deposits and loans must be analyzed, and cost-reducing technologies developed to lower bank transaction costs over time. Special attention must be given to the information demands placed on banks, the costs these demands imply, and the value of such information if it makes little contribution to more efficient banking.
6. Expanding financial services in rural Bangladesh requires a balancing of bank and bank customer transaction costs. The Khalily research revealed the impor-

tance of number of bank branches for deposit mobilization by reducing transaction costs for depositors. Low depositor transaction costs imply a large number of widely distributed branches. The research reported here, however, shows the importance of increasing average branch size to reduce bank intermediation costs. Additional analysis is needed to determine if the current number and geographic distribution of branches is appropriate to simultaneously meet the objective of reduced customer transaction costs and increased bank efficiency. There may be important trade-offs so that rural customers will gladly pay higher costs for bank services because the branch is small, but is located nearby.

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## FOOTNOTES

1. This research is part of the Ph.D. dissertation being prepared by the junior author. The theory and econometric model are summarized in Srinivasan and Meyer (1987b). The general methodology followed the procedures developed by Cuevas in his study of Honduras banks.
2. Details on sample selection are found in project reports prepared by Cookson.
3. Data were not analyzed for Sonali Bank. These results were obtained by analyzing branch level balance sheets and income statements.
4. As reported in Economic Trends, August, 1985.
5. This issue was discussed in a paper by Meyer.
6. We are indebted to Forrest E. Cookson for providing the raw data and to Greg Gregory for assembling these results and sharing them with us.
7. The paper by Ali provides some insights into the issue of loan repayment by rural elites.

Table 1

MEAN VALUES FOR THE COST FUNCTION VARIABLES<sup>a/</sup>

VARIABLE	BANK				
	AGRANI	SXB	JANATA	RUPALI	SONALI
Total Cost (TK)	553,950	239,982	328,958	461,806	261,244
Price of labor (TK/employee)	19,340	16,226	12,186	15,892	12,118
Price of capital (TK) <sup>b/</sup>	0.0024	0.0012	0.0036	0.0016	0.0038
Labor Share	3.72	2.61	0.73	3.33	6.77
Capital Share	0.06	0.07	0.14	0.09	0.10
Deposits (TK)	4,555,000	1,417,470	5,398,574	6,003,013	6,455,717
Loans/Advances (TK)	3,924,740	12,390,417	3,557,767	3,030,026	6,054,897
Average Deposit Size (TK)	2,390	1,000	2,450	2,893	2,988
Average Loan Size (TK)	4,940	3,832	3,496	3,773	3,280
Number of Branches	40	42	43	13	46

<sup>a/</sup> Average for the pooled sample, 1983 and 1984

<sup>b/</sup> Capital costs measured in taka per taka of total deposits and loans

Table 2

Lender's Intermediation Costs  
and Related Cost Concepts for Agrani Bank<sup>a/</sup>

Cost Concept	Output Definition	
	Value of Deposit and Loan Balances	Number of Deposit and Loan Accounts
<u>Cost Share in Total Intermediation Costs</u>		
1. Deposit Mobilization Costs	70.6%	65.7%
2. Lending Costs	29.4%	34.3%
<u>Costs of Lending</u>		
3. Average Costs	2.88%	4.80%
4. Marginal Costs	0.80%	1.48%
<u>Costs of Mobilizing Deposits</u>		
5. Average Costs	4.22%	1.86%
6. Marginal Costs	2.80%	1.10%
<u>Overall Intermediation Costs</u>		
7. Average Costs	7.10%	6.66%
8. Marginal Costs	3.60%	2.58%
9. Economies of Scale	0.94	0.90
<u>Partial Economies of Scale</u>		
10. Deposits	0.66	0.59
11. Loans	0.28	0.31
12. Cost Complementarities	-0.099	0.079

<sup>a/</sup>Results of cost-system estimations evaluated at the geometric means of the variables in the models.

Table 3

Lender's Intermediation Costs  
and Related Cost Concepts for BKB Bank<sup>a/</sup>

Cost Concept	Output Definition	
	Value of Deposit and Loan Balances	Number of Deposit and Loan Accounts
<u>Cost Share in Total Intermediation Costs</u>		
1. Deposit Mobilization Costs	23.64%	21.82%
2. Lending Costs	76.36%	78.18%
<u>Costs of Lending</u>		
3. Average Costs	0.87%	1.05%
4. Marginal Costs	0.36%	0.45%
<u>Costs of Mobilizing Deposits</u>		
5. Average Costs	2.55%	0.65%
6. Marginal Costs	0.34%	0.08%
<u>Overall Intermediation Costs</u>		
7. Average Costs	3.42%	1.70%
8. Marginal Costs	0.70%	0.53%
9. Economies of Scale	0.55	0.55
<u>Partial Economies of Scale</u>		
10. Deposits	0.13	0.12
11. Loans	0.42	0.43
12. Cost Complementarities	-0.027	0.156

<sup>a/</sup>Results of cost-system estimations evaluated at the geometric means of the variables in the models.

