PERI-URBAN ECONOMIC GROWTH IN AFRICA

THE BANCO POPULAR DE DESENVOLVIMENTO (BPD) AND FORMAL-INFORMAL FINANCIAL MARKET LINKAGES IN MAPUTO, MOZAMBIQUE

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Table of Contents

List of Tables

List of Appendix Tables

THE BANCO POPULAR DE DESENVOLVIMENTO (BPD) AND FORMAL-INFORMAL FINANCIAL MARKET LINKAGES IN MAPUTO, MOZAMBIQUE

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Douglas H. Graham and Antonio Alberto da Silva Francisco

This second phase of the peri-urban research agenda for Greater Maputo emphasizes the role of the Banco Popular de Desenvolvimento in the Maputo peri-urban area and the formal-informal financial market linkages of its peri-urban clientele. The first chapter of this report reviews the recent performance of the BPD as a lending institution. Among other things, this will entail an analysis of its changing portfolio for the seven year period from 1985 through 1991. This is followed by an analysis of its balance sheets and income statements for the five year period 1988 through 1992. This analysis allows one to evaluate the performance of the standard financial ratios over this period. The second chapter investigates the performance of the current portfolio by reviewing the loan repayment status of a randomly selected sample of borrowers from one principal branch and one office of the BPD servicing an urban and peri-urban clientele in Greater Maputo. The third chapter documents the supplier and client level informal financial networks characteristic of the BPD borrower-clientele. Chapters Four and Five assemble a number of specific case studies. Chapter Four focuses on three large borrwers from the Bank of Mozambique (and one from the BPD) while Chapter Five investigates case histories for four agricultural input supply firms. These case studies highlight the upstream and downstream financial linkages of the respondents to their suppliers and clients, and reviews their experience with formal financial institutions. It was felt that these targeted case studies in the agricultural input distribution area and in the large company borrower constituency could highlight important insights into financial market behavior and market linkages that would be distinct from the much smaller clientele sampled in the BPD branch and office data. A concluding chapter draws out the lessons from the study.

I. The Banco Popular de Desenvolvimento (BPD): Portfolio Shifts and Institutional Performance

A. Portfolio Profile 1985-91: From a Public to a Private Clientele

The BPD is the smaller of the two government banks that dominate Mozambique's financial markets. As of early 1992 only one other institution, a private bank (Standard Totta) functioned in the country and its operations were severely restricted in the services it could offer and the locations in which it could operate. Hence, during the period under review the Bank of Mozambique and the BPD largely constituted the banking industry in Mozambique. The former functioned as the Central Bank as well as the largest commercial bank in the country throughout this period. It's clientele was made up of all the large export companies run by the state along with many other large parastatal operations at this time. At this time it also dominated the foreign exchange market. By early 1992 efforts were launched to separate the commercial banking functions from the Central Bank with each constituting a separate institutional entity in its own right.

The BPD, though smaller than the Bank of Mozambique in terms of volume of transactions, nevertheless has an extensive network of branches and offices throughout the country consisting of 10 filiais (large branches) and 148 offices and collection posts. Many of the latter are merely deposit collecting units. This gave it a comparative advantage to service an agricultural clientele. At the same time, it was expected to promote development, as its title implied, and thus had a large component of longer term loans in its portfolio in the mid-1980s. On the whole, it dealt with a more numerous but smaller sized clientele than the Bank of Mozambique. Finally, the bank had a large branch and office network to mobilize deposits during this period. It also offers savings facilities through post office branches. However, as will be seen shortly, its deposit instruments have largely been non-interest bearing through 1992, thereby constituting a dubious service for savers given the high rates of inflation throughout this period. It would be best to refer to these as safe-keeping and transaction accounts rather than savings accounts. Finally, the development mandate permits the bank to take share holdings in enterprises. Recently, the government has chosen to reimburse the bank for some of the bad debts generated by bankrupt state clients by transferring ownership of several properties over to the bank. The bank also has equity in textile firms and other small enterprises. It has an equity capital department to manage these holdings.

It would be misleading to think of the BPD in the mid-1980s as a financial intermediary mobilizing savings from the public at large and granting loans again to the public at large. It was largely a conduit for government transfers to state enterprises and cooperatives. Private or individual borrowers represented only a negligible share of its outstanding volume of loans in mid-decade. Again, this is not surprising given the ideological orientation of the government at this time. This socialist focus obviously imposed this clientele on BPD authorities. However, the gradual shift in the political orientation of the government towards more market oriented policies from the mid-1980s to the early 1990s had a marked impact on the bank's portfolio composition. This is the principal finding from text tables I-1 and I-2 (derived from appendix tables I-1 and I-2) which trace out the changing composition and real growth of the portfolio in terms of "credito concedido," i.e. new loans issued each year. Appendix tables I-1 and I-2 present the nominal and real value time series respectively on new loans granted from 1985 to 1991. Several striking shifts in the portfolio from text tables I-1 and I-2 can be summarized as follows:

1. State entities declined rapidly as an important borrower of the BPD. Whereas in 1985 they accounted for 97 percent of the volume of short term loans, by 1991 this share had dropped to 10 percent. On the other hand, private sector borrowers increased from less than one percent in 1985 to 89 percent by 1991;

2. At the same time, agricultural lending declined from almost 60 percent of the portfolio in 1988 to only 25 percent in 1991. This strongly suggests that much agricultural lending had been channelled through the declining portfolio of state entities;

3. The industrial sector clientele also declined substantially from 40 percent of the portfolio (in terms of economic activity) in 1988 to roughly 15 percent in 1991. This also suggests that most industrial activities (particularly agro-industry) were undertaken in the declining state sector;

4. Bank lending increased sharply for commerce and services (trading activity, hotel, restaurants, and other personal service businesses), rising from less than one percent in 1988 to 53 percent in 1991. This reflects the rapid growth of commercial activity growing out of the relaxation of price controls and the liberalization of markets from the late 1980s onwards.

The predominance of short term loans in 1985 in table I-1, followed by a gradual decline up to 1989 and then an increase in 1991 is partially misleading. Loans to state enterprises and firms in the mid-1980s were largely in short term form. However, the bank invariably rescheduled these loans from the early through the middle 1980s so that they were in effect implicit long term loans. It would be more accurate to argue that there has been a shortening of the term structure of formal finance as the issue of new loans from 1987 to the present has shifted dramatically from public to private borrowers and from agriculture and industry to commerce and services.

This is clearly a logical direction for the bank to go. Much of the public sector agricultural and industrial portfolio were comprised of non-performing loans. They constituted an unacceptable risk for bank finance. Commerce and services, on the other hand, represent the classic sector of business benefiting from the liberalization measures promoting private market forces from the late 1980s onwards. On the whole the banks decision to reorient its portfolio towards these activities in the private sector represents an intelligent strategy of risk management.

TABLE I-1 PERCENT OF TOTAL APPROVED CREDIT ALLOCATION IN THE BPD BY TERM STRUCTURE, SECTOR, AND LEGAL JURISDICTION (1985-1991)

SELECTED CATEGORY	1985	1986	1987	1988	1989	1990	1991
SHORT-TERM							
LEGAL JURIS.							
State	97.05	96.66	89.77	87.49	55.45	28.74	10.38
Cooperative	2.04	1.56	3.31	1.46	0.57	1.14	1.94
Private Bus.	0.91	1.78	6.92	11.06	43.99	70.11	87.68
SECTOR							
Agriculture				58.72	39.22	49.54	25.32
Industry				40.72	53.60	31.77	14.82
Comm. Hotels				0.45	6.91	18.58	53.48
Construction				0.06	0.06	0.01	2.72
Transports				0.05	0.20	0.11	3.66
LONG-TERM							
LEGAL JURIS.							
State	49.40	23.66	60.13	14.81	7.10	12.12	13.25
Cooperative	27.15	25.37	5.50	0.59	0.68	0.89	0.01
Private Bus.	23.46	50.97	34.37	84.60	66.60	86.99	86.72
CCADR					25.63		
SECTOR							
Agriculture				50.53	30.22	39.63	31.95
Industry				42.39	32.58	32.05	29.09
Comm. Hotels				0.95	4.69	11.91	10.01
Construction				0.90	0.08	0.00	3.78
Transports				5.23	6.80	16.41	25.17
CCADR					25.63		
TERM STRUCT.							
Short-term	94.77	93.06	72.45	71.27	39.59	53.18	84.63
Long-term	5.23	6.94	27.55	28.73	60.41	46.82	15.37
LEGAL JURIS.							
State	94.56	91.59	81.60	66.60	26.24	20.96	10.82
Cooperative	3.35	3.21	3.91	1.21	0.63	1.03	1.64
Private Bus.	2.09	5.19	14.48	32.19	57.65	78.02	87.53
CCADR					15.48		
SECTOR							
Agriculture				56.37	33.78	44.90	26.34
Industry				41.20	40.90	31.90	17.01
Comm. Hotels				0.59	5.57	15.45	46.80
Construction				0.30	0.07	0.00	2.89
Transports				1.54	4.19	7.74	6.96
CCADR					15.48		

Source: Derived from appendix table I-1.

TABLE I-2 GROWTH INDICES FOR REAL CREDIT ALLOCATIONS IN THE BPD BY TERM STRUCTURE, SECTOR, AND LEGAL JURISDICTION (1985-1991)

	Approved Credit Allocation						
SELECTED CATEGORY	1985	1986	1987	1988	1989	1990	1991
SHORT-TERM							
LEGAL JURIS.							
State	100.00	71.00	25.01	47.32	29.49	12.37	9.92
Cooperative	100.00	54.60	43.89	37.49	14.30	2.32	88.16
Private Bus.	100.00	139.05	205.09	636.29	2488.58	3209.34	8910.75
SECTOR							
Agriculture				100.00	65.66	67.10	76.16
Industry				100.00	129.40	62.05	64.26
Comm. Hotels				100.00	1515.69	3294.82	21060.63
Construction				100.00	106.43	12.14	8496.68
Transports				100.00	372.62	163.99	12161.46
LONG-TERM							
LEGAL JURIS.							
State	100.00	46.10	226.72	114.90	205.04	163.32	81.77
Cooperative	100.00	89.96	37.72	8.38	35.63	21.91	0.15
Private Bus.	100.00	209.16	272.89	1382.68	4050.14	2469.43	1127.20
SECTOR							
Agriculture				100.00	222.54	136.22	50.28
Industry				100.00	286.01	131.34	54.58
Comm. Hotels				100.00	1843.72	2184.59	841.01
Construction				100.00	33.55	0.00	333.65
Transports				100.00	483.74	544.70	382.60
GRAND TOTAL	100.00	72.59	35.37	69.81	123.55	74.41	103.81
TERM STRUCT.							
Short-term	100.00	71.29	27.04	52.50	51.61	41.75	92.71
Long-term	100.00	96.26	186.24	383.36	1426.51	665.85	304.89
LEGAL JURIS.							
State	100.00	70.32	30.52	49.17	34.29	16.49	11.88
Cooperative	100.00	69.58	41.28	25.15	23.34	22.78	50.88
Private Bus.	100.00	180.19	244.87	1074.22	3404.80	2775.21	4343.90
SECTOR							
Agriculture				100.00	106.07	84.91	69.49
Industry				100.00	175.69	82.53	61.40
Comm. Hotels				100.00	1666.54	2784.28	11762.64
Construction				100.00	43.37	1.64	1433.79
Transports				100.00	481.01	535.35	671.82

Source: Derived from appendix table I-2 with initial year of real credit series equal to 100.

TABLE I-3 ASSETS FOR THE BANCO POPULAR DE DESENVOLVIMENTO (BPD) 1988-1992 (PERCENT OF TOTAL)

Uses (Assets)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
LIQUID ASSETS	36.27	40.53	34.28	22.23	19.95	41.61
Cash	1.99	1.10	2.45	3.07	2.23	1.72
Reserve Requirement	0.00	0.00	0.00	10.42	14.91	21.47
Dd. Dep. in Mozambique Bk.	25.75	33.58	30.72	2.93	1.47	15.40
Other Deposits in Banks	8.32	5.58	0.05	0.05	0.04	2.11
Dd. Dep. in For. Exchange	0.11	0.00	0.73	5.66	1.12	0.52
Time Dep. in For. Exchange	0.00	0.00	0.09	0.13	0.15	0.26
Miscellaneous	0.10	0.27	0.24	0.03	0.03	0.13
LOANS	46.16	44.25	51.22	59.64	63.30	47.12
State	6.17	4.23	3.75	3.82	2.84	0.00
War Veterans (CCADR)	5.29	3.96	4.97	3.88	2.73	2.72
Enterprises and Individuals	32.49	34.04	40.94	47.64	47.30	41.66
Sanctioned Overdrafts	0.00	0.00	3.87	3.33	2.10	4.06
Other Loans	11.14	20.15	22.93	28.94	26.49	33.29
Unsanct.Overdraft Acct	0.15	0.08	0.21	1.99	3.21	0.17
Loans in Arrears	20.17	13.55	13.53	12.63	14.03	3.20
Defaulted Loans	1.04	0.26	0.39	0.75	1.46	0.93
Loans in Irregular Status	2.21	2.02	1.56	2.47	5.98	1.24
State	1.61	1.42	0.19	0.16	4.02	0.10
War Veterans (CCADR)	0.00	0.00	0.59	1.26	0.94	0.35
Enter. and Indiv.	0.59	0.60	0.78	1.05	1.02	0.79
FINANCIAL AND OTHER ASSETS	16.67	11.64	9.52	14.73	13.98	6.95
Stocks, Bonds, and Other Financial Assets	1.96	1.52	1.57	1.40	2.77	1.31
Government Securities	1.79	0.76	0.64	0.43	0.32	0.39
Other Domestic Sec.	0.00	0.00	0.00	0.00	0.00	0.00
Other Financial Assets	0.17	0.76	0.93	0.97	2.45	0.92
Use of Designated Source Funds	0.50	0.41	0.32	0.26	1.56	0.20
Other Assets	14.21	9.71	7.63	13.07	9.65	5.45
FIXED ASSETS	0.90	3.59	4.98	5.18	7.10	5.82
Buildings	0.06	0.50	0.51	0.66	1.53	2.09
Equipment	0.71	2.67	3.64	2.96	2.94	2.72
Artistic Assets	0.00	0.03	0.03	0.03	0.10	0.03
Other Real Assets	0.10	0.00	0.00	0.02	0.02	0.02
Fixed As. in Construction	0.00	0.21	0.46	1.07	1.93	0.65
Other Fixed Assets	0.03	0.18	0.33	0.46	0.58	0.31
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00

Source: Derived from appendix table I-3.

TABLE I-4 LIABILITIES FOR THE BANCO POPULAR DE DESENVOLVIMENTO (IN MILLIONS OF CURRENT METICAIS)

Sources (Liabilities)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
DEPOSITS	86.64	87.57	86.72	88.62	88.84	85.88
Demand Deposits	81.12	81.94	79.62	81.99	81.40	78.02
Monetary Institutions	11.24	3.15	0.76	1.04	0.78	0.65
Financial Institutions	10.3	1.16	1.15	0.65	0.04	0.42
State	35.74	37.92	26.80	26.94	26.34	23.45
Enter. and Indiv.	33.11	39.72	50.92	53.36	54.24	53.45
State Enterprises	4.40	6.85	11.55	12.05	12.71	10.55
Cooperatives	0.44	0.44	0.61	0.31	0.49	0.16
Private Enterprises	3.28	5.02	3.06	4.40	5.64	4.13
Individuals	20.79	23.52	31.67	32.41	31.32	35.34
Other	4.20	3.90	4.03	4.19	4.08	3.27
Time Deposits	5.52	5.63	7.09	6.63	7.44	7.85
Up to 90 Days	0.21	0.23	0.25	0.38	0.51	0.31
From 90 to 180 Days	0.17	0.20	0.28	0.26	0.47	0.24
From 180 to 365 Days	1.38	1.42	1.66	1.40	1.61	1.05
From 1 to 2 Years	2.65	2.62	3.45	3.28	3.69	4.71
More Than 2 Years	1.11	1.17	1.46	1.30	1.16	1.54
FUNDS FROM DESIGNATED SOURCES	0.59	0.39	0.33	0.26	0.19	0.21
OTHER LIABILITIES	10.60	9.11	10.63	8.89	6.74	8.41
Domestic Currency Borrowers	0.14	0.07	0.06	0.05	0.04	0.04
Accounts Payable	4.00	4.31	6.36	4.92	4.22	4.71
Domestic Currency Creditors	1.53	2.07	2.12	2.20	1.57	2.09
Other Liabilities	4.94	2.65	2.09	1.72	0.91	1.57
CAPITAL AND RETAINED EARNINGS	2.17	2.93	2.33	2.23	4.23	5.50
Social Capital	0.80	0.53	0.44	0.35	4.15	3.93
Miscellaneous	1.37	2.41	1.88	1.89	0.08	1.57
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00

Source: Derived from appendix table I-5.

Text table I-2 confirms the trends set forth in table I-1, however, it also highlights the sharp rises and declines discussed earlier in terms of an index of real (constant meticais) credit derived from appendix table I-2 for the period 1985 to 1991. Short term loans to agriculture by 1991 had declined in real terms to 75 percent of their value in 1988, industry 64 percent, and, of course, commerce, construction and transport loans grew exponentially from their infinitely small bases in 1988, the first year for data structured conveniently by sector of activity. The long term loan growth indices in the middle panel of table I-2 show roughly the same pattern, but reflect an even greater relative decline in new agricultural and industrial loans in 1991 to approximately one-half their real values in 1988. The longer time series from 1985 to 1991 confirms the earlier findings of a rapid decline of new loans issued to state clients (a 90 percent fall in real terms) and an exponential rise in private business loans.

Overall, there was a substantial decline in total credit from 1985 to 1987 as seen in the last line in table I-2 tracing out the grand total of real credit. By 1987, total credit in real terms declined to only 35 percent of its value in 1985. These were years of rapid inflation which eroded the real value of the loan portfolio. The rapid decline in loans to agricultural and industrial state enterprises in real terms overwhelmed the smaller rise in loans to private business to create the overall decline in real credit during this two year period. From 1987 to 1991, however, the rapid growth in private sector real credit to commerce, transport and construction activities weighted more heavily than the continuing decline in loans to public sector entities. By 1991, after this portfolio restructuring, the flow of new loans had recovered in real terms to roughly the level recorded back in 1985.

B. An Analysis of the Balance Sheet 1988-92

1. The Profile of Assets and Liabilities

Appendix tables I-3 and I-4 set forth the nominal and real time series for assets and Appendix tables I-5 and I-6 for liabilities (i.e. the balance sheet) of the BPD for the five year period 1988 through 1992. This is the strategic period during which the bank was privatizing its clientele. Tables I-3 and I-4 in the text are derived from these appendix tables and underscore the relative composition of assets and liabilities respectively, while text tables I-5 and I-6 highlight the real growth trends. In table I-3, it is evident that loans comprise the major component of total assets, moreover this share has been increasing from 1988 (46 percent) to 1992 (63 percent). This latter figure is close to the average loan share of assets recorded in the U.S. banking industry in the past decade.

Financial assets (i.e. government securities), on the other hand, are greatly underrepresented in the balance sheet of the BPD, accounting for no more than 14 percent of total assets in 1991 and 1992. In contrast, short term securities in the U.S. banking industry have fluctuated between 25 and 33 percent of assets in the past decade. The shortfall of financial assets in the BPD portfolio of course reflects the underdeveloped market for interest earning government securities in Mozambique. This market limitation greatly increases the portfolio risk for the BPD. It is unable to diversify its portfolio through the purchase of relatively risk-free short term securities as financial institutions do in more developed financial markets. This is an area in which there is a role for international donors, namely, to contribute to the creation of a government securities market. Among other things, the creation of a securities market introduces a valuable tool for the government to manage the money supply through open market operations as well as offering a valuable short term interest earning asset for the healthy diversification of assets in the banking industry. Until this occurs, banks such as the BPD will be induced to lend beyond an acceptable risk adjusted threshold to riskier customers since there is no alternative asset available to balance their portfolios.

One consequence of not having an active market in government securities can be seen in the very high level of liquid assets recorded in table I-3. The extremely high ratios of liquid assets to total assets from 1988 to 1990 (between 34 and 40 percent) is not normal and clearly reflects monetary regulations from the Bank of Mozambique to control the money supply through high liquid reserve requirements (credit ceilings or "plafons") in the absence of formal reserve requirements. The 20 to 22 percent level registered for 1991 and 1992 when reserve requirements were finally developed to control the money supply are more reasonable. However, one must remember that these liquid assets earn no interest and in an annual inflationary environment of 40 to 50 percent inflation characteristic of Mozambique in recent years, this high level of liquid reserves lose their real value rapidly. In effect, it becomes a tax on the non-loan assets of the BPD. In summary, the absence of a securities market deprives the BPD of an important financial product with which it could diversify its portfolio. The bank has only two choices: to issue loans in a risky market or hold substantial reserves in liquid form and be taxed through the inflation tax.

Ordinarily a bank is anxious to loan out its deposits to earn sufficient interest revenue to cover its cost of funds (i.e. the interest charges on its deposits). A quick inspection of the composition of liabilities in table I-4 indicates that this pressure has not been present in the BPD since it draws its funding resources overwhelmingly (i.e. 80 percent) from demand deposits that are practically interest free. Interest bearing time deposits represent no more than 6 to 7 percent of total liabilities. These shares are in sharp contrast to the liability structure of a bank operating in a developed financial market like the United States where interest free demand deposits would represent no more than 15 to 20 percent of total liabilities. In short, the BPD can survive the high inflation tax on its relatively high share of non-interest earning liquid assets since it is fortunate in being able to draw heavily on non-interest bearing deposits.

TABLE I-5 REAL GROWTH INDICES FOR ASSETS FOR THE BPD 1988-1992 (1988 = 100)

Uses (Assets)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
LIQUID ASSETS	100.00	120.79	83.85	49.07	58.92	85.73
Cash	100.00	59.66	109.46	123.21	120.33	64.55
Reserve Requirement				100.00	191.83	192.67
Dd. Dep. in Bank of Mozambique	100.00	140.94	105.80	9.09	6.12	44.69
Other Deposits in Banks	100.00	72.49	0.57	0.48	0.48	18.92
Dd. Dep. in For. Exchange	100.00	0.00	579.74	4030.39	1066.74	348.93
Time Dep. in For. Exchange			100.00	124.93	198.74	238.43
Miscellaneous	100.00	307.73	218.66	21.25	30.56	102.50
LOANS	100.00	103.63	98.43	103.23	136.58	76.29
State	100.00	74.10	53.88	49.45	49.33	0.00
War Veterans (CCADR)	100.00	80.92	83.38	58.62	55.32	38.45
Enterprises and Individuals	100.00	113.25	111.78	117.16	155.95	95.81
Sanctioned Overdrafts			100.00	77.43	65.59	88.24
Other Loans	100.00	195.54	182.67	207.61	254.80	223.38
Unsanct.Overdraft Acct	100.00	55.30	128.80	1076.46	2327.39	85.97
Loans in Arrears	100.00	72.64	59.50	50.02	74.49	11.87
Defaulted Loans	100.00	27.37	33.33	58.16	151.39	67.26
Loans in Irregular Status	100.00	99.06	62.62	89.51	290.29	41.97
State	100.00	95.24	10.42	7.82	266.73	4.85
War Veterans (CCADR)			100.00	194.57	194.62	50.16
Enter. and Indiv.	100.00	109.49	117.11	141.41	183.89	99.06
FINANCIAL AND OTHER ASSETS	100.00	75.46	50.66	70.60	90.58	31.17
Stocks, Bonds, and Other Financial Assets	100.00	83.74	70.94	57.20	151.31	49.90
Government Securities	100.00	45.72	31.79	19.31	19.48	16.44
Other Domestic Sec.	100.00	71.43	49.60	34.93	34.93	24.60
Other Financial Assets	100.00	473.57	472.46	445.80	1503.77	393.14
Use of Designated Source Funds	100.00	88.23	57.49	40.93	333.59	29.72
Other Assets	100.00	73.87	47.62	73.49	73.65	28.63
FIXED ASSETS	100.00	432.55	492.67	461.69	848.10	485.29
Buildings	100.00	953.70	804.11	929.35	2907.11	2764.85
Equipment	100.00	406.46	455.54	333.01	443.25	286.62
Artistic Assets		100.00	85.47	68.65	354.55	66.23
Other Real Assets	100.00	0.00	2.89	14.55	25.91	12.30
Fixed As. in Construction		100.00	176.67	367.62	892.02	211.03
Other Fixed Assets	100.00	553.56	836.47	1042.36	1767.96	670.90
TOTAL	100.00	108.10	88.71	79.91	107.12	74.73

Source: Derived from real asset series reported in appendix table I-4.

TABLE I-6 REAL GROWTH INDICES FOR LIABILITIES FOR THE BPD 1988-1992 (1988 = 100)

Sources (Liabilities)	1988	1989	1990	1991	1992	1992 Goals
	Outstanding Balances on 12/31					
DEPOSITS	100.00	109.26	88.79	81.73	73.15	74.07
Demand Deposits	100.00	109.19	87.08	80.76	72.99	71.88
Monetary Institutions	100.00	30.26	5.97	7.38	5.18	4.35
Financial Institutions	100.00	121.73	99.28	50.50	43.54	30.46
State	100.00	114.68	66.52	60.23	63.10	49.03
Enter. and Indiv.	100.00	129.66	136.41	128.77	107.60	120.63
State Enterprises	100.00	168.21	232.79	218.75	206.73	179.24
Cooperatives	100.00	108.77	124.41	57.34	35.08	26.98
Private Enterprises	100.00	165.46	82.67	107.27	107.85	94.07
Individuals	100.00	122.26	135.13	124.56	92.00	126.99
Other	100.00	100.24	85.00	79.61	88.28	58.18
Time Deposits	100.00	110.23	113.92	95.93	75.50	106.31
Up to 90 Days	100.00	117.23	106.97	146.92	122.34	112.67
From 90 to 180 Days	100.00	125.74	142.63	120.73	112.79	102.03
From 180 to 365 Days	100.00	110.86	106.29	81.14	66.12	56.65
From 1 to 2 Years	100.00	106.93	115.49	98.94	76.80	132.89
More Than 2 Years	100.00	113.60	116.53	93.72	69.48	104.12
FUNDS FROM DESIGNATED SOURCES	100.00	71.14	49.67	34.98	24.63	26.56
OTHER LIABILITIES	100.00	92.91	88.96	67.01	47.96	59.33
Domestic Currency Borrowers	100.00	57.47	39.91	28.11	19.79	19.79
Accounts Payable	100.00	116.62	141.17	98.38	65.48	88.10
Domestic Currency Creditors	100.00	146.42	122.95	115.20	86.25	102.50
Other Liabilities	100.00	58.14	37.54	27.78	22.71	23.79
CAPITAL AND RETAINED EARNINGS	100.00	146.20	95.11	82.23	79.33	189.37
Social Capital	100.00	71.43	49.60	34.93	24.60	368.99
Miscellaneous	100.00	189.48	121.45	109.60	111.00	85.41
TOTAL	100.00	108.10	88.71	79.91	70.33	74.73

Source: Derived from real liabilities series reported in appendix table I-6.

TABLE I-7 REAL RATE OF INTEREST[1] ON DEPOSITS (BY TERM MATURITIES) AND THE REDISCOUNT RATE IN MOZAMBIQUE

	FROM JANUARY 1987 TO SEPTEMBER 1992			
TERM PERIOD	90 Days	181-365 Days	1-2 Years	More Than 3 Yrs
A. DEMAND DEPOSITS				
January 1, 1987	-60.88	-60.88	-60.88	-60.88
January 1, 1988	-31.38	-31.38	-31.38	-31.38
January 1, 1989	-26.43	-26.43	-26.43	-26.43
March 1, 1990	-28.47	-28.47	-28.47	-28.47
July 1, 1991	-27.46	-27.46	-27.46	-27.46
B. TIME DEPOSITS				
January 1, 1987	-57.46	-55.94	-55.18	-54.42
January 1, 1988	-25.38	-22.72	-21.39	-20.05
January 1, 1989	-20.00	-17.14	-15.71	-14.29
September 1, 1989	-18.57	-15.71	-14.29	-12.86
March 1, 1990	-18.06	-16.67	-15.28	-13.89
November 1, 1990	-10.42	-9.03	-8.33	-6.94
July 1, 1991	-9.15	-7.04	-6.34	-4.93
September 23, 1991	-2.82	-1.41	-0.70	0.00
C. REDISCOUNT RATE FROM THE CENTRAL BANK				
1. Up To 6% of Demand Deposits				
January 1, 1987	-58.22	-58.22	-58.22	-58.22
January 1, 1988	-26.72	-26.72	-26.72	-26.72
January 1, 1989	-21.43	-21.43	-21.43	-21.43
March 1, 1990	-23.61	-23.61	-23.61	-23.61
July 1, 1991	-9.86	-9.86	-9.86	-9.86
September 23, 1991	-6.34	-6.34	-6.34	-6.34
2. More Than 6% of Demand Deposits				
January 1, 1987	-57.46	-57.46	-57.46	-57.46
January 1, 1988	-25.38	-25.38	-25.38	-25.38
January 1, 1989	-20.00	-20.00	-20.00	-20.00
March 1, 1990	-22.22	-22.22	-22.22	-22.22
July 1, 1991	-8.45	-8.45	-8.45	-8.45
September 23, 1991	-4.93	-4.93	-4.93	-4.93

(1) Real interest rates were determined according to the following formula: $(i-p)/(1+p)$ where i = nominal interest rate and p = rate of inflation.

Source: Nominal interest rates from circulars of Bank of Mozambique. Inflation data from consumer price index series in *Informação Estatística*, various years 1986-92.

