

BORROWING COSTS, DEBT CAPACITY AND DEMAND FOR AGRICULTURAL FINANCE IN FIJI

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1. Introduction

The channelling of institutional finance to agriculture has increasingly become an important policy instrument for increasing agricultural output, particularly of the rural poor, redistribution of income and facilitating the participation of the heretofore neglected farmers. A number of studies carried out do indicate that an augmented supply of institutional finance to agriculture has influenced output increases [2, 3, 6, 11, 12]; however, recent studies also indicate that relatively little of the additional loanable funds have gone to the rural sector, thus negating to a large extent, the very purport of this increase. A number of explanations have been put forth for the relative lack of use of institutional finance by the poorer farmers. Some observers attribute the low credit demand among the poor farmers to a failure to perceive profitable investment opportunities, ignorance of the availability of institutional finance and the fact that these farmers do not have the know-how to use finance effectively or are just too shy to request institutional finance [10,9]. Lipton [8], on the other hand, views the problem more from the point of view of political issues and power structure in poor countries and ascribes the channelling of credit away from the rural segment to an urban bias of the institutions concerned. Others [2, 7, 4] regard the preferential supply allocation to larger farmers as being due to low and concessional interest rate policies combined with the comparatively higher lender loan transaction costs involved in serving numerous small and new farmers. Adams and Nehman [1], however, provide a further explanation which focuses on differences in borrowing costs among various types of borrowers. According to them these borrowing costs determine to a significant extent, the willingness of the poorer and smaller farmers to seek institutional credit. Apparently an interplay of all the reasons offered may be responsible for deterring the rural poor in low income countries from availing institutional credit facilities. In the light of the three known studies in the world of this nature [1], this paper provides yet further evidence (based on a survey of 148 farms in Fiji in 1981¹) of the impact of borrowing costs on loan demand. Another aspect of the problem, which is of great relevance to Fiji is the influence of the land tenure system on the debt capacity and demand for agricultural finance. This is also examined in this paper and some recommendations are set forth to resolve the inherent incompatibility between the financial institutions and the land

1 Though a total of 173 farms were visited, only 148 questionnaires were completed.

tenure system in order to promote commercialisation of the large subsistence sector in Fiji.

2. The Research and the Findings

Generally, demand analyses equate the nominal interest rate charged on a loan with the price of the loan. However, a more appropriate measure should include other costs incurred by the borrower such as the opportunity cost of the time lost in acquiring the loan in terms of mandays, travel expenses, etc. Adam and Nehman define borrowing cost (BC) as including three elements: the nominal interest payments made to the lender (NI), additional loan transaction costs incurred by the borrower (TC) and inflation over the period (ΔP). They further state that the expected BC used by the prospective borrower in making loan demand decisions would be:

$$BC = NI + TC - \Delta P$$

In Fiji, since inflation is not significantly higher than the nominal interest rate, inflationary expectations do not play a dominant role in the borrowers' decision making. Thus this aspect, though important in concept has been ignored in this paper.

In my survey of 148 farms, 106 farms had acquired loans from institutional sources. These farms were divided into sugarcane and general (non-sugar) farms. The sugar industry in Fiji is largely based on a small-holder system and is the only agricultural sub-sector which is organised fully along commercial lines. The harvesting, production and marketing of sugar is done by the Government-owned Fiji Sugar Corporation and Fiji Sugar Marketing Company. Thus the Government has a monopoly of production and marketing of sugar. 52 sugarcane farms of various sizes which had acquired institutional finance were documented, while in the general category 54 farms had acquired institutional finance. The farm sample, for all practical purposes, was random. For our purposes, loan transactory costs have been taken as comprising (apart from the interest rate paid): (i) Application fees, service charges, stamp duties, legal fees, and other costs, pertaining directly to the loan e.g. payment of veterinary services, etc.; (ii) Cost of preparation of loan application or any other representation made on behalf of the borrower; (iii) The borrower's time lost in acquiring the loan, which is perhaps the single most important cost, especially during times such as the planting and harvesting season. The time factor was calculated on the basis of mandays lost on the farm; (iv) Travelling expenses, which include the cost of staying at an urban centre for procuring

the loan, phone calls, etc. During the period under study, the interest rates charged by the Fiji Development Bank have ranged from 5.5% to 10% per annum. An average nominal interest rate of 8% has been taken for our calculations. The duration of loans studied has been broadly classified as the 12 months and 3 year category.

