

Research Note

Lending Trends in the Sugar Cane Sector

Gyaneshwar Rao

Abstract

The paper looks at the trends in grower indebtedness and investment in the sugar cane sector. Data shows that there has been a declining trend in formal sector loans made out to sugar cane growers. This indicates a declining investment levels in sugar cane production section of the sugar industry.

Introduction

Investment in an industry is necessary for its growth. It raises capital stock in the industry, and can often lead to productivity improvements. Investments can also lead to reductions in the unit cost of production thereby making the industry output more price competitive. Investments also have the significant potential of raising the quality of the output, thus making the product more quality competitive as well. For an individual business, investment could generally be financed either from within the business' funds (internal funds), or, more commonly, from outside the firm. Outside financing could take the form of raising funds from the stock market, or by outright borrowing from banks. For an industry as a whole, however, it is often funds from outside the industry, channelled by banks, which are relied on to finance investment. Loans made to an industry, therefore, are crucial indicators of investment and growth of an industry.

An important industry for Fiji is the sugar industry. This industry

supports a large proportion of the population, has a large multiplier effect and is responsible for a significant share of total export earnings of the country; in many respects it is still the most significant industry in the country (Prasad and Narayan, 2003; RBF, 2002). The industry is built on production of sugar cane by cane growers. The growers are contracted by the Fiji Sugar Corporation to supply sugar cane in return for an annually determined price of sugar cane. Currently there are 21,246 sugar cane growers in Fiji. In 2002, collectively they produced 3,216,000 tonnes of sugar cane from which approximately 330,000 tonnes of raw sugar was manufactured. The figures today stand considerably lower than what they were in the 1980's. Cane production has declined for a number of reasons, which include a declining confidence in the sugar industry, continuing land lease problems, inter-generational shifts in job preferences, and the deteriorating capability of the sugar manufacturing sector to efficiently absorb and process all sugar cane produced thereby adversely affecting the net returns to farmers.

Given the above, one would expect investment in the industry to decline as well. This paper examines the lending trends and grower indebtedness in the sugar cane industry.

Grower Indebtedness

Sugar cane farming began in Fiji in the late 1800s. The Australian Company, Colonial Sugar Refining Co. Ltd, played a crucial role in building the industry. The industry itself has passed through three important stages. Initially, the millers themselves produced their sugar cane. But during early 1900's the millers subdivided their estates, leased them to their workers and entered into contracts with them to supply sugar cane. During this period, the industry came to be monopolised by the CSR Ltd. After the mid-1940's when the Native Lands Trust Board was established, thousands of farmers were induced into the industry to produce sugar cane under contract. The contract mode of cane production has remained to this day.

While the nature of the contract has evolved over the past few decades, one element has remained unchanged. This concerns the mode of payment to the growers. Payment to growers is scattered over a relatively long period of time. Growers do not get the full price well

after their crop is supplied, milled and output sold; the final payment is often made between 10 to 16 months after sugar cane is supplied to the manufacturer.

Given this, grower indebtedness had been an integral feature of the industry since the early 1900's. A vast majority of the growers were, and continue to be, small holders, tilling land areas of, on average, between 8 to 12 acres. The lack of regular cash flowing to the growers meant that their consumption needs had to be financed from borrowing. During much of the pre-independence days, such borrowing was in the form of credit extended by local retailers and money lenders. Nand (1967) established that in 1967, 8,600 out of the approximately 9,500 cane growers (representing over 90% of the cane farmers) were in debt. He further found that over 80% of ethnic Indian growers were in debt for consumer goods. Most of this debt was to the local retailers. A majority of the retailers were 'business migrants' from the Bombay and Gujerat areas of India.

After Fiji's independence, but more specifically after the government bought out the CSR mills, the formal finance sector began increasingly lending to the growers. Beginning initially with investment loans, banks now finance consumption as well as investment needs of the growers. Whether the formal money market has taken over the informal money market is a difficult question to answer. What, however, is clear is that the mode of cane payment requires that growers rely on loans to finance working capital as well as consumption needs. In this environment, investment will almost invariably need to be financed from loans.

