

## **Differential Access and the Rural Credit Market in Pakistan: Some Recent Evidence**

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### **INTRODUCTION**

Throughout the remarkable growth of institutional rural credit in Pakistan there has been an underlying concern for its provision to the small farmers and those unable to compete in the market for reasons of inadequate collateral or repayment capacity. It is felt that the provision of credit for production purposes would enable the small farmers to avail of the benefits of the seed-fertilizer revolution and equip them in time with the repayment capacity required to qualify for loans in the open market. With this end in view the government continued, and continues to, heavily subsidize the provision of agricultural credit in Pakistan. According to official statistics, in 1984-85 about 89 percent of the total credit disbursed in Pakistan by the Federal Bank for Cooperatives went to the small farmers (those owning 12.5 acres or less); 70 percent of ADBP loan recipients and 90 percent of commercial bank loan recipients owned less than 25 acres of land [see Government of Pakistan (1985)]. However, a number of independent studies contradict these official figures [see for example National Fertilizer Corporation (1984) and Punjab Economic Research Institute (1986 and 1986a)].

This paper looks at the changing relative importance of institutional sources of credit in Pakistan and presents evidence on the limited access of the small farm households to these subsidized sources of credit. Some evidence is also presented on the significantly higher rates of interest that borrowers have to pay on loans from non-institutional sources than they have to pay for similar loans from institutional sources for different purposes of utilization.

### **THE SURVEYS**

This paper is based on data from two large national surveys. The rural credit survey of Pakistan was first conducted by the Agricultural Census Organization

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*Authors' Note:* Due to space constraint the tables have been removed from the study. Those interested can get the tables from us.

[supervised by the State Bank of Pakistan] in early 1973 (January to March) "to know the present state of rural indebtedness and to assess the future credit needs of the rural population in general and the farmers in particular. Besides it was intended to ascertain through this survey the share of different agencies in providing rural credit, the purposes for which credit was obtained, and the terms for obtaining credit" [Government of Pakistan (1973)].

A total of 99,081 households were selected and interviewed all over the country. Multi-stage weighted probability samples were used for the purpose. Details of the sampling methodology are available in Malik (1981). Data from a final sample of 94,082 households were 'blown up' by using a raising factor equal to the inverse of the probability of selection of the respective households, to represent a total population of 6,939,054 households of the entire rural sector of Pakistan in that year. These data were then processed in the form of cross tabulations across type of household and size of farm categories and published with the collaboration of the Pakistan Institute of Development Economics. Unfortunately access to the original data tapes is not possible. This constrains the type of analysis that is possible.

The 1985 rural credit survey was conducted by the Agricultural Census Organization in September-October of 1985. Details of the sampling methodology are available in Government of Pakistan (1985). A total of 54,987 households were interviewed all over the country. The data thus collected was made available to IFPRI for analysis through the initiative of USAID in Pakistan and the cooperation of the then Secretary Statistics Division.

One major limitation from the point of view of the analysis was an inability to get the raising factors for the 1985 survey so that the data could be 'blown up' to reflect the national aggregates. This limits the comparison across categories because it is possible that, for example, the number of owner farmers picked up in the 1985 survey does not correspond to their proportion in reality. However, analyses of behaviour *within* this category would still be valid given the size of the sample. The limitations of the data are spelled out in greater detail in Malik (1989).

However, despite these limitations, the size of the sample permits effective generalizations.

### CHANGING RELATIVE IMPORTANCE OF INSTITUTIONAL CREDIT

One way of looking at the changes in the source structure of credit is to look at the percentage distribution of total borrowing across sources for each type of farm household. The data show that the relative importance of institutional sources has increased much more dramatically for the owner and owner-cum-tenant category than it has for the tenants reflecting perhaps the fact that inability to meet collateral requirements bars the tenants from the use of institutional sources.

For the owner category in 1985 the sources in order of importance are the ADBP Friends and Relatives, Commission Agents and Merchants and Commercial Banks. In 1973 this ordering was Friends and Relatives, Commission Agents and Merchants and the ADBP.

For the owner-cum-tenant category the same pattern as that for the owners is true. However, the relative importance of the ADBP has increased nearly tenfold as compared to 1973. This increase for the owner farmers is only about half that for the owner-cum-tenants.

The general picture that emerges for the farm sector is an increased relative importance of the institutional sources of credit, especially the ADBP, Commercial Banks and Cooperatives. There is a relative decline in the importance of the non-institutional sources, especially Friends and Relatives. Commission Agents and Merchants appear to hold their relative position which in the light of the tremendous increase in institutional credit is remarkable. This position is maintained through an increased importance for the owner-cum-tenants and the tenant farmers despite a decline in the relative importance for owners. This finding lends some support to the hypothesis that inadequate collateral drives owner-cum-tenants and tenants to Commission Agents and Merchants who use tying arrangements as substitutes for the collateral. If this is true then more sophisticated collateral procedures could increase use of credit from institutional sources especially given the lower rates of interest that prevail there.