The results of the survey are summarised in Table 1 and Table 2. As the transactory costs are more or less fixed for a given loan, the effective annualised cost of borrowing a given amount at a fixed rate decreases as the duration of the loan is increased. It was noted that generally first time borrowers and farmers who acquired small loans incurred comparatively larger transactory costs to secure a loan. Apart from this, the number of visits involved in transacting the loan were many more. The larger borrowers, on the other hand, incurred not only lower transactory costs but had in cases, negotiated loans through a single visit.

Tables 1 and 2 also show that sugarcane farmers incur lower transactory costs than non-sugarcane farmers. This is probably due to the fact that sugarcane farms are organised along commercial lines with guaranteed markets and loan collection is much easier in this subsector through deduction from crop proceeds. Moreover, sugarcane farmers are able to provide not only crop lien but also their land (which is generally leased) as collateral. All these factors collectively make it more profitable for the lenders to administer loans to this group. On an average, sugarcane farmers made only half the number of visits to the financial institutions to secure loans as compared to the non-sugarcane farmers.

The data presented by farm size in the 12 month category shows that there is a correlation between loan size and farm size. In the sugarcane sub-sector, for the smaller farmers the average loan transaction cost was 23% of the loan as compared to 5% in the case of larger farmers. The interest rate charges increased with farm size and size of the loan. For a 12 month loan, interest rate charges accounted for 26% of the borrowing cost for small loans, while it was almost 60% for larger loans. On the other hand, the annualised direct cost of borrowing as a percentage of the loan value varied inversely with loan size. In the case of small borrowers, this percentage was as high as 31%, while for the larger borrowers it was only about 12%. In general agriculture (non-sugarcane) the corresponding figures were higher, probably due to the fact that since they are not as well organised and commercialised as the sugarcane sub-sector, financial institutions ration finance more strictly for this group. The preferential lending to the sugarcane sub-sector is well evident from the fact that about 65% of institutional finance in recent years has gone to this sub-sector. In the 3 year category, interest

paid accounted for a larger share of the direct cost of borrowing for both small and large farmers.

Table 1

FARMER COST OF BORROWING FROM INSTITUTIONAL SOURCES (SUGARCANE FARMS)

Farm Size (hectares)	Av. Loan size (\$)	Av. Loan Transaction Cost (\$)	Av. Duration of Loan approval (weeks)	Nominal Interest Rate (%)	Int. Charge % of Direct Cost of Borrowing %	Annualised Cost of Borrowing as % of Loan Amount %
				12 Months		
0.4-2	300	70	4	24	26	31
2-4	460	78	5	37	32	25
4-6	700	63	4	56	47	17
6	1200	65	4	96	60	13
				3 Years		
0.4-2	1600	190	9	384	67	12
2-4	2000	197	10	480	71	11
4-6	2800	186	6	672	78	10
6	4000	245	5	960	80	10

Source: Sharma, P. The Development of Fijian Agriculture, University of Cambridge, 1983, Unpublished.

It was found during my field investigations that a number of loan applicants had not been successful in acquiring loans despite incurring considerable costs in the futile pursuit of their applications. Many of these farmers had therefore resorted to money-lenders, traders or shopkeepers for loans at exorbitant interest rates varying from 30% to 60%.