Working capital needs for cane growers are significant. Growers need to pay upfront to get their crop ready for harvest. Costs are incurred for land preparation, crop growing and nurturing, herbicide, fertilizer, seed cane, harrowing, and labour expenses. Even cane harvesters demand advances for them to agree to harvest cane. These advances, called 'goodwill payment', can be anywhere up to F\$1000 for an expected harvest of 150 tonnes of cane. Loans fund these expenses.

The estimated cost of producing a tonne of sugar cane is between F\$35 and F\$38 (Reddy, 1998, 2003; Sugar Cane Growers Council, 2003). Table 1 shows the net incomes for an average farmer for the 2000, 2001 and 2002 financial years. The average output per farm is estimated to be 160 tonnes (Kurer, 2001).

Table 1: Net Income from Sugar Proceeds for an Average Producer

Year	Cane Price (per tonne)	Gross Income	Production Costs	Net Income
2000	\$50.76	\$8121.60	\$5600	\$2521.60
2001	\$44.01	\$7041.60	\$5840	\$1,201.60
2002	\$60.43*	\$9668.80	\$6080	\$3588.80

* This is the estimated cane price for the 2002 crop.

Source: FSC Annual Reports, Reddy (2003) and Kurer (2001).

Given the 2003 rural poverty line of \$115 per week (ADB, 2003), the average sugar cane grower earns a sugar cane income which is lower than the poverty line. This income, therefore, is unable to generate the level of savings needed to finance his next crop. An average grower, thus relies on borrowing to finance his consumption expenditure, working capital and investment on the farm.

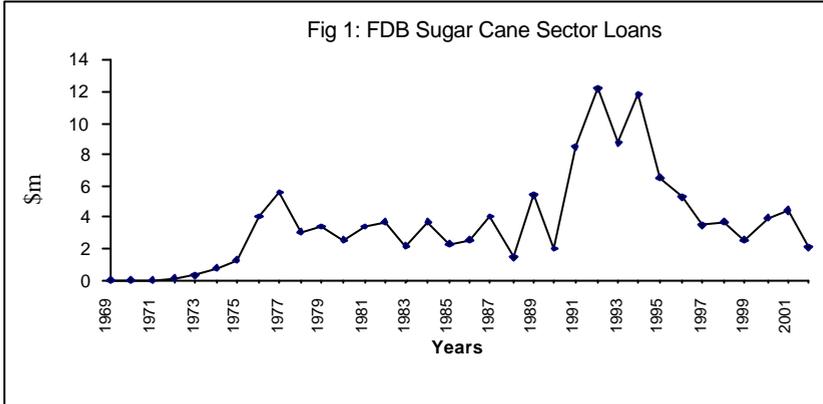
Lending Trends

There are three main sources of funds for the growers from the formal sector. These are the Fiji Development Bank, Commercial Banks and the Sugar Cane Fund. Some lending takes place from the thrift and credit societies, but their presence is neither nation wide, nor is their lending substantial or for long term. Borrowing from formal institutions is for a wide range of purpose; it includes finances for working capital (general farm expenses), investment (land clearing, planting new crops, tools, including farm bullocks), and consumption. (construction, repair, extension of farm residences, living expenses, educational expenses, weddings, etc). Growers also borrow for farm and house reconstruction and rehabilitation after natural disasters. The Fiji Sugar Corporation also advances the growers expenses for drainage, fertilizer and some rice and sugar supplies, but these advances are deducted from the proceeds of cane harvested during the season. These advances are excluded from this study.

Fiji Development Bank Loans

The Fiji Development Bank was established in 1968 as the Agricultural and Industrial Loans Board. The main function of the bank was to provide longer terms loans to stimulate agricultural and industrial

development in Fiji. Lending to sugar cane farmers took an upward turn after the Fiji Government bought the sugar mills in 1973. Figure 1 shows lending by the Fiji Development Bank.



(Source: Table 2, and FDB Annual Reports, various years)

The graph shows that while there was an increasing trend in the FDB lending to cane farmers after 1973, the year in which the Fiji Government took over sugar cane milling, there was a significant jump in FDB loans after 1975. This was due to the start of the Seaqaqa Sugar Development Project in 1976. This project was in large part funded by the World Bank. It provided the government \$6m for the project. The government on-lent this money to the FDB, which became responsible for lending and managing it.