TABLE I-8 REAL RATES OF INTEREST[1] ON LOANS BY SECTOR[2] AND SELECTED TERM MATURITIES FROM JANUARY 1987 TO SEPTEMBER 1992[3]

SECTORAL PERIOD	90 Days	181-365 Days	1-2 Years	More Than 3 Yrs
1. Agr., Livestock, Fishing, Consumer Goods Ind., and Export Sector				
January 1, 1987	-57.08	-55.56	-54.80	-54.04
January 1, 1988	-24.72	-22.05	-20.72	-19.39
January 1, 1989	-18.57	-17.14	-12.86	-12.86
September 1, 1989	-17.14	-16.43	-12.86	-12.86
March 1, 1990	-18.75	-18.06	-15.28	-15.28
November 1, 1990	-16.67	-11.11	-9.03	-9.03
July 1, 1991	-9.51	-8.45	-7.04	-7.04
September 23, 1991	-6.69	-5.28	-4.93	-4.93
April 1, 1992	-2.11	-1.41	-0.70	0.00
2. Industry, Construction, Transport Cooperatives, and Utilities				
January 1, 1987	-56.70	-55.18	-54.42	-53.67
January 1, 1988	-24.05	-21.39	-20.05	-18.72
January 1, 1989	-15.71	-12.86	-11.43	-10.00
September 1, 1989	-14.29	-11.43	-10.71	-9.29
March 1, 1990	-16.67	-13.89	-13.19	-11.81
November 1, 1990	-9.72	-8.33	-7.64	-6.25
July 1, 1991	-9.51	-8.45	-7.04	-7.04
September 23, 1991	-6.69	-5.28	-4.93	-4.93
April 1, 1992	-2.11	-1.41	-0.70	0.00
3. Hotels (Tourism), Wholesale and Retail (Trade), Services, Restaurants, and Individual Loans				
January 1, 1987	-54.81	-53.41	-52.65	-51.32
January 1, 1988	-20.72	-18.27	-16.94	-14.61
January 1, 1989	-10.00	-7.14	-5.71	-4.29
September 1, 1989	-8.57	-5.71	-5.00	-3.57
March 1, 1990	-11.11	-8.33	-7.64	-6.25
November 1, 1990	-5.56	-4.17	-2.78	-1.39
July 1, 1991	-5.63	-4.23	-2.82	-1.41
September 23, 1991	-4.23	-2.82	-1.41	0.00
April 1, 1992	-2.11	-1.41	-0.70	0.00

(1) Real interest rates were determined according to the following formula: $(i-p)/(1+p)$ where i = nominal interest rate and p = rate of inflation.

(2) From January 1st 1987 to January 1st 1989 the priority sectors level 1, category 3 and levels 2 and 3 were merged to fit into the priority format governing from January 1989 to April 1992.

(3) In April 1992 all sectoral interest rate differentials were eliminated as one rate ruled for all activities within the same term maturity.

Source: Nominal interest rates from circulars of Bank of Mozambique. Inflation data from consumer price index series in *Informação Estatística*, various years 1986-92.

TABLE I-9 CHANGING SHARES OF MAJOR COMPONENTS OF TOTAL INCOME AND TOTAL EXPENSES FOR THE BPD FROM 1988 TO 1992

	1988	1989	1990	1991	1992	1992 Goals
I. SHARE OF TOTAL EXPENSES						
Interest on Dep. and Savings Accts	0.28	0.23	0.20	0.20	0.16	0.13
Personnel Costs	0.48	0.41	0.42	0.36	0.47	0.51
Material Expenses	0.10	0.12	0.12	0.10	0.09	0.08
Third Party Services	0.11	0.14	0.20	0.16	0.13	0.12
Cost of Foreign Ex. Operations	0.00	0.00	0.00	0.00	0.04	0.04
Other Costs	0.02	0.02	0.02	0.02	0.01	0.02
Depreciation Allowance	0.00	0.00	0.00	0.08	0.05	0.05
Loan Loss Provision	0.00	0.07	0.04	0.08	0.04	0.05
Total	1.00	1.00	1.00	1.00	1.00	1.00
II.SHARE OF TOTAL INCOME						
Interest Outstanding Loans	0.87	0.89	0.89	0.88	0.73	0.73
Interest Financial Assets	0.02	0.01	0.03	0.00	0.01	0.00
Income from Bank Services	0.02	0.02	0.02	0.01	0.02	0.02
Other Bank Income	0.09	0.08	0.07	0.09	0.10	0.06
Income from Foreign Ex. Operation	0.00	0.00	0.00	0.02	0.12	0.17
Total	1.00	1.00	1.00	1.00	1.00	1.00

Source: Derived from appendix tables I-7 and I-8.

TABLE I-10 REAL GROWTH INDICES OF INCOME IN THE BPD 1988-1991 (BASED ON CONSTANT 1985 METICAIS)
(YEAR WITH FIRST RECORDED VALUE = 100)

Income	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
1. INTEREST INCOME ON OUTSTANDING LOANS	100.00	137.54	129.71	140.43	187.88	196.46
State Entities	100.00	180.35	102.92	81.21	83.02	0.00
Financial Institutions	100.00	122.11	55.91	0.00	0.00	0.00
Enterprises and Individuals	100.00	140.71	145.55	170.65	228.38	239.07
Sanct. Overdrt. Accts.			100.00	0.00	0.00	0.00
Other Loans	100.00	107.95	131.95	159.16	192.71	217.54
Delinquent Loans	100.00	361.36	224.58	173.80	261.93	445.84
Defaulted Loans	100.00	3.86	19.44	79.77	121.00	75.13
Unsanctioned Overdrt. Accts.	100.00	112.36	175.31	461.57	981.60	25.39
Miscellaneous	100.00	485.70	1594.70	265.47	172.20	12.30
2. INCOME FROM FINANCIAL ASSETS	100.00	85.90	170.39	0.00	52.71	0.00
Government Securities	100.00	85.90	80.01	0.00	52.71	0.00
Other Securities			100.00	0.00	0.00	0.00
3. INTEREST FROM OTHER ASSETS			100.00	915.48	3471.57	0.00
Bank of Mozambique Deposits			100.00	915.48	3471.57	0.00
Other Bank Deposits						
4. INCOME FROM BK. SERVICES	100.00	101.45	122.66	62.12	248.99	185.49
5. OTHER BANK INCOME	100.00	118.17	93.06	130.39	232.45	205.07
6. INCOME FROM FOREIGN EXCHANGE OPERATIONS			100.00	53485.37	508089.48	743908.46
INCOME TOTAL	100.00	133.98	127.04	137.93	217.43	232.41

Source: Derived from real income series reported in appendix table I-9.

The real losers are savers who have suffered from high levels of negative real rates of interest. Text tables I-7 and I-8 illustrate the trend in real interest rates for depositor-savers and borrowers, respectively. It is quite clear that depositor-savers in table I-7 have paid a high price for inflation and the lack of any significant interest bearing instruments in Mozambique's rudimentary financial markets. They have been implicitly taxed by the inflation tax while borrowers in table I-8 have been implicitly subsidized by enjoying equally high real negative rates of interest during the late 1980s. Only in late 1991 and early 1992 have nominal interest rates risen to about equal the rate of inflation as a result of a greater liberalization of nominal interest rates.

2. The Profile of Growth: Assets and Liabilities

As mentioned earlier, text tables I-5 and I-6 set forth the growth indices for real assets and liabilities during the period 1988-92. Table I-5 shows that total assets fell in real terms in 1990 and 1991 but recovered by 1992 to slightly exceed the real level of assets recorded in 1988. By 1992, liquid assets had declined to a bit less than 60 percent of their value in 1988. Loans, on the other hand, were roughly constant in real terms from 1988 through 1991 but quickly grew 36 percent more in real terms in 1992, underscoring the fact that the BPD recently has chosen to reallocate a growing share of its portfolio from non-interest earning to interest earning assets. Finally, table I-6 indicates that total liabilities have declined to roughly 70 percent of their real value in 1988. Given the lack of any meaningful incentives for formal savings in the inflationary environment of Mozambique during this period, it is not surprising to note the decline in liabilities in real terms.

C. Income and Expense Statements: Analysis of Composition and Trends 1988-92

Appendix tables I-7 and I-8 document the nominal (current value) time series for the BPD's income and expenses respectively while appendix tables I-9 and I-10 set forth the real (constant value) time series for the same statements. The first finding of note is that for the most recent three years (1990 through 1992) the BPD has recorded losses, i.e. total nominal expenses in appendix table I-8 are greater than total nominal income recorded in appendix table I-7 for these years. The bank has clearly encountered difficulties in generating net profits.

It is instructive in light of these findings to review the changing composition of income and expenses in text table I-9 and the real growth indices for both assets and liabilities in text tables I-10 and I-11 derived from the respective appendix tables. Interest on deposit accounts have actually declined substantially as a percent of total costs in table I-9 from the late 1980s to 1992. The principal components that account for the rise in costs from 1989 to 1992 are the rise in costs associated with third party services (primarily maintenance and repair) in 1990, the rapid rise in salaries and related fringe benefits in 1992 and the emergence of loan-loss provisions from 1989 and amortization allowances from 1991 onwards. One suspects that if loan loss provisions has been appropriately charged in 1988 and amortization allowances in 1988 and 1989, the bank would have registered losses throughout the entire five year period. Text table I-11 disaggregates these expense categories in greater detail and sets forth their growth in real terms from 1988 to 1992.

The second panel in table I-9 indicates no great shift in the relative share of income sources except for the year 1992 when the relative income earned from loan activity declined to 73 percent of total income and income from foreign exchange operations rose sharply to 12 percent of total earnings. Table I-10 presents in greater detail the growth in real terms of the various components of income from 1988 to 1992. It is apparent in comparing the bottom lines of tables I-10 and I-11 that total expenses in real terms in table I-11 rose more rapidly than total real income from 1990 through 1992, moreover, in 1991 and 1992 real costs rose substantially more than real income clearly contributing to the losses recorded for those years.

D. Financial Ratio Analysis: Institutional Performance 1988-92

The preceding discussions and documentation have established the basic parameters determining the performance of the BPD during the past five years. Table I-12 summarizes this record through a range of financial ratios and other performance indicators. Among the general financial indicators the loan deposit ratio indicates that loans have increased from roughly one-half of the deposit base to 71 percent by 1992. This reflects the effort of the BPD to privatize and expand its loan portfolio in recent years. The loan asset ratio shows that loans have also increased their share of total assets (table I-12, line I-B) from 46 to 63 percent over the same period. Finally, deposits have maintained their preponderant role (87 to 89 percent) of total liabilities. At the same time that loans were increasing as a share of deposits and of assets, liquid assets in line II-G of table I-12 were declining rapidly. As pointed out earlier, the bank was no longer required to hold or sterilize a large liquid asset balance within rigid credit ceilings to control the money supply with the adoption of formal reserve requirements after 1990. All these results highlight the bank's drive to lower its deadweight burden of non-income earning liquid assets and to increase its only available income earning asset, i.e. loans, given the absence of a short term government securities market in Mozambique. It was giving up liquidity to gain an increase in returns, but at the cost of increased risk as we shall see shortly.

The gross return on assets (made up principally by the gross return on loans in line II-A-1 of table I-12) is relatively low and has increased only modestly during this period. Considering the large interest rate margins in line II-H and the high nominal rates of interest charged on loans in recent years, i.e. 30 to 40 percent, the 7 percent gross return on loans registered for most of these years is unusually low. The reason for this large gap is due to the high level of default and delinquency in the portfolio (line II-B-1). These non-performing loans accounted for about half the portfolio in 1988. By 1992, this had declined to roughly 25 percent. However, there is likely a higher burden of default than these official figures suggest from balance sheets and income statements available in the appendices. A separate loan repayment analysis by the OSU team of a randomly selected sample from a branch and an office of the BPD indicates a continuing high level of delinquency or arrears as will be discussed shortly.

TABLE I-11 REAL GROWTH INDICES OF EXPENSES IN THE BPD 1988-1992 (BASED ON CONSTANT 1985 METICAIS)
(YEAR WITH FIRST RECORDED VALUE = 100)

Expenses	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
1. DEPOSIT AND SAVINGS ACCOUNTS INTEREST COSTS	100.00	109.95	108.29	142.12	165.80	121.24
Interest costs demand dep.	100.00	99.52	72.71	23.14	2.12	0.82
Interest costs time dep.	100.00	115.09	125.82	200.74	246.44	180.57
Other Financial Costs						
2. PERSONNEL COSTS	100.00	111.55	128.43	146.72	277.16	266.29
Basic Salary	100.00	106.31	111.17	95.37	188.21	197.15
Complimentary Pay	100.00	111.38	158.18	164.72	393.44	317.71
Social Security Charge	100.00	141.07	169.03	287.81	633.78	637.88
Other Charges	100.00	532.13	1055.28	7999.10	2816.64	2060.21
3. MATERIAL EXPENSES FOR THIRD PARTY SERVICES	100.00	151.88	173.74	203.27	250.01	199.06
Light and Water Charges	100.00	114.84	146.86	157.05	292.30	282.17
Gas and Transport	100.00	142.20	267.70	385.08	302.65	260.90
Office Supplies	100.00	13.23	146.77	197.48	203.25	167.63
Office Equipment		100.00	86.38	71.17	735.00	659.40
Maintenance and Repair		100.00	237.82	151.05	430.83	338.73
Other Supply Expenses	100.00	32.14	6.38	26.90	316.63	191.52
4. SERVICE CHARGES BY THIRD PARTIES	100.00	163.67	257.94	283.60	337.53	263.14
Maintenance and Repair	100.00	471.65	556.53	574.26	665.01	484.61
Transport Expenses		100.00	91.55	106.07	0.00	0.00
Telephone and Communication	100.00	94.92	194.00	241.18	316.51	192.42
Advertising		100.00	170.13	141.25	0.00	0.00
Public Relations		100.00	179.16	168.97	0.00	0.00
Travel and Lodging	100.00	138.39	266.40	307.01	378.42	346.03
Training		100.00	154.01	185.68	0.00	0.00
Other Services	100.00	17.17	52.53	52.42	260.09	26.26
5. COST OF FOREIGN EXCHANGE OPERATIONS				100.00	146884.45	152920.80
6. OTHER COSTS	100.00	142.76	143.31	170.83	164.88	239.01
7. AMMORTIZATION ALLOWANCES	100.00	71.43	49.60	7002.70	5381.14	5381.14
8. LOAN LOSS PROVISIONS		100.00	69.44	166.50	127.91	127.91
COST TOTAL	100.00	131.26	148.89	199.72	283.40	254.36

Source: Derived from real expense series reported in appendix table I-10.

TABLE I-12 GENERAL FINANCIAL RATIOS AND PERFORMANCE INDICATORS FOR THE BPD FROM 1988 TO 1992

Indicators	1988	1989	1990	1991	1992	1992 Goals
I. GENERAL FINANCIAL INDICATORS						
A. Loan-Deposit Ratio	0.53	0.51	0.59	0.67	0.71	0.55
B. Loan-Asset Ratio	0.46	0.44	0.51	0.60	0.63	0.47
C. Deposit-Liability Ratio	0.87	0.88	0.87	0.89	0.89	0.86
II.SELECTED PERFORMANCE INDICATORS						
A. GROSS RETURN ON ASSETS	0.030	0.037	0.043	0.051	0.060	0.093
1. GROSS RETURN ON LOANS	0.056	0.074	0.074	0.076	0.070	0.144
a. Return on State Ent. Loans	0.001	0.002	0.002	0.002	0.002	0.000
b. Return on CCADR	0.086	0.130	0.052	0.000	0.000	0.000
c. Return on Pvt. Sector Loans/Assets (Enterprises and Individuals)	0.064	0.082	0.084	0.093	0.127	0.092
2. GROSS RETURN ON NON-LOANS	0.007	0.007	0.010	0.015	0.044	0.047
a. Return on Fin. Assets	0.031	0.032	0.075	0.000	0.011	0.000
b. Return on Deposits	0.000	0.000	0.000	0.000	0.000	0.000
c. Return on Foreign Exchange Holdings (1)	0.000	0.000	0.000	0.018	0.590	2.000
B. NET RETURN ON ASSETS	0.003	0.005	-0.001	-0.014	-0.014	0.003
1. Delinquency Ratio (2)	0.459	0.312	0.272	0.224	0.245	0.088
C. DEBT-EQUITY RATIO	45.087	33.077	41.985	43.784	39.860	17.188
D. DEBT-ASSET RATIO	0.978	0.971	0.977	0.978	0.976	0.945
E. INTEREST PAID TO DEPOSIT RATIO	0.008	0.008	0.010	0.015	0.019	0.014
1. Demand Deposits	0.003	0.003	0.002	0.001	0.000	0.000
2. Time Deposits	0.088	0.092	0.097	0.184	0.287	0.150
F. NON-DEPOSIT EXPENSE TO LOANS RATIO	0.041	0.055	0.069	0.089	0.092	0.165
1. Personnel Costs to Loans	0.028	0.030	0.036	0.039	0.052	0.096
2. Non-Personnel Costs to Loans	0.014	0.026	0.033	0.049	0.040	0.069
G. LIQUIDITY RATIO (3)	0.419	0.463	0.395	0.134	0.085	0.235
H. GROSS FINANCIAL MARGINS (AVE. REAL INTEREST ON LOANS- AVE.REAL INTEREST ON DEPOSITS)	15.24	15.41	15.56	18.76		
I. PROFIT OR LOSS (IN MILLIONS OF CURRENT METICAIS)	440.00	951.30	-328.00	-4108.50	-4975.00	1208.00

(1) For the years of 1988 through 1991, this was computed taking "Proveitos em Operações em Moeda Externa" as a proportion of end-of-year foreign exchange balances. For 1992, "Proveitos em Operações de Ouro em Moeda Nacional" was taken as a proportion of end-of-year foreign exchange balances.

(2) The delinquency ratio is defined as: (loans in arrears + defaulted loans) / total loans.

(3) The liquidity ratio is defined as: (liquid assets - the reserve requirement) / total deposits.

Source: Derived from data reported in appendix tables I-3, I-5, I-7, and I-8.

TABLE I-13 AVERAGE LOAN SIZE IN THE BPD (1988-1991) (IN MILLIONS OF CURRENT CONTOS)

Economic Sector	1988	1989	1990	1991	Economic Sector	1988	1989	1990	1991
1. SHORT-TERM CREDIT	15006.65	12896.30	19641.17	50393.97	2. LONG-TERM INVESTMENTS	6102.40	22403.86	26167.16	40134.56
AGRIC.	11347.08	6653.38	15151.30	35003.86	AGRIC.	6590.57	15593.22	27528.10	31392.82
State	155066.81	201427.77	347707.08	572165.93	State	52120.66	206757.13	258217.16	256072.40
Coop.	2081.68	5351.39	24979.62	260392.50	Coop.	2274.98	20092.54	9344.69	1089.00
Pvt. Sec. Bus.	1542.61	3156.03	7978.66	21593.39	Pvt. Sec. Bus.	5339.03	13061.08	23176.60	24666.42
INDUSTRY	31138.42	38213.29	29024.87	102575.16	INDUSTRY	6111.00	16160.33	23648.74	52408.38
STATE	293130.98	360807.97	127853.40	126249.00	STATE	38939.30	70676.39	159269.82	289229.67
Agro-ind.	301555.99	360807.97	127853.40	126249.00	Agro-ind.	38939.30	70676.39	159269.82	289229.67
Tourism	116205.02	0.00	0.00	0.00	Tourism	0.00	0.00	0.00	0.00
Coop.	1513.58	1202.98	9818.15	95000.00	Coop.	2600.72	5095.66	7854.99	0.00
Fishing	500.01	700.04	0.00	95000.00	Fishing	1572.35	0.00	0.00	0.00
Other	1640.27	1454.49	9818.15	0.00	Other	2986.48	5095.66	7854.99	0.00
PVT. SEC. BUS.	3652.33	15014.45	25305.10	100681.08	PVT.SEC.BUS.	5709.34	15880.57	21238.08	44207.64
Fishing	1150.62	162.71	6776.64	51719.66	Fishing	3477.56	5931.32	19457.93	29592.18
Tourism	0.00	0.00	0.00	0.00	Tourism	3811.14	4835.02	27253.35	30402.00
Other	4856.89	18163.73	26234.43	103327.81	Other	6957.75	20820.28	21561.46	124829.00
COMM. HOTELS	2933.58	17327.46	29392.68	48384.57	COMM.HOTELS	3371.54	34811.65	21365.62	42724.16
State	0.00	135650.02	0.00	0.00	State	0.00	420000.02	0.00	0.00
Coop.	0.00	0.00	0.00	500000.00	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	2933.58	16094.94	29392.68	47926.55	Pvt. Sec. Bus.	3371.54	26950.69	21365.62	42724.16
CONSTRUCTION	9999.99	7449.97	2447.02	486489.40	CONSTRUCTION	32100.02	6031.63	0.00	153308.25
State	9999.99	9999.99	0.00	0.00	State	0.00	0.00	0.00	0.00
Coop.	0.00	0.00	0.00	0.00	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	0.00	4900.03	2447.02	486489.39	Pvt. Sec. Bus.	32100.02	6031.63	0.00	153308.25
TRANSPORT	2344.76	4077.34	5168.03	653080.00	TRANSPORT	3548.50	19262.33	34971.07	38140.58
Coop.	0.00	0.00	0.00	0.00	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	2344.76	4077.34	5168.03	653082.21	Pvt.Sec.Bus.	3548.50	19262.33	34971.07	38140.59
					CCADR	0.00	3169076.65	0.00	0.00
					TOTAL	10573.52	17342.66	22425.17	48489.19

Source: Derived from data on number of loans and volume of loans for "credito concedido" series reported in BPD files, *Situação dos Creditos Concedidos*, Direcções de Credito Agrario e Industrial (DCA/DCI), various years.

TABLE I-14 AVERAGE LOAN SIZE IN THE BPD (1988-1991) (IN CONSTANT 1985 CONTOS)*

Economic Sector	1988	1989	1990	1991	Economic Sector	1988	1989	1990	1991
1. SHORT-TERM CREDIT	2737.44	1680.30	1777.16	3211.03	2. LONG-TERM INVESTMENTS	1113.17	2919.07	2367.64	2557.32
AGRIC.	2069.88	866.89	1370.91	2230.40	AGRIC.	1202.22	2031.69	2490.78	2000.31
State	28286.54	26244.66	31461.01	36457.62	State	9507.60	26939.04	23363.84	16316.58
Coop.	379.73	697.25	2260.19	16591.85	Coop.	414.99	2617.92	845.52	69.39
Pvt. Sec. Bus.	281.40	411.21	721.92	1375.90	Pvt. Sec. Bus.	973.92	1701.77	2097.05	1571.71
INDUSTRY	5680.12	4978.93	2626.21	6535.95	INDUSTRY	1114.74	2105.58	2139.77	3339.39
STATE	53471.54	47010.81	11568.35	8044.41	STATE	7103.12	9208.65	14410.95	18429.31
Agro-ind.	55008.39	47010.81	11568.35	8044.41	Agro-ind.	7103.12	9208.65	14410.95	18429.31
Tourism	21197.56	0.00	0.00	0.00	Tourism	0.00	0.00	0.00	0.00
Coop.	276.10	156.74	888.36	6053.27	Coop.	474.41	663.93	710.73	0.00
Fishing	91.21	91.21	0.00	6053.27	Fishing	286.82	0.00	0.00	0.00
Other	299.21	189.51	888.36	0.00	Other	544.78	663.93	710.73	0.00
PVT.SEC.BUS.	666.24	1956.28	2289.64	6415.26	PVT.SEC.BUS.	1041.47	2069.13	1921.65	2816.85
Fishing	209.89	21.20	613.16	3295.51	Fishing	634.36	772.81	1760.58	1885.57
Tourism	0.00	0.00	0.00	0.00	Tourism	695.21	629.97	2465.92	1937.17
Other	885.97	2366.61	2554.69	6583.91	Other	1269.20	2712.74	1950.91	7953.93
COMM.HOTELS	535.13	2257.65	2659.49	3083.00	COMM.HOTELS	615.02	4535.72	1933.19	2722.32
State	0.00	17674.27	0.00	0.00	State	0.00	54723.13	0.00	0.00
Coop.	0.00	0.00	0.00	31859.31	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	535.13	2097.06	2659.49	3053.81	Pvt. Sec. Bus.	615.02	3511.49	1933.19	2722.32
CONSTRUCTION	1824.15	970.68	221.41	30998.43	CONSTRUCTION	5855.53	785.88	0.00	9768.59
State	1824.15	1302.93	0.00	0.00	State	0.00	0.00	0.00	0.00
Coop.	0.00	0.00	0.00	0.00	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	0.00	638.44	221.41	30998.43	Pvt. Sec. Bus.	5855.53	785.88	0.00	9768.59
TRANSPORT	427.72	531.25	467.61	41613.36	TRANSPORT	647.30	2509.75	3164.23	2430.27
Coop.	0.00	0.00	0.00	0.00	Coop.	0.00	0.00	0.00	0.00
Pvt. Sec. Bus.	427.72	531.25	467.61	41613.50	Pvt. Sec. Bus.	647.30	2509.75	3164.23	2430.27

* Current meticais data from Table I-13 were deflated using the consumer price index for the corresponding years. The inflation levels incorporated in these indices are 50%, 40%, 44%, and 42% for the years 1988, 1989, 1990, and 1991 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatistica*, various years.

TABLE I-15 REAL GROWTH INDICES (IN CONSTANT METICAIS) FOR AVERAGE LOAN SIZE IN THE BPD FROM 1988 TO 1991 (1988 = 100)

Economic Sector	1988	1989	1990	1991	Economic Sector	1988	1989	1990	1991
1. SHORT-TERM CREDIT	100.00	61.38	64.92	117.30	2. LONG-TERM INVESTMENTS	100.00	262.23	212.69	229.73
AGRIC.	100.00	41.88	66.23	107.75	AGRIC.	100.00	168.99	207.18	166.38
State	100.00	92.78	111.22	128.89	State	100.00	283.34	245.74	171.62
Coop.	100.00	183.62	595.21	4369.38	Coop.	100.00	630.84	203.74	16.72
Pvt. Sec. Bus.	100.00	146.13	256.55	488.95	Pvt. Sec. Bus.	100.00	174.73	215.32	161.38
INDUSTRY	100.00	87.66	46.24	115.07	INDUSTRY	100.00	188.89	191.95	299.57
STATE	100.00	87.92	21.63	15.04	STATE	100.00	129.64	202.88	259.45
Agro-ind.	100.00	85.46	21.03	14.62	Agro-ind.	100.00	129.64	202.88	259.45
Tourism	100.00	0.00	0.00	0.00	Tourism				
Coop.	100.00	56.77	321.75	2192.42	COOP.	100.00	139.95	149.81	0.00
Fishing	100.00	100.00	0.00	6636.63	Fishing	100.00	0.00	0.00	0.00
Other	100.00	63.34	296.90	0.00	Other	100.00	121.87	130.46	0.00
PVT. SEC. BUS.	100.00	293.63	343.67	962.91	PVT. SEC. BUS.	100.00	198.67	184.5[illegible]	270.47
Fishing	100.00	10.10	292.13	1570.11	Fishing	100.00	121.83	277.54	297.24
Tourism					Tourism	100.00	90.62	354.70	278.65
Other	100.00	267.12	288.35	743.13	Other	100.00	213.74	153.71	626.69
COMM. HOTELS	100.00	421.89	495.98	576.12	COMM.HOTELS	100.00	737.49	314.33	442.64
State		100.00	0.00	0.00	State		100.00	0.00	0.00
Coop.				100.00	Coop.				
Pvt. Sec. Bus.	100.00	391.88	496.98	570.67	Pvt. Sec. Bus.	100.00	570.96	314.33	442.64
CONSTRUCTION	100.00	53.21	12.14	1699.34	CONSTRUCTION	100.00	13.42	0.00	166.83
State	100.00	71.43	0.00	0.00	State				
Coop.					Coop.				
Pvt. Sec. Bus.		100.00	34.68	4855.34	Pvt. Sec. Bus.	100.00	13.42	0.00	166.83
TRANSPORT	100.00	124.21	109.33	9729.11	TRANSPORT	100.00	387.73	488.84	375.45
Coop.					Coop.				
Pvt. Sec. Bus.	100.00	124.21	109.33	9729.14	Pvt. Sec. Bus.	100.00	387.73	488.84	375.45

Source: Derived from data reported in table I-14.

Returning to table I-12, the relatively low gross return on assets is overwhelmed by the level of costs to produce near zero or negative returns on assets (line II-B). This result of course is consistent with the negligible profits or growing losses recorded in the last line of the table (line II-I) for the this period. The rising interest rate charges on the recently expanded time deposits in 1991 and 1992 (line I-E-2), the more than doubling of the non-deposit expense (largely salaries) to loans in line II-F, and the continuing burden of delinquent loans reducing potential interest income, all explain the emergence of losses in recent years in the BPD.

Finally, the debt equity ratio (line II-C) and the debt asset ratio (line II-D) reflect an unusually high equity multiplier, roughly between 40 and 50 up to 1992. For example, the small difference between the debt asset ratio of .976 for 1992 and 100 represents capital or net worth, in this case .024. Dividing this into total assets yields 41.6. The BPD is generating assets (largely loans) roughly 40 to 50 times its net worth or equity capital. Of course, the BPD is not a private bank which explains why its equity multiplier is so high, namely, its social capital contributed by the government is unusually low. In the end, the bank is leveraged to an unusually high multiple (equity multipliers for U.S. banks currently fluctuate between 12 and 15). Depositors in the BPD could be facing severe moral hazard unless the government covers their risk through an implicit ad-hoc deposit insurance guarantee. In short, it is important to capitalize the BPD at a much higher level to lower its leverage closer to multiples comparable to well capitalized and well functioning banks in developed financial markets (i.e. 15 to 20).

In summary, the BPD has undergone a major restructuring in actively reducing it's state enterprise and public sector clientele and increasing its private sector portfolio. In the process, it has emphasized more short term commerce and service activities and de-emphasized more risky agricultural undertakings. Tables I-13, I-14 and I-15 offer yet another perspective on this portfolio restructuring through trends in average loan size by sector, term and jurisdiction. Table I-13 shows that loans to public sector enterprises whether in industry or agriculture were on average 80 to 100 times larger than loans to private sector operators in the same sectors. Indeed, the private sector clientele in all sectors including commerce and services and transport as well as agriculture and industry were unusually small in size compared to the state clientele at this time.

However, by 1991, with the exception of state farms, this average loan size profile had radically altered with a dramatic decline in the average size of state loans in agro-industry. What really stands out is the sharp increase in the average size of private sector loans in all sectors. One can see this more graphically in the constant meticais series (table I-14) and in the growth indices built upon this real meticais series (in table I-15). By 1991, average sized loans to private business clients or businesses in the industrial sector had almost grown to sizes comparable to that of state industry loans and in the transport sector private loans were among the largest in size in the entire portfolio. One positive consequence of this development was that administrative costs per private sector loan declined with the rapid growth of average sized loans in this sector. Only in agriculture did private loan sizes remain dwarfed by state enterprise loans. This no doubt reflects the fact that liberalized market forces were operating more dramatically in the non-agricultural sector and were more constrained in the agricultural sector where the state still held land rights.

These findings underscore the rapid growth of private business and the average size of businesses in Mozambique from 1988 to the present (both new firms and the expansion of small businesses). While this speaks well for the spirit of entrepreneurship and the role of the BPD in fostering and nurturing that spirit through debt finance, this unusually rapid growth undoubtedly occurred within an unusually risky environment as well as introducing risks of its own. Many new untested entrepreneurs were launching their ventures in a weak and unstable market setting where commercial contracts and business practices were rudimentary. Moreover, supplier and client marketing chains were also poorly developed and policy risks were high (i.e., uncertain availability of foreign exchange and input supplies, taxes, pricing policies, etc.). In short, elements of uncertainly and risk were undoubtedly widespread in this environment.