From the above analysis and various interviews with the farmers, it appears that high loan transaction costs are a major deterrent to small and new farmers requiring credit. The comparatively lower transaction costs incurred by the sugarcane farmers has only polarized the agricultural sector further. In the light of the high interest rates prevailing in the informal market, revision of the interest rates upwards will have little impact on loan demand; however, lowering of loan transaction costs is likely to have a greater influence on borrowing decisions and hence on loan demand. By the same token,

Table 2

FARMER COST OF BORROWING FROM INSTITUTIONAL SOURCES GENERAL AGRICULTURE (NON-SUGARCANE FARMS)

Farm Size (hectares)	Av. Loan Size (\$)	Av. Loan Transaction Cost (\$)	Av. Duration of Loan Approval (weeks)	Nominal Interest Rate (%)	Int. Charge % of Direct Cost of Borrowing %	Annualised Cost of Borrowing as % of Loan Amount %
12 Months						
0.4-2	200	57	6	16	19	36
2-4	340	58	7	27	28	28
4-6	500	79	5	40	33	24
6-8	1180	81	6	94	54	15
8-10	1700	96	8	152	61	8
10	3000	125	8	240	66	12
3 Years						
0.4-2	1200	225	9	288	55	14
2-4	1950	217	11	468	68	12
4-6	2700	273	13	648	70	11
6-8	3800	311	11	912	74	11
8-10	7000	426	7	1680	80	10
10	6700	455	6	1608	82	10

Source: Sharma P. The Development of Fijian agriculture, University of Cambridge 1983, Unpublished.

since interest rate charges constitute the single largest fraction of the direct cost of borrowing for large borrowers, demand for loans in this group is likely to be more sensitive to interest rate changes. Thus if the financial institutions are to achieve a greater and more effective penetration of the agricultural sector, then the reduction of transactory costs for the borrower is imperative. In view of the high opportunity cost of the time lost in following up their loan application and travelling expenses, an effective reduction of these costs may be achieved through minimising the cumbersome procedures and formalities involved in the acquisition of loans and a reduction in the number of visits that a small farmer is required to make to obtain a loan. It is conceivable that the net result of an increase in the interest rate may lower the borrowing cost for the small farmer. Higher interest rates would also tend to lower loan demands from larger borrowers, improve the interest rate spread and thereby facilitate greater lending to the small and new borrowers.

It should be realised, however, that mere reduction of the borrowing cost alone would not affect the loan demand very significantly. An important aspect of loan demand which has been overlooked if not ignored in various reviews in recent years is the land tenure system and the institutions upholding it. This aspect is of special relevance to Fiji, where communal ownership of land is the order of the day despite the existence of a free enterprise economy and financial institutions which have been established primarily to serve a capitalist system. In Fiji and indeed in other similar countries, the head of the clan has the authority to allocate land on an informal basis and terminate the arrangement at his own will. These tenure arrangements determine the ability of the individual to gain access to institutional credit and define to some extent, the nature, dimensions and future security of such opportunities. Thus in this way, land tenure institutions determine the pattern of income distribution in the agricultural sector. Although farming is done on an individual family unit basis on communal land², there is little security of tenure or recognition of their rights by the lending institutions. Over 70% of the farmers in Fiji farm on communal land and since they are unable to offer collateral for borrowing, they are ineligible for seeking credit. Given the problems of acquiring or renewing a lease, it is only natural that this large group are excluded from the lendings of the financial institutions. Thus, although the financial institutions are set up with objectives of serving the rural poor, little is achieved in promoting the development of this group due to the basic incompatibility between the land tenure system and the lending criteria of the financial institutions. It is therefore not surprising that consequent to all the inhibitory factors operative in the system, the debt capacity of the subsistence and semi-subsistence farmers is rather low and will continue to remain so unless leases are provided. It appears that the existing agrarian structure in Fiji is not entirely conducive to commercialisation of agriculture or to agricultural development of the country.

3. Conclusions

It is not the modification of financial policies (in particular, the interest rate policy) alone that will bring about a more equitable distribution of income, but agrarian modifications

2 About 83% of the land area in Fiji is communally owned.

would also be needed concurrently. This is clearly brought out in Fiji's case, where the sugar industry under modified tenure with safeguards of security of tenure via issue of leases and compensations for capital improvements has prospered, while other sub-sectors (with family farm units on communally owned land as the basic structure) have largely remained stagnant and within the domains of subsistence agriculture. Income distribution affects the allocation of investment of funds and these investments have taken place largely in the sugar industry in the last 90 years. In a country where the subsistence sector is a large one, as is the case in Fiji, participation of this segment of farmers is just as important as increased production and the manner in which these increases are achieved. The skewed income distribution in Fiji is to some large extent directly related to the rigid land tenure system. The gap between the urban and rural population is large as is also the gap between the rural areas and the villages. The latter is because most of the sugarcane and other commercial farmers are located in rural areas.