There was yet another, but more significant, increase in FDB loans after 1990. FDB embarked on a more flexible lending policy which made possible a wider variety of loans, and new appraisal procedures ensuring quicker processing of loans. In 1991, the FDB stated that 'the Bank will now make loans available for a much wider variety of purposes and new appraisal procedures mean quicker processing of applications' (1991: 9). The wider variety of purposes referred to the inclusion of consumption lending in the FDB portfolio. This was a major departure for the FDB. Whether this departure is consistent with the objectives of the FDB is a matter for separate research. But what is clear is that a significant component of the FDB loans comprised loans other than investment loans. The 1992 Annual Report stated that

finance 'for cane farmers was again a dominant feature of agricultural lending, with a more flexible lending policy creating more activity in this sector' (1992: 9).

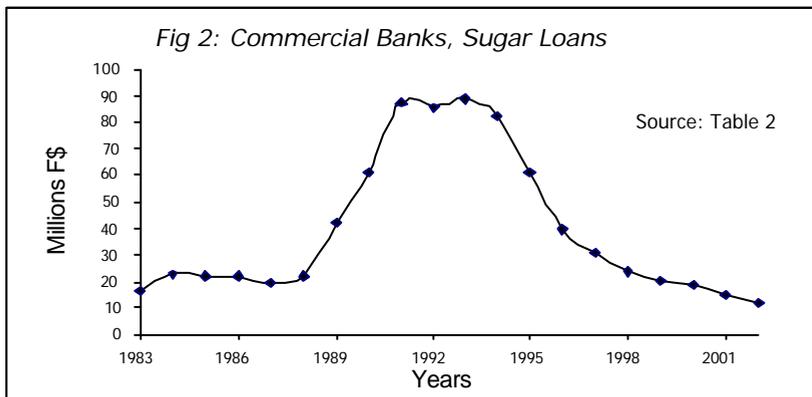
It must also be noted that the industry at this time was in a boom due to high sugar cane prices following the 1987 post-coup devaluations. While higher cane prices may indicate a lower need to rely on credit, the devaluations indicated that the farmers would continue to be credit worthy. In addition, the generally depressed investor confidence after the 1987 coups, saw an excess supply of credit. The bank had to find alternative means of getting the credit absorbed; the easiest and most immediate sector was sugar cane growing.

Of equal significance to the rapid increase in the FDB loans to cane growers is the equally rapid decline in these loans after 1994. The reasons for the decline would be discussed later.

Commercial Bank Lending

Commercial banks had generally been cautious to lending to the agricultural sector in Fiji. In fact a major reason for the establishment of the Fiji Development Bank was this caution which the commercial banks exercised. In the mid 1990's total commercial bank lending to the entire agriculture, fishery and forestry sector comprised only 10% of total commercial bank loans and advances. By 2002, this figure had fallen to 2.4%.

Figure 2 shows the trends in commercial bank lending to the sugar cane sector for the period for which data is available.



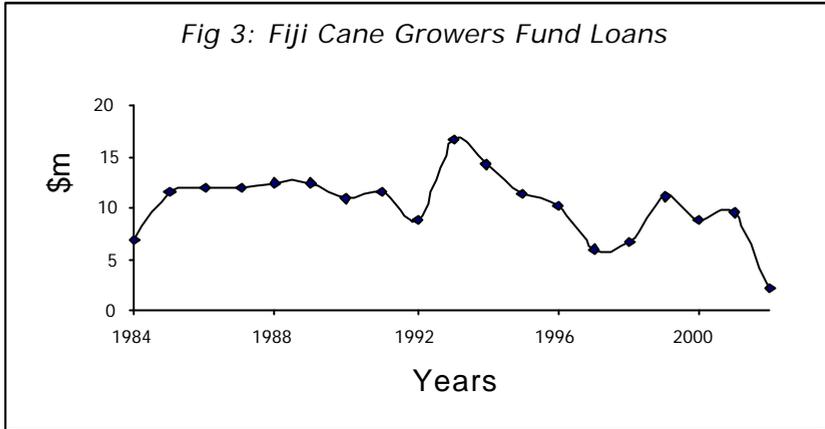
Commercial bank lending also follows a similar pattern as that for FDB lending: there was a massive increase in commercial bank loans and advances from 1989, reaching a peak of \$89m in 1993, after which it began an equally rapid slide, reaching a low of \$12m in 2002. The reasons for this behaviour in loan trends is unclear. But it is likely that the high liquidity in the banking system, following a period of depressed investor confidence, aided in changing the attention of commercial banks to sugar cane sector, a sector from which the commercial banks had generally kept away for long. Commercial bank loans to the sugar cane sector included loans for consumption. It is also likely that the relatively higher price of sugar cane raised the confidence of the cane farmers to spend money on durable goods, especially after about 5 years of depressed consumer confidence following the 1987 coups.