Table 4

Lender's Intermediation Costs  
and Related Cost Concepts for Janata Bank<sup>a/</sup>

Cost Concept	Output Definition	
	Value of Deposit and Loan Balances	Number of Deposit and Loan Accounts
<u>Cost Share in Total Intermediation Costs</u>		
1. Deposit Mobilization Costs	62.50%	70.73%
2. Lending Costs	37.50%	29.57%
<u>Costs of Lending</u>		
3. Average Costs	2.57%	3.56%
4. Marginal Costs	0.86%	0.86%
<u>Costs of Mobilizing Deposits</u>		
5. Average Costs	2.70%	1.78%
6. Marginal Costs	1.48%	1.04%
<u>Overall Intermediation Costs</u>		
7. Average Costs	5.27%	5.34%
8. Marginal Costs	2.34%	1.90%
9. Economies of Scale	0.88	0.82
<u>Partial Economies of Scale</u>		
10. Deposits	0.55	0.58
11. Loans	0.33	0.24
12. Cost Complementarities	0.023	0.225

<sup>a/</sup>Results of cost-system estimations evaluated at the geometric means of the variables in the models.

Table 5

Lender's Intermediation Costs  
and Related Cost Concepts for Rupali Bank<sup>a/</sup>

Cost Concept	Output Definition	
	Value of Deposit and Loan Balances	Number of Deposit and Loan Accounts
<u>Cost Share in Total Intermediation Costs</u>		
1. Deposit Mobilization Costs	62.63%	70.97%
2. Lending Costs	37.37%	29.03%
<u>Costs of Lending</u>		
3. Average Costs	3.89%	5.75%
4. Marginal Costs	1.43%	1.55%
<u>Costs of Mobilizing Deposits</u>		
5. Average Costs	2.36%	1.91%
6. Marginal Costs	1.46%	1.27%
<u>Overall Intermediation Costs</u>		
7. Average Costs	6.25%	7.66%
8. Marginal Costs	2.89%	2.82%
9. Economies of Scale	0.99	0.93
<u>Partial Economies of Scale</u>		
10. Deposits	0.62	0.66
11. Loans	0.37	0.27
12. Cost Complementarities	0.698	-1.742

<sup>a/</sup> Results of cost-system estimations evaluated at the geometric means of the variables in the models.

Table 6

Lender's Intermediation Costs  
and Related Cost Concepts for Sonali Bank<sup>a/</sup>

Cost Concept	Output Definition	
	Value of Deposit and Loan Balances	Number of Deposit and Loan Accounts
<u>Cost Share in Total Intermediation Costs</u>		
1. Deposit Mobilization Costs	44.16%	46.75%
2. Lending Costs	55.84%	53.25%
<u>Costs of Lending</u>		
3. Average Costs	1.96%	2.36%
4. Marginal Costs	0.84%	0.96%
<u>Costs of Mobilizing Deposits</u>		
5. Average Costs	1.28%	1.09%
6. Marginal Costs	0.44%	0.39%
<u>Overall Intermediation Costs</u>		
7. Average Costs	3.24%	3.45%
8. Marginal Costs	1.28%	1.35%
9. Economies of Scale	0.77	0.77
<u>Partial Economies of Scale</u>		
10. Deposits	0.34	0.36
11. Loans	0.43	0.41
12. Cost Complementarities	-0.019	-0.024

<sup>a/</sup> Results of cost-system estimations evaluated at the geometric means of the variables in the models.

Table 7  
 Number of Sample Short-Term Loans  
 by Year and Bank

BANK	YEAR							TOTAL
	1979	1980	1981	1982	1983	1984	1985	
Agrani	74	146	54	166	395	195	2	1,032
Janata	147	110	43	100	288	46	-	734
Rupali	27	17	13	63	205	77	-	402
Sonali	49	362	216	227	605	364	26	1,849
BKB	45	75	110	238	425	352	8	1,253
TOTAL	342	710	436	794	1,918	1,034	36	5,270

Figure 1

# Loan Recovery Profile for Short-Term Agricultural Loans Made in 1979-1984: All Banks

Percent of Principal Recovered