In a country like Fiji where there is surplus agricultural labour, shortage of working capital, and where land constitutes the major resource base, ways must be found to utilize³ this resource in such a manner that it can serve as the vehicle for promoting development. In fulfilling this objective, the task of the land tenure system would be to provide the rural poor with viable opportunities and employment not only to gain commercial experience and discipline that comes from productive work, but also to augment their incomes and alleviate their position from the present low level of equilibrium. The tenure system of a country influences the productivity of agriculture both through incentives which tenure arrangements offer for the effective participation of workers and investors and the capacity of the tenure system to adapt to the changing needs of the economy such as the adoption of new technology, changes in the size of farms and changes in the socio-economic attitudes of the population. The tenure form that seems to come closest to providing the necessary incentive conditions is the owner-operated family farm unit. In countries with large areas of communal land as in Fiji, leasing arrangements can be devised that create about the same security of expectations for tenants as on owner-operated systems. This would enhance the debt capacity of subsistence farmers significantly and increase their risk threshold, thereby increasing the loan demand for on-farm investments by this important group.

3 Currently only 32% of the usable land in Fiji is being utilised.

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LES COÛTS DES PRÊTS, LA CAPACITÉ D'ENDETTEMENT ET LA DEMANDE DE CRÉDIT AGRICOLE DANS LES ÎLES FIJI

RESUME

Cet article analyse quelques problèmes du financement agricole du secteur rural à faible revenu dans les îles Fiji et se situe dans le contexte des rares études sur le sujet dans le pays considéré.

Le secteur rural à faible revenu comprend une importante proportion de la population et le problème est aggravé par le fait que les 73% des exploitants agricoles sont des exploitants de subsistance ou de presque subsistance. L'exclusion de cet important secteur de l'activité de prêts des institutions financières implique naturellement que ces exploitants peuvent participer seulement de façon limitée au processus de développement.

Cet article est centré sur l'effet des coûts élevés des emprunts sur la demande des prêts du secteur institutionnel dans les îles Fiji et se base sur les données d'une enquête menée dans les îles sur 148 exploitations agricoles. Les résultats montrent que les emprunteurs de petite dimension ont des coûts sensiblement plus élevés que les exploitations de large dimension pour les prêts du secteur formel. On peut remarquer encore que les exploitations agricoles de la canne à sucre ont des coûts de transactions relativement moins élevés que les autres entreprises du secteur agricole. Enfin, dans le cas des exploitations de petite dimension, l'élément le plus important dans les coûts de transaction est le temps perdu dans l'attente des prêts tandis que pour les grandes entreprises l'élément le plus important est le taux d'intérêt.

Le deuxième aspect important analysé dans cet article est l'influence du système d'exploitation agricole sur la demande de prêts dans les îles Fiji où la plus grande partie des terres est propriété communautaire.

Cet article analyse l'importance et les implications d'une modification du système actuel d'exploitation agricole pour le rendre compatible avec les institutions financières de ce pays qui sont essentiellement créées pour opérer dans un système capitaliste. L'Auteur suggère pour éliminer l'incompatibilité actuelle d'offrir aux exploitations agricoles de subsistance ou de presque subsistance ce qui est nécessaire pour les rendre accessibles au financement institutionnel. Cet article recommande une réduction des coûts des transactions obtenue par une meilleure efficacité généralisée et une révision vers le haut des taux d'intérêt. Cela peut permettre une marge accrue entre les différents taux d'intérêt qui favorise des prêts plus importants aux nouveaux et aux petits emprunteurs. Cette mesure associée à des modifications du système foncier prévoyant le bail des terres aux exploitants, pourra stimuler l'accès des exploitations de petite dimension au financement institutionnel et donc la demande de prêts de ce groupe jusqu'à présent négligé.