Sugar Cane Growers Fund Lending

The third major source of loan funds for cane growers is the Sugar Cane Growers Fund. This Fund was established by Sugar Cane Growers Fund Authority Act in 1984 on the basis of funds available in the Sugar Cane Price Support Fund.¹ The assets and funds of the Price Support Fund were transferred to the Sugar Cane Growers Fund. Funds to the tune of \$19.2m were so transferred. In 1996, the name of the institution was changed to Cane Growers Fund. The principal objective of the Fund is to make loans to sugar cane growers. Figure 3 shows loans from the Sugar Cane Growers Fund.

Trends in Cane Growers Fund loans show that it also reached a peak in 1993, at \$16m, after which it began declining, reaching a low of just over \$2m in 2002.

¹ The Sugar Cane Price Support Fund, earlier called the Sugar Price Stabilisation Fund, was established in 1959 under support from the Commonwealth Sugar Agreement of the ACP-EEC agreement. Funds from this source were hardly used to support sugar cane price in Fiji, thereby leading to an accumulation in the quantum of funds.



(Source: Table 2)

Total Loans

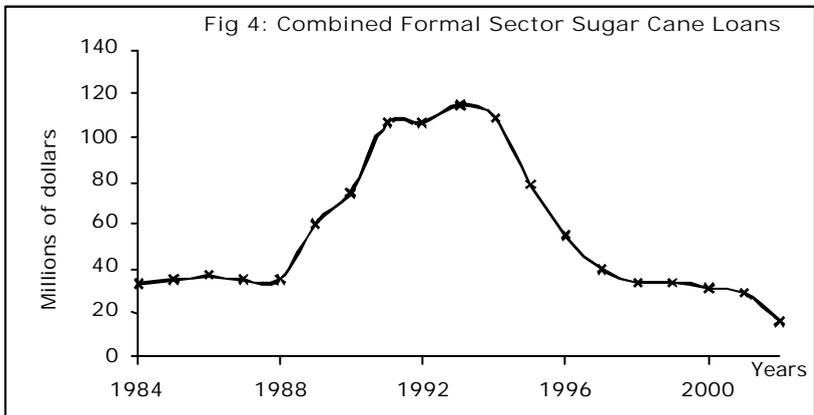
The combined formal sector loans and advances for sugar cane sector is shown in Table 2, and in Figure 4 below.

The bell shape of the formal sector credit to the sugar cane sector needs an explanation. One notable feature is that natural disasters in Fiji incur extensive damage to cane farms, buildings and farm infrastructure which require rehabilitation. Government assistance in these cases has been, with the exception of the 1998 drought relief assistance, insignificant. Other businesses re-coup losses from natural disasters by acquiring adequate insurance coverage. The absence of any such scheme for the farmers, inadvertently, means additional borrowings. Formal sector loan trends tend to correlate with the occurrence of natural disasters: Cyclones Wally in 1980, Oscar in 1983, Eric and Nigel in 1985, Fran in 1992, Kina and Oli in 1993, Garvin in 1997, a prolonged drought in 1998 and flooding in 1999. But the variations due to these disasters are small, and unable to explain the bell shape of the curve.