Given the unusually rapid growth of the BPD private sector clientele during this period, many things were bound to go wrong with many ventures failing. The BPD, as an important financier of these initiatives, was therefore unable (due to imperfect or incomplete information) to avoid what economists call "adverse selection," i.e. a selection of clients with a high likelihood of default given the risks associated with their projects in this uncertain environment. The bank was also subject to "moral hazard" in that the lack of rigorous collateral and the absence of credible, low cost legal sanctions created incentives for borrowers to engage in risky project activity with the bank's money since the benefits, if the borrower succeeded, would be high (i.e., the borrower could keep all the profits and only pay the BPD a fixed amount according to the loan contract) and the losses negligible since if he failed he would suffer little or nothing and the BPD would bear the loss (given the poor collateral and weak legal sanctions inherent to Mozambique). In short, the bank has been subjected to a "hazard" or a danger due to the improper (i.e. immoral) behavior of the borrower. As a consequence of these adverse selection and moral hazard problems inherent to the Mozambican financial market setting, the BPD, not surprisingly, has experienced a high level of delinquency and default.

There is one revealing administrative irony in this experience. The BPD undoubtedly improved its delinquency and default record by reducing its loans to state sector entities and rapidly increasing its servicing of private sector clientele. However, as the above discussion indicates, in rapidly acquiring a private sector clientele it also incorporated important adverse selection and moral hazard problems inherent to any rapidly expanding private financial market. While the banks overall aggregate default has been reduced because of this substitution of a private for a public sector clientele, there is still an important level or threshold of default that will remain in the portfolio until these problems of adverse selection and moral hazard are addressed and reduced.

Appendix Tables

APPENDIX TABLE I-1 APPROVED CREDIT ALLOCATIONS IN THE BPD BY TERM STRUCTURE, SECTOR, AND LEGAL JURISDICTION (IN CURRENT CONTOS) (Approved Credit Allocation)

SELECTED CATEGORY	1985	1986	1987	1988	1989	1990	1991
SHORT-TERM							
LEGAL JURIS.							
State	5956416.00	4229183.85	1489700.71	2818817.22	1756342.54	736579.44	590850.83
Cooperative	125149.00	68337.42	54931.54	46912.99	17901.37	2903.93	110333.25
Private Bus.	55986.00	77850.04	114822.84	356234.59	1393258.89	1796780.40	4988770.68
SECTOR							
Agriculture				1891873.40	1242250.16	1269462.09	1440836.75
Industry				1312107.44	1697815.11	814125.95	843137.19
Comm. Hotels				14448.38	218992.31	476048.59	3042919.14
Construction				1824.15	1941.37	221.41	154992.16
Transports				1710.87	6374.98	2805.65	208066.78
LONG-TERM							
LEGAL JURIS.							
State	167390.00	77174.48	379510.41	192335.83	343217.72	273376.40	136870.84
Cooperative	91992.00	82751.98	34696.60	7708.50	32780.72	20157.62	138.78
Private Bus.	79485.00	166253.79	216906.90	1099024.63	3219255.50	1962826.91	895957.31
CCADR					1238727.04		
SECTOR							
Agriculture				656411.71	1460786.19	894189.74	330050.66
Industry				550679.50	1574974.72	723242.49	300545.05
Comm. Hotels				12300.44	226786.19	268713.99	103448.32
Construction				11711.05	3929.38	0.00	39074.36
Transports				67966.25	328777.46	370214.62	260038.36
CCADR					1238727.04		
GRAND TOTAL	6476418.00	4701550.82	2290568.18	4521033.20	8001354.79	4819024.43	6723108.77
TERM STRUCT.							
Short-term	6137551.00	4375371.30	1659454.82	3221964.25	3167373.94	2562663.68	5689952.02
Long-term	338867.00	326179.52	631113.36	1299068.95	4833980.85	2256360.75	1033156.75
LEGAL JURIS.							
State	6123806.00	4306358.33	1869211.12	3011153.05	2099560.26	1009955.85	727721.68
Cooperative	217141.00	151089.40	89628.15	54621.49	50682.08	49461.55	110472.03
Private Bus.	135471.00	244103.82	331729.74	1455259.21	4612514.40	3759607.31	5884727.99
CCADR					1238727.04		
SECTOR							
Agriculture				2548285.11	2703036.35	2163651.83	1770887.41
Industry				1862786.94	3272789.84	1537368.44	1143682.24
Comm. Hotels				26748.81	445778.50	744762.58	3146367.47
Construction				13535.21	5870.75	221.41	194066.52
Transports				69677.13	335152.44	373020.27	468105.14
CCADR					1238727.04		

Source: Data files provided by *Direcções de Credito Agrario e Industrial* (DCA/DCI) of the Banco Popular de Desenvolvimento (BPD), various years, 1985-91

APPENDIX TABLE I-2 **APPROVED CREDIT ALLOCATION IN THE BPD BY TERM STRUCTURE, SECTOR, AND LEGAL JURISDICTION (1985-1991)**
(in constant 1985 contos)*

Selected Category	1985	1986	1987	1988	1989	1990	1991
SHORT-TERM							
LEGAL JURIS.							
State	5956416.00	4229183.85	1489700.71	2318817.22	1756342.54	736579.44	590850.83
Cooperative	125149.00	68337.42	54931.54	46912.99	17901.37	2903.93	110333.25
Private Bus.	55986.00	77850.04	114822.84	356234.59	1393258.89	1796780.40	4988770.68
SECTOR							
Agriculture				1891873.40	1242250.16	1269462.09	1440836.75
Industry				1312107.44	1697815.11	814125.95	843137.19
Comm. Hotels				14448.38	218992.31	476048.59	3042919.14
Construction				1824.15	1941.37	221.41	154992.16
Transports				1710.87	6374.98	2805.65	208066.78
LONG-TERM							
LEGAL JURIS.							
State	167390.00	77174.48	379510.41	192335.83	343217.72	273376.40	136870.84
Cooperative	91992.00	82751.98	34696.60	7708.50	32780.72	20157.62	138.78
Private Bus.	79485.00	166253.79	216906.90	1099024.63	3219255.50	1962826.91	895957.31
CCADR					1238727.04		
SECTOR							
Agriculture				656411.71	1460786.19	894189.74	330050.66
Industry				550679.50	1574974.72	723242.49	300545.05
Comm. Hotels				12300.44	226786.19	268713.99	103448.32
Construction				11711.05	3929.38	0.00	39074.36
Transports				67966.25	328777.46	370214.62	260038.36
CCADR					1238727.04		
GRAND TOTAL	6476418.00	4701550.82	2290568.18	4521033.20	8001354.79	4819024.43	6723108.77
TERM STRUCT.							
Short-term	6137551.00	4375371.30	1659454.82	3221964.25	3167373.94	2562663.68	5689952.02
Long-term	338867.00	326179.52	631113.36	1299068.95	4833980.85	2256360.75	1033156.75
LEGAL JURIS.							
State	6123806.00	4306358.33	1869211.12	3011153.05	2099560.26	1009955.85	727721.68
Cooperative	217141.00	151089.40	89628.15	54621.49	50682.08	49461.55	110472.03
Private Bus.	135471.00	244103.82	331729.74	1455259.21	4612514.40	3759607.31	5884727.99
CCADR					1238727.04		
SECTOR							
Agriculture				2548285.11	2703036.35	2163651.83	1770887.41
Industry				1862786.94	3272789.84	1537368.44	1143682.24
Comm. Hotels				26748.81	445778.50	744762.58	3146367.47
Construction				13535.21	5870.75	221.41	194066.52
Transports				69677.13	335152.44	373020.27	468105.14
CCADR					1238727.04		

* Current meticaisdata in appendix table I-1 were deflated using the consumer price index for the corresponding years. The inflation levels incorporated in these indices are 39%, 163%, 50%, 40%, 44%, and 42% for the years 1986, 1987, 1988, 1989 1990, and 1991 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatística*, various years.

APPENDIX TABLE I-3 ASSETS FOR THE BANCO POPULAR DE DESENVOLVIMENTO (BPD) 1988-1992 (IN MILLIONS OF CURRENT METICAIS)

Uses (Assets)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
LIQUID ASSETS	45601	77115	77089	64066	76923	158925
Cash	2500	2088	5517	8818	8612	6560
Reserve Requirement	0	0	0	29972	57494	82000
Dd. Dep. in Mozambique Bk.	32380	63894	69066	8422	5676	58820
Other Deposits in Banks	10460	10616	121	143	143	8045
Dd. Dep. in For. Exchange	141	0	1648	16269	4306	2000
Time Dep. in For. Exchange	0	0	208	369	587	1000
Miscellaneous	120	517	529	73	105	500
LOANS	58033	84197	115163	166270	226909	174220
State	7763	8054	8432	10980	10963	0
War Veterans (CCADR)	6647	7530	11173	11155	10527	10390
Enterprises and Individuals	40850	64767	92057	137020	182374	159099
Sanctioned Overdrafts	0	0	8712	9579	8114	15500
Other Loans	14003	38336	51568	83225	102143	127156
Unsanct.Overdraft Acct	186	144	483	5732	12393	650
Loans in Arrears	25359	25788	30419	36316	54081	12233
Defaulted Loans	1302	499	875	2168	5643	3560
Loans in Irregular Status	2773	3846	3501	7106	23045	4731
State	2028	2704	426	454	15486	400
War Veterans (CCADR)	0	0	1316	3636	3637	1331
Enter. and Indiv.	745	1142	1759	3016	3922	3000
FINANCIAL AND OTHER ASSETS	20964	22147	21411	42370	54365	26562
Stocks, Bonds, and Other Financial Assets	2466	2891	3527	4038	10682	5002
Government Securities	2245	1437	1439	1241	1252	1500
Other Domestic Sec.	2	2	2	2	2	2
Other Financial Assets	219	1452	2086	2795	9428	3500
Use of Designated Source Funds	629	777	729	737	6007	760
Other Assets	17869	18479	17155	37595	37676	20800
FIXED ASSETS	1127	6825	11194	14896	27363	22233
Buildings	71	948	1151	1889	5909	7980
Equipment	892	5076	8192	8504	11319	10393
Artistic Assets	0	52	64	73	377	100
Other Real Assets	120	0	7	50	89	60
Fixed As. in Construction	0	408	1038	3067	7442	2500
Other Fixed Assets	44	341	742	1313	2227	1200
TOTAL	125725	190284	224857	287602	385560	381940

Source: BPD files: *Mapa Sintético das Fontes e das Aplicações de Recursos*, various years 1988-92.

APPENDIX TABLE I-4 REAL ASSETS FOR THE BPD 1988-1992 (IN MILLIONS OF CONSTANT 1985 METICAIS)*

Uses (Assets)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
LIQUID ASSETS	8318.31	10047.56	6975.12	4082.20	4901.43	7131.48
Cash	456.04	272.05	499.19	561.87	548.74	294.37
Reserve Requirement	0.00	0.00	0.00	1909.77	3663.44	3679.61
Dd. Dep. in Bank of Mozambique	5906.60	8324.95	6249.19	536.64	361.67	2639.44
Other Deposits in Banks	1908.06	1383.19	10.95	9.11	9.11	361.01
Dd. Dep. in For. Exchange	25.72	0.00	149.11	1036.64	274.37	89.75
Time Dep. in For. Exchange	0.00	0.00	18.82	23.51	37.40	44.87
Miscellaneous	21.89	67.36	47.86	4.65	6.69	22.44
LOANS	10586.10	10970.29	10420.10	10928.51	14458.33	8076.37
State	1416.09	1049.38	762.94	700.20	698.55	0.00
War Veterans (CCADR)	1212.51	981.11	1010.95	710.78	670.77	466.23
Enterprises and Individuals	7451.66	8438.70	8329.44	8730.73	11620.62	7139.29
Sanctioned Overdrafts	0.00	0.00	788.27	610.36	517.01	695.54
Other Loans	2554.36	4994.92	4665.94	5302.98	6508.41	5705.90
Unsanct.Overdraft Acct	33.93	18.76	43.70	365.24	789.66	29.17
Loans in Arrears	4625.87	3360.00	2752.35	2314.01	3445.97	548.93
Defaulted Loans	237.50	65.02	79.17	138.14	359.56	159.75
Loans in Irregular Status	505.84	501.11	316.78	452.78	1468.40	212.30
State	369.94	352.31	38.55	28.93	986.75	17.95
War Veterans (CCADR)	0.00	0.00	119.07	231.68	231.74	59.73
Enter. and Indiv.	135.90	148.79	159.16	192.18	249.90	134.62
FINANCIAL AND OTHER ASSETS	3824.15	2885.60	1937.30	2699.76	3464.06	1191.92
Stocks, Bonds, and Other Financial Assets	449.84	376.68	319.13	257.30	680.64	224.46
Government Securities	409.52	187.23	130.20	79.07	79.78	67.31
Other Domestic Sec.	0.36	0.26	0.18	0.13	0.13	0.09
Other Financial Assets	39.95	189.19	188.74	178.09	600.74	157.06
Use of Designated Source Funds	114.74	101.24	65.96	46.96	382.76	34.10
Other Assets	3259.58	2407.69	1552.21	2395.50	2400.66	933.36
FIXED ASSETS	205.58	889.25	1012.85	949.15	1743.53	997.67
Buildings	12.95	123.52	104.14	120.36	376.51	358.09
Equipment	162.71	661.37	741.22	541.86	721.23	466.37
Artistic Assets	0.00	6.78	5.79	4.65	24.02	4.49
Other Real Assets	21.89	0.00	0.63	3.19	5.67	2.69
Fixed As. in Construction	0.00	53.16	93.92	195.43	474.19	112.18
Other Fixed Assets	8.03	44.43	67.14	83.66	141.90	53.85
TOTAL	22934.15	24792.70	20345.37	18325.60	24567.35	17138.88

* Current meticais data from Appendix Table I-3 were deflated using the consumer price index for the corresponding years. The inflation levels incorporated in these indices are 50%, 40%, 44%, 42%, and 42% for the years 1988, 1989, 1990, 1991, and 1992 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatistica*, various years.

APPENDIX TABLE I-5 LIABILITIES FOR THE BANCO POPULAR DE DESENVOLVIMENTO (IN MILLIONS OF CURRENT METICAIS)

Sources (Liabilities)	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
DEPOSITS	108931	166629	194985	254877	342542	328000
Demand Deposits	101989	155916	179041	235812	313862	298000
Monetary Institutions	14127	5985	1700	2985	2996	2500
Financial Institutions	1292	2202	2586	1868	172	1600
State	44940	72151	60266	77487	101571	89565
Enter. and Indiv.	41630	75573	114487	153472	209113	204135
State Enterprises	5532	13028	25963	34644	49018	40308
Cooperatives	547	833	1372	898	1874	600
Private Enterprises	4123	9551	6872	12661	21738	15767
Individuals	26143	44749	71223	93224	120746	134960
Other	5285	7417	9057	12045	15737	12500
Time Deposits	6942	10713	15944	19065	28690	30000
Up to 90 Days	262	430	565	1102	1964	1200
From 90 to 180 Days	217	382	624	750	1826	900
From 180 to 365 Days	1737	2696	3722	4035	6201	4000
From 1 to 2 Years	3332	4988	7758	9438	14235	18000
More Than 2 Years	1394	2217	3275	3740	4464	5900
FUNDS FROM DESIGNATED SOURCES	741	738	742	742	742	800
OTHER LIABILITIES	13325	17333	23899	25561	25978	32140
Domestic Currency Borrowers	174	140	140	140	140	140
Accounts Payable	5026	8206	14304	14155	16268	18000
Domestic Currency Creditors	1920	3936	4759	6332	6054	8000
Other Liabilities	6205	5051	4696	4934	3516	6000
CAPITAL AND RETAINED EARNINGS	2728	5584	5231	6422	16298	21000
Social Capital	1000	1000	1000	1000	16000	15000
Miscellaneous	1728	4584	4231	5422	298	6000
TOTAL	125725	190284	224857	287602	385560	381940

Source: BPD files: *Mapa Sintetico das Fontes e das Aplicações de Recursos*, various years.

APPENDIX TABLE I-6 REAL LIABILITIES FOR THE BPD 1988-1992 (IN MILLIONS OF CONSTANT 1985 METICAIS)

Sources	Outstanding Balances on 12/31					1992
(Liabilities)	1988	1989	1990	1991	1992	Goals
DEPOSITS	19870.67	21710.62	17642.51	16240.41	14535.52	14718.42
Demand Deposits	18604.34	20314.79	16199.87	15025.61	13579.40	13372.22
Monetary Institutions	2576.98	779.80	153.82	190.20	133.45	112.18
Financial Institutions	235.68	286.91	233.98	119.03	102.63	71.80
State	8197.74	9400.78	5452.95	4937.36	5172.49	4019.07
Enter. and Indiv.	7593.94	9846.64	10358.94	9779.02	8170.83	9160.20
State Enterprises	1009.12	1697.46	2349.17	2207.47	2086.20	1808.75
Cooperatives	99.78	108.53	124.14	57.22	35.00	26.92
Private Enterprises	752.10	1244 43	621.79	806.74	811.13	707.52
Individuals	4768.88	5830.49	6444.35	5940.10	4387.44	6056.09
Other	964.06	966.38	819.49	767.49	851.07	560.92
Time Deposits	1266.33	1395.83	1442.63	1214.80	956.11	1346.20
Up to 90 Days	47.79	56.03	51.12	70.22	58.47	53.85
From 90 to 180 Days	39.58	49.77	56.46	47.79	44.65	40.39
From 180 to 365 Days	316.86	351.27	336.77	257.10	209.51	179.49
From 1 to 2 Years	607.81	649.90	701.95	601.38	466.82	807.72
More Than 2 Years	254.29	288.86	296.33	238.31	176.67	264.75
FUNDS FROM DESIGNATED SOURCES	135.17	96.16	67.14	47.28	33.30	35.90
OTHER LIABILITIES	2430.68	2258.37	2162.41	1628.71	1165.81	1442.23
Domestic Currency Borrowers	31.74	18.24	12.67	8.92	6.28	6.28
Accounts Payable	916.82	1069.19	1294.25	901.94	600.36	807.72
Domestic Currency Creditors	350.24	512.83	430.60	403.47	302.09	358.99
Other Liabilities	1131.89	658.11	424.90	314.39	257.08	269.24
CAPITAL AND RETAINED EARNINGS	497.63	727.56	473.31	409.20	394.75	942.34
Social Capital	182.42	130.29	90.48	63.72	44.87	673.10
Miscellaneous	315.21	597.26	382.83	345.48	349.88	269.24
TOTAL	22934.15	24792.70	20345.37	18325.60	16129.37	17138.88

* Current meticais data from Appendix Table I-5 were deflated using the consumer price index for the corresponding years. The inflation levels incorporated in these indices are 50%, 40%, 44%, 42%, and 42% for the years 1988, 1989, 1990, 1991, and 1992 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatistica*, various years.

APPENDIX TABLE I-7 INCOME STATEMENT FOR THE BPD 1988-1991 (IN MILLIONS OF CURRENT METICAIS)

Income	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
1. INTEREST INCOME ON OUTSTANDING LOANS	3249.00	6256.30	8496.30	13062.30	24815.00	25948.00
State Entities	8.00	20.20	16.60	18.60	27.00	0.00
Financial Institutions	571.00	976.20	643.60	0.00	0.00	0.00
Enterprises and Individuals	2670.00	5259.90	7834.70	13043.70	24788.00	25948.00
Sanct. Overdrt. Accts.	0.00	0.00	12.80	0.00	0.00	0.00
Other Loans	2183.00	3[illegible]9.20	5807.00	9946.80	17101.00	19305.00
Delinquent Loans	355.00	1796.00	1607.30	1766.30	3780.00	6434.00
Defaulted Loans	37.00	2.00	14.50	84.50	182.00	113.00
Unsanctioned Overdrt. Accts.	93.00	146.30	328.70	1228.90	3711.00	96.00
Miscellaneous	2.00	13.60	64.30	15.20	14.00	1.00
2. INCOME FROM FINANCIAL ASSETS	77.00	92.60	264.50	0.00	165.00	0.00
Government Securities	77.00	92.60	124.20	0.00	165.00	0.00
Other Securities	0.00	0.00	140.30	0.00	0.00	0.00
3. INTEREST FROM OTHER ASSETS	0.00	0.00	0.20	2.60	14.00	0.00
Bank of Mozambique Deposits	0.00	0.00	0.20	2.60	14.00	0.00
Other Bank Deposits	0.00	0.00	0.00	0.00	0.00	0.00
4. INCOME FROM BK. SERVICES	74.00	105.10	183.00	131.60	749.00	558.00
5. OTHER BANK INCOME	345.00	570.80	647.30	1287.80	3260.00	2876.00
6. INCOME FROM FOREIGN EXCHANGE OPERATIONS	0.00	0.00	0.40	303.80	4098.00	6000.00
INCOME TOTAL	3745.00	7024.80	9591.70	14788.10	33101.00	35382.00

Source: BPD files: *Mapa Sintetico das Fontes e das Aplicações de Recursos*, various years 1988-1992.

APPENDIX TABLE I-8 EXPENSE STATEMENT FOR THE BPD 1988-1992 (IN MILLIONS OF CURRENT METICAIS)

	Outstanding Balances on 12/31					1992
Expenses	1988	1989	1990	1991	1992	Goals
1. DEPOSIT AND SAVINGS ACCOUNTS INTEREST COSTS	912.00	1403.90	1991.10	3710.70	6147.00	4495.00
Interest costs demand dep.	301.00	419.40	441.20	199.40	26.00	10.00
Interest costs time dep.	611.00	984.50	1549.90	3511.30	6121.00	4485.00
Other Financial Costs	0.00	0.00	0.00	0.00	1460.00	1520.00
2. PERSONNEL COSTS	1601.00	2500.30	4145.20	6724.80	18038.00	17331.00
Basic Salary	1123.00	1671.50	2517.00	3066.10	8592.00	9000.00
Complimentary Pay	330.00	514.60	1052.40	1556.20	5278.00	4262.00
Social Security Charge	144.00	284.40	490.70	1186.50	3710.00	3734.00
Other Charges	4.00	29.80	85.10	916.00	458.00	335.00
3. MATERIAL EXPENSES FOR THIRD PARTY SERVICES	337.00	716.60	1180.40	1961.10	3425.00	2727.00
Light and Water Charges	51.00	82.00	151.00	229.30	606.00	585.00
Gas and Transport	33.00	65.70	178.10	363.80	406.00	350.00
Office Supplies	183.00	33.90	541.50	1034.60	1512.00	1247.00
Office Equipment		24.60	30.60	35.80	525.00	471.00
Maintenance and Repair		78.90	270.20	243.70	987.00	776.00
Other Supply Expenses	70.00	31.50	9.00	53.90	901.00	545.00
4. SERVICE CHARGES BY THIRD PARTIES	373.00	854.70	1939.70	3028.40	5118.00	3990.00
Maintenance and Repair	30.00	198.10	336.60	493.20	811.00	591.00
Transport Expenses		50.90	67.10	110.40		
Telephone and Communication	45.00	59.80	176.00	310.70	579.00	352.00
Advertising		69.80	171.00	201.60	0.00	0.00
Public Relations		56.90	146.80	196.60	0.00	0.00
Travel and Lodging	120.00	232.50	644.50	1054.70	1846.00	1688.00
Training		103.80	230.20	394.10		
Other Services	178.00	42.80	188.50	267.10	1882.00	190.00
5. COST OF FOREIGN EXCHANGE OPERATIONS	0.00	0.00	0.00	0.70	1460.00	1520.00
6. OTHER COSTS	74.00	147.90	213.80	361.90	496.00	719.00
7. AMMORTIZATION ALLOWANCES	8.00	8.00	8.00	1603.80	1750.00	1750.00
8. LOAN LOSS PROVISIONS	0.00	442.10	442.10	1505.20	1642.00	1642.00
COST TOTAL	3305.00	6073.50	9920.30	18896.60	38076.00	34174.00

Source: BPD files: *Mapa Sintetico das Custos e Proveitos*, various years 1988-1992.

APPENDIX TABLE I-9 INCOME STATEMENT FOR THE BPD 1988-1991 (IN MILLIONS OF CONSTANT 1985 METICAIS)*

Income	Outstanding Balances on 12/31					1992
	1988	1989	1990	1991	1992	Goals
1. INTEREST INCOME ON OUTSTANDING LOANS	592.67	815.15	768.76	832.31	1113.53	1164.37
State Entities	1.46	2.63	1.50	1.19	1.21	0.00
Financial Institutions	104.16	127.19	58.23	0.00	0.00	0.00
Enterprises and Individuals	487.05	685.33	708.89	831.13	1112.32	1164.37
Sanct. Overdrt. Accts.	0.00	0.00	1.16	0.00	0.00	0.00
Other Loans	398.21	429.86	525.43	633.80	767.38	866.28
Delinquent Loans	64.76	234.01	145.43	112.55	169.62	288.71
Defaulted Loans	6.75	0.26	1.31	5.38	8.17	5.07
Unsanctioned Overdrt. Accts.	16.96	19.66	29.74	78.30	166.52	4.31
Miscellaneous	0.36	1.77	5.82	0.97	0.63	0.04
2. INCOME FROM FINANCIAL ASSETS	14.05	12.07	23.93	0.00	7.40	0.00
Government Securities	14.05	12.07	11.24	0.00	7.40	0.00
Other Securities	0.00	0.00	12.69	0.00	0.00	0.00
3. INTEREST FROM OTHER ASSETS	0.00	0.00	0.02	0.17	0.63	0.00
Bank of Mozambique Deposits	0.00	0.00	0.02	0.17	0.63	0.00
Other Bank Deposits	0.00	0.00	0.00	0.00	0.00	0.00
4. INCOME FROM BK. SERVICES	13.50	13.69	16.56	8.39	33.61	25.04
5. OTHER BANK INCOME	62.93	74.37	58.57	82.06	146.29	129.06
6. INCOME FROM FOREIGN EXCHANGE OPERATIONS	0.00	0.00	0.04	19.36	183.89	269.24
INCOME TOTAL	683.14	915.28	867.87	942.28	1485.35	1587.70

* Current meticais data from Appendix Table I-7 were deflated using the consumer price indices for the corresponding years. The inflation levels incorporated in these indices are 50%, 40%, 44%, 42%, and 42% for the years 1988 through 1992 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatistica*, various years.

APPENDIX TABLE I-10 EXPENSE STATEMENT FOR THE BPD 1988-1992 (IN MILLIONS OF CONSTANT 1985 METICAIS)*

Expenses	Outstanding Balances on 12/31 1988	1989	1990	1991	1992	1992 Goals
1. DEPOSIT AND SAVINGS ACCOUNTS INTEREST COSTS	166.36	182.92	180.16	236.44	275.84	201.71
Interest costs demand dep.	54.91	54.64	39.92	12.71	1.17	0.45
Interest costs time dep.	111.46	128.27	140.24	223.74	274.67	201.26
Other Financial Costs	0.00	0.00	0.00	0.00	65.51	68.21
2. PERSONNEL COSTS	292.05	325.77	375.06	428.49	809.42	777.70
Basic Salary	204.85	217.79	227.74	195.37	385.55	403.86
Complimentary Pay	60.20	67.05	95.22	99.16	236.84	191.25
Social Security Charge	26.27	37.06	44.40	75.60	166.48	167.56
Other Charges	0.73	3.88	7.70	58.37	20.55	15.03
3. MATERIAL EXPENSES FOR THIRD PARTY SERVICES	61.47	93.37	106.80	124.96	153.69	122.37
Light and Water Charges	9.30	10.68	13.66	14.61	27.19	26.25
Gas and Transport	6.02	8.56	16.11	23.18	18.22	15.71
Office Supplies	33.38	4.42	49.00	65.92	67.85	55.96
Office Equipment	0.00	3.21	2.77	2.28	23.56	21.14
Maintenance and Repair	0.00	10.28	24.45	15.53	44.29	34.82
Other Supply Expenses	12.77	4.10	0.81	3.43	40.43	24.46
4. SERVICE CHARGES BY THIRD PARTIES	68.04	111.36	175.51	192.97	229.66	179.04
Maintenance and Repair	5.47	25.81	30.46	31.43	36.39	26.52
Transport Expenses	0.00	6.63	6.07	7.03	0.00	0.00
Telephone and Communication	8.21	7.79	15.92	19.80	25.98	15.80
Advertising	0.00	9.09	15.47	12.85	0.00	0.00
Public Relations	0.00	7.41	13.28	12.53	0.00	0.00
Travel and Lodging	21.89	30.29	58.32	67.20	82.84	75.75
Training	0.00	13.52	20.83	25.11	0.00	0.00
Other Services	32.47	5.58	17.06	17.02	84.45	8.53
5. COST OF FOREIGN EXCHANGE OPERATIONS	0.00	0.00	0.00	0.04	65.51	68.21
6. OTHER COSTS	13.50	19.27	19.34	23.06	22.26	32.26
7. AMMORTIZATION ALLOWANCES	1.46	1.04	0.72	102.19	78.53	78.53
8. LOAN LOSS PROVISIONS	0.00	57.60	40.00	95.91	73.68	73.68
COST TOTAL	602.88	791.34	897.60	1204.07	1708.59	1533.50

* Current meticais data in appendix table I-8 were deflated using the consumer price indices for the corresponding years. The inflation levels incorporated in these indices are 50%, 40%, 44%, 42%, and 42% for the years 1988 through 1992 respectively. 1985 is the base year. Inflation data as reported in consumer price index series in *Informação Estatística*, various years.

II. The Privatized Clientele in the BPD: A Preliminary Assessment in the Greater Maputo Area 1990-91

A. Introduction

The foregoing analysis underscored the growing importance of the private sector as the principal clientele of the BPD. In the Mozambican context it was clearly easier and a more likely step to privatize the portfolio rather than the institution. This is what the BPD successfully carried out from 1988 onwards. And in this sense the institution has been acting more like a conventional bank from 1988-89 onwards. However, incorporating a new private sector clientele has introduced the risks of adverse selection and moral hazard common to any financial market as discussed in the previous section. The Ohio State University (OSU) research team therefore chose to select a random sample of private sector borrowers in recent years to identify the nature and severity of these adverse selection and moral hazard problems that lead to delinquency and default.

Our concern was to document the loan repayment status of a random sample of recent private borrowers by sector and loan characteristics. At the same time, the OSU team was interested in documenting the role and performance of a peri-urban clientele compared to a strictly urban clientele. Thus, one principal branch of the BPD and a smaller office serving both clientele were chosen to form our sample frame or population: the Maputo Branch of the BPD and the Green Zones office (subordinate to the Maputo Branch). The former was largely made up of recent private sector borrowers drawn into the BPD's new portfolio; the latter is largely made up of loans to the cooperative farming sector in the Green Zone area of peri-urban Maputo and loans to the World Bank financed microenterprise program administered jointly by the BPD and the Gabinete de Promoção de Emprego (GPE) located in the Ministry of Labor.

