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Promoting Urban Entrepreneurs:

An Evaluation of the Peruvian Urban Development Fund

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PREFACE

This evaluation of the Urban Development Fund (UDF) managed by the Industrial Development Bank of Peru (BIP) was conducted by a three-person team from Development Alternatives, Inc. (DAI) during six weeks in January-February 1985. The first week was spent conducting interviews at the central BIP office, pretesting the questionnaire, and selecting a sample. The three DAI team members, assisted by two professional BIP staff, dedicated the next three weeks to interviewing subborrowers and reviewing their files. The final two weeks involved analysis of the UDF fund's financial performance and of the survey data. A draft report was presented to AID/Peru, and debriefings were conducted with both BIP and AID/Peru prior to the team's departure. Team members conducted further analysis in Washington, and incorporated substantial revisions into the final report.

Each team member was responsible for distinct sections of the draft report. Jean-Jacques Deschamps concentrated on the BIP's management of the UDF fund and analyzed its financial performance and viability (Chapter One). Raundi Halvorson conducted the initial analysis of survey data and participated in the writing of Chapter Two on UDF loan impact on subborrowers. Susan Goldmark analyzed the project's economic impact (Chapter Three) and investigated future projects for AID/Peru's consideration (Chapter Four). After their return to Washington, Susan Goldmark and Jean-Jacques Deschamps reviewed all survey data, recalculated financial benefits to the subborrowers, and conducted a more detailed analysis of the project's economic impact.

The team wishes to thank those who made this evaluation possible. This evaluation could not have been conducted without the assistance and kind cooperation of BIP staff. Jorge Ponce, BIP's President, ensured that the team had access to all necessary staff and data. Special thanks go to Nestor Corbetto, head of the public relations office, advisor to the International Division, and UDF project manager, who spared no efforts to assist the team. Jorge Alvarado and Sonia Obregon of the International Division diligently gathered detailed financial data needed for analysis and survey preparation. Finally, Susy Arce and Jose Luis Rodo worked long hours interviewing subborrowers under sometimes harsh conditions and helped code and input data to the computer.

Our thanks also go to the AID/Peru mission for its support. John Sanbrailo, AID/Peru Director, George Hill, AID/Peru Deputy Mission Director, and George Wachtenheim, Director of Office of Development Resources, supported this evaluation and provided useful comments. Mark Johnson, AID/Peru Private Sector Officer, supervised this evaluation and offered guidance and support whenever necessary.

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EXECUTIVE SUMMARY

MAJOR FINDINGS

The Urban Development Fund (UDF), implemented by Banco Industrial del Peru (BIP) and funded by the government of Peru (GOP) and by the United States Agency for International Development in Lima (AID/Peru), has generated substantial economic benefits in terms of direct and indirect value added and increased employment in urban shantytowns (pueblos jovenes). The project further institutionalized small enterprise lending programs within BIP, thus contributing to the creation of a strong base for future initiatives. Despite impressive gains by certain firms, however, on average the financial performance of sampled subborrowers has deteriorated since receipt of the loan.

BIP's operation and management of the UDF benefited from the bank's previous experience with similar lending programs, chiefly the Rural Development Fund (RDF), which was implemented from the 1970s to the early 1980s in the mountains and high jungle areas of the country. Contrary to the RDF, the UDF was run as part of the bank's general lending program, with no separate UDF cell created at branch level. This approach has proved satisfactory and has eased the integration of the project into the general lending activities of participating branches. Only at the head office did the project receive special treatment, for monitoring as well as reporting reasons.

BIP's management of the UDF has been generally commendable. The project has provided loans to a new target group that previously lacked access to institutional credit sources. In addition, the UDF project enabled BIP to offer savings programs that benefit low-income clients located near field offices. Fifty BIP training courses were provided to 1,250 existing or potential UDF subborrowers in 1984. The project has, however, fallen behind in a number of areas:

- Overall lending activity during the first 17 months of the project was far below target because a strong promotional effort was not made. Total disbursements have now caught up with projections, and all credit funds should be disbursed by early 1986 at the latest.

- Lending activity was concentrated heavily in the Lima area during the first year of the project. Lima offices accounted for 93 percent of all loans made until September 1983. BIP subsequently launched a commendable and effective promotional campaign to increase lending outside the Lima area. During July-November 1984, loan disbursements outside the Lima area represented 66 percent of all new loans.

- Internal training of BIP staff involved in UDF activities has been practically nil to date. Only one course has been organized since the project began.