Table 2: Combined Sugar Sector Loans

Year	Sugar Cane Growers Fund Authority (\$m)	Fiji Development Bank (\$m)	Commercial Banks (\$m)	Total (\$m)	Loan Per Grower (\$)
1984	6.86	3.65	22.70	33.21	1501
1985	11.57	2.23	21.90	35.70	1648
1986	11.90	2.57	22.50	36.98	1667
1987	11.90	4.00	19.60	35.49	1595
1988	12.45	1.40	21.90	35.75	1615
1989	12.37	5.36	42.40	60.13	2762
1990	10.95	1.95	61.40	74.30	3483
1991	11.47	8.44	87.20	107.11	4765
1992	8.97	12.18	86.00	107.15	4592
1993	16.77	8.72	89.00	114.49	4882
1994	14.27	11.76	82.50	108.53	4665
1995	11.33	6.52	60.80	78.65	3504
1996	10.15	5.23	40.00	55.38	2483
1997	5.91	3.49	30.90	40.30	1824
1998	6.73	3.62	23.50	33.85	1529
1999	11.05	2.56	20.70	34.31	1547
2000	8.84	3.91	18.90	31.64	1427
2001	9.57	4.46	14.90	28.93	1322
2002	2.13	2.08	12.00	16.21	745

(Source: Sugar Cane Growers Fund Authority (various years), FDB (various years), RBF (various years)).



(Source: Table 2)

The increase in lending until 1988 can be stated to be a part of the normal industry growth trend. However, the massive jump in lending to farmers only 2 years after a major political upheaval in the country needs an explanation. According to the FDB annual reports, lending was made flexible and relaxed to cover a wider variety of loans in the late 1980's and early 1990's. The heavy liquidity in the banking system after 1987, and the continuing depressed investment climate, together with the increased cane prices following the 1987 devaluations, indicated that the cane industry could absorb the surplus funds. It is also a strong possibility that a significant share of the increased credit to the industry after 1988 was to finance consumption expenditure. But further research in the composition of the loans is needed to ascertain this.

Statistics show a very clear declining trend in loans to the sugar cane sector. In terms of loans per grower, there is also a marked decline from approximately \$4900 per grower in 1993 to approximately \$740 per grower in 2002.

This note does not delve into the exact reasons for the decline. One can, however, suggest possible reasons which could be investigated in future research.

Likely Causes

There are three categories of explanations for the trend. The first emerges from the behaviour of the existing growers. The second category emerges from the alternatives to formal sector loans. The third concerns the alternatives to loans for the sugar sector.

In the first category, come four possible explanations for the trend; these include the general lack of confidence in the sugar cane sector by the growers, the intergenerational shifts in occupational preferences, the lack of profitability of the industry, and the increasing reliance on remittance incomes by cane growers.

First, the fall in aggregate loans around mid-1990s is consistent with the apprehension over the non-renewal of native land leases, the sitting tenants re-locating in non-sugar endeavours and incoming farmers showing little enthusiasm working the taken-over farms. Land leases began expiring in 1997. But during the few years preceding 1997, the then management of the Native Lands Trust Board had started making statements that a majority of the leases would not be

renewed. This sent very clear signals to the lending institutions that loans made to farmers whose leases were expiring had high probabilities of default. One can expect bank lending to drop considerably because of this.

On the demand side, the agitation by the management of the NLTB, combined with frequent statements by extremists claiming to speak on behalf of landowners, diminished the confidence which the growers had in lease renewal and the general future of the sugar industry. The persistent failure of the government to address the issue of land leases also seems to have dampened the confidence of the growers of a future in the industry. These worked to reduce investments on both, the farm as well as consumption expenditure on durable goods, like house renovations, expansions, water supply projects, etc. The increasing age-profile of cane crops (see Reddy, 2003) is also an indicator of the lack of investment on the farms. Thus, there seemed to be both, reduced incentives by banks to make loans, as well as a reduced demand for bank loans.

Second, there seems to be a marked change in the preferences of the younger generations away from the sugar industry. Production of sugar cane is a physically demanding operation. It is back-breaking, has long work hours, necessitates work in intense heat, rain and mud, and at the end, does not produce any regular income, with net incomes being significantly lower than what alternative jobs command. Added to these are the constant uncertainty of leases, and demands for 'goodwill' payments, and kerekere² from people purporting to be landowners. The inaction of the law enforcement authorities to curtail such extortion compounds the problem of an increasing loss of confidence in the industry in particular, but in agriculture in general, by the younger generation. Those remaining within agriculture, and in sugar cane more specifically, are there either because they have access to large plots of land amenable to modern agricultural methods, or because there is no other choice open to them.