For the Maputo branch approximately one-third of the borrowers soliciting and securing loans in 1991 were selected as our sample from the log entry of loan requests and loan approvals in the branch office (i.e., 133 borrowers). Next, information was secured from the loan dossier to document relevant loan and borrower characteristics including the loan repayment status of the client up to the time of the sample selection in the first trimester of 1992. If the client also had evidence of an earlier loan in 1990 on his dossier card, this information was also recorded. It is important to note that the loan repayment status was always in reference to what was due for repayment. Therefore, longer term loans were inspected to determine the status of the borrowers repayment record on installments due up to the time of the survey If no installments were yet due, it fell into the not due category.

A sample of 70 borrowers was selected from the GPE portfolio managed out of the Green Zones office of the BPD. Although this clientele also consisted of private sector borrowers, these microentrepreneurs were all first time borrowers (a requirement for eligibility), hiring in less than five workers in their business and drawing upon resources from the World Bank line of credit to import machinery or equipment to launch their small enterprises into a higher scale of operation.

B. The Maputo Branch Clientele: Loan Characteristics and Portfolio Performance

1. Loan Profile by Location

Table II-1 sets forth the results of the random sample survey of clientele for the Maputo branch of the BPD. Of the total of 133 clients, almost 30 percent of the sample (by number) and 25 percent (by volume of loan) resides in the peri urban area outside the central city of Maputo, while 70 and 75 respectively live in Maputo (lines 1 and 2). Not surprisingly, the average loan size (in line 3) is smaller in the peri urban area. This in turn is consistent with the finding that the peri urban borrowers register a higher relative participation in the smallest quintile and decile loan size categories (in panels 4A and 4B respectively) while there is a higher share of borrowers from Maputo in the highest loan size class.

Maputo city borrowers are represented in greater relative numbers in short term loans (up to 12 months) while peri urban borrowers stand out more as borrowers with a larger share of long term loan activity (panel 5). One can see that this longer term loan profile is very likely associated with loans to an agricultural clientele as this sector stands out with substantially greater weight in panel 7 among the borrowers from the peri urban area than from Maputo. Again, this is not surprising. Agricultural activity has been a traditionally important activity in the green zones rounding the city. Industrial sector and transportation businesses predominate in the portfolio of borrowers in Maputo city, accounting for 56 percent of all loans in this constituency (column 1, panel 7, lines c-f), while these activities only account for 20 percent of the peri urban borrower population. In short, Maputo city borrowers are predominantly located in industrial and transportation enterprises while peri urban borrowers are largely in agriculture (and fishing) and traditional trading and service sector activity.

TABLE II-1 PROFILE OF SELECTED LOAN AND BORROWER CHARACTERISTICS FOR SAMPLE CLIENTELE OF GREATER MAPUTO FROM MAPUTO BRANCH (BPD) (1990-1991)

Variable	MAPUTO		PERI URBAN AREA		TOTAL	
	No.	%	No.	%	No*	%
	(1)	(2)	(3)	(4)	(5)	(6)
1. NUMBER OF LOANS (%)	94	(70.7)	39	(29.3)	133	(100.0)
2. VOLUME OF LOANS (%) (contos)	3,025,945	(75.4)	988,971	(24.6)	4,014,916	(100.0)
3. AVE. LOAN SIZE (contos)	32,190		25,358		29,358	
4A.LOAN SIZE QUINTILES: (contos)						
a) 556 to 6,860	17	(17.7)	11	(28.2)	28	(21.0)
b) 7,104 to 16,898	21	(22.3)	7	(18.0)	28	(21.0)
c) 17,500 to 31,000	19	(20.2)	8	(20.5)	27	(20.3)
d) 32,142 to 43,000	17	(18.1)	8	(20.5)	25	(18.8)
e) 47,078 to 250,000	20	(21.3)	5	(12.8)	25	(18.8)
TOTAL	94	(100.0)	39	(100.0)	133	(100.0)
4B.LOAN SIZE DECILES: (contos)						
a) 556 to 4,000	8	(8.5)	6	(15.4)	14	(10.5)
b) 4,694 to 6,860	9	(9.6)	5	(12.8)	14	(10.5)
c) 7,104 to 10,000	11	(11.7)	2	(5.1)	13	(9.8)
d) 10,280 to 16,898	10	(10.6)	5	(12.8)	15	(11.3)
e) 17,500 to 22,398	8	(8.5)	5	(12.8)	13	(9.8)
f) 23,800 to 31,000	11	(11.7)	3	(7.7)	14	(10.5)
g) 32,142 to 37,486	8	(8.5)	4	(10.3)	12	(9.0)
h) 38,000 to 43,000	9	(9.6)	4	(10.3)	13	(9.8)
i) 47,078 to 61,000	9	(9.6)	2	(5.1)	11	(8.3)
j) 62,538 to 250,000	11	(11.7)	3	(7.7)	14	(10.5)
TOTAL	94	(100.0)	39	(100.0)	133	(100.0)
5. TERM OF LOAN:						
a) Up to 12 months	20	(21.5)	6	(15.4)	26	(19.8)
b) 13 to 36 months	40	(43.0)	13	(33.3)	53	(40.1)
c) 37 and more.	33	(35.5)	20	(51.3)	53	(40.1)
TOTAL	93	(100.0)	39	(100.0)	132	(100.0)
6. INTEREST RATE:						
a) Up to 24%	9	(9.6)	13	(34.2)	22	(16.7)
b) 25% to 29%	22	(23.4)	7	(18.4)	29	(22.0)
c) 30% to 34%	19	(20.2)	6	(15.8)	25	(18.8)
d) 35% to 39%	28	(29.8)	6	(15.8)	34	(25.8)
e) 40% and more	16	(17.0)	6	(15.8)	22	(16.7)
TOTAL	94	(100.0)	38	(100.0)	131	(100.0)

TABLE II-1 (continued)

Variable	MAPUTO No.	MAPUTO %	PERI URBAN AREA No.	PERI URBAN AREA %	TOTAL No.*	TOTAL %
	(1)	(2)	(3)	(4)	(5)	(6)
7. ECONOMIC ACTIVITY:						
a) Agriculture	9	(9.6)	15	(38.5)	24	(18.1)
b) Non-Agric. Primary Activ.	16	(17.0)	8	(20.5)	24	(18.1)
c) Food Processing	15	(16.0)	3	(7.7)	18	(13.5)
d) Furniture and Constr. Trades	10	(10.6)	2	(5.1)	12	(9.0)
e) Passenger Transportation	25	(26.6)	2	(5.1)	27	(20.3)
f) Cargo Transportation	6	(6.4)	1	(2.6)	7	(5.2)
g) Commerce & Personal Serv.	13	(13.8)	8	(20.5)	21	(15.8)
TOTAL	94	(100.0)	39	(100.0)	133	(100.0)
8. LOAN REPAYMENT BEHAVIOR:						
a) Full delinquency to date	49	(52.1)	15	(38.5)	64	(48.1)
b) Some repayment	20	(21.3)	9	(23.1)	29	(21.8)
c) Strong repayment	10	(10.6)	5	(12.8)	15	(11.3)
d) No repayment due	15	(16.0)	10	(25.6)	25	(18.8)
TOTAL	94	(100.0)	39	(100.0)	133	(100.0)
9. FIRST TIME BORROWERS:						
a) % by location	81	(73.0)	30	(27.0)	111	(100.0)
b) % over total borrowers	81/94	(86.2)	30/39	(76.9)	111/133	(83.5)
10. NATURE OF COLLATERAL:						
a) Fixed mortgage	15	(16.0)	8	(20.5)	23	(17.3)
b) Heavy Equipment	64	(64.9)	24	(61.5)	85	(63.9)
c) Light equipment etc.	18	(19.1)	7	(18.0)	25	(18.8)
TOTAL	94	(100.0)	39	(100.0)	133	(100.0)
11. EQUITY PARTICIPATION:						
a) 0 %	34	(38.2)	14	(38.9)	48	(38.4)
b) 1% to 14%	8	(9.0)	9	(25.0)	17	(13.6)
c) 15% to 29%	29	(32.6)	6	(16.7)	35	(28.0)
d) 30% and more	18	(20.2)	7	(19.4)	25	(20.0)
TOTAL	89	(100.0)	36	(100.0)	125	(100.0)

Note *: The slightly changing number of total borrowers in column 5 for different panels reflects missing data from some borrowers for the information in question.

Source: OSU field survey.

2. Portfolio Performance: Maputo and the Peri Urban Clientele

Panel 8 in table II-1 summarizes the loan repayment profile of the survey clientele. Overall (column 6) almost half the clientele (48 percent) register full delinquency, that is, 64 borrowers out of 133 have not made any "due" installment payments on their outstanding loans issued in 1990 and/or 1991. Approximately 22 percent made partial payment on their due obligations and only 11 percent of the sample recorded full repayment of due installments. If one removes the borrowers that had no repayments due in column 5 (25 borrowers) then a new total of 108 borrowers are left for whom loan repayment installments were due. With this new total, the share of fully delinquent borrowers now reaches 59 percent, partial repayment borrowers 27 percent, and clients with full repayment to date clients 14 percent respectively.[1]

The bank could possibly argue that while the above documentation may be correct (for the moment), there is the likelihood that some of these delinquent borrowers will eventually repay some, if not all their loan obligations. Perhaps. Giving the bank the benefit of the doubt in this case, one could accept that the true level of final default in 1992 (for fully matured loans) lies somewhere between the official level of 25 percent documented in table I-12 in Chapter One and the 59 percent of all "due" loans illustrated above from our sample. This would range around 40 to 45 percent, an alarmingly high level by any standard. One could argue that this represents an improvement over the higher default rates in the heavy state-client dominated portfolio of the mid-1980s. Nevertheless, it is still far beyond the levels required to become a self sustaining financial institution. The full delinquency shares of total outstanding loans in panel 8 stand out more in the Maputo portfolio (column 2) at 52 percent than in the peri urban clientele in column 4 (38 percent).[2]

Panels 9, 10, and 11 of table II-1 offer additional insights into the loan repayment issue. It is clear that the BPD suffers from the risk of dealing with a unusually high "first time" borrower clientele in our sample, namely 84 percent (panel 9, line b, column 6). Clearly a bank can only begin to manage portfolio risk when it has well established bank client relationships. This clearly is not characteristic of the Maputo branch clientele. Furthermore, the low levels of equity participation for more than half of the clientele (panel 11, lines a and b) generates an incompatible incentive structure for the bank since the

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[1] This new set of repayment rates is important to keep in mind, since it suggests the probabilities of future loan repayment for the loans not yet due.

[2] If full delinquency is estimated only for loans due (eliminating line d in panel 8) then the Maputo city full delinquency share rises to 62 percent and the peri urban share to 52 percent. These results are somewhat surprising in that one would expect borrowers in the more settled urban area to record lower overall arrears than those in the less developed peri urban setting.

borrower has little to lose in defaulting). Finally, it would appear that the allegedly rigorous collateral requirements documented in panel 10 did little to reduce the level of delinquent behavior evident in panel 8.

Tables II-2 and II-3 focus further on loan repayment behavior, this time through cross classification by loan characteristics for Maputo city (table II-2) and the peri urban area (table II-3). Columns 1 through 5 document the number of loans by loan repayment status and total loans within the disaggregated categories of each panel in the table for the two locations. Column 6 is the important column for analysis in both tables. This shows the ratio of full delinquency (no repayment to date on all installments due) in column 1 to total loans due (column 5 minus column 4). The probabilities of delinquency evident in column 6 suggest the loan repayment expectations for those loans not yet due (in column 4).

There are high delinquency or arrears for all disaggregated categories in all four panels. The evidence, therefore, is not promising for what may likely emerge as the future loan repayment profile for those loans not yet due. Overall, more than one-half of the portfolio, as pointed out earlier, is roughly in arrears in both regions. Reviewing these results by panel several features stand out. Generally, the longest term loans (49 months and more) record a lower arrears in column 6 of table II-2 than loans for shorter terms in panel 1 for the Maputo city clientele, while the two to three year period records the lowest relative arrears for the peri urban clientele in panel 1, column 6 in table III-3. The second panel delineating sector of economic activity highlights the high level of arrears among the agricultural clientele in both the Maputo city and peri urban regions. Given the large weight of agricultural lending among total loans in the peri urban portfolio of the Maputo branch in table III-3, the performance of this sector clearly shapes the overall high arrears rate for the peri urban clientele as a whole. Therefore, any actions to reduce the arrears rate for this portfolio either has to reduce the relative weight of this clientele in the total portfolio or take on the burden (or persuade the government) to help this clientele reduce its risks and/or increase its income generation possibilities so it can repay its loans. The former route is clearly the least costly and more appropriate path to follow for a financial institution.

TABLE II-2 LOAN REPAYMENT PROFILE BY NUMBER OF LOANS BY SELECTED LOAN CHARACTERISTICS FOR MAPUTO (CITY) FOR SAMPLE CLIENTELE FROM MAPUTO BRANCH OF BPD 1990-1991

Variable	Number of Loans					
	Full Delinquency	Partial Repayment	Full Repayment	Not Due	Total No. Loans	Full Delinquency as % of total loans due (col. 1/col. 5 - col. 4)
	(1)	(2)	(3)	(4)	(5)	(6)
1. Term of Loan:						(%)
a) Up to 12 months	9	6	1	4	20	56
b) 13 to 24 months	14	5	1	0	20	70
c) 25 to 36 months	12	2	4	2	20	67
d) 37 to 48 months	8	2	2	6	18	67
e) 49 months and more	6	5	2	2	15	46
Total No. of Loans or (%)	49	20	10	14	93	62
2. Economic Activity						
a) Agriculture	4	1	0	4	9	80
b) Non-Agric. Primary Activ.	9	3	2	2	16	64
c) Food and Food Processing	10	5	0	0	15	66
d) Furniture, Constr. Trades	7	1	2	0	10	70
e) Passenger Transportation	13	3	4	5	25	65
f) Cargo Transportation	1	3	1	1	6	20
g) Commerce & Personal Serv.	5	4	1	3	13	50
Total No. of Loans or (%)	49	20	10	15	94	62
3. Loan Size by Quintiles:						
a) From 556 to 6,860	11	4	0	2	17	73
b) From 7,104 to 16,898	15	5	0	1	21	75
c) From 17,500 to 31,000	11	3	4	1	19	61
d) From 32,142	4	5	2	6	17	36
e)	8	3	4	5	20	53
Total No. of Loans or (%)	49	20	10	15	94	62
4. Nature of Collateral:						
a) Fixed Mortgage	6	4	0	5	15	60
b) Heavy Equipment	30	14	8	9	61	57
c) Light Equipment, etc.	13	2	2	1	18	76
Total No. of Loans or (%)	49	20	10	15	94	62

TABLE II-3 LOAN REPAYMENT PROFILE BY NUMBER OF LOANS BY SELECTED LOAN CHARACTERISTICS FOR PERI URBAN AREA FOR SAMPLE CLIENTELE FROM MAPUTO BRANCH 1990-1991

	Number of Loans					
Variable	Full Delinquency	Partial Repayment	Full Repayment	Not Due	Total No. of Loans	Full Delinquency as % of total loans due (col. 1/col. 5 - col. 4)
	(1)	(2)	(3)	(4)	(5)	(6)
1. Term of Loan:						(%)
a) Up to 12 months	4	1	0	1	6	80
b) 13 to 24 months	3	3	1	1	8	43
c) 25 to 36 months	1	1	1	2	5	33
d) 37 to 48 months	3	1	1	3	8	60
e) 49 months and more	4	3	2	3	12	44
Total Number of Loans	15	9	5	10	39	52
2. Economic Activity						
a) Agriculture	7	4	0	4	15	64
b) Non-Agric. Primary Activ.	2	2	1	3	8	40
c) Food and Food Processing	1	1	1	0	3	33
d) Furniture, Constr. Trades	1	1	0	0	2	50
e) Passenger Transportation	0	0	1	1	2	0
f) Cargo Transportation	0	0	0	1	1	0
g) Commerce & Personal Serv.	4	1	2	1	8	57
Total Number of Loans	15	9	5	10	39	52
3. Loan Size by Quintiles: (contos)						
a) From 556 to 6,860	6	3	2	0	11	54
b) From 7,104 to 16,898	3	2	0	2	7	60
c) From 17,500 to 31,000	3	3	1	1	8	43
d) From 32,142	2	1	1	4	8	33
e)	1	0	1	3	5	50
Total Number of Loans	15	9	5	10	39	52
4. Nature of Collateral:						
a) Fixed Mortgage	3	1	2	2	8	50
b) Heavy Equipment	10	5	2	7	24	59
c) Light Equipment, etc.	2	3	1	1	7	33
Total Number of Loans	15	9	5	10	39	52

The arrears record in column 6 for the urban clientele in Maputo in panel 2 of table II-2 is uniformly high for all activities except for the relatively small number of freight or cargo transport businesses. This Maputo city portfolio is more diversified than the primary sector focus of the peri urban portfolio in table III-3. However, this makes it difficult to reduce the overall arrears by reshuffling the portfolio as most activities (with the exception of cargo transport) record high arrears. In short, the elements of adverse selection and moral hazard with a high risk clientele is fairly widespread. The issue here is not so much reallocating the portfolio by sector of activity to reduce risk (as one could conceivably do for the peri urban clientele) as much as improving the loan tracking and client selection criteria in the future for entrepreneurs across all sectors of activity for the Maputo clientele. Clearly the bank will have to identify strategic information that predicts likely loan performance within as well as across sectors of activity. Information that would have previously documented (on a continuing basis) the prices of an array of products and key inputs by branch of economic activity (including sector specific taxes, duties, etc.) would offer a rough insight into the profit potential of a range of activities to evaluate the risks associated with prospective borrowers. In short, the bank should establish a more reliable information system that can establish the creditworthiness and risk domain of prospective borrowers.

The final two panels relate the loan repayment rate to loan size and collateral. It would appear that collateral of different categories plays no visible role in containing delinquency for the Maputo city clientele and, except for a few loans, not for the peri urban clientele as well. This raises questions about the effectiveness of various guarantees in Mozambican financial markets and the rigor o. any contract enforcement mechanisms in the country's legal system. The OSU research team was unable to explore this dimension in any detail other than being made aware by bank officials that legal remedies are costly, time consuming, and frequently ineffective. The data from this survey would certainly bear this out. More research is clearly called for to identify the strategic weaknesses in the legal environment so that measures can be undertaken to improve local contract enforcement mechanisms.

The loan repayment profile by loan size reflects a similar trend in both clienteles, namely, a gradually declining rate of full delinquency over loans due from small to larger sized loans until the last, and largest, loan size category. This generally rough inverse association between loan size and full delinquency is not necessarily contrary to conventional wisdom in which smaller sized loans register a greater relative incidence of full delinquency or default in terms of numbers of loans while larger delinquent loans, though smaller in number, weigh more in the total volume of delinquency. In conclusion, the widespread arrears profile for the clientele of the BPD branch of Maputo raises questions as to whether a specialized non-governmental organization (NGO) could possibly lower risks and costs by acting as a broker between the bank and its clientele, particularly a small borrower clientele. This issue is explored in more detail the following section.

C. The BPD-GPE Microenterprise Program: Loan Characteristics and Portfolio Performance

1. Introduction: Program Description and Loan Administration Issues

The Green Zones office of the Maputo branch of the BPD has been given the responsibility to administer the loan portfolio of the microenterprise program supported by World Bank funding. BPD officials do this in collaboration with the staff of the Gabinete para a Promoção de Emprego (GPE) of the Ministry of Labor. The GPE staff recruits the microentrepreneurs for the loan program, evaluates their prospects for investment loans, and, on behalf of the clients, prepares all the documentation required for the loan request for the BPD office. In short, the GPE acts as a broker or intermediary between the bank and the customer and, in so doing, presumably relieves the bank of all the costs it would otherwise have had to incur to do these tasks itself.

The microenterprise borrowers by definition represent a high risk clientele. Otherwise, there would be no need for a special line of credit from the World bank to service this group. First, to qualify for the program all clients have to be first time borrowers. Therefore, the BPD-GPE team have no past borrower record to draw upon to evaluate risk and determine prospective borrower performance. Second, all loans are designed to finance medium to long term investment (not lower risk short term working capital) to promote expansion of production facilities and employment. Third, all microentrepreneurs are expected to have only five employees or less at the time of the loan request to meet the "micro" definition for the World Bank program. These unusually small operators very likely have only rudimentary technical experience in their product line and no experience in meeting the market challenge of managing the loan repayment requirements of a long term loan obligation. Fourth, all loans are expected to use this World Bank tranche to import equipment from abroad. There would be really no other alternative since very little, if any, equipment is produced locally. However, equipment imports from abroad introduce long delays and high costs to facilitate expedient passage through customs officials along with taxes. Finally, it is pertinent to point out that many studies have documented a high turnover of microenterprises with many new starts and many failures as a natural phenomenon in the microenterprise world of all developing countries. It is to be expected that Mozambique would reinforce this turnover rate to even higher levels given the risks and uncertainties in a transitional distorted economy haltingly adapting to imperfect market forces.

The cumulative impact of all of the above risk-prone features underscore the high likelihood that this loan clientele would register a problematical portfolio performance. This, in effect, is what the evidence shows to date. First, table II-4 highlights the delays that are inherent to the administration of this program through several time consuming stages of the loan process. Seven stages are documented in the table for the status of GPE program clients as of November 1991. A larger number are in the earlier stages since they have only recently initiated their loan process. Columns 1 and 3 indicate the average number of days GPE clients spent in each stage of the loan process depending on different estimation methods explained at the bottom of the table. The average number of days spent from the initial inquiry and request for funding from the GPE staff to the final delivery of the imported equipment on the premises of the borrower-investor takes well over a year (from 402 to 428 days). Since an important part of this equipment comes from South Africa, it is not clear why there are such long delays in stage five. Also, it is not clear why it takes so much time to go through the first two loan administration stages and, more specifically, why the BPD has to spend almost an additional two months (in stage two) to further process the loan documentation, if the GPE had carried out their loan preparation tasks thoroughly in stage one. One would think there could be room for improvement here to shorten substantially this loan processing time. In its present pattern, there are clearly high transaction costs in time and expense for the borrower and program alike.

TABLE II-4 ESTIMATE OF THE AVERAGE NUMBER OF DAYS REQUIRED FROM INITIAL LOAN REQUEST TO FINAL DELIVERY OF EQUIPMENT IN THE GPE-BPD MICROENTERPRISE LOAN PROGRAM AS OF LATE 1991.

Stages in GPE-BPD Loan Process for 272 Clients as of late 1991.	Estimation 1 (a)		Estimation 2 (b)	
	(1) Ave. No. Days	(2) No. Cases	(3) Ave. No. Days	(4) No. Cases
1. Submission to GPE to Submission to BPD	104.3	139	106.4	154
2. Submission to BPD to BPD Approval	55.7	133	56.6	148
3. Submission to GPE to BPD Approval (1-2)	204.6	39	169.8	68
4. BPD Approval to Contractor	150.1	94	148.5	137
5. Contractor to Customs	129.7	43	76.7	81
6. Customs to Delivery of Equipment	26.3	45	38.0	83
7. Submission to GPE to Delivery (1-6)	427.9	45	402.0	83

(a) Estimation 1 was calculated by eliminating all observations for which a date corresponding to a later stage was previous to an earlier stage in the computer printout from the GPE program.

(b) Estimation 2 was calculated rearranging any inconsistent dates in ascending order. It was assumed that a mistake was made in the placement of the dates if a later date preceded an earlier date.

2. Loan Portfolio by Location: Maputo vs. the Peri Urban Area

A sample of 70 GPE borrowers was chosen from the clientele list at the BPD Green Zones office, 35 from urban Maputo and 35 from the peri urban area. Similar to the results for Maputo branch clients, both the average firm size, loan size, and relative distribution of the volume of loans favor the Maputo over the peri urban clientele as one would expect (table II-5, lines 2, 3, and 4). This is consistent with the fact that the urban based clientele in Maputo city register a higher relative distribution of average monthly sales in the largest size category (in panel 5 line e) and the largest loan size category (in panel 10 line e). The peri urban borrowers in the GPE program, in contrast, register higher relative participation in the smallest firm size and loan size categories. Also, it is of interest to note that the average loan size in line 3, column 5 is two times the average firm size (in line 4, column 5) measured as average monthly sales. This multiple rises to more than three times average monthly sales when one large outlier is removed from the sample. This suggests that these loans would represent a formidible cash flow burden when loan repayments come due.

TABLE II-5 CLASSIFICATION OF URBAN AND PERI-URBAN CLIENTELE BY SELECTED LOAN CHARACTERISTICS IN THE BPD-GPE LOAN PROGRAM OF THE ZONAS VERDES OFFICE OF BPD (1990-1991)

LOAN CHARACTERISTICS	NUMBER IN MAPUTO AREA		NUMBER IN PERI URBAN AREAS		TOTAL	
	No.	%	No.	%	No.	%
	(1)	(2)	(3)	(4)	(5)	(6)
1. NUMBER OF LOANS	35	50.0	35	50.0	70	100
2. VOLUME OF LOANS (contos)	1,155,683	62.2	702,902	37.8	1,858,585	
3. AVE. LOAN SIZE (contos)	33,019		20,082		26,551	
4. AVE. FIRM SIZE (contos)**	17,451 (7,702*)		6,874		12,162 (8,531*)	
5. AVE. MONTHLY SALES (contos)						
a) 865 to 3,000	6	17.1	8	22.9	14	20.0
b) 3150 to 4,391	6	17.1	5	14.3	11	15.7
c) 4,500 to 5,800	5	14.3	12	34.3	17	24.3
d) 6,276 to 12,350	8	22.9	6	17.1	14	20.0
e) 12,402 to 320,726	10	28.6	4	11.4	14	20.0
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
6. TERM OF LOAN						
a) Up to 12 months	0	0.0	9	25.7	9	12.9
b) 13 to 24 months	19	54.3	13	37.1	32	45.7
c) 25 to 36 months	11	31.4	10	28.6	21	30.0
d) 37 to 48 months	4	11.4	0	0.0	4	5.7
e) 48 months and more	1	2.9	3	8.6	4	5.7
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
7. INTEREST RATE						
a) Up to 24%	1	2.9	0	0.0	1	1.4
b) 25% to 29%	5	14.3	7	20.0	12	17.1
c) 30% to 34%	12	34.3	8	22.9	20	28.6
d) 35% to 39%	3	8.6	12	34.3	15	21.4
e) 40% and higher	14	40.0	8	22.9	22	31.4
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
8. ECONOMIC ACTIVITY						
a) Primary Sector	3	8.6	20	57.1	23	32.9
b) Processing	4	11.4	2	5.7	6	8.6
c) Furniture, Constr. Trades	18	51.4	9	25.7	27	38.6
d) Commerce & Ser.	10	28.6	4	11.4	14	20.0
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100

* These averages were computed deleting one outlier with a value of 320,726 contos.

** Average monthly sales in contos.

TABLE II-5 (continued)

	NUMBER IN MAPUTO AREA		NUMBER IN PERI URBAN AREAS		TOTAL	
	No.	%	No.	%	No.	%
	(1)	(2)	(3)	(4)	(5)	(6)
9. LOAN REPAYMENT BEHAVIOR						
a) Full delinquency to date	22	62.9	21	60.0	43	61.4
b) Some repayment	3	8.6	1	2.9	9	12.9
c) Full repayment	2	5.7	6	17.1	3	4.3
d) No repayment due	8	22.9	7	20.0	15	21.4
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
10. LOAN SIZE BY QUINTILES (contos)						
a) 2,089 to 2,967	2	5.7	15	42.9	17	24.2
b) 3,212 to 13,560	8	22.9	4	11.4	12	17.1
c) 14,318 to 22,320	8	22.9	5	14.3	13	18.6
d) 23,274 to 41,226	8	22.9	5	14.3	13	18.6
e) 44,392 to 116,578	9	25.7	6	17.1	15	21.4
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
11. LOAN SIZE BY DECILES (contos)						
a) 2,089 to 2,328	1	2.9	7	20.0	8	11.4
b) 2,656 to 2,967	1	2.9	8	22.9	9	12.9
c) 3,212 to 6,400	4	11.4	2	5.7	6	8.6
d) 7,586 to 14,318	5	14.3	2	5.7	7	10.0
e) 15,000 to 20,000	6	17.1	2	5.7	8	11.4
f) 20,519 to 23,274	2	5.7	3	8.6	5	7.1
g) 25,880 to 36,026	5	14.3	2	5.7	7	10.0
h) 37,561 to 46,983	3	8.6	5	14.3	8	11.4
i) 49,932 to 70,960	4	11.4	2	5.7	6	8.6
j) 82,400 to 116,578	4	11.4	2	5.7	6	8.6
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100
12. NATURE OF COLLATERAL						
a) Fixed Mortgage	2	5.7	1	2.9	3	4.3
b) Heavy Equipment	26	74.3	32	91.4	58	82.9
c) Light Equipment, etc.	7	20.0	2	5.7	9	12.9
TOTAL NO. OF LOANS OR (%)	35	100.0	35	100.0	70	100

Source: Peri-urban field survey on BPD client dossiers.

Primary sector activity (largely fishing and, to some extent, agriculture) stands out for the peri urban clientele in panel 8. In sharp contrast, the artisan, construction, trading and service sector trades stand out much more for the urban based Maputo clientele in this program. Fixed mortgages play almost no role as collateral (panel 12) as one would expect for this low-income small microenterprise clientele. The equipment associated with the investment more often than not serves as a guarantee. However, collateral, in the end, means very little in a targeted microenterprise program. This is evident in panel 9. Loan repayment data indicates a high 63 percent full arrears for Maputo borrowers and 60 percent of total loans issued in the peri urban area in our dossier sample. (These compare to 52 and 38 percent respectively for the regular BPD clientele of the Maputo branch discussed in the earlier section). Panel 6 indicates that the preponderant majority of these loans are medium to long term in nature (largely two to three year terms), therefore, full arrears means no repayments have been made on any of the outstanding installment payments due for a majority of the BPD-GPE clientele. If we assume that this is not willful, deliberate default, we must assume that the business enterprises financed through these loans are experiencing difficulties, or, the entrepreneur is inexperienced in managing his cash flow and, as a result, cannot meet his loan installment obligations. Very likely the difficulty is a combination of both factors. In the end, the element of risk leading to arrears is clearly underscored in this portfolio.

Table II-6 highlights this arrears profile further, similar to our earlier analysis for the regular BPD clientele in the Maputo branch of the bank. Columns 9 and 10 summarize the incidence of the non-performing loan portfolio in terms of the number of fully delinquent loans over total loans due. The results are not encouraging. Client files in the Green Zones office indicate that eighty-one percent of the Maputo based clientele and 75 percent of the peri urban clientele have made no repayments on the installments due on their outstanding loan obligations. (This contrasts to 62 and 52 percent respectively on "due" loans for the Maputo and peri urban clientele from the BPD regular clientele of the Maputo branch reported in tables II-2 and II-3). Moreover, within the limited sample here, there does not appear to be any marked differentials by loan or borrower characteristics. In short, the arrears profile is widespread through all disaggregated categories in table II-6.