Most credit programmes of the Government are targeted at the small farmers. Government statistics claim that the bulk of the credit from institutional sources is flowing to the small farmers. This is, however, sensitive to what constitutes a small farm. The data clearly indicate that the smallest farmers are not the principal recipients of subsidized loans. For the purposes of our analysis small farmers are defined as those with less than 5 acres of operational holdings. Although the official cut-off point for the small farm category is 12.5 acres, farmers in this size category can be very well off especially in the irrigated areas of the Punjab. We have chosen the less than 5 acres category to highlight the performance of government efforts in reaching the most inaccessible.

The data reveal a pattern in direct contrast to that for the overall categories. Institutional sources have declined in importance for all categories of small farmers although there are some increases in the relative importance of Commercial Banks for the small farm owner category and of the ADBP for the small farm owner-cum-tenant and tenant category.

The relative importance of Friends and Relatives has increased over time for the small farm owner and owner-cum-tenant although it has declined somewhat for the small farm tenant category. The importance of the landowner has increased substantially for the tenant and owner-cum-tenant category. There is a decline in the

relative importance of the Commission Agents and Merchants for small farmers in all types of households. It would appear that tying does not work below a minimum level of operational holding.

It is obvious from the declining relative importance of the institutional sources that credit schemes aimed at the small farm category are not working for the smallest group. These findings strongly substantiate the finding of earlier studies by the Punjab Economic Research Institute (1986) and the Applied Economic Research Institute Karachi that concluded that credit schemes for small farmers especially 'markup free' credit was not reaching the intended group. Another way to look at the problem is in terms of evaluating the access of the small farm households to credit.

### THE PROBLEM OF ACCESS

The problem of access to credit for the small farm households can best be seen in terms of a measure that relates the proportion of a particular household category receiving credit from a source to the weight of that category in the total households of that category. Thus, if a particular category is getting a larger proportion of loans than its proportion in the population it has more than equal access; if it is getting the same proportion of loans as its weight in the population then it has equal access and if it is getting a smaller proportion of loans than its weight in the population then it has less than equal access. The smaller the value of this measure is from 1, the greater is the problem of access to credit for that category.

The statistics indicate that access to institutional sources is much lower than that to non-institutional sources for all categories of small farm households. There is a serious problem of access to institutional sources of credit for the small farmer households. Moreover, this limited access is worsening over time for all types of small households if we look at the institutional sources combined. In fact, the same pattern of decline is true for the non-institutional sources also. Access is however, more equal in the case of the non-institutional sources. The only improvement in access to institutional sources is for the owner households in the case of access to Commercial Banks. However, it is a slight improvement and the value of the access indicator in 1985 is only 0.30. It should, however, be borne in mind that Commercial Banks only entered the realm of rural lending in 1973.

Another measure of access is to look at the weight of loans (in terms of the volume of loans made to a category) in the total portfolio of a particular source. These percentage weights are especially helpful in looking at changes over time. A perusal of these data reveals the same pattern of declining shares to the small farm category that was evidenced by the first measure. The only exception is the case of the small owner category where the proportion of institutional loans has increased due to the increase in the proportion for Commercial Banks. This was

evident from the first measure also. The general conclusion that emerges from these data are that there is a serious problem of access to institutional credit sources for the small farmers and that this problem is worsening over time. The marginal improvement in the case of Commercial Banks is confined to the owner category. It is obvious that the small farm credit schemes have not worked in the past. Moreover, if the trend can be extrapolated it implies that the small farm households will be effectively excluded from virtually any access to institutional sources of credit. The policy-makers should take a serious note of this trend.

The problem of access can also be looked at by disaggregating the data for 1985 to the provincial level. These data show the almost negligible access to institutional sources of credit for all types of small households in each province in terms of the first measure of access. The problem is much more acute in Balochistan and Sindh than it is in Punjab and NWFP. However, in these provinces also the highest value of this measure is significantly less than 1.

For non-institutional sources the situation is significantly better especially in the case of NWFP, Sindh and Punjab. In fact, for the all-cultivators category combined, the value of this measure for non-institutional sources is 1 implying equal access in the case of NWFP and Sindh. This index is 0.8 for Punjab and only 0.5 for Balochistan for the all-cultivators category from the non-institutional sources.

The data show that for the small farm all-cultivator households category combined the volume of institutional sources to total loans was 12 percent in NWFP, 3 percent in Punjab and 0.7 percent in Sindh. These proportions are generally higher for the owner than they are for the other households. However, in NWFP, small farm tenant households received 16 percent of the total institutional loans to tenant farms. Over 54 percent of the total loans by volume in NWFP to cultivator households go to the small farmers. This percentage is significantly higher than in Punjab, Sindh and Balochistan where these figures ranged from 13.2 percent in Punjab to 11.2 percent in Balochistan and 11.1 percent in Sindh.