The average cane farm in Fiji is financially not viable. Growers have, over the past decade, increasingly been relying on income earned outside of cane farming to sustain their living standards. Farm-

² 'kerekere' is traditional Fijian customary borrowing without any necessary obligation to return the item or pay back the sum.

ers produce crops other than sugar cane, including livestock and poultry, which adds to their real income position. In addition, most farmers take on casual jobs during the non-peak season to supplement their incomes. Many farmers – the principal growers – even have full-time jobs elsewhere, leaving cane farming as a part-time engagement, relying on hired hands.

Finally, cane farming in Fiji is still largely an extended family affair. Almost every family in the cane district has family members working outside the farm. These incomes supplement incomes from sugar cane production. Since independence, farmers invested heavily in the education of their children, thereby reducing the reliance of their off-springs on farms and especially on leasehold land. It is expected that a large proportion of farmers have their children staying and working outside the cane farms, including staying and working in other countries. These children continue to contribute to the welfare of their parents. There is no reliable estimate of the level of remittance which cane farmers get from others, but this is expected to be significant.

These factors combine to reduce the reliance of growers on sugar cane production as their primary source of income, thereby depressing their demand for funds for farm investment. It also depresses the demand for funds from formal institutions as funds flow into the farming household from other sources.

The second category of possible explanation emerges from the alternatives to formal sector loans. It is expected that there has emerged a significant informal sector money market in Fiji. A combination of very high lending rates and high charges for commercial bank loans (like high legal fees, documentation charges, loan maintenance charges), and the very low deposit rates (see Jayaraman and Sharma, 2003), has reduced the incentives for cane farmers to borrow, and for people with surplus funds to invest in interest earning deposits. The search for alternatives by both, the growers and those with surplus funds, seems to have created a growing informal money market in the country. Often it turns out that members of the extended family, often staying away from the farms and engaged in relatively better paying jobs (like the civil service), have some surplus cash, which are lent to their cane farming relatives at reasonable interest rates for short term, often unusual consumption needs (like weddings, medical expenses), and purchase of durable

goods.

The third factor contributing to the declining bank loans to the cane industry concerns the inflow of funds into the sugar sector from the state. Since 2001, the government introduced a scheme where landowners who took cane farms back from leasees were allocated \$10,000 grant per farm for farm development, working capital, and consumption. Each year after 2001, upto \$10m of state funds flowed into the sugar cane sector. This tended to crowd out commercial bank and FDB lending to some extent.

It is expected that a combination of factors listed above have reduced formal sector lending to the sugar cane industry. The precise impact of each of these factors, however, could only be ascertained upon further empirical research.

What the present study shows is that there has been a steady decline in credit to the sugar cane sector. Data on the composition of lending to the sugar cane farmers is absent. The three main components of loans to the sugar industry are development loans, working capital loans, and private consumption loans. Factors like declining farm productivities and increasing crop age, indicate that farm development investment has fallen significantly. Thus, while there has been a rapid decline in credit taken by cane farmers, a significant proportion of credit seems to be devoted to consumption expenditure rather than farm development expenditure.

The total credit outstanding from formal sources for 2002 was \$16.2m. In real terms, this sum is lower than the total cane sector investment at the date when the Fiji Government took over the interests of the Colonial Sugar Refining Co. Ltd.

Conclusion

The sugar industry has been regarded as an important industry for Fiji. For the survival and growth of an industry, investment is necessary. The major source of investment within an industry is funds borrowed from outside the industry. This paper has examined the trends in loans given to the sugar cane production sector of the sugar industry. It shows a declining trend in loans to this sector from 1994. Credit to the sugar cane sector fell from a peak of \$114m in 1993, to a mere \$16.2m in 2002.

This is a significant decline. The paper also proposes some factors which may be responsible for the decline. Included amongst these are the general lack of confidence in the sugar cane sector by the growers, the intergenerational shifts in occupational preferences, the lack of profitability of the industry, and the increasing reliance on remittance incomes by cane growers. It is also suggested that farmers may now be turning to the informal money market to finance some of their borrowing needs. State grants to ethnic Fijians entering the sugar cane farming sector, also seems to crowd out bank loans. However, further empirical research is needed to confirm the reasons for the massive decline in formal sector credit to the industry.

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Gyaneshwar Rao is Assistant Lecturer in the Department of Economics at the University of the South Pacific, Suva. email: rao_gr@usp.ac.fj