TABLE II-6 LOAN REPAYMENT BEHAVIOR BY LOCATION AND SELECTED LOAN CHARACTERISTICS IN THE BPD-GPE LOAN PROGRAM OF THE ZONAS VERDES OFFICE OF BPD (1990-1991)

Loan Characteristics	Number of Loans								Full Delinquency as a Percent of Total Loans Due	
	Full Delinquency		Some Repayment		Full Repayment		Total Loans Due[1]			
	Maputo	Peri Urban	Maputo	Peri Urban	Maputo	Peri Urban	Maputo	Peri Urban	Maputo	Peri Urban
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Term of Loan									(%)	(%)
a) Up to 12 months	0	2	0	3	0	3	0	6	0.0	33.3
b) 13 to 24 months	14	10	3	1	0	0	17	11	82.4	90.9
c) 25 to 36 months	6	6	1	0	0	0	7	6	85.7	100.0
d) 37 months and more	2	3	1	0	0	0	3	3	66.7	100.0
Total Number or (%)	22	21	5	4	0	3	27	28	81.5	75.0
2. Economic Activity										
a) Primary Sector	2	9	0	4	0	3	2	16	100.0	56.3
b) Processing	2	1	1	0	0	0	3	1	66.7	100.0
c) Furniture, Cons. Trades	11	8	3	0	0	0	14	8	78.6	100.0
d) Commerce and Serv.	7	3	1	0	0	0	8	3	87.5	100.0
Total Number or (%)	22	21	5	4	0	3	27	28	81.5	75.0
3. Loan Size by Quintiles (contos)										
a) 2,089 to 2,967	2	7	0	3	0	3	2	13	100.0	53.8
b) 3,212 to 13,560	5	2	3	0	0	0	8	2	62.5	100.0
c) 14,318 to 22,320	6	4	0	1	0	0	6	5	100.0	80.0
d) 23,274 to 41,226	4	5	2	0	0	0	6	5	66.7	100.0
e) 44,392 to 116,578	5	3	0	0	0	0	5	3	100.0	100.0
Total Number or (%)	22	21	5	4	0	3	27	28	81.5	75.0

[1] Total loans not due in the BPD-GPE loan portfolio were subtracted from total loans issued in 1990-1991 to arrive at total loans due in columns 7 and 8.

These findings can be discussed from several perspectives. First, this targeted microenterprise program records higher arrears than the regular BPD clientele which one would expect given the risk profile for this group discussed earlier. However, it should be reemphasized that the arrears for the regular clientele, though less severe, is already way beyond the level compatible for a solvent financial intermediary. Secondly, arguments could conceivably be made that this microenterprise clientele is merely experiencing a temporary interruption in its cash flow and, in time, will be able to honor its debt obligations. In short, this argument would emphasize that temporary arrears does not necessarily mean final default. It would be more realistic to recognize the inherent risks in servicing this microenterprise clientele and appreciate that high arrears are part of the territory. In short, there is likely an unavoidable "grant" element in this program.

Third, field visits with some of the entrepreneurs highlighted the risk and uncertainty they face in their businesses. Some experienced unexpected rises in input prices (such as fuels) and interrupted supplies. Others would suffer from market risks in being unable to sell their output at remunerative prices. Others experienced technical problems with their imported equipment which of course was difficult to service through foreign suppliers. In the end, cash flows were reduced and they were unable to service their debt obligations.

Fourth, the long delays in processing the loans and importing the equipment no doubt caused problems for the microentrepreneurs in terms of lost market opportunities, and rising costs of doing business not anticipated in the original investment loan evaluation. Finally, the program design of most microenterprise programs create a weak incentive for borrowers to repay their loans. On the one hand, the aforementioned bureaucratic delays in loan processing and import transactions create problems that in turn generate disappointment and, in some cases, resentment among borrowers. On the other hand, casual loan recovery efforts signal borrowers that they can likely delay their payments without serious consequences. Consistent with this is the knowledge that this is a special program drawing on outside money. This always creates the impression that sanctions for arrears in repayments will be weak to non-existent. In the end, the borrowers service other, more pressing senior claims on their available cash flow and debt repayments are slighted.

In summary, the BPD-GPE program faces difficult challenges. Despite the conscientious commitment of a dedicated GPE staff to service a deserving marginal clientele, there are inherently high risks to service this clientele as documented and discussed above. Results to date suggest that the program staff should emphasize loan recovery efforts more and scale back the number of clientele served in order to focus their efforts on helping the current clientele to work out of their cash flow constraints. Finally, both the BPD-GPE program and the BPD regular branch management should institute more effective information management systems. A loan tracking program should be introduced to document the on-going loan repayment performance of their respective clienteles on a regular and systematic basis. Only with this computer generated data base on hand will it be possible to strategically plan client visits to induce loan repayments before bad loan habits set in. Furthermore, cross classifying loan recovery to key loan and borrower market characteristics can generate a risk profile to score creditworthiness criteria to use in evaluating future loan requests. In the end, both the bank and the program would be much better positioned to carry out effective risk management in their portfolio loan strategies.

III. Informal-Formal Financial Market Linkages in Greater Maputo: A Modest Profile

A. Introduction

From the surveyed clientele of Chapter II for the Maputo branch and Green Zones office a further random sample of clients was chosen to carry out a case study of formal-informal market linkages. For the Maputo branch, this consisted of 21 clients, while 25 clients were chosen from the GPE-BPD program clientele at the Green Zone office of the BPD. This effort was designed to identify the informal supplier and client networks through which these BPD borrowers operated and the nature of the financial contracts within these marketing networks. Given the relatively small numbers involved in the interviews, the field survey was designed to highlight the principal features of these marketing transactions in the spirit of a case study rather than recording detailed documentation about the volume and terms and conditions of each transaction (the latter was attempted but the respondents were generally reticent to share this specific information in detail).

B. The Linkage Profile for the Maputo Branch Clientele

1. The Upstream Supplier Connection

Table III-1 presents the general characteristics of the 21 clients from the Maputo branch clientele. It should be pointed out attempts were made to contact 38 firms for the case study sample. Seventeen firms were unable to be interviewed. It was discovered that a majority of these 17 borrower-owners had moved to other locations not listed in the bank files. Others claimed they had insufficient information to answer our questionnaire. Both factors clearly underscored the "non-performing" nature of these bank loans. Seven broad sectors of economic activity are documented for the remaining 21 borrowers. Overall, they averaged about seven employees per firm (column 2) with a normal monthly volume of sales in column 4 of approximately 4,000 contos (i.e., around 2,000 dollars at the parallel market rate of exchange at this time). It is of interest to note that the average BPD loan for these surveyed clientele (column 6) is 62 percent of their estimated average annual sales (column 7). For the 3 firms in the food processing sector, loans averaged out to 1.6 times their normal annual sales volume and for the clothing firm, it was 2.4 times its annual sales and the single office supply firm 6.5 times annual sales. (This latter case was associated with a newly founded business).

All of these rates are remarkably high and no doubt reflect an investment loan designed to substantially change the production profile of the firms. However, they also represent a high profile of risk (i.e., moral hazard) for the bank in that these highly leveraged clients would undoubtedly encounter cash flow problems and not be able to meet these demanding loan repayment schedules. In established financial markets such as the United States, banks usually will lend up to ten percent the annual receipts of a business customer. On rare occasions, this may rise to 20 percent. No responsible banker would make a loan that would amount to 62 percent of the annual sales of a business customer, even with drawn out installment schedules. This strongly suggests either the bank did not secure accurate income statements from their clients, or the clients have experienced severe income problems since the loans were granted, which hopefully represents a temporary downturn rather than a permanent condition. Evidence to this abrupt downturn can be seen in the notes to the table which indicate that six of the 21 firms reported zero or practically no sales in the most recent month of activity prior to the interviews in the first trimester of 1992. This evidence highlights the high risks and uncertainty causing business failures or temporary slow downs among this clientele. In summary, these high loan to sales ratios go a long way towards explaining the high arrears documented in the previous chapter.

TABLE III-1: SURVEY CLIENTELE FROM MAPUTO BRANCH OF THE BPD: GENERAL CHARACTERISTICS

SECTOR	No. of Clients	Ave. Number of Employees	Ave. Last Month Sales (Contos)*	Ave. Normal Monthly Sales (Contos)	Normal Annual Sales (Contos) (Col.(4)x12)	Average Size of BPD Loan (Contos)	Loan to Normal Annual Sales Ratio (Col.(6)/Col.(5))
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agricultural Activity	5	9.6	1,503	2,950	35,400	26,818	0.76
2. Food Processing	3	1.3	117	183	2,200	3,521	1.60
3. Food Retail Business	3	12.7	9,750	6,967	83,600	36,637	0.44
4. Transport Activity	5	1.8	7,055	3,220	38,640	36,722	0.95
5. Clothing and Textiles	1	15.0	375	1,750	21,000	50,000	2.38
6. Office Supplies and Services	1	2.0	15	375	4,500	29,500	6.56
7. Construction, Building Supplies and Repair Services	3	12.3	9,333	4,833	58,000	61,000	1.05
TOTAL	21	7.3	5,553*	4,032	48,385	29,876	0.62

* Includes four clients (one each in Agriculture, Food Processing, Food Retail and Transportation) who reported no monthly sales in last month and, in addition, two clients (in Agricultural activities) reporting less than 10 contos for sales in last month. The average last month sales excluding these six cases rises to 6,663 for 15 firms.

Source: OSU Field Survey 1992.

TABLE III-2: SELECTED CHARACTERISTICS OF UPSTREAM SUPPLIER TRANSACTIONS FOR MAPUTO BRANCH CLIENTELE IN SURVEY

TYPE OF INPUT	No. of Input Transactions	Ave. Interval of Purchases (Days)	Form of Contract Payment (Percent of no. of input transactions)					
			Cash	Cheques	Consigned Goods	Supplier Credit	Advanced Purchases	Cash and Consignment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Food	27	87	67	33	0	0	0	0
2. Chemical Inputs	33	79	88	9	0	0	3	0
3. Mechanical Inputs	18	238	67	33	0	0	0	0
4. Maintenance and other Services	20	98	55	10	0	35	0	0
TOTAL	98	114	71	20	0	7	1	1

Source: OSU Field Survey 1992.

Table III-2 delineates the 98 input transactions recently carried out by these 21 businesses. The average interval for input purchases was 114 days, a bit less than four months. This interval could range from a low of 79 days for chemical inputs (frequently fertilizer) for agricultural activity to 238 days, almost eight months for mechanical inputs. The most revealing statistic of table III-2, however, is the high demand for cash payments from the input suppliers of our 21 clients from the Maputo branch. In short, there is no supplier credit in this group. As we shall see shortly in our case studies of larger borrowers from the Bank of Mozambique in the next chapter, the same finding holds across the board, from small to large firms in Mozambique. Since suppliers of equipment, fertilizer, spare parts, etc., are invariably foreign in origin, it is evident foreign suppliers consider the Mozambican market in 1991-92 to be far too unstable and risky to qualify for traditional supplier credit.

It is interesting to note the one exception to this rule in table III-2, the apparent role of supplier credits for domestic maintenance and repair services, where cash transactions in column 3 drop to only 55 percent and supplier credit rises to 35 percent of total forms of contract payments. The explanation for this is that they are supplied domestically (as are most services) in contrast to the dominant role of foreign suppliers for goods (i.e., hardware or chemical inputs). In light of this supply constraint, BPD bank finance clearly makes a difference for these businesses who need to import foreign inputs. Since our sample here is made up of BPD borrowers who frequently received loans to purchase inputs, it is not surprising to see that supplier credits are negligible since the loans in part performed this function. Possibly businessmen with no loans and purchasing inputs domestically would register higher levels of supplier credit than those reviewed here.

Finally, it is instructive to note that checks have not yet reached a stage to be an important medium of exchange in Mozambique. This fact more than any other underscores the rudimentary nature of financial markets in the country, and, more specifically, the deficiency in the payment services offered by the banking industry. The principal problem is the long time required to clear checks in the banking system. In this sense, payment by check can, in effect, be an implicit interest free loan for one to two months given the time to clear checks. No well developed commercial system can function without a payments system. This invaluable clearing house function is still lamentably underdeveloped in the country and many customers write checks that are not backed up by funds due to the long delays as well as to fraud. Clearly, computerization of checking accounts for quick monitoring and review is called for as well as quick processing. To close out this section, one could argue that payment by check (given the long clearance time) represents another "implicit" form of supplier credit and thus should be added to the other informal forms of payment in table III-2. With this reasoning, supplier credits would reach about 30 percent for this clientele. The checks of course would be used largely for domestic suppliers since foreign suppliers typically would expect cleared payment before shipping the goods.

TABLE III-3: SELECTED CHARACTERISTICS OF DOWNSTREAM CLIENT TRANSACTIONS FOR MAPUTO BRANCH CLIENTELE IN SURVEY

TYPE OF OUTPUT	No. of Output Transactions	Ave. Interval of Sales (Days)	Form of Contract Payment (percent of no. of transactions w/client transactions by type) Cash	Cheques	Consigned Goods	Client Credit	Advanced Purchases	Cash and Consignment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Non-durable Goods	26	7.1	84.6	3.8	3.8	3.8	0.0	3.8
2 Durable Goods	6	1.0	100.0	0.0	0.0	0.0	0.0	0.0
3 Services	9	24.0	100.0	0.0	0.0	0.0	0.0	0.0
TOTAL	41	9.9	90.4	2.4	2.4	2.4	0.0	2.4

Source: OSU Field Survey 1992.

2. The Downstream Client Connection for the Maputo Clientele

The lack of an efficient payments system and negligible commercial credit as well stands out even more in table III-3 where we see that our clients demand that their downstream retail level clients or final consumers pay them in cash rather than by checks. Furthermore, sales on credit or consignment is almost completely absent from our 21 clients. For the most part, they do not sufficiently trust their downstream marketing agents (retailers) or final consumers to grant them even short term credit. The only exception to this rule is for downstream sales of non-durable goods (largely food products to restaurants, business or public sector establishments) where, cumulatively, about 10 percent of the sales are conducted through some credit transactions. Given the delays for checks to clear, one could also include the 3.8 percent payment by check as implicit credit generating a total of 16 percent for informal credit. Sales on credit usually are only for a week or two. Usually the credit is associated with the amount of time it takes for the retailer to sell the non-durable goods to final consumers enabling him or her to repay our client-wholesaler firms. In summary, downstream informal sales credit appears to be much less developed than it is in other African settings. This no doubt is a result of continued instability and risk in the embryonic commercial networks that militate against widespread credit transactions within the traditional marketing chain. Very likely, informal marketing credit will grow once production and commerce become more stable and marketing risks decline. Furthermore, it is quite likely that sales of larger and more expensive durable appliances do incorporate credit at the retail level (as they do in most countries) than those items represented in our smaller client list here. Our study of larger borrowers in the next chapter explores this issue further.

3. Informal Finance by Location for the Maputo Clientele

Tables III-4 and III-5 present the commercial transactions of our 21 member clientele by spatial location of their businesses. On the whole, there are no marked disparities between the experience of the bank's clientele in Maputo as compared to the peri urban area. In table III-5, the Maputo based clientele, on average hire slightly more employees and record slightly higher monthly sales and loan volumes. In the end, both sets of clients register roughly similar loan to annual sales ratios (column 7). Table III-4 registers a surprisingly low level of informal credit transactions for this clientele. It is of interest to note that there are a greater number of informal loans granted than received by our group of borrowers and that this stands out more in the peri urban than in the Maputo area. This is consistent with the fact that all our clients were sufficiently privileged to secure formal loans from the BPD (and an additional four formal loans from other sources). Hence, it would be likely they would be sufficiently serviced with these loans to not need informal loans and, in the end, actually be a source of informal credit. One would expect this to stand out even more in the low income peri urban area where the mere access to formal loans would make our peri urban BPD borrower emerge as an even more likely candidate to act as a source of informal credit than might be true in the higher income urban Maputo setting. For the most part, these informal loans are salary advances to the borrower-client's employees. These are generally secure loans in that the company can always deduct payments from future salaries.

TABLE III-4: NUMBER OF INFORMAL AND FORMAL FINANCIAL CONTRACTS DOCUMENTED FOR THE 21 CLIENTS OF THE MAPUTO BRANCH IN SURVEY

LOCATION	No. of Clients	No. of Informal Loans		No. of Formal Loans	
		Received	Granted	B.P.D.	Others
	(1)	(2)	(3)	(4)	(5)
1. Maputo	10	3	2	10	1
2. Peri-Urban Area	11	0	5	11	3
3. TOTAL	21	3	7	21	4

	No. of Deposit Accounts		
	In Banks	In Xitiques	Total
	(6)	(7)	(8)
1. Maputo	10	3	28
2. Peri-Urban Area	11	0	31
3. TOTAL	21	3	59

Source: OSU Field Survey 1992.

TABLE III-5: SURVEY CLIENTELE FROM MAPUTO BRANCH OF THE BPD: GENERAL CHARACTERISTICS BY LOCATION

TOTAL BY LOCATION	No. of CLIENTS	Ave. Number of Employees	Ave. Last Month Sales (Contos)*	Ave. Normal Monthly Sales (Contos)	Normal Annual Sales (Contos) (Col.(4)x12)	Average Size of BPD Loan (Contos)	Loan to Normal Annual Sales Ratio (Col.(6)/Col.(5))
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Maputo	10	7.8	6,155.6	4,337.5	52,050	29,498	0.57
Peri urban Area	11	6.8	4,951	3,755	45,054	30,221	0.67
TOTAL	21	7.3	5,553	4,032	48,385	29,876	0.62

* Four clients (1 in Maputo and 3 in the Peri urban area) reported no monthly sales in last month. In addition, 2 clients (one in Maputo and 3 in the Peri urban area) reported less than 10 contos for sales in last month.

Source: OSU Field Survey 1992.

TABLE III-6: PERCEPTIONS OF SURVEYED CLIENTELE FROM THE MAPUTO BRANCH CONCERNING IMPACT OF BPD LOAN ON THEIR BUSINESS

QUESTIONS ASKED	No. Clients Answering Yes[1]		No. of Clients Answering No[1]		Total No. Clients in Sample Survey	
	Maputo	Peri urban	Maputo	Peri urban	Maputo	Peri urban
	(1)	(2)	(3)	(4)	(5)	(6)
1. Will create more employment?	6	8	3	3	10	11
2. Let you buy new equipment?	7	8	3	3	10	11
3. Contracts with new suppliers?	4	8	6	2	10	11
4. Better terms with suppliers?	2	9	6	1	10	11
5. Product market expanded?	7	5	1	5	10	11
6. Move into new product markets?	6	3	2	6	10	11
7. Gain new clients?	6	6	2	4	10	11
8. Allow you to lower your prices?	1	2	7	8	10	11
9. Did you change form of payment?	1	1	7	9	10	11

[1] When answers do not add up to totals in columns 5 or 6, some clients did not answer the question.

Source: OSU Field Survey 1992.

Having said this, however, it is still surprising that there isn't a higher overall level of informal transactions in the Greater Maputo area beyond the employee advances documented here. One can only surmise that the political and economic dislocation of recent years has generated great uncertainty for commercial transactions (outside one's kinship group). Furthermore, the doubts surrounding the availability of foreign exchange, and the long delays to process foreign import transactions, clearly negatively impact supplier credit from foreign sources. The still rudimentary and inefficient payments system limiting the use of checks in the banking industry also reduce the level of downstream retail credit below what would be characteristic of a well functioning commercial milieu. In time, this environment will hopefully improve and along with the growth of informal supplier and client level financial contracts.

The uniformly high holdings of deposits in formal banks in table III-4 is consistent with the fact that all our 21 clients have loans from banks. Banks typically require borrowers to hold a deposit account so the comparable number of formal deposits is to be expected. It is interesting to note, however, the rather small number participating in informal xitiques (i.e., rotating savings and credit associations). Previous peri urban studies in this project have identified an important role for xitiques. However, these informal savings groups were invariably associated with traders, frequently market women, very few with producers. Our survey clients here are predominantly individual producers working on separate individual premises, not traders operating in close proximity in public wholesale or retail markets. Producers are more inclined to depend on informal supplier credits or client advances to generate working capital rather than xitiques. Unfortunately, our survey results suggest that this informal business finance is less developed for small to medium sized entrepreneurs in Mozambique. If formal bank loans are not available, only retained earnings and past family savings can service current working capital needs for these operators.

4. The Impact of BPD Loans on Production and Business Practices

Table III-6 completes this documentation of the formal-informal financial market linkages for the Maputo branch clientele in Greater Maputo. Our clients responded to a set of questions designed to identify their perception of the impact of the BPD loan on the conduct of their business operations. Both the Maputo and peri urban clientele claimed that the BPD loan created new employment and allowed them to buy new equipment (lines 1 and 2). Combining the two areas, 14 out of 21 clients stated the loan created new employment and 15 out of 21 bought new equipment. Thus, the availability of finance appears to have made a difference in two important variables shaping the real economy.

A difference emerges (in lines 3 and 4) between the more urban based clientele in Maputo and the somewhat less developed clientele in the peri urban area concerning the impact of the loan on their supplier relationships. The BPD loans appear to have made a marked difference in generating new contracts and better terms with suppliers for the peri urban clientele. This change was much less visible among the Maputo clientele in lines 3 and 4, column 1. This contrasting performance may reflect the fact that peri urban borrower-clients likely deal with domestic suppliers while the more urban clientele in Maputo are largely linked to foreign suppliers from whom immediate cash payments are almost universally required. This finding will stand out sharply for the larger borrowers foreign supplier relationship in the following chapter.

Maputo borrowers appeared to be more successful in broadening their product markets than peri urban borrowers (lines 5 and 6, columns 1 and 2) through their loan finance. However, it is almost universally true that neither Maputo nor peri urban clienteles lowered prices or granted downstream retail client credit as a result of their access to loan finance. In short, the commercial world of Greater Maputo for this clientele is still experiencing sufficient risk and uncertainty that the availability of formal finance does not yet by itself alter the existing forms of payment (line 9) to emphasize more sales on credit or consignment.

TABLE III-7: SURVEY CLIENTELE FROM GPE PORTFOLIO OF THE GREEN ZONES OFFICE OF THE BPD: GENERAL CHARACTERISTICS

TOTAL BY SECTOR	No. of CLIENTS	Ave. Number of Employees	Ave. Last Month Sales (Contos)[1]	Ave. Normal Monthly Sales (Contos)[2]	Normal Annual Sales (Contos) (Col.(4)x12)	Average Size of BPD Loan (Contos)	Loan to Normal Annual Sales Ratio (Col.(6)/Col.(5))
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Fishing	10 (9)[3]	6.5 (6.2)[3]	21,305 (2,131)[3]	11,473 (657)[3]	137,679 (7890)[3]	5,386	0.04 (0.68)[3]
2. Food Processing	1	23	17,500	17,500	210,000	36,000	0.17
3. Clothing and Textiles	1	5	17,500	15,000	180,000	23,000	0.13
4. Office Supplies and Serv.	2	3	375	375	4,500	3,193	0.71
5. Construction, Building Supplies and Repair Serv.	11 (10)[3]	9.6 (9.8)[3]	7,265 (1,548)[3]	7,755 (2,100)[3]	93,066 (25,200)[3]	35,185	0.38 (1.40)[3]
6. TOTAL 1[4]	25 (23)[3]	8.2 (8.2)[3]	12,193 (3,752)[3]	9,806 (2,891)[3]	117,672 (34,692)[3]	20,251	0.17 (0.58)[3]
7. TOTAL 2[4]	25 (23)[3]	8.2 (8.2)[3]	8,291 (2,447)[3]				

[1] Four clients, one in fishing, two locksmiths classified under repair services and another firm in construction, reported monthly sales of less than 10 contos for the last month.

[2] For those clients not reporting a normal monthly sales, the last month sales figure was used if it was reported

[3] Numbers in parentheses are the calculations after two outliers, one in fishing with monthly sales of 98,000 contos (row 1) and one in construction (row 5) with monthly sales of 53,000 contos were omitted.

[4] The average for total 1 was calculated omitting clients who reported no last month sales. The average for total 2 was calculated including firms with zero monthly sales.

Source: OSU Field Study.

C. The Linkage Profile for the GPE Clientele from the BPD Green Zones Office

1. General Characteristics: Size, Sales and Loan to Sales Ratios

The second half of this chapter focuses on the experience of the GPE microentrepreneurs with informal financial market networks. Table III-7 presents the survey interview data on 25 GPE borrowers from the Green Zones office of the BPD. Column 1 indicates a heavy incidence of our sample in fishing activity and a broad sectoral grouping consisting of building materials firms, construction, and a number of maintenance and related service trades. Only a handful of firms are represented in the other three sectors. This was the distribution that emerged from the chronological loan processing sequence of GPE borrowers contained in the BPD files. Our field study was interested in documenting the experience of those GPE borrowers who had completed their loan cycle through delivery of imported equipment including a period of business activity with the new equipment secured through the auspices of the relatively new GPE program. Clearly later samplings would generate a different mix of firms from those shown in table III-7, column 1 as the GPE program expands into other client business areas.

Taking this current survey sample for reference, one can see a modest sized clientele of roughly eight workers per firm on average (column 2, line 6). This is roughly the size of the average firm size registered for the Maputo branch clientele in table III-1. It should also be pointed out that some of these firms may currently have more than ten employees (the cut-off point to be eligible for the World Bank line of microenterprise administered through the BPD-GPE program). However, they likely had ten or fewer employees when they applied for the loan. Indeed, the expansion of this small employment base was precisely one of the major goals of the program. Nevertheless, it would appear that one food processing firm (a bakery) in row 2 probably secured a loan with a level of employment above this level.

The GPE survey clientele registers higher monthly sales than that characteristic of the Maputo branch regular clientele sampled on our field survey in table III-1 (column 3, line 6). Only when two large outliers are excluded from the GPE clientele (as explained in footnote 3 to table III-7, do the totals (in parentheses) fall below those recorded for the Maputo branch borrowers. GPE borrowers also, on average, received a smaller sized loan and recorded a smaller loan to annual sales ratio (in column 7) than that recorded for the Maputo branch borrowers (0.17 to 0.62). As pointed out earlier, some borrowers experienced considerable difficulty in managing their loan obligations suggesting that these relatively high loan to sales ratios documented in some sectors in table III-7, column 7, prevented them from properly servicing their loans with negative consequences for the BPD. Similarly, the fact that four businesses reported practically no sales in the month prior to the interview in early 1992 underscores the problem-ridden nature of the GPE portfolio. When one excludes the two large sales outliers, the loan to annual sales ratio rises to an unusually high ratio of 0.58 (comparable to ratio for the Maputo branch clientele) as indicated in the parenthesis to line 6, column 7 in table III-7. One can note the uncomfortably high ratios recorded (in parenthesis) for the remaining businesses in fishing (line 1, column 7) and construction et. al. (line 5, column 7). The above evidence confirms the high turnover and fluctuating fortunes common to microenterprises worldwide. Even if the shortfall in gross receipts for a number of these firms with high loan to sales ratios is temporary, this still represents a serious problem for the repayment of BPD loans.

2. The Upstream Supplier Connection

Table III-8 presents the characteristics of the upstream supplier relationships of the GPE firms. On the whole, there are a considerably larger number of input transactions and a longer average interval between transactions than for the Maputo clientele documented in table III-2. These input transactions, of course, include more activities than those associated with the importation of the foreign equipment financed through the GPE loan. A large number of the inputs in table III-8 are domestic in origin. Similar to the Maputo branch clientele, supplier credit is almost non-existent for GPE clients except for wood products and hardware items. Also for the rather small number of food input transactions advance purchases from the clientele themselves was quite important. However, given the small number of transactions, this result is less significant.

In the end, supplier credit is not well developed for the GPE clientele. Eighty-five percent of the 186 input transactions were carried out on a cash basis (compared to 71 percent for the Maputo branch clientele) while only 9 percent used checks (compared to 20 percent for the Maputo clientele in table III-2). Given the fact that the GPE borrower-clientele are first time borrowers from a formal financial institution (a program requirement), it is not surprising that suppliers would be cautious about extending supplier credit. Given the large cash transaction feature of their input transactions, it is quite likely that these firms, similar to those from the Maputo branch, are making every effort to establish their credentials with their domestic input suppliers by meeting their supplier cash obligations at the expense of not repaying their BPD-GPE loan obligations. Put differently, it is now likely more important for these firms to cultivate their supplier relationships to secure a future source of short term credit now that their BPD loan has taken care of their long term financial needs for the foreseeable future. In a situation of cash shortage, the loan repayment obligations are rationed out so they can meet their supplier obligations. In the pecking order of claims, input suppliers represent more senior claims on available resources than the BPD-GPE loan obligation. Likely, reinforcing this behavior is the knowledge that legal sanctions for delinquent BPD-GPE loans are weak to non-existent, plus the strong likelihood they would not secure any more formal loans from the GPE-BPD investment program, even if they repaid this loan. In this context, it is more important to cultivate a possible future informal credit line through one's suppliers with whom one will continue to do business in the future on a regular basis. Meeting one's cash payment obligations promptly to these suppliers is a step in this direction.

TABLE III-8: SELECTED CHARACTERISTICS OF UPSTREAM SUPPLIER TRANSACTIONS WITH GPE CLIENTELE IN SURVEY

TYPE OF INPUT	No. of Input Transactions	Ave. Interval of Purchases (Days)	Form of Contract Payment (% of no. of Input Trans.)				Buyer-Seller Relation(%)	
			Cash	Cheques	Supplier Credit	Advanced Purchases	Strict. Commerc.	Kinship
	(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
1. Food	4	no information	50	0	0	50	100	0
2. Chemical Inputs	64	102	87	11	0	2	100	0
3. Mechanical Inputs	63	200	92	3	0	5	100	0
4. Maintenance and other Services	3	37	33	67	0	0	100	0
5. Wood Products and Hardware Items	52	137	79	10	11	0	98	2
TOTAL	186	145	85	9	3	3	99	1

Source: OSU Field Study.

3. The Downstream Client Linkage

The results in table III-9 highlight the only marked presence of informal finance in our Mozambican study. It is understandable that this would emerge more in the downstream client relationship than in the upstream supplier relationship for the various reasons mentioned earlier in this chapter. Whereas 85 percent of the 185 contracts were carried out on a cash basis for suppliers (table III-8, column 3), only 34 percent of the downstream 82 client contracts were consummated through cash payments (table III-9, column 3). Whereas supplier credit on sales or consignment was negligible in table III-8, sales to clients on credit represent 53 percent of all the downstream client transactions in table III-9 (with an additional 6 percent on consignment). Finally, it should be noted that this high level of downstream client finance for the GPE clientele contrasts sharply with only a modest level of client level credit from the Maputo branch clientele in table III-3. In the latter case, only 2.4 percent of the 41 downstream client contracts were associated with sales on credit and an additional 4.8 percent on consignment and cash and consignment.