While it is obvious that the problem of limited access to institutional credit is primarily one of inadequate availability of acceptable collateral with the small and tenant households; this can be handled through introducing more sophisticated collateral arrangements and making agricultural produce a more readily acceptable form of collateral. However, the provincial differences indicate that the problem has dimensions that go beyond the straightforward.

The impact of the limited access to institutional sources of credit can best be gauged by looking at the differences in the amount-weighted rates of interest on loans for different purposes of expenditure from the two types of sources. The implicit assumption is that the borrower whose access to institutional sources is limited would turn to non-institutional sources for their credit needs. Interest rates are computed for 1985 and presented in Table 1. It is clear that non-institutional

Table 1  
*Rate of Interest by Purpose of Expenditure 1985*  
*All Cultivator Household – Pakistan*

Purpose	Mean Interest Rates of		Difference of Means Test
	Institutional Sources	Non-institutional Sources	
Total Expenditures	12.31	19.61	23.31
Current Expenditures	12.18	19.93	22.45
Capital Expenditures	12.33	18.07	8.99
Non-farm Expenditures	12.82	15.94	2.16
Family Expenditures	12.37	23.01	18.31
Miscellaneous Expenditures	10.92	15.80	2.96

*Note:* Figures reported in the last column are Z statistics which are significant at 5 percent level.

rates in each case are significantly higher than the corresponding institutional rates. The difference between the two ranges from about 3 percent to over 11 percent. The difference of means tests also reported in this table are all significant at (at least) the 5 percent level indicating that the difference in the mean rates of interest are statistically significant in each case. These rates are computed after excluding borrowings reported at zero nominal rates. It should be noted that the majority of loans from non-institutional sources and a considerable proportion from institutional sources in 1985 were reported at zero nominal rates. These zero rate loans are extremely difficult to handle within established neo-classical economics and are outside the purview of the present paper. However, if we exclude these interest-free loans the increased cost to the potential borrower who is unable to borrow in the institutional market is obvious.

### CONCLUSIONS

The general picture that emerges from the foregoing description for the farm sector is an increased relative importance of the institutional sources of credit, especially the ADBP, Commercial Banks and Cooperatives. There is a relative decline in the importance of the non-institutional sources, especially Friends and Relatives. However, despite the increased importance of institutional sources of credit overall,

the analysis has highlighted the problem of limited access to these subsidized sources of credit by the small farmer in each type of household and especially the small tenant farmers. The general conclusion that merges is that this problem is worsening over time. The marginal improvement in the case of Commercial Banks is confined to the owner category. It is obvious that the small farm credit schemes have not worked in the past. This problem also has extremely important provincial dimensions that need the attention of the policy-makers. In terms of the cost of this differential access to small and tenant farmers the analysis reveals that there are significantly higher interest rates for non-institutional borrowing. The analysis shows that the small and tenant farmers because of their limited access to institutional sources are faced with much higher non-institutional rates.

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**Comments on  
“Differential Access and the Rural Credit Market in Pakistan:  
Some Recent Evidence”**

This paper is a welcome addition to the study of credit/markets and economics of rural institutions.

This field of analysis got a major boost from the burst of activity that has occurred in the economics of information. Once economists developed easily manageable tools and models to deal with issues of imperfect competition such as personalized exchange, bilateral bargaining, strategic behaviour, etc.; this brand of theorizing was used in all branches of economics as international trade, macro-economics and theoretical industrial organization. In the economics of development, the main beneficiary was the economics of rural institutions. This approach has gathered enough acceptances that Meier, in his popular development text, has a section on the information theoretic paradigm. Economics of information accompanying game theoretic models suffer from an embarrassment of riches that we have too many theories chasing too few facts. That is why Sohail Malik's paper is useful in establishing some stylized facts around which further modelling peculiar to this environment can take place.

The question of access is important in the light engineering sector. Ijaz Nabi has shown that differential access effects production decision-making such as capital intensity and the firm's ability to react to exogenous shocks.

The fact that small farmers have smaller 'access' to the institutional credit market has often been attributed to lack of collateral.

Collateral is important because if a borrower's assets cannot cover the 'loan' then strategic default becomes an important issue.

But determining the value of collateral is problematic. Different parties might have different private valuations for it; there might be legal and takeover costs, and the value of the collateral might be dependent on the particular state of nature.

The fact that people borrow from different sources might suggest that collateral as a function of total indebtedness might be taken into account.

Lastly I would think that loans at zero interest rates are a clear sign of inter-linked transactions.

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