TABLE III-9: SELECTED CHARACTERISTICS OF DOWNSTREAM CLIENT TRANSACTIONS FOR GPE CLIENTELE IN SURVEY

TYPE OF OUTPUT	No. of Output Transactions	Ave. Interval of Sales (Days)	Form of Contract (% of no. Trans.) Cash	Cheques	Consigned Goods	Client Credit
	(1)	(2)	(3)	(4)	(5)	(6)
1. Non-durable Goods	30	1	40	0	0	60
2. Durable Goods	38	165	24	3	13	60
3. Services	14	17	50	36	0	14
TOTAL	82	79	34	7	6	53

Source: OSU Field Study.

The average interval of sales documented in column 2 of table III-9 offers a clue into the factors behind this high incidence of client sales on credit. Non-durable goods have, on average, one day sales intervals while durable goods stretch out their intervals to 165 days (i.e., 5 and one half months). The former sector is made up largely of fishermen who belong to an active fishing cooperative in the peri-urban area of Costa do Sol. These fishermen largely drew on their BPD-GPE loans to import outboard motors for their boats. Their daily catch is consigned to market women on the beach with whom the fishermen deal to sell their fish in the urban markets. This leads to several days downstream credit on the consignment of goods (i.e., fish) that sometimes can stretch to a week before the women pay the fishermen following their sales in the market. A number of fishermen experienced losses through the women not being able to sell all the catch before spoilage occurred. Given the highly perishable nature of the product, the short period of consignment, the lack of conventional collateral, and the strategic intermediary role of the market women, interest rates are not a part of this short term consignment. Moreover, to protect their investment and their market vulnerability to the market women, fishermen try to create collateral substitutes by using wives, daughters and kinfolk as intermediaries for this high risk trade. Despite this high risk, most fisherman did record high sales in the month prior to the interview.

The second area of high downstream client finance lies in the housing sector (line 2, columns 5 and 6). Many clients in our sample were builders or artisans building or repairing housing units. These business operators typically required that 50 percent of the cost of the job be paid up front while the other 50 percent be paid over a two to six month period depending on the scope of the work. In this case, the cash flow of these businessmen used to service their BPD-GPE loan payments, is influenced by the cash flow they receive from the downstream credit to their customers. Many complained about late payments from their customers which in turn compromised their ability to meet their loan installment obligations with the BPD. This is another illustration of how the uncertain and highly fluctuating economic climate of the country enters the cash flow world of our GPE clients and, in the end, the arrears world of the BPD.

Finally, it is instructive to note the differences between the GPE and Maputo branch clientele concerning downstream informal finance. The Maputo branch clientele contain no fishermen and only one builder, in sharp contrast to the heavy incidence of these borrowers in the GPE portfolio we sampled from the Green Zones office of the BPD. Therefore, it is perhaps not surprising to note the lack of downstream finance in the Maputo branch clientele. Most clients from this branch were associated with agricultural activities (agropecuario) and transportation businesses, along with a highly diverse array of activities from clothing to office supplies to millers and restaurants. It is interesting to note the absence of downstream client finance within this diverse group compared to the higher degree of this form of informal finance among the less diverse GPE clientele. A larger case study sample in the future could help clarify more definitively the differential degree of downstream finance across sectors. Clearly the multiplier impact of formal finance on broadening or improving downstream informal financial contracts would be greater in these sectors.

4. Informal Finance by Location for the GPE Clientele

In line with the larger downstream client finance for the GPE clientele is the finding that this clientele, (outside of their purchasing and selling contracts) also records a higher level of informal loan activities (table III-10) than that recorded earlier for the Maputo branch clientele in table III-4. Whereas the 21 Maputo branch clientele registered 10 informal loans (either granting or receiving) the GPE clientele records 19 informal loans. Three features of this activity stand out as being similar for both the GPE and the Maputo clientele. First, there is a visible bias for both clienteles to lend rather than receive informal loans from third parties. Second, this activity stands out more in the peri urban than in the Maputo city district for both borrower clienteles. Third, inspection of the questionnaires indicates that almost all these informal loans take the form of salary advances to their employees. A fourth common feature pertains to the xitiques (i.e., the informal rotating savings and credit groups in the area) in column 7 of table III-4 (for the Maputo branch) and table III-10 (for the GPE borrowers). Neither clientele is particularly involved in this activity (the GPE borrowers in table III-10 register no activity here at all). As explained earlier, this type of informal activity is more associated with trading, not production activity, and both our clienteles are small scale producers on separate and disparate premises. Xitiques more commonly emerge among lower income traders in frequent daily contact in urban wholesale markets or among housewives in the same residential neighborhood.

TABLE III-10: NUMBER OF INFORMAL AND FORMAL FINANCIAL CONTRACTS DOCUMENTED FOR THE 25 CLIENTS OF THE GPE BRANCH IN THE SURVEY

LOCATION	No. of Clients	No. of Informal Loans		No. of Formal Loans		No. of Deposit Accounts		TOTAL
		Received	Granted	B.P.D.	Others	In Banks	In Xitiques	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Maputo	11	1	9	14	3	16	0	43
2. Peri-Urban Area	14	1	8	14	1	14	0	38
TOTAL	25	2	17	28	4	30	0	81

Source: OSU Field Study.

Finally, it is apparent in table III-10 that formal deposits are closely associated with formal loans in both locations. Banks invariably require that borrowers open up deposit accounts. It is of some interest to note that the more developed Maputo area records a higher incidence of deposits and formal loans than those registered for the peri urban GPE borrower clientele. This is not surprising given the fact that Maputo city is more developed economically. One would expect this to be reflected in the clientele's greater relative access to loans and use of deposit accounts.

Table III-11 offers additional information by location. Several contrasts are apparent. Maputo based firms are larger in terms of number of employees (column 2) while the peri urban clientele record higher last month sales with or without the two outliers discussed in footnote three to the table. In short, it would appear that fishing activity (which predominates in our peri urban sample) registers higher returns than some of the more diverse urban business activity in Maputo. Moreover, column 7 indicates that the loan to annual sales ratios are higher in the Maputo area. This would naturally follow from having an average loan size three times higher (in column 6) while at the same time recording a lower average for last month and normal month sales. This would be consistent with the earlier result in table II-6 showing a slightly higher full delinquency for Maputo than for the peri urban area. However, the differential arrears are not large, so one should not exaggerate these findings.

TABLE III-11: SURVEY CLIENTELE FROM THE GPE BRANCH OF THE BPD: GENERAL CHARACTERISTICS BY LOCATION

TOTAL BY LOCATION	No. of Clients	Ave. Number of Employees	Ave. Last Month Sales (Contos)[1]	Ave. Normal Monthly Sales (Contos)[2]	Normal Annual Sales (Contos) (Col.(4)x12)	Average Size of BPD Loan (Contos)	Loan to Normal Annual Sales Ratio (Col.(6)/Col.(5))
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Maputo	11 (10)[3]	9.9 (10.1)[3]	8,417 (2,845)[3]	8,652 (3,109)[3]	103,833 (37,312)[3]	32,151	0.31 (0.86)[3]
2. Peri urban Area	14 (13)[3]	6.9 (6.5)[3]	16,441 (4,790)[3]	10,671 (2,732)[3]	128,060 (32,792)[3]	10,901	0.09 (0.33)[3]
3. TOTAL 1[4]	25 (23)[3]	8.2 (8.2)[3]	12,193 (3,752)[3]	9,806 (2,891)[3]	117,672 (34,692)[3]	20,251	0.17 (0.58)[3]
4. TOTAL 2[4]	25 (23)[3]	8.2 (8.2)[3]	8,291 (2,447)[3]				

1 Four clients, one in fishing, two locksmiths classified under repair services and another firm in construction, reported monthly sales of less than 10 contos for the last month.

2 For those clients not reporting a normal monthly sales, the last month sales figure was used if it was reported

3 Numbers in parentheses are the calculations after two outliers, one in fishing with monthly sales of 98,000 contos and one in construction with monthly sales of 53,000 contos were omitted.

4 The average for total 1 was calculated omitting clients who had no last month sales. The average for total 2 was calculated including firms with zero monthly sales.

Source: OSU Field Study.

5. The Impact of BPD-GPE Loans on Production and Business Practices

Table III-12 rounds out this discussion by reviewing the GPE borrowers judgement on the impact of the BPD-GPE microenterprise loans on their businesses. Similar to the answers for the regular Maputo branch clientele in table III-6, a majority of the GPE program clientele reported an increase in employment and new equipment (in lines 3 and 4). However, the loan did little to change their supplier relationships (lines 3 and 4). This is consistent with out earlier findings showing negligible supplier credit and the overwhelming practice of consummating supplier contracts with up-front cash payments. A substantial majority of both the Maputo and peri urban borrowers claim that their BPD-GPE loans made a positive contribution to the expansion of their product markets, the introduction of new products, and their ability to gain new clients. Similar to the findings for the Maputo branch clientele, the GPE borrowers state that the availability of formal finance did not have any substantial impact on prices or in the form of payment used to close out downstream client contracts. Apparently, the relatively high incidence of downstream client finance extended by the fishermen and the builders and construction tradesmen in our sample had already been in place before their BPD-GPE loan came on line. In the end, the availability of this formal finance only made a difference in extending downstream finance (line 9) for five out of 25 respondents to this questions.

TABLE III-12: PERCEPTIONS OF SURVEYED CLIENTELE CONCERNING IMPACT OF BPD/GPE LOAN PROGRAM ON THEIR BUSINESS

Number Questions Asked	No. Clients Answering Yes		No. Clients Answering No		Total No. Responding	
	Maputo	Peri-urban	Maputo	Peri-urban	Maputo	Peri-urban
1. Will it create more employment?	9	6	4	7	13	13
2. Let you buy more equipment?	6	8	4	6	10	14
3. Contracts with new suppliers?	3	0	6	14	9	14
4. Better terms with suppliers?	3	0	8	14	11	14
5. Product market expanded?	8	11	2	3	10	14
6. Move into new product markets?	9	8	1	6	10	14
7. Gain new clients?	9	7	1	7	10	14
8. Allow you to lower prices?	2	1	9	13	11	14
9. Change the form of payments?	4	1	7	13	11	14

Source: OSU Field Study.

D. Conclusions

Private sector supplier credit is in very short supply in Greater Maputo for both loan constituencies studied in this chapter. Foreign supplier credit is altogether absent while only a very modest share emerges from domestic suppliers (mostly in maintenance services). Downstream client finance is a bit more developed, especially for the GPE borrowing clientele in fishing and house building and repair activities who extended finance (or consignment of goods) to their clients. Cash payments predominated with checks playing an unusually small role in closing out commercial transactions. This fact highlights the deficiency of the payments system in the banking sector, introducing high transaction costs for commercial activity.

Additional informal finance outside of the supplier and client contracts mentioned above was minimal. Loans granted predominated over loans received and these were practically all loans to employees (i.e., salary advances), a relatively safe loan collateralized through future salary deductions. Informal self help groups such as the rotating savings and credit "xitiques" were almost non existent among our two BPD clientele groups. This is not surprising given the greater prevalence of these indigenous groups among close knit traders (especially women) rather than the more dispersed and independent producers that made up our sample.

The peri urban clientele for the Maputo branch clientele generally registered slightly smaller firm sizes. However, average loan sizes and loan to sales ratios were roughly similar for both Maputo city and peri urban clientele. For the GPE program clientele, however, firm sizes in the peri urban area were clearly smaller than those registered for Maputo city borrowers and average loan sizes were three times larger for the Maputo city borrowers creating a much higher loan to sales ratio. Both the Maputo and peri urban borrowers stated that their access to loans made an important difference in generating employment, purchasing new equipment and expanding markets for both the Maputo branch and GPE clients. The Maputo branch regular borrowers in the peri urban area also stated that formal finance allowed them to secure better terms with their suppliers (cash discounts, not loans), while, in sharp contrast, the peri urban borrowers in the GPE program uniformly stated no improvement in relation to suppliers.

In summary, informal finance in Greater Maputo is still rudimentary and poorly developed. The risks and uncertainties of conducting business in this setting limit the degree of informal supplier and client level financing that one would expect to find in a more dynamic commercial setting. Presumably, this informal contracting will grow once peace and security is established in the country and continued progress in market reforms stabilize commercial activity.

IV. Four Case Studies of Large Borrowers from the Bank of Mozambique

Four case studies make up this section: a large plastics company; a large juice and beverage enterprise; a large conglomerate of associated enterprises, and the União Geral de Cooperativas operating in the Peri Urban Green Belt of Maputo. The purpose of this section was designed to capture an insight into the commercial practices of these operators, their contractural relationships with suppliers and clients, their experience with bank finance and, in general, the nature of market competition and market integration in the sectors in which they operate and the impact of government policies. It was felt that the more informal open-ended interviews with these large scale businessmen would offer valuable and different insights into the way markets function in the Maputo area compared to the smaller scale entrepreneurs analyzed in Chapters II and III. The specific names of the companies and respondents was withheld for the first three cases as a gesture of anonymity although we recognize the difficulties of achieving this goal in a business society as small as Greater Maputo.

A. Case Number One: A Large Plastics Enterprise

1. Introduction

The businessman in this case study is part of the group of private entrepreneurs that were selected among the borrowers receiving finance from the GPE program in the BPD. He received 49,000 dollars from this program for his private construction business. To cover the local currency expense of covering his purchase of foreign exchange needs, he solicited 20 million meticais from the BPD. He covered the rest through self-financing. The last installment deadline was programmed for November 1993, but in January 1992 he finished paying back his debt to the bank. The actual importation of construction equipment was transacted though another business of his, a consulting and accounting service company.

This entrepreneur was included as a case study because he is also involved in other important activities. Beside his two private companies, one the construction business which benefited from the GPE credit, and another, a consulting and accounting services company among others, the entrepreneur is presently director of a state enterprise, a plastics firm which has received financing from the Bank of Mozambique. It is of interest to note that former or current managers (or directors) of state enterprises are frequently the source of human capital from which the new generation of private sector entrepreneurs emerge. This makes sense in that they have been actively involved in buying and selling products and generally running an organization. Furthermore, they have a valuable network of contacts within the government to secure loans and work around administrative obstacles. However, it is still an open question whether these individuals can own and run a private venture business successfully. The plastics firm is the only company in Mozambique that currently makes plastic products, for the general public (buckets, hoses, kitchen utensils, children's balls, etc). It is the experience of the plastics firm that will be our focus here to gain insights into the marketing and financial linkages of a large economic entity in Mozambique.

2. The Large State Owned Plastics Firm

This enterprise has five production units in Maputo, each making different or similar plastic articles for several uses, from industrial to domestic use such as balls, toys, hoses for agricultural uses, and different plastic packaging materials. It also produces sacks, bottles, etc. It hires a total of 400 workers in its 5 existing factories of Maputo. For its present activities, the company has received credit from the Bank of Mozambique (BM), since all the raw materials used in the production of plastics is imported. The credit line that helped the firm is part of the foreign aid received by the Government of Mozambique from the Norwegian Government. The Treasury Department, of the Finance Ministry, places this type of financing under the management of the Bank of Mozambique (BM).

The credit was drawn upon about 2 years ago, when the enterprise incurred a large debt with the bank to be able to import raw materials. It ended up importing enough to insure the company's work for a period of two years. Presently, even with the knowledge that the company has not yet repaid all its debt to the bank, the inventory of raw materials it has at hand (which initially could have been seen as perhaps unecessary overinvestment) has actually ensured production in the enterprise's factories for two years.

3. Relationship with suppliers

The recourse to credit provided by the bank was principally used to import raw materials and equipment. Because the enterprise is a state company that only works with imported materials, the relationship with its principal foreign suppliers had to be conducted through the Bank of Mozambique (BM). Under present economic legislation, the company as a state company, cannot have bank accounts outside of the country; not even foreign exchange balances in the Bank of Mozambique. Therefore the company establishes its foreign contacts to import raw materials and equipment, finds the suppliers that accept the arrangement that the Bank of Mozambique (BM) will make the payments at a later date, and, after verification of arrival of the product in the country, requests the bank to transfer the money to the supplier.

While commenting on the advantages and disadvantages of this type of supplier relationship, the director explained that the company experiences several constraints prejudicial to development of a good supplier relationship. The first constraint is the bureaucratic delay involved in trying to pay suppliers. The second constraint is the delay in the availability of credit at the bank. A third problem is that in order to be able to import inputs, the bank demands the retention of 25 percent of the CIF value of the necessary credit. This is used as security or collateral for the bank and earns no interest. When the product arrives in the country, the company has to pay the other 75 percent. The 25 percent retention of the value of the imports used by the company, considering that the money cannot yield interest, ends up as an implicit tax and constrains the company's liquidity.

4. Relationship with Banks

The director commented on the difficulties in obtaining bank finance by most of the population, and, in particular, by new Mozambican businessmen. In his opinion, the difficulties in securing credit are in part due to the limited business experience of these entrepreneurs, and their inability to satisfy bank creditworthiness criteria. Many have low skills and limited administrative experience to establish a working contact with banks and new customers have to work through those who already have some experience or relationship with the banks. The newest and most inexperienced businessmen feel obligated to look for those who have already received credit. They inquire about the proceedings, the ways to overcome difficulties, the channels, and ways to develop key contacts. The entire process between loan request and the loan approval and disbursement is very long and difficult. Among the difficulties that come up in this process, the director-entrepreneur mentioned:

a) the presentation of guarantees (collateral) that the bank finds credible;
b) the availability of co-participation in the project and/or co-signers to the loan;
c) the issue that the bank does not have confidence in the loan candidates, either for lack of information regarding their honesty, or because it doubts their capacity to succeed in the projects for which they ask credit;
d) that even after having fulfilled the bank's criteria, candidates for loans have to go through many bureaucratic obstacles and even cases of opportunism and corruption among some public servants working in the credit sector. As our interviewee would say, many analysts and directors in the credit sector proceed as if the money were theirs.

This last aspect referred to by the director of the plastics company suggests some lack of transparency or openess in establishing a relationship in the bank credit system. In short, the formal system of bank finance in Mozambique is in part dominated by a group of relationships and mechanisms that function in an informal way.

5. Relationship with Clients

The client or customer's payment for products sold by the company varies to some extent according to the products sold. For example, buckets and kitchen utensils are mostly sold on a cash basis. On the other hand, larger and more expensive items are associated with a delayed payment arrangement. For the most part, the company favors cash sales. However, in cases where a large volume of transactions of products are involved, including customers outside of Maputo, the most advantageous way for the company is the bill of exchange. The problem is that this involves risk, since banks do not always accept certain clients' "bills." Before payment is accepted against these bills, the company tries to investigate the reputation of the customer from the banks.

In those cases where the sale involves some type of implicit credit, the company prefers to opt for pre-dated checks. This was the most effective form that the company found to avoid having to pursue debtors. When the customer pays by check, there is always the possibility of depositing it, then going after the customer to insist on covering the check. As for the bills of exchange, these can be paid by the company or by the customer, depending on the terms of the contract or the business.

6. Market Competition

Although this plastics company has no competition from other national producers, it still experiences competition. From one side, it faces competition from importers, the largest competition being from those buyers who are able to import without paying taxes. From another side, there is the underground competion represented by the workers themselves, who steal the products and sell them at much lower prices than those offered by the company. The director explained that it is extremely difficult to eliminate theft on the company's premises. There is great solidarity and collusion among the workers. In spite of some punitive measures such as firing certain workers, the existing attitude among workers is not to denounce anyone. Whoever is caught has to deal with the problem, but nobody openly denounces a fellow worker. It is not clear if this is a more serious problem in public enterprises or private enterprises. The free license to steal and lack of effective monitoring is more likely in the former than the latter, since there is a stronger incentive (i.e. profits) to implement better surveillance in private firms. Finally, another obstacle to sales is related to the low buying power of the customers. According to the company's director, there is just not enough purchasing power among those comprising the market.

B. Case Number Two: A Large Juice and Beverage Processing Company

1. Introduction

This industry manufactures citrus concentrates, fruit juices and syrups. It is the only company that manufactures citrus concentrates in Mozambique. According to its director, the company has obsolete machinery. One machine was acquired in 1964, another in 1969, and a third in 1971. The principal raw material used in processing its products are the citrus fruits grown in Maputo or in Manica. The company has 160 workers. The company's minimum wage is 56,000 MT. The annual salary bill is around 20 thousand contos, from which 25 percent is allocated for 10 employees and the other 75 percent for all the other workers. The company had annual gross revenues of 5 million contos in 1991.

2. The Company's Activity during the Recent Economic Recovery Program (ERP)

At the beginning of the ERP, the company could still develop its activity on the basis of self-financing. At that time, and during the first three years of the Rehabilitation Program, the BM did not particularly hesitate in providing credit. But prices were not controlled any longer. Therefore, it was also possible to realistically price its products at a remunerative level. However, more recently, successive devalorizations, the rapidly rising cost of living, and rising production costs make life difficult for producers as well as consumers (its buyers).

The company profited from the availability of foreign exchange financing to install a line of juice machines. After opening the credit line, 6 months were calculated as necessary to prepare the assembly line, plus 3 months to receive the machinery, 3 for assembly, and 3 for final installation. This would be a total of 18 months, at 17.5 percent interest charges for the funds available immediately after the opening of credit, a 22 percent charge before the arrival of the equipment, a 35-36 percent charge ruling until the start-up of the new line, and the rest by the end of 18 months. The company had asked for a five-year term loan, including a one year grace period and four more with interest payments. The Bank of Mozambique responded that it would only accept three years. The financing system was based on "livranças." This meant that 30 percent had to be paid right away. The other 70 percent would be paid at the end of the established term.

Sale prices stagnated in 1990, not only because of competition in the internal market, but also because of the influence of South Africa's import competition. Prices started to drop, falling to below cost. Liquidity became scarce for the company. Budgetary crises emerged along with negative cash flows. The company experienced severe competition, high interest rates, and larger debt obligations. In 1990, the company resorted to the credit line of the Bank of Mozambique, including "livranças," namely, credit with a 6-month term to permit sale of merchandise, as well as Treasury Bills, for an 8-month term, made available by the Government through external credit, (for example, ADI, England).

During that same year many electric energy cuts or "brown outs" occurred. This destroyed tons of products. Because of this, the company asked for a "livrança" to buy an electric generator for 145 thousand Rands. At the end of 6 months, the director went to the Bank to renegotiate the debt. Meanwhile, another input, sugar, became scarce. The company secured a credit for 1000 tons from ENACOMO. In sum, the company became indebted in the following manner:

560,000 contos -	Debt in "livranças" (short term);
800,000 contos -	Credit for investment for juice equipment for a three year term;
700,000 contos -	Bills ("letras") to repay the Bank (short term debt);
600,000 contos -	Debt to ENACOMO;
2,660,000 contos -	TOTAL DEBT OF THE COMPANY IN 1990

The company had a capital of 20,000 contos. Under these conditions, the company was in technical bankruptcy. The Bank agreed to reschedule the debt. The company asked to pay in small installments in the first year, and, in the second, it would pay the rest with accumulated interest. The Bank did not accept this. Instead, it rescheduled the debt over 24 months, with decreasing interest. The result was 66,000 * 24 months = 1580 thousand contos. This meant that in interest alone, the company had to pay more than double the amount of the loan. In the end, the bank no longer financed the company because it had reached its limit. It informed the company to self finance all activities. In the meantime, the company was able to renegotiate with ENACOMO to pay off their 600,000 contos debt in 12 months.

At this time the country's frontiers tightened. Businessmen lost interest in importing. In the domestic market it was no longer possible to raise prices to the consumer. Merchants know that a bag of "rebuçados" costs 9,000 MT. Consumers would continue to buy only if the price stayed at this level. For juice, there is no competition.

In 1991, the company utilized between 3,500 and 4,000 tons of citrus products to produce 350.000 liters of juice destined for the production of alcoholic beverages. This juice was used by another company situated in Manica. However, the citrus harvest was zero in 1991. The major citrus supply company wanted to raise the price on citrus products from 55.00 MT/Kg. to 250.00 MT/Kg. Our case study processing company did not accept this. Because it still had reserves of concentrates, there was no major problem.

What is ironical is that the citrus supplier ended up selling the citrus fruit that it used to sell to our case study firm to a company in Swaziland for about 60 or 70 Rands/ton. Although our case study citrus processor was ready to accept a raise in price for these fruits up to 80.00 MT/Kg., its traditional fruit supplier chose to sell its citrus products in Swaziland for 42.00MT/Kg. This occurred because the supplier placed a high premium in being able to sell in rands.

In January 1992, the inventory of concentrates in our case study firm ended. The company had to import concentrates from South Africa. However, the custom duties are high in Maputo. Concentrate packages that in South Africa cost the equivalent of 4,100 or 4,200, arrived in Maputo at the price of 7,500 MT. It was still more economical to import the concentrate, instead of buying oranges from its traditional domestic citrus supplier at 250 MT/Kg. Meanwhile, its citrus supplier decided to decrease its agricultural producing areas and sell oranges directly to the retail market.

The director of the processing company added a few more critical comments concerning custom taxes. He mentioned, for instance, the fact that South Africa also has custom taxes. However, with the drought, the government of that country decided to exempt producers from such charges. These exemptions benefit the processing industry as well. For example, all processors or manufacturers in South Africa benefit from export sales, receiving a 50 percent discount immediately, compared to the internal price (exemption from advertising costs, distribution costs, and rebates for the buyer).

In his opinion, the customs duties in Mozambique should exempt local producers. Right now the company's processing machinery is old. The director asked, how can the company be motivated to purchase new equipment? There are no customs duty exemptions and no other incentives to draw upon. Every financing operation implies paying normal interest charges, with no concessional rates or other incentives to offset the costs elsewhere. Under such conditions, the company director sees no incentive to invest. At this moment, it is better to place one's retained earnings in trading activities and not bury it in production schemes that end up full of unpayable debts.

This also reflected the experience of the director with a small independent private business he had established on the side to produce and sell food snacks. A machine for this small firm was imported for about 140 thousand contos, with 30 percent payment due at the beginning and 70 percent upon its arrival. At that time, the director-entrepreneur tried to make arrangements for making 130 thousand contos available. However, it was not possible to come up with this money immediately to buy the machine. A line of credit, "livrança," to cover the import would mean paying interest up-front and reimbursing the credit in 6 months. Unfortunately, it would take 6 months for the machine to arrive. Production revenues could only be generated after 6 months. The bank reduced by 50 percent the company's request for liquidity, saying that it had credit limits restricting its capacity to finance. The director-entrepreneur just recently received financing from Banco Standard Totta. The company asked for 70 percent of the value of the machine and a 12 month grace period, but the bank only agreed to cover 50 percent of the import cost, with 6 month's grace period.

At about this same time, however, the company also started to import "french fries" from South Africa. In a few months, it imported 100 thousand rands in "french fries" and it was all immediately sold. A new "french fries" batch has already been ordered, and corresponds to 33 thousand rands. This experience leads us to wonder, said the director, if it is worth investing in production cum credit projects. What is the advantage, when the trading activity (i.e., french fries) is much less complicated and yields much faster returns?

3. Relationship with the customers

The principal relationship with customers is, as the Director would have said in popular slang, "give here, take there." The company gives privileges to warehouse owners. The marketing of the company's products is designed so that the warehouse owner keeps 5 percent and the retailer 10 percent. Before, the warehouse owners paid the company in cash and gave credit to their customers (the retailers). But later, the warehouse owners also began to ask the company for credit. In the beginning, the company did not accept this. Then, they began to buy South Africa products, with more turnover, even though they got less revenue. This induced the company to begin to give implicit credit. Before, there were bills of exchange. Now, if the bank has credit limits, it becomes difficult to discount the bills. So, little by little, the company was obliged to give credit. For example, for a purchase of 200 boxes, it began to accept that 50 percent of the sale could be paid by the end of 15 days. In the meantime, the company quietly increased the price of its product by 12 percent (instead of 7.5 percent as it would have done without the credit service).

When warehouse owners come from the North of the country, they ask for 45 days credit. They allege they need one week to ship the merchandise from Maputo, two weeks for the trip, and two more for the final payment. However, the company only accepts giving credit for 30 days. This is because each of these wholesale sales involves from 50 to 60 thousand contos, and the company cannot afford to be without this liquidity for much longer than 30 days. Recently, the company gave 30 days credit, without pre-payment, to the company GANI-Comercial, for 70 thousand contos. The problem is that in these cases, our case study firm asks for a pre-paid check that may be cashed in Maputo's market. If the check were cashed in Nampula, the time necessary to get the money would represent a 90 day credit (45 for the check to go to Maputo, 45 to return.) In Maputo, the company still has the retail outlet of sellers in the large urban central markets. They are permanent customers who receive the company's products with seven days credit and sell the juice with 50 to 100 meticais price discounts. This permits the company to control sales, and avoid losses growing out of price speculation in emergencies.

4. Relationship with Suppliers

Domestic suppliers are: Vidreira (for the bottles), Carmoc (for the cardboard boxes), and Empresa Moderna. None of these suppliers give credit. Carmoc demands 50 percent of the price at the time the product is ordered, and the other 50 percent at the time of delivery of the boxes.

Foreign suppliers offer no form of credit whatsoever. This is not surprising given the instability of commercial life in Mozambique. Before independence, foreign suppliers accepted letters of credit from local banks, but now everything has to be transacted in cash. The company imports about 60 percent of its raw materials from South Africa. The other 40 percent came from Holland. The price difference between the two countries is quite large. While a kilogram of citric acid costs 2,000 MT in Holland, it costs 5,000 MT in South Africa. But Holland does not accept small orders, for example, 2,000 tons of citric acid every two months. It would accept an import order from Mozambique of nothing less than 15,000 tons at one time. So, the local processing company has to import from South Africa, buying at 5,000 MT.

5. Dealing with the Company's Debt

When a unit of our case study firm was purchased in Chimoio, the factory was estimated as being worth 270,000 contos. The Ministry wanted to sell it for 430,000 contos (1.59 * 270,000). Our case study firm offered a multiplier of 1.15. A final price of 400,000 contos (1.48) was agreed upon, to be paid in 6 months, plus interest. At the beginning, the company planned to apply for the World Bank credit line for the Small and Medium-sized Companies in the Bank of Mozambique. The viability study suggested a total investment of 4 million contos. But some on the company's board began to have second thoughts. Why make such investment? Is it worth it, when afterwards we have to beg for customs duty exemptions (which few can get) on the basis of the industrial contribution of the project?

The possibility of accepting foreign capital participation was then considered. But foreigners only expressed interest in the technical assistance area. They did not want to put in either money or equipment. They just wanted to offer their know-how. The company was not satisfied and chose not to accept this arrangement. At this time, there is a dispute in Manica. The case study firm controls the company that can absorb most of the citrus production of that province. On the other hand, some South Africans have recently bought the citrus plantations in the area. They tried right away to take advantage of this control of raw materials to secure participation in the industrial processing plant controlled by our case study firm. So far, the company has not responded, but it does not accept being placed in an unfavorable condition. As a last resource, it will import the citric acid, but the director maintains that he will not accept blackmail to purchase the citrus products from the South Africans. In his opinion, they may try to export part of the production. But most likely profits can only be made if it is to be used locally.

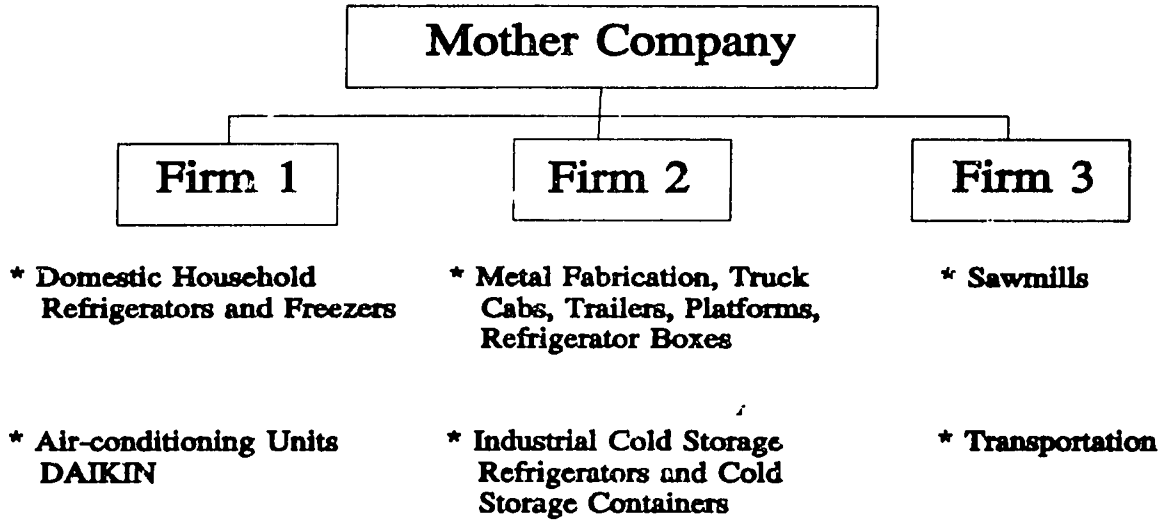
Finally, the company director thinks it is necessary to create better opportunities for domestic producers. This could be achieved, on one hand, through more effective customs administration. On the other hand, it would be necessary to create some degree of protection to benefit the domestic economy. This has nothing to do with providing subsidies, he argues, but only in providing facilities and advantages for national producers.

C. Case Number Three: A Sawmill and Transport Enterprise (A Smaller Associated Business of a Large Refrigeration and Air Conditioning Company).

1. Introduction

This firm is an associated business of a larger conglomerate enterprise consisting of several associated companies, according to the organigram presented in the office. The company developed from its own capital and from short-term credit provided by Standard Totta Bank; after a while, that bank stopped making this credit available. The lead or head company of this conglomerate currently employs 72 workers. The other associated companies (including this one) are just starting their activities. It is important to mention here that the mother or head company has an advanced internal organization. It has set up an internal radio system. Each team manager has a radio, therefore all the company's key members are in constant contact, in the entire area of Greater Maputo. The owner, and at the same time director, has wide banking experience, since he worked at the Bank of Mozambique for 12 years. In addition, the office work and accounting are all computerized. The company has fax equipment and other modern equipment as well.

CONGLOMERATE ENTERPRISE



The interview with the Director dealt principally with company number 3 in the above organization chart. Since that was the company that benefitted from a 4 billion meticais loan at the beginning of this year, through a line of World Bank credit for Small and Medium-sized Companies. However, the mother company, which has been in existence for four years, has been helping the smaller associated firm to get off the ground.

The principal medium term activity of company no. 3 will be sawmills. The company will have an advanced technology, where the system of measuring and cutting wood will be done by laser technology. It will have a production capacity of 80m3. This compares to the present capacity of all the sawmills of Maputo which is 60.7 m3. The strategic objective of the company is to export boards.

But the Director thinks that it is also necessary to prepare the company's activities for the post-war situation. In his opinion, when peace returns to the entire country, there will be a "boom" in several activities, principally in transportation, agricultural marketing and tourism. Because of this, the firm will also specialize in transport vehicles. At the present time, it already has three trucks and three trailers. The company is already earning 10 million MT per month. In the director's opinion, it is important to give more attention to the trailer business. In Mozambique, only tractors are imported. It so happens that throughout Africa, 60 percent of all heavy transport service is carried out by tractors. if these tractor units had large trailers, the transportation capacity could increase significantly in the country.

2. The Loan Process and Related Issues

The request for the financing of company three's project entered the branch of the Bank of Mozambique, in Maputo, on June 28, 1991. At that time, the official exchange for the dollar was still 1533.33 meticais/U.S. dollar. At the same time, on January 15, 1992, a request for fiscal incentives was introduced by the company in the Ministry of Finance, under the aegis of the 5/87 decree. The positive answer to this request was given on March 16, 1992. The positive answer to the financing request was received on March 4, 1992. The Bank of Mozambique granted a 4 billion MT credit, under the following conditions:

-Co-participation of 40 percent;
-Annual interest o 35 percent;
-Repayment in 36 quarterly installments, after a one year grace period.

The co-participation was supported through the head company of the conglomerate enterprise described earlier. Regarding the fiscal system and financial instruments presently utilized in Mozambique, the Director of company 3 said that they are really draconian. At the fiscal level, taxes are forbidding. For example, an import transaction at the value of 58 thousand contos, would pay a tax of 37 thousand contos.

As for the banking system, the first problem that arises for businessmen is the fact that they have their access hindered or at least made difficult, to the most efficient bank in Mozambique, the Standard Totta Bank.

For three months company 3 has been trying to import products currently valued at 100 thousand Rands. The Director is afraid that in the meantime a devalorization will occur, and, he might have to spend much more than planned in local currency to cover an increased cost to buy foreign exchange reflecting the devaluation. The delays in responding to requests for credit, and for currency transfers to foreign suppliers, cause businessmen to lose millions of meticais. Through the letter of credit system, it is a double loss, and, using the secondary or parallel market is still more expensive.

The Director thinks that the entire financial system is poorly administered. Control mechanisms are created that do nothing but aggravate the situation. In the end, he argues, it is the banks who most contribute to inflation. They lend money to those who do not reimburse it, and, many times, to borrowers who do not even reach production levels corresponding to the volume of credit issued to finance the company The Director gave the example of a cousin of his who lives in Pemba: Some time ago, he got a loan for 300 thousand contos, and he does not even have reserves or collateral to cover this debt. What kind of internal decisionmaking in the bank could have permitted such a decision?, he asked. To his own company (our case study no. 3) 5 million contos of financing was granted by the Bank of Mozambique. The payments to the suppliers are done through account transfers.

3. Relationship with Suppliers

The input purchases made by the company are principally from abroad. Ninety percent of the supplies come from South Africa. The rest is bought in Italy, Japan, and Sweden. The quality of the products from these latter countries is better, but there are disadvantages in the form of payment. All foreign suppliers demand pre-payment. In the case of the Italian, Japanese, and Swedish suppliers, five months are necessary. With South Africa, it is from 40 to 60 days. According to the Director, this happens because foreign suppliers do not have confidence in Mozambican customers, due to the country's instability. Therefore, they demand that a letter of credit be opened. Of course this system reduces working cash reserves substantially and reduces the competitiveness of domestic firms. One way to reduce this delay is to go through SOCIEF. But this penalizes local businessman. Since SOCIEF demands down payment of 100 percent of the money used to purchase the equipment from abroad, the Bank of Mozambique only demands a 15 percent retention.

4. Relations with Customers and Market Competition

The customers of the associated companies of this conglomerate are both individual households and incorporated businesses. All companies in the conglomerate permit their customers to purchase their merchandise and pay at the end of a specified time period. They do this principally for government ministry clients and responsible and established private companies. They do not charge interest for this service, but whoever pays in cash enjoys a 3 percent discount in price.

The principal competitors of the associated companies are FNAC and other companies of lesser importance. But the conglomerate controls 50 percent of the market. At the same time, the conglomerate is also succeeding in being the exclusive representative of important brands of refrigeration equipment of very high quality. For example, a new air-conditioner brand, with a thermic switch that allows the unit to adjust to unexpected electricity failure.

The conglomerate has sold an average of 900 to 1,000 air-conditioning units per year. The revenues have become more stable after these initial equipment sales. It also has contracts for technical assistance. There are many projects and the government budget itself has specific line items earmarked for this technical assistance. Even if the units are expensive, they become more and more indispensable. According to the Director air conditioning was initially installed just for the comfort of people. Now, however, even computers need a cool environment to function well. Because of this, the market is growing.

The Director admitted that at the beginning, the conglomerate made mistakes in its operation. For example, there were problems in the assembly of several air conditioning units in the warehouse. When this was pointed out by the director of that associated company, the head company repaired everything without charging the customers. From then on, the head company and its associated firms have received new contracts. Recently it concluded a contract with Eletricidade de Mozambique. This contract has implicitly incorporated some informal credit. Currently, the utility owes one of the conglomerate's associated companies 300 thousand contos. The utility now is preparing a plan how it expects to repay its debt to the associated company. The Director explained that in the recent years there has been a tendency to facilitate credit contracts. He argues that the market needs this. Finance is necessary for commercial activity to become more integrated in Mozambique.

D. Case Number Four: General Union of the Agricultural Livestock Cooperatives of Maputo (UGC)

At the same time as about 10 interviews with different cooperatives were being carried out close to the city, information regarding the General Union of the Agricultural Livestock Cooperatives (Uniao Geral das Cooperativas, UGC) was also gathered. This is presented below.

1. First Experiences

In 1987, the first large project appeared, namely, one financing "100 Houses," for the families of cooperative members. Some 800 million meticais were invested and 30 million were recovered. The amount left has generated a dispute with some of the families that have not yet paid up. In 1989, the BPD stopped giving credit to the Uniao. The UGC Board never quite understood the reasons for such a decision. The line of credit for the cooperatives and the Uniao were only reopened in July 1991 through a fund from FIFA. The cooperatives were always exempt from the credit limits of the BPD.

After the first experience with BPD, the UGC launched an in-kind loan program to some members of the cooperatives. The credit was directed to the purchase of baby chicks and was to be reimbursed at the end of one year. Initially, the UGC did not apply any interest charge. By the end of 1990, there was still money from a seed project. From this, it was decided to create what was called a "savings and credit cooperative." It was established on January 9, 1991, according to the following criteria:

- Payment of a fee;
- Inscription of 185 members;
- Interest of 20 percent for deposits and 30 percent for loans;

Objective: To maintain the initial capital of the cooperative and generate some profit, through interest earnings on loans, so that each of the members might have the opportunity to increase his own capital through future loans.

The UGC planned to raise about 120 thousand chickens a month, but ended up producing only 40 thousand. The loans directed to this end followed at least three criteria: First, preference was to be given for members who already had the infrastructure to raise poultry. Secondly, an attempt was made to exclude dishonest members and those who had no intention of repaying the money. Finally, another opportunity was to be given to those who had unexpected difficulties. It was not clear how the UGC would be able to distinguish between the latter two categories and avoid moral hazard in their loan program.

Approximately 235 million meticais was issued as loans to 185 people. The "savings and credit cooperative" was left with 90 million. To date, some 70 million has been repaid. Roughly 50 million are expected to be repaid in the future with about 20 million lost to default. The BPD chose not to grant credit for the poultry houses and related infrastructure. The Cooperative Director finds this regrettable. He does not understand why the cooperative members cannot apply for quarterly credit from the bank. When dealing with projects for raising chickens, credit could be recovered quickly and thus the bank could allegedly benefit from this quick turnover as well. Allegedly the BPD would always have the guarantee of repayment by the UGC itself on behalf of the cooperatives. This should act as an effective collateral for the debt. The UGC Director feels that the Mozambican banks are now unfortunately specializing in areas outside the cooperative area. Although the UGC Director did address this issue in the interview, it is quite possible that the 20 million default mentioned above may have dissuaded the bank from granting poultry loans. Also, it is not clear how secure or credible is the guarantee offered by the UGC, at least from the bank's point of view.

The Director mentioned a group of reasons that contributed in part to the failure of the previous poultry initiative:

1. Willful default for some members.
2. Lack of proper infrastructure to raise poultry safely. The capacity to raise the chickens was overestimated and a high mortality resulted.
3. The negligence of some technicians also contributed to the high mortality of the chickens.
4. The idea of saving for capital formation is a goal for which many members have to be persuaded.

In light of the previous experience, the UGC's immediate priority is to invest 300 million meticais and recover interest right away. The Director argues this 300 million could be decisive in launching a new direction in the peasant economy of the UGC. If the bank grants these loans, it would be a great help. The UGC is currently requesting this financing through the BPD and, at the same time, exploring options at the GPE.

Among other objectives, the UGC Board thinks that it is fundamental to broaden and deepen the credit experience among the members of the cooperatives. They state that until now, the credit cooperative was working as if it were a big family. This sometimes leads members to take contracts lightly. If one has to ask money from a father, a mother or a brother, one does not always feel obligated to pay back the debt. For many, the UGC is some sort of a mother figure, so it is difficult to get money reimbursed through UGC channels.

The UGC wants to increase more commercial activity with its operations. Because the meat market is good, the UGC chose this type of product. Poultry production permits one to recover one's money within 45 days after the purchase of baby chicks. At the same time, a network could be created among the poultry farms, the cooperatives and individual cooperative members, the UGC feed factory, large scale input and product dealers, and the bank. It is forecast that at the end, 60 percent of the profits will be earned by the cooperatives, 10 percent by its members, and 30 percent by the UGC. The money goes to the bank and is managed and allocated by the Uniao's Board.

One of the problems encountered by the UGC, when trying to get financial aid from foreign organizations, is related to the conditions that accompany such aid. A German organization proposed to provide 450 thousand dollars, under the condition that the UGC accept a technician chosen by the aid organization. The UGC felt it did not need that particular technician, but rather others. The situation couldn't be negotiated and there was no solution. FNUAP offered 200 thousand dollars, but 160 thousand dollars were to go to the technician that their board wanted to place there. Of the 600 thousand dollars that PNUD wanted to provide, 400 thousand were to go to a technician. All aid offers follow this pattern and the UGC does not accept these conditions. The Director argues that if the aid agencies want to make donations, to help the development of those who are less fortunate, they should also offer the opportunity for the beneficiaries to choose help according to their needs. There have been times in the past when the technical assistance was accepted with stipulated conditions, but the experiences were generally not positive. Many times the technicians in their judgement often lacked experience, or were not the one's appropriate to the tasks needed by the UGC.

The UGC Director added that since October 1991, the UGC has already made 10 requests for financing. There are some organizations that are receptive, but they want the mediation of a bank in Mozambique. If possible, the Uniao will try to create a financing cooperative. The objective will be to establish financial self-sufficiency. For that, the saving mentality will have to be developed among cooperative members. Of course, the Director adds, this can only be accomplished if at the same time social and economic stability is created in the peri urban area of Maputo.

V. Agricultural Input Suppliers: Case Studies of Input Distribution and Marketing Finance

A. Introduction

Part of the OSU field research of financial markets in Greater Maputo involved interviews to determine the nature of the contracts that businessmen established with their own suppliers and customers. Special attention was directed to identifing terms and conditions of finance associated with the purchase and sale of agricultural inputs in Greater Maputo. The agricultural inputs considered were principally pesticides, herbicides, insecticides, and seeds. Reasons for the decline in market activity in these products was also reviewed in passing.

Interviews were set up with people belonging to three organizations that have been directly involved with agricultural input imports in Maputo, as well as the marketing of agricultural inputs. The first, Ciba Geigy Trading and Marketing Services Co. Ltd., is one of the foreign input supply organizations of agricultural inputs. The interview involved the representative in Maputo and an individual that sometimes controls distribution in the central and northern areas of the country. The second company, Boror Comercial, is the oldest national company in the domestic input trade. CAFUM is also in the business, but this company devotes itself principally to fungacides. The third company interviewed is the principal seed producing and seed distributing company in Mozambique, SEMOC (Mozambique seeds).

Other contacts were made for collecting information on the subject dealt with here. But the interviews with the principal input suppliers here offered a more detailed knowledge about the scope, nature, and difficulties associated with the marketing network for agricultural inputs. These companies have attempted to carry out input marketing in many parts of the country. The information obtained in these interviews complement the information and problem identification provided by the large borrowers documented in the previous section.

B. Interview with Mr. Jorge Matos from Ciba Geigy Trading and Marketing Services Co. Ltd.

1. Background on the Agricultural Input Market

Before independence, the businesses that needed to import agricultural inputs would prepare a list of their needs and present it to Boror Comercial. Boror had always been the principal input trading company in the country, covering key areas of the country, south, central, and north. Upon receiving the list of needs of its client-businesses, Boror would submit this list to a Technical Commission of the Ministry of Agriculture for analysis, approval, and decision regarding the authorization to import agricultural inputs. Imports were executed principally through Interquímica, starting with existing suppliers in the international market, such as Ciba and Bayer. The foreign suppliers were responsible for the product until its arrival in the ports of Maputo (Lourenco Marques), Beira, Nampula, and Nacala. There, Boror took the products and stored them in warehouses, where the producing businesses and retailers went to buy the desired amounts.

After independence, principally after the State intervention in Boror, Ciba decided they did not want to be represented by a national agent such as Boror and opened its own representation in Maputo. As time went by, Boror ran into debt with the banks, principally because state agricultural enterprises purchased the inputs on credit and never repaid the money. State companies could secure the inputs by means of a simple requisition and a promise to repay at the end of the season. Private farmers, on the other hand, had to pay for all their inputs through cash purchases. In those years the importation of chemical products was based on uneconomical and inefficient criteria. The history of chemical products imported for the cotton sector in the 1980s is a well known case in this regard whose uneconomic consequences lasted throughout the decade.

2. The Domestic Marketing Network: Institutional Weaknesses and Lack of Market Integration

In the context of the program of economic reforms since 1987, the techincal commision made an effort to help Boror by trying to collect on its outstanding debts to the state enterprises. In the end, this was unsuccessful, and Boror went bankrupt. In the Agriculture Ministry some directors were of the opinion that Boror should be privatized or that it should even be returned to its old owners. Mr. Jorge Matos reported that there is non-official information that the old owners, of Swiss nationality, do not seem particularly interested in recovering the company.

After the appearance of the Bureau of Coordination of Import Programs (GCPI), from 1986-1988, imports were coordinated by that organization, along with Interquímica which also received funds for imports. After receiving the price quotes from foreign suppliers in the international market, a line of credit is opened at the Bank of Mozambique, or imports are carried out directly from donor funds of the African Development Bank (BAD), from Japan, or from ODA (England). The Germans also financed imports for two years. Presently, the principal foreign suppliers are:

- Bayer International Service Gmbh
- Ciba Geigy Trading and Marketing Services Co. Ltd.
- ICI (Export) LTD - (British)
- ODA - Overseas Development Agency
- Shell Chemical Mozambique (Pty) Ltd.
- Society of Mozambique Agrochemicals (Bayer and Shell Chemical agent)
- Hoechsr Mozambique LDA

Most of these and some other suppliers only have representatives in Maputo. ICI also has one in Nampula. Some others also have representatives in Beira. Some have telex facilities, however, nobody trades internally. On the domestic level, trade was conducted from large zonal centers. Boror had representation in all the provincial capital cities and in some other important centers: Maputo/Matola, Chokwe, Xai-Xai, Beira, Chimoio, Quelimane, Tete, Nampula, Nacala, Lichinga, and Pemba. In Chokwe, for example, there was a Boror representative (i.e., marketing agent) and a UDA (União de Direcção Agricola) that controlled all purchases of inputs for the state and private companies. A few years ago, the UDA unit was eliminated while Boror's representation is almost closed and has not been replaced.

The representation in Xai-Xai, Chimoio, Tete, and Quelimane was handed over to CAFUM Comercial LDA (Companhia de Fumegacoes de Mocambique LDA), a company of Manica Freight Services (Mozambique) SARL. In Nampula, Nacala, and Pemba input representatives are about to close. In Lichinga (Niassa), the owner of the only hotel in that city bought the representation rights from Boror. Boror's marketing agents only remain in Maputo/Matola and Beira. As far as one can tell, it has been close to two years since Boror has imported any imports. It is currently merely drawing down on its previously accumulated inventories.

Presently, the principal users of agricultural imported inputs are:

a) The State Secretariate for Cotton
b) Joao Ferreira dos Santos Company
c) Entreposto
d) LOMACO
e) The Nampula Cotton Company

These private businesses or state entities benefit from favorable credit ceilings, and from access to previously mentioned sources. They supply themselves and service the needs of small private producers (sector familiar) located in their area of business. For example, Lomaco in Montepuez in the province of Cabo Delgado, buys inputs for itself and for the families that produce cotton. This covers an area of about 15,000 hectares. Lomaco also supplies contractors from the private sector, but only those who produce cotton.

All the other small and medium sized private producers are outside this network and face serious difficulties in securing agrochemicals. The Provincial Departments of Agriculture, DPA, are the ones that should place the orders, according to the credit ceilings of their respective provinces. But everything in on-hold until someone opens a business. With some luck, from time to time a few DPAs may provide some type of agrochemical product. But the DPA does not handle either fertilizers or pesticides. The picture is more clear if we review what happens in each of the provinces.

In Niassa, the hotel owner who bought the marketing agent rights from Boror, is still the only retailer who sometimes is able to obtain some type of petrochemicals. But, for that, he has to go to Beira for his supplies and travel back to Niassa through Zimbabwe, Tete, Malawi and finally Lichinga. In Nampula, there are only three principal businesses that are able to obtain agrochemicals: the Nampula Cotton Company, Joao Ferreira dos Santos, and Entreposto. These businesses only buy inputs for the cotton cultivation activity associated with their businesses. But nobody currently supplies anything. Meanwhile, no one supplies inputs for horticultural products in the green belt of the city of Nampula. Because of this, the quality of the vegetables sold in the local market is poor. Each producer tries to find solutions to his own needs, and there is no input supply network designed to help improve the productivity of those producers.

In Zambezia, there is practically no one that supplies agrochemicals. CAFUM kept the Boror representational role, but has been only selling seeds apparently at speculative prices. They are old products, obtained from existing seed inventories in Beira. These products are sold to CAFUM at relatively low prices, to be resold in Quelimane at great profit. In general, no one is ordering agricultural inputs any longer. In Beira, Boror has large agrochemical inventories. The company has not imported such products for some time now, since it receives no further credit allocations due to its outstanding bank debt. In Sofala there are some projects that require agrochemicals in the following locations: Mafambisse, supported by funds from BAD (Banco Africano de Desenvolvimento); in Buzi, another project of a South African; and in Metichira, there is Lomaco. Finally, there is the Citrus Products Company, which owes Ciba $300,000. It will be difficult for them to repay this debt.

In Tete, there was only a Green Zone project in the city and another in "irmazinhas." The Inhambane province was forgotten as well; it has but one project in Inhassoro. In Gaza, besides the elimination of the UDA unit, as pointed out earlier, there is the Joao Ferreira dos Santos Company in Chokwe, the Lomaco Company, and the Semoc operation (the latter, only for seeds). Finally, in the province of Maputo, there is only the Citrus Fruit Company in Umbeluzi (Empresa Citrino de Maputo). However, it is now in serious trouble. It used to market its products in East Germany and was able to work out an export agreement with South Africa, given the international economic boycott against that country. However, the end of the South African boycott and German unification is already generating a negative impact on the sales of the Maputo Citrus Company.

In this context, Ciba Geigy functions as one of the principal importers of inputs, but has no commercial rights to market the product in the domestic market. It has ended up being limited to four customers, who only control an area of about 50,000 hectares. It has no other wholesale customers through whom it could supply the country regularly with agrochemicals for food products. Even the four regular customers only request agrochemicals for cotton. When Boror was still operating, more or less well, Ciba tried to convince the provincial directors of that company to buy agrochemicals for horticultural farming, corn, and other food products as well. But without Boror operating, Ciba has no internal distributor. The representatives of Ciba in Maputo, Beira, and Nampula are no longer well received. To start a network for domestic distribution in the interior to replace Boror would be very costly.

One fundamental preoccupation remains: Besides cotton,who worries about the other agricultural products,above all food products? Apparently, nobody. The situation is alarming, because Mozambique should invest strongly in this agricultural activity. In reality, what is observed is a total indifference by the institutions most directly connected with input distribution and its financing. Nobody worries about the large private farming majority, i.e. the small family producers, and the cooperatives.

In the majority of cases, small and average-sized producers have no access to foreign exchange. How could they gain access to this? How could they open up a credit line when they have no experience with banks, nor banks with them? How could they secure input supply credit from suppliers themselves when these suppliers themselves find it difficult to secure credit? Merely posing these questions underscores how difficult it is to imagine the large number of small producers securing access to input supplies or input credit in the present disorganized state of the input distribution networks and agricultural finance.

Private sector businesses and farmers, particularly, have to struggle and face these problems alone. A small number find ways to have things sent from South Africa. That is what some producers of Chokwe have been successful in doing. Others find ways to supply themselves, either through the "candonga," (i.e., black market) or through state companies, or through family members who benefit from access to inputs from large companies (through their jobs), and sell these inputs to private customers as a way to make some money.

3. Custom duties, taxes and technical assistance

Aggravating the problems of agricultural input distribution are the issues related to the new custom duties and taxes to be paid on these products. For pesticides, fungicides, and herbicides custom duties are 35 percent, and the distribution taxes 20 percent, for a total of 55 percent. Fertilizers and seeds pay from 10 to 15 percent in custom duties.

Another problem concerns technical assistance. Ciba has 14 agronomists. In contrast, Boror and Cafum have no network of technical assistance. There is practically no cadre of extension agents or technical specialists today who might look out for the farmer and ask him what is wrong or what his problems or needs are. What happens, then,is that many times a producer tries to buy a certain input based on whatever brand he has heard of. For example, he might approach the personnel of Boror or Cafum, and ask for Bazodim. If the company personnel do not have it, they have no experience or expertise to counsel farmers on a possible substitute product that has the same properties and can still do the job. Sometimes they do have the substitute solution product in stock, but, not being aware of the problem and possible solution through the substitute product, they merely tell the producer they do not have the product and avoid the issue. It is clear that the lack of a well developed educational base in the agricultural sciences in Mozambique limits the human capital base that marketing agencies can draw upon to services farmers and act as well informed commercial agents for input distribution.

5. Future Outlook?

In the short term, many things are still constrained by the climate of war and the instability existing in many areas of the country. But looking further into the future, how can these obstacles be overcome? One alternative would be for some private businesses to take an interest in creating input distribution networks. However, most domestic private businesses lack capital to start this kind of enterprise. A domestic business would need bank finance to hire local agronomists to handle the technical requirements of proper extension advice and service local producers with short term seasonal credit to use agricultural inputs.

Whoever wants to tackle this market seriously must know what to sell and convincingly demonstrate the advantages in using selected agrochemicals. It is known, for example, in Nampula, that the small producers are content to get only 15 to 20 tons of horticultural produce per hectare. At the same time, Lomaco achieves yields of 65 tons per hectare because it knows how to use the proper mix of agrochemical inputs. The difference of production systems results in this difference of 45 tons per hectare between modern producers and traditional farmers. A properly functioning importer-wholesaler-retailer marketing chain for agricultural inputs could make a strategic contribution to closing this yield gap.

C. Interview with Mr. Eugenio Fazenda of Boror Comercial, Distributor of Agricultural Inputs

1. The Boror situation

Mr. Fazenda began by explaining that Boror is the company which has the best marketing network in Mozambique to distribute inputs throughout the whole country. In 1972 Boror was still a private company. But in that same year the company allegedly engaged in export activity that involved substantial capital flight so the government intervened and took over the business. At the present time, Boror is bankrupt because of bad management. Bank credit was prohibited since there is a dispute to be resolved, related to a debt of roughly 4 million contos. The company has 380 workers.

Although for the past two years several new distributors began to appear in the market, Boror has always been the principal agent. Every year the provincial sales representatives draw up orders of the products needed for production such as pesticides, herbicides, and fungicides. After the orders have been assembled, they are usually sent to the Ministry of Agriculture in order to verify if there are foreign donor funds available to purchase and import these items through the CEE, BAD, KR2, ODA, etc.

Each of these funds have different terms and conditions. They are either grants (which means that only 2/3 of the FOB price be paid, e.g., funds from Ja...) or credit (that has to be repaid). This difference has important implications. The Japanese donor funds require that they be used only to buy chemical products that produce food products. For that reason, the inputs purchased through their program cannot be used for cotton the major export crop from North Mozambique.

For the large number of small family farms (sector familiar) it is estimated that about five million dollars of chemical inputs are needed for agrochemicals per year. For food production input needs are larger. However, the input supply companies are scattered throughout the country and do not have market linkages with this sector. The distributors do not provide the necessary coverage. After 1984 Boror imported a great deal. However, the state enterprises and state farms to whom they granted input supply credit went bankrupt. Thus, Boror was left with large uncollected customer debts which meant they could not repay their banks loans.

The economic reforms have yet to make up for missing or fragmented markets. In Chkwe, the UDA disappeared. The GCPI is going to fold and the funds will be transferred to the Bank of Mozambique. Boror can now only import with money obtained in the parallel market, or if other importing agents do it, then, cover the cost of the product in meticais.

Boror has sales representatives in Maputo, Gaza, Beira, Nampula, Nacala, and Pemba. Four years ago it also had agents in Inhambane, Manica, and Zambezia. But at that time these agents were with CAFUM. In Maputo there are many input sales distributors including, Interquímica, CAFUM, and Boror. As far as fertilizers are concerned, the principal companies are: Química Geral, Boror, and CAFUM.

Presently, the biggest problem of the distributing companies is the lack of a sufficient supply of meticais to pay for the foreign exchange needed to import inputs. Producer demand has not been satisfied in most provinces. With fertilizers, the needs are estimated around 8,000 tons for the agricultural season throughout the country. While at this time, there are only 4,000 tons in stock, producers do not want to buy these stocks because they consist of old products that have likely lost some of their strength. Some of it dates to 1980. This product could be in part improved in quality. But there is not only a problem of quality, there is also the problem of prices.

Química Geral is able to satisfy one-third of the market; the rest has to be imported. Domestic production is costly and thus is sold at a very high price. What is imported turns out to be cheaper, even after the custom duties of 60 percent are included. In Gaza, the Boror agents cannot fill the orders that have been regulated. From Beira 3,000 tons of fertilizer were ordered. Boror provided 1,000 tons and the rest was provided by Interquímica.

In the North of the country the large cotton farm enterprises combine their requests with those of the small family sector. Then they place these orders with Boror so that the required imports can be made. This also happens with Lomaco, SODAN (ventures between Joao Ferreira dos Santos and the Government) and SAMO (a joint venture between Entreposto and the Government). The problem arises with input orders for food crops. The only possibility for horticultural and basic grain farmers is to go to the "casas agrarias."

2. Boror's Future

There has been a discussion as to whether Boror should be privatized. A committee was formed to study the subject. Mr. Fazenda believes that privatization might permit the firm to overcome its critical situation. The present company went bankrupt because of a lack of liquidity or cash flow growing out of the upaid debts of its customers (primarily state enterprises). Since the company already has a large infrastructure, added Mr. Fazenda, it has assets worth purchasing. Private ownership might be able to rescue the company, provided it would not be difficult to secure short term credit for working capital. A foreign investor-buyer would presumably be able to secure such credit. Our interviewee maintains that 2/3 of the value of the company (including infrastructures, trucks, and input inventories) would be enough to cover its outstanding bank debt. In his opinion it is currently unlikely that a company would fail, the way Boror did in the past. Each company is now beginning to protect itself in several ways. Interquímica, for example, accepts imports through "livranças," i.e., written orders for payment. Boror also provides credit to its customers, principally on 90 day consignments to Lomaco and Semoc. But the company that has the most cash flow and financial stability at this moment is Interquímica.

In a final comment about the situation of Ciba and CAFUM, Mr. Fazenda stated that their major difficulties are associated with not having any sales agents in the sector. Ciba does not have a domestic marketing network, nor does it currently intend to establish one. At this moment, this may not practical for anybody. Not too long ago, Boror had a truck destroyed by war action. The companies have to limit their activities to the green areas of the provincial capitals. The economic reform has forced readjustment to these markets. The previous consumption of agricultural inputs in large state farms and state enterprises was artificial. The state companies automatically bought the same amount of inputs each year. Now nobody functions this way. Each company has to analyze carefully the market demand and the risks inherent to the granting of input loans to selected customers and constituencies. Market forces and market discipline have to replace the uneconomic administrative input distribution practices of the past.

D. Interview with Mr. Rui Riberio SEMOC (Mozambique Seeds)

1. Introduction: Two levels of difficulty

Mr. Rui Ribeiro began the interview stating that the problems in supplying of seeds are similar to those faced by other marketing companies in distributing other agricultural inputs. On the one hand, there are difficulties related to Government measures (e.g., custom duties). On the other hand, there are market specific problems of marketing and sales. In 1992, there were a number of government measures that penalized agricultural input trade and, in turn, agricultural production. First, the CIF seed prices were increased by a circulation or sales tax of 5 percent, in addition, another 5 percent is added for each wholesale distributor, and 10 percent for the retailer. All these sales taxes are in addition to the custom duties levied on imported inputs. Concerning custom duty policies, there are no specific guidelines for the seeds, nor is there any distinction made between seeds for production and those consumed directly as food by the public. The customs duties are: 10 percent for corn, rice and vegetables, and 35 percent for peanuts. SEMOC has argued that seed purchases should not be taxed. Mr. Ribeiro stated it makes no sense to apply custom duties on seeds in a country whose agriculture sector is destabilized, stagnant, and suffering serious drought problems.

With respect to agricultural chemicals (pesticides,fungicides, and herbicides), Mr. Ribeiro made it clear that the company is more a customer than a supplier. But he understands that these products are treated, at customs, the same way as perfumes. When trying to understand the rationale for this treatment, Semoc was informed that these products damage the environment. Because the seeds and agricultural chemicals are mostly imported, by the time the product ends up in the hands of the final customers, they will have experienced an increase in price, from 50 to 70 percent. Then there are the operational problems of the customs authorities themselves. Recently, a new administrative layer was established in the customs unit, which was supported through increased handling and storage taxes. In principle, all imported products have to go through FRIGO. SEMOC had to pay 17 "contos" per ton of seed. Finally, a third issue is the local currency cost of securing foreign exchange for imports which is subject to taxes levied through the Ministry of Finance.

2. Contracts with Foreign Suppliers

Foreign suppliers are generally companies located in Zimbabwe, Zambia, and South Africa. These are companies that only trade in seeds and generally establish contracts directly with farmers in their countries. Semoc has contracts with these foreign suppliers, for the amount and variety of seeds required. According to Mr. Ribeiro, these supplier relationships have proven profitable. Another positive aspect of their supplier contracts is that these suppliers support the local multiplication of seeds in Mozambique. In the case of corn, 40 percent of the seed is imported and 60 percent is generated through domestic production. Rice seeds are not imported, while seeds for peanuts and beans cannot be economically produced locally. Foreign exchange for seed imports are donated by several countries. Because of the changing conditionalities and availability of these donations, Semoc never knows if funds will be available for it to pay for the next season's imports of seeds.

3. The Distribution Network for the Domestic Market

The most important input distribution company in the domestic market, Boror, is bankrupt. Currently, it is hardly distributing any inputs. It is also believed that CAFUM has a debt of 800 million meticais from a USAID fund to finance fertilizer imports. Currently, the country has no effective input distribution network, because traditional distributors are going bankrupt or have serious management problems. On the other hand, the typical 90 day credit vehicles drawn upon do not work for agricultural activity. Producers need at least six to nine months to repay seasonal loans with harvest proceeds.

In the rural areas of many provinces, the marketing network of commercial input operators was replaced by an emergency network. In Tete, this network also involves businessmen. But in general, few retail business outlets are left in the country for input sales. Businessmen say they have no money. SEMOC does not want to provide credit, but has been discussing with the BPD the possibility of granting credit to wholesalers and retailers. SEMOC was not organized to do domestic marketing. But the lack of a distribution network has forced the company to create sales representatives in Beira, Quelimane, Manica, Chowkwe and Nampula. It is difficult to move beyond these agents. The Emergency distribution network is still in place. But, Mr. Ribero asks, when it finally closes down, what can be done? If marketing risks decrease significantly, then maybe a commercial input distribution network can be resurrected. But this will depend vitally on the availability of an agricultural finance facility to support this effort.

Mr. Ribeiro also emphasized that SEMOC has already invested what it had to invest. It also does not foresee production increases. It only wants to consolidate its current levels of activity. If a network of domestic wholesale marketing firms do not emerge in the market, the only solution will be for SEMOC to deal directly with retailers throughout the country. As far as production is concerned, Semoc has contracts with peasant producers for the production of rice seed, for example, in Chokwe, Marracuene, and Zambezia. With these contracts, these small producers are able to produce better yield varieties. Corn is more difficult, because of the market and the technological complexity (i.e., the case of cross pollination.) In the case of peanuts and nhemba beans, the principal difficulties come from market prices. Finally, for vegetables, seeds are basically imported.

Seed production in SEMOC, in 1991, was 6,000 tons. For 1992, no more than 5,000 tons is foreseen. Potential capacity is around 8,000 to 9,000 tons. Feed production is concentrated in the "machambas" of Umbeluzi (for diverse varieties), Chokwe (principally rice), Chimoio, and Namialo (for corn). The Ministry of Agriculture estimates a need of 20 to 25 thousand tons. With the war situation, the drought and emergency condition, the question remains: who will distribute such a large volume of seeds? Mr. Ribeiro is convinced there is no current capacity to market more than 12,000 tons.

4. Final Considerations

In short, Mr. Ribeiro outlined his perceptions on the principal difficulties related to the agricultural inputs. These are:

- lack of sales personnel;
- weak agronomical and technical human captial base in input firms;
- problems of prices and high costs of agrochemicals and seeds;
- weak marketing network espcially at the wholesale level;
- lack of rural extension skills (there is no clear understanding in Mozambique of what rural extension skills should be);
- existing stocks of high inputs are not sold because of prices and weak marketing network;
- the large number of family farms have no extension support to assist them in improving their yields.

Following the war, Mozambique will still face a difficult challenge to modernize its agricultural sector along with the constant threat of droughts. If the producers are not helped to stabilize their production and improve yields through modern inputs, the crisis will not be overcome. The careful creation of a viable agricultural input marketing network clearly will play a strategic role in overcoming this crisis.

VI. Summary and Recommendations

A. Introduction

Risk and uncertainty dominate the commercial world of Greater Maputo. Markets, though growing in size and scope from the late 1980s onwards, still experience unexpected fluctuations in prices. Input supplies are frequently unavailable, particularly when dependent upon foreign suppliers and uncertain access to foreign exchange. Clients frequently are overextended and unable to repay credits extended to them by wholesalers. Technical problems are common to production lines growing more overworked with only sporadic supplies of spare parts available from South Africa and elsewhere. Finally, government policies are subject to change introducing policy risks into commercial calculations concerning the availability and cost of foreign exchange; the long delays to access foreign suppliers through the banking system; the uneven application of taxes and their exemptions; and the changes in customs duties and regulations.

All of the above risk elements operate in the markets of the clientele serviced by the Banco Popular de Desenvolvimento (BPD), thus it is not surprising to note the uncomfortably high level of non-performing loans in its portfolio in Chapter II. Any financial intermediary in Mozambique would find it difficult to avoid the dangers of adverse selection in its choice of clientele, unless it restricted itself to merely servicing the foreign exchange accounts of the resident expatriate community and a handful of safe businesses that experience no cash flow problems.

With this setting in mind, one can now review the findings of this study. This will be done in three areas: the constraints to financial intermediation; the current state of marketing channels and informal finance in the country's peri urban area; and the special challenges of the microenterprise sector. The typical problems of large and small businesses will be apparent in this review; and finally the suggested role of the government and donors to address these issues will be spelled out in each area.

B. The Constraints to Financial Intermediation: From Supply Leading Finance of State Clientele to Adverse Selection in the Private Sector

1. Summary

The BPD has carried out a substantial restructuring of its portfolio in the past five years. State enterprise clients which in the mid 1980s accounted for over 95 percent of the loan portfolio have declined in importance to only 10 percent by the end of 1991. Agricultural sector lending declined from 60 to 25 percent of the portfolio over this same period, while industrial sector loans (largely in state agroindustries) followed suit from 40 to 15 percent. The major increase occurred in private sector commerce and services which rose from less than one percent of total lending in 1988 to 53 percent in 1991. This rapid growth in the banks private sector clientele underscored the positive impact of economic liberalization on the growth of this sector over this period.

In terms of real (constant) meticais, BPD lending declined rapidly from 1985 to 1987 due to growing arrears with its state clientele and the erosion of high inflation on the real value of its outstanding portfolio. By 1991, however, the rapid growth in its private sector clientele in commerce, services, transport, and construction activities more than made up for the decline in its state sector clients for the portfolio to reach roughly the same level of real meticais lending in 1991 as that registered back in 1985.

One of the more revealing features of BPD activity was seen in its high ratio of liquid assets to total assets. Up to 1990, it ranged between 34 and 40 percent, an unusually high level that grew out of Bank of Mozambique credit controls on the volume of lending to control the money supply. More recently, it has dropped to 20 percent in the new regime of explicit reserve requirements. This is still a high ratio for an asset that earns no return and loses value rapidly in an inflationary environment. What the BPD lacks is the option of investing part of its assets in interest bearing short term government securities. This restricts the bank to choose between continued lending beyond an acceptable risk threshold in the loan market or placing its excess deposit holdings in non-interest earning liquid assets. This is one area where donor support could made a contribution by facilitating the creation of a short term treasury bill market. This would encourage a healthier diversification of assets in bank portfolios and introduce a valuable indirect tool to control the money supply (i.e., open market operations of T-bills).

Financial ratio analysis highlights the precarious state of the BPD as it struggles to achieve self sustaining viability. The loan deposit ratio has risen from 50 to 71 percent in recent years as the bank has worked to reduce its non-interest bearing liquid assets and, at the same time, reallocate its portfolio out of low interest, higher risk state clientele into higher interest, private sector clientele. Still, its rate of delinquency, while lowered from 30 to 40 percent in the late 1980s to 25 percent in 1992, is still uncomfortably high for an institution striving to gain a more solvent state. The net rate of return on assets is negative or near zero for the past five years. Losses have been recorded for the past three years as the institution has written off a substantial share of its defaulted portfolio. This financial state makes it difficult for the bank to offer anything other than a negligible share of its deposits as interest bearing instruments that compensate for inflation. Finally, it is clear the bank is grossly undercapitalized as it operates with an equity multiplier of close to forty to one. It is incumbent upon the government to secure the capital base of the bank at a more substantial level than it currently enjoys to protect depositors from bearing the entire burden of losses through unremunerative interest rates.

In summary, the bank has moved from one high risk clientele (state enterprises) to another (new private borrowers). The former clientele contained all the risks inherent to a top-down administrative allocation of credit common to a supply leading financial development strategy. The latter group represents all the features of adverse selection and moral hazard growing out of incomplete information and the lack of effective monitoring, collateral, and contract enforcement mechanisms in an embryonic, uncertain market environment.

2. Recommendations

The foregoing discussion leads to the following set of recommendations for the bank, on the one hand, and for the government and donors on the other hand.

- **The bank needs to establish a more effective information management system.** Essential here is the create of a **risk management team** supported with ample resources and responsibility to document performance of the portfolio on a regular and systematic basis. This should entail a **"loan tracking"** methodology on the loan repayment status of all outstanding loans (or at the very least an acceptable sample of all loans). It is particularly important to monitor installment repayments of outstanding long term loans and document the amounts repaid as a ratio of only the amounts due (and not the entire outstanding loan). Moreover, loan repayment status should be correlated with borrower characteristics (sector of activity, size of business, first time borrower, etc.) and loan characteristics (term, loan size, collateral, interest rate, etc.) to generate a **risk profile** for current and future creditworthiness criteria used in loan evaluation exercises.

- **The bank should hire in new personnel that are computer literate** and have some economics training and/or meaningful business background. This new human capital should form the basis of the risk management team outlined above.

- **The bank should computerize all its activities** to better implement more effective management control, rapid check clearing facilities, portfolio and asset management, and risk management strategies.

- **In addition to the risk management team discussed above, the bank should set up an allied market intelligence unit** to document key prices of outputs (products and services) and inputs for all the major markets represented in the bank's portfolio. An index of output to input prices and their recent trends by detailed sectors of activity can offer a useful proxy to evaluate the sector specific profit potential of future loan applicants. This should entail periodic field visits to selected business sites and markets by team members to actually collect and up-date this data at the ground level instead of relying too much on government generated data. At the very least, documentation of the output and key input prices for the activities of the current clientele should be introduced as part of this on-going market intelligence effort. In time, this data base could be used to forecast future price trends. For the present, it could highlight price fluctuations by market activity and allow one to develop rate of return-variance measures to use in evaluating risk-return profiles by type of activity.

- Associated with this market intelligence effort should be an effort **to determine the cost effectiveness of alternative forms of collateral** to establish the most appropriate guarantee for contract enforcement with different types of clientele. For example, instead of traditional mortgage property collateral that might be difficult to enforce, the bank might identify secure accounts receivable for a client (i.e., ensured sales contracts with established buyers) that could act as a perfectly acceptable collateral substitute.

- **To reduce the risks of non-performing loans, the BPD should continue to restrict direct lending to non-corporate, private agricultural producers except for established clientele with good repayment records. Instead, the bank should focus on lending to larger wholesalers of agricultural inputs, on the one hand, and agricultural product buyers on the other hand.** These traders are able to offer more reliable guarantees and meet loan repayment schedules better than small sized agricultural producers. Moreover, facilitating the finance of large input and output traders facilitates their downstream financial and commercial dealings with farmers in their networks much more effectively than the bank trying to deal with these producers directly. Traders are better positioned to sort and screen these clients (for their inputs or for possible forward contract purchases of farm products). In short, they suffer from much less imperfect information and transaction costs than do banks with these clients.

- **The bank can consider working through non-governmental organizations (NGOs) to reach a smaller and riskier clientele.** While the NGO can reduce the bank's costs by acting as a downstream broker between the bank and these clients, the risks of high arrears are always present. If the bank is not directly and primarily responsible for client selection and loan evaluation, it should limit its own capital for these ventures and engage in these programs only when outside funding covers the costs of administration and shares in the risk of loan losses.

- **The bank should make every effort to avoid high loan to annual sales ratios.** To avoid loan rescheduling and accumulating arrears, these ratios should be at least below 30 percent and preferably below 20 percent. This will permit borrowers to more effectively absorb their repayment obligations within their normal cash flows.

- **The bank should broaden its supply of financial services** and develop more foreign exchange business and develop foreign bank correspondent relationships in South Africa and elsewhere. This facilities the servicing of its clients import transactions and reduces the high transactions costs and long delays clients currently incur in this area.

- **Finally, the bank should decentralize management authority** sufficiently to make key branch managers and the principal loan officers under their jurisdiction more accountable for the performance of the loan portfolio generated and administered under their auspices. Among other things, these officers should have immediate and continuing access to the information generated by the risk management team (on the current portfolio) and the market intelligence unit (for the economy). This information should be incorporated into their loan evaluation exercises. Then, loan management criteria should be established that rewards good portfolio performance with bonuses and restricts pay raises and promotions for those responsible for a poorly performing portfolio (vis-a-vis the bank-wide average).

The government (and donors) should collaborate to carry out the following measures to facilitate financial intermediation in the country.

- **Both the government and international donors should work together to establish a short term treasury bill market in the country.** This interest bearing instrument should be indexed to cover the costs of inflation, plus a decent rate of return to allow it to be held as a remunerative riskless short term asset in the mix of total assets held by banks in the country. Banks should be given the option of diversifying their portfolio through the holdings of these securities, a common occurrence for banks in more developed financial markets. At the same time, this new financial product creates the opportunity for monetary authorities to manage the money supply through the purchase and sale of these securities in open market operations.

- The government with the counsel and technical assistance of the international donor community **should review in detail the current legal and institutional environment as it pertains to the enforcement of contracts.** Banks cannot operate as effective financial intermediaries unless expedient and cost effective means exist to ensure the enforcement of financial contracts and the foreclosure, if necessary, on collateral guarantees in the event of a default on contractual obligations. Special courts or juridical processes should be established to expedite bankruptcy proceedings to facilitate negotiated settlements between creditors and debtors.

- **The government with donor support should move ahead quickly to establish a bank examination and supervisory unit to ensure prudential and fiduciary responsibilities for the banking sector.** With the growing deregulation of interest rates and other elements of financial control, banks will have greater freedom to grow (or make mistakes). They will now have to exercise greater internal discipline and implement more creditworthy criteria in allocating their portfolio. Nevertheless, they may not be ideally trained yet to avoid serious errors of adverse client selection and resultant moral hazard to their portfolios. One should remember they never had to manage a portfolio under these more liberal guidelines in the era of state directed financial flows in the past. In the meantime, it is appropriate to create a supervisory review authority to encourage more discipline into portfolio management by banks through periodic bank examinations. This will necessarily take time and depend upon donor support for the necessary technical assistance and external training required to create this team of examiners for this regulatory body.

- **The government should recapitalize the BPD at more adequate levels of capital adequacy.** Currently, the equity multiplier is far too high for sound banking and deposit protection. However, recapitalization should not be carried out before the BPD begins to redesign the asset and risk management reforms suggested above.

- Finally, the government should **remove the barriers to market entry and allow foreign bank competition** to emerge in the supply of financial services. This more open and competitive environment will create an important competitive stimulus for more efficient reorganization within the BPD and the newly created commercial bank from the Bank of Mozambique.

C. Marketing Networks for Large and Small Businesses: The Financial Connections

1. Summary

The results from Chapters III, IV, and V underscore the still fragile and risk-ridden world of commerce in Mozambique. Private business supplier credit, a widely used source of finance in most developing countries is largely absent in the country. Bank finance or retained earnings are essential to import supplies from outside the country since foreign suppliers rarely if ever grant supplier finance to Mozambique customers. Downstream domestic finance to retailers from wholesaler-manufacturer-artisan businesses is also limited though not as severely as supplier credit from abroad. Builders and artisans extend downstream credit to their clients as do larger firms selling household appliances or related consumer durables to businesses and the government. Interest rates are rarely explicit in these arrangements, instead price differentials (between cash prices and credit sales) assume this role. Cash payments far exceed the use of checks in all commercial transactions underscoring the continuing deficiency of the payments system in the banking industry.

Informal finance beyond supplier credits and client finance is limited largely to advances to employees within these businesses. The self help groups common to Mozambique such as xitiques are not drawn upon as a source of working capital by producers and artisans. These informal savings groups are more popular among housewives in low income neighborhoods and market women in frequent daily contact in urban markets.

The strategic agricultural input marketing chain is weakened by still not being integrated into downstream retail networks. Moreover, the large wholesale importers find it difficult to secure supplier advances from abroad. This is one sector that could clearly benefit from more regular access to formal finance. However, these wholesaler importers of agricultural inputs are subject to downstream risks in a risky sector with customers who frequently do not meet repayment schedules. In light of these difficulties the following recommendations are suggested.

2. Recommendations

- **Banks should restrict their lending to wholesaler importers and largely avoid direct retail small farmer lending** given the high transaction costs of securing adequate client information at this micro unit level and the associated costs of monitoring and administering contracts at this level. Wholesale traders are better positioned to screen, finance, and administer a downstream network through informal supplier credits and consignments than is a bank through direct finance.

- **Wholesalers of agricultural inputs should try to vertically integrate their operations** as much as possible to reduce the costs and risks of dealing with geographically dispersed independent retail agents. One is more securely organized to manage risk through one's own agents rather than dealing with independent retail operators over whom one has no effective control.

- **Where possible the retail agents of these wholesaler input importers should also consider acting as the agent for the purchase of farm output.** This gives them an avenue to collect on outstanding input loans, thereby creating an informal contract enforcement vehicle through operating in both markets.

- Given the continuing uncertainties and risks in agricultural activities, input suppliers will undoubtedly face some degree of arrears on any informal consignment contracts to their downstream clienteles. If, however, donors feel the recovery of the agricultural sector is of strategic importance to the recovery of the economy as a whole, **they should be prepared to create a loan guarantee program to share the banks' risk of financing of wholesaler-importer credit needs.** The downstream multiplier effect of this key level of wholesale financing should be substantial. In time, the need for loan guarantees will decline as the agricultural sector recovers and risk declines to a more normal threshold that the banks and the wholesalers can manage themselves without loan guarantees. For the present, however, this level is too high to expect banks to accept all the risk themselves. There is a role for donors here in reducing this risk to the banks (i.e., the BPD and the new "commercial" Bank of Mozambique).

D. The Microenterprise World

1. Introduction

Our review of the BPD-GPE program in Chapters II and III illustrated some of the important issues associated with the challenge of implementing microenterprise finance in Mozambique. First, the country has a large number of small enterprises. Indeed, this small firm trend for private sector activity was reinforced in the past as the state dominated the commanding heights of the economy in large sized firms. Now that the state is gradually privatizing its parastatal activity and private market forces and ownership are being encouraged, the role of small, microenterprises is strengthened.

Any program to expand production and employment in the country must recognize the quantitative importance of this sector in this effort. However, given the large numbers of small firms in this population, it is difficult to reach any but a handful through special programs. Several important features should be kept in mind in dealing with the microenterprise world (firms with 10 employees or less). First, personal savings and gradually accumulated retained earnings are the universal sources of finance drawn upon by the vast majority of these firms in all developing countries to launch and build up their businesses. Second, given the large numbers involved and their widespread distribution, general market forces are the principal vehicle to stimulate these firms. General policy liberalization of prices, regulations and trade (exp. imports) are the major means to promote economic expansion of employment and output in this sector. Third, given the heterogeneous nature of this sector, lack of entry barriers, and the constantly fluctuating market opportunities and market constraints, there is invariably a high turnover of firms. This is important for any potential financial agent to keep in mind before embarking on a program to service these firms with loan finance.

2. Review of Findings

Upstream supplier credits were rarely documented in the empirical findings for microenterprises in Chapter III. Downstream client finance, however, was more visible, especially for durable products like housing and building trades. Cash transactions predominated in both markets, underscoring the continuing weakness of the payments system even in the Greater Maputo area. To the extent that checks are used, they are only for domestic suppliers. The absence of a credible, well functioning payments system through efficient check clearing facilities clearly increases transaction costs in the commercial activity of the country. Microenterprises cannot access foreign inputs except through bank finance or personal savings. To a large extent, this is also true for larger firms in Chapter IV. The overwhelming use of cash payments (rather than sales on credit or consignment) is apparent even to settle accounts with domestic suppliers. This fact, combined with the high rate of arrears of these microentrepreneurs with the BPD-GPE loan program, suggests that in the pecking order of obligations, payments to suppliers represent more senior claims on available resources than debt repayments to the bank. Very possibly the businesses are carefully trying to cultivate a solid supplier relationship (in the domestic market) that could likely generate supplier credit in the future on an ongoing, regular basis. Since it is unlikely these clients would secure any more formal finance following their current investment loan, it makes sense in their judgement to cultivate future informal finance through one's suppliers. When this reasoning is combined with the lack of any credible sanctions for arrears in BPD repayments, one's future utility is maximized through ranking supplier cash payments as a higher or more senior claim on cash flow resources than the repayment of formal loan installments.

The risks and uncertainties that make it difficult for microentrepreneurs to meet loan repayment schedules have many origins. Many of these businessmen and women are upwardly mobile operators from the informal economy that had been functioning in a marginalized fashion during the era of high socialism promoting state driven and state controlled activity. Second, these operators have little to no access to supplier credit. Third, all are first time borrowers from formal intermediaries when they are drawn into microenterprise programs, therefore they are inexperienced in cash flow management associated with the added burden of debt repayment. Fourth, a number of these firms reviewed in Chapter III experienced interruptions in their own business activities growing out of unstable market environments further compromising their debtor status. Finally, more often than not, their outstanding program loans were far too high a proportion of their annual sales activity thereby creating a serious cash flow management problem.

Despite this pessimistic scenario, one has to recognize that there are success stories in the microenterprise world, and, in time, this sector will play an important role in absorbing employment and contributing to economic expansion. However, one must recognize the high risk of substantial loan losses for any financial program servicing this clientele. Donors, of course, are expected to accept risk in their programs and hope that in time this can be reduced. It is in this spirit that the following recommendations are made.

3. Recommendations

- **Microenterprise loan programs should ideally begin by financing short term working capital needs of their first time borrowers.** These smaller loan sizes are easier for the client to manage in his/her cash flow projections. Quick repayment on a short term loan instrument gives the program or bank hard evidence that the client is indeed creditworthy for further loans. Long term (i.e., investment) loan finance should only be considered after clients have proven capable of managing and repaying a smaller short term loan obligation.

- **It should be made clear to microenterprise clients that this is not a "one loan only" program.** Otherwise, there will be no incentive to repay the loan since borrowers would not be rewarded with additional loans for responsible loan repayment behavior. The goal of the program should be to finance and cultivate a long term lender-borrower relationship. Microenterprise programs that emphasize a single loan philosophy (to reach as many clients as possible with its given resource base) create an incompatible incentive environment compromising effective loan recovery and a non-self sustaining program.

- **A much more regular and systematic documentation and reporting of loan recovery should be designed into the GPE program and any future microenterprise financial brokers.** Few microenterprise programs conducted through NGOs emphasize loan recovery efforts. Even fewer incorporate effective loan repayment documentation in their standard reporting procedures. Recovery of long term loans, in particular, are poorly documented as NGO accounting systems generally overlook the term loan repayments on installments due. They tend to report the ratio of arrears over the entire outstanding portfolio (most of which is not yet due) generating a misleadingly low arrears measure compared to that which would emerge over the amounts due. This was clearly highlighted in our discussion of the GPE arrears problem evident in table II-6 of Chapter II. A much more regular documentation and reporting of loan recovery should be designed and implemented on an amounts due basis in NGO intermediary microenterprise programs.

- **Microenterprise programs must make efforts to avoid high loan to sales ratios.** Programs that emphasize long term investment loans to first time borrowers tend to overlend (i.e., issue loans that are too large vis-a-vis the annual sales revenues of the business). This seriously compromises the feasibility of servicing loan repayments with the normal cash flow of the business. Loan to annual sales ratios should not be over 20 percent and, in most instances, should be no more than 10 percent. Short term working capital loans lend themselves to more feasible loan sales ratios than long term investment loans. This is yet another reason why a microenterprise program should first cultivate and establish its lender-borrower relationships with the former rather than the latter loan instruments.

- **Microenterprise program officials must make an effort to determine accurate income flows of their prospective borrowers business activity.** This is typically a strategic weakness in these programs because this is not easy to do. Multiple visits are likely required to build up this information from prospective clients. Information on the market experience and income flows of the current borrower clientele should also make a contribution to the documentation effort for prospective borrowers. Without this information the program will be subject to the risk of overlending, creating inappropriate loan to sales ratios and the growing likelihood of loan defaults.

- **Donors and microenterprise officials should explicitly recognize the high element of risk in the market environment of microenterprise business in Greater Maputo.** This should be designed into the program. Annual income or cash flow projections should not be based exclusively on normal sales estimates. Downside risk must be programmed into these projections, and, in the same spirit, a one time rescheduling of the loan repayment schedule every two years should be permitted, especially for investment loan clients who have previously established a responsible installment repayment record in their earlier short term working capital loans.

- **Microenterprise loans should not be issued with subsidized interest rates.** The loan program should strive to be self sustaining and cover its loan administration costs and anticipated loan losses. It can never cover these costs with subsidized interest rates. **Subsidies, however, could be used to build in a technical assistance component as a separate service in the program.** Technical assistance components have frequently been oversold in microenterprise programs in developing countries. Technical assistance for technical production problems are invariably beyond the knowledge and experience of most microenterprise program staff. The producers themselves are far more involved and on top of these problems than program personnel. However, microentrepreneurs could likely benefit from accounting, cash flow management and general business planning advice. It is not clear if the microenterprise staff, frequently recruited from former public sector jobs, have the business experience and familiarity with markets to make a difference here. In short, donors should be aware of these issues and review the backgrounds of microenterprise program staff to satisfy themselves they have the proper human capital to offer effective technical assistance. In any event, one should not expect these programs to cover their technical assistance costs through their loan rates. However, one should expect to cover regular loan administrative costs (and prospective loan losses) with these rates. If loan losses persist in a program offering technical assistance services, these services should be discontinued since they clearly would not be making any visible contribution to the lowering of defaults in the loan program.

- Finally, microenterprise financial program design must explore ways to design incentives for better borrower screening, client selection, and more effective loan recovery if they presume to move beyond straight forward grant schemes and intend to become self sustaining, viable NGO financial intermediaries. The best way to do this is for the NGO financial intermediaries to have a stake in the program. Two approaches are possible. First, one could require the NGO to put up some of its own funds for on-lending, thereby subjecting this capital to the risk of default loss if clients are poorly selected and loans are poorly administered. Having its own capital at stake will create incentives for more rigorous loan evaluation (i.e., eliminate adverse selection) and more effective monitoring and contract enforcement efforts (reducing moral hazard).

  A second approach is to develop local village or neighborhood savings and loan associations. Donor funding would subsidize the initial institutional start up costs, training in bookkeeping skills, and education in cooperative philosophy, etc., but all lending would be at unsubsidized lending rates since the source of funding for loans would largely be drawn from local savings deposits which would be remunerated at positive real rates of interest. Since savings deposits placed at risk through on-lending would be from local neighborhood savers, there would be more careful client selection criteria and more rigorous loan recovery efforts demanded of management by the "local" suppliers of funds. Either of these approaches would be preferable to traditional program design that operates completely on donor funded resources. No matter how committed and conscientious the staff, the basic structure of incentives for careful client selection and determined loan recovery are weak if they do not have something at stake themselves.