- Loan processing is often inefficient, according to evaluation team observations and client comments. Lengthy delays often occur between loan application and disbursement.

The most serious problem affecting the project is the rapid decapitalization of the loan fund because the bank charges negative effective interest rates. BIP has never promoted the use of indexed interest rates, a major project component designed to maintain the real value of the fund. Since the fund's inception, effective interest rates charged to UDF subborrowers have consistently trailed the level of inflation, with current effective rates ranging from 70 to 87 percent while inflation is well above 100 percent. Calculations show that, as of the end of November 1984, the fund had already been decapitalized by 26 percent of funds contributed by both AID and BIP, that is, $1.33 million out of $5.2 million. More important, five-year projections based on fairly conservative estimates of the future inflation rate (120 percent), effective average loan yields (85 percent), and bad debts (10 percent of annual disbursements) show that the fund would fall to $4.6 million, or 35 percent of its original value, by the end of 1989. Initial data indicate that bad debt levels may be significantly higher than projected above, leading to a still more rapid decapitalization of the loan fund.

Under the Loan Agreement between AID/Peru and the GOP, BIP pledged to maintain the dollar value of the UDF during the loan repayment period. BIP has not made any contributions to compensate for losses in value, nor is it in a financial position to do so in the near future.

Description of Subborrowers and UDF Loan Impact

To analyze the impact of UDF loans on subborrowers, the evaluation team conducted comprehensive interviews of 84 firms located in Chiclayo, Chimbote, Lima, and Trujillo, over a period of three weeks. Data on these beneficiary enterprises were designed to analyze their financial and socioeconomic situations both before (in the case of established firms) and after receiving the UDF loan.

The data gathered revealed that the majority of the sampled enterprises were relatively young. Over 50 percent had started operations only since 1980; 28 percent of sampled firms used UDF funds to start new businesses or product lines. These beneficiary enterprises clearly fell within the small-scale enterprise category: average sales and assets, weighted to reflect portfolio composition, were about $41,000 and $16,000, respectively. The average UDF loan size was $3,500. Average loan terms were 2.3

years, with no grace periods granted for any in the sampled group. Loan purpose, weighted to reflect portfolio composition, was 47 percent for working capital, 41 percent for acquiring fixed assets, and the remainder to cover prepayment of interest and refinancing of loans.

The interpretation of the financial condition of sampled firms is affected by the methodology chosen by the evaluation team. Assets were revalued according to current prices, whereas loans remained in nominal terms. This led to a reduction of debt-to-equity ratios. Survey results show:

- Net worth increased at an average yearly compounded rate of 34 percent (industry, 39 percent; services, 25 percent; commerce, 18 percent). The difference among sectors is explained by the fact that commercial enterprises primarily received working-capital loans that did not generate profits at expected levels, whereas industries and services purchased fixed assets that appreciated.

- The debt-to-equity ratio, on average, was a moderate 29 percent. Services had the highest debt-equity at 47 percent, followed by industry at 30 percent, and commerce at 19 percent.

The direct impact of UDF loans on the profitability of the subborrowers surveyed can be summarized as follows, with all values converted into constant soles:

- Sales increased at an average yearly compounded rate of 38 percent. Most of this dynamic change resulted from the performance of industry (43 percent annual growth) and services (35 percent). Commercial enterprises' sales increased at a slower rate of 18 percent per annum.

- Operating profits increased at an average yearly compounded rate of only 8 percent (industry, 8 percent; services, 11 percent; commerce, 6 percent), indicating that operating profits did not increase as fast as sales.

- Profitability indicators declined dramatically when comparing performance immediately prior to loan receipt and at the time of the evaluation. Ratios of gross and operating profits to sales declined somewhat for industries (from 45 to 40 percent and from 34 to 25 percent, respectively), remained fairly constant for commercial enterprises (from 27 to 23 percent and from 25 to 21 percent, respectively), and fell sharply for services (from 51 to 31 percent and from 29 to 9 percent respectively).

The debt service burden (ability to cover interest payments) was manageable for about three quarters of the sampled firms. The debt repayment burden (ability to make principal and interest payments), however, varied greatly among sampled firms. About 46 percent had an acceptable debt repayment burden (under 35 percent), 20 percent had high debt repayment burdens (35-64 percent), and 34 percent had unacceptable burdens (over 65 percent or negative). Since operating profits do not subtract income to owners and family members, it is difficult to know the extent to which enterprises could shoulder higher interest rates. Nevertheless, firms that cannot bear real positive interest rates are poor investments; lending to these firms results in an economically inefficient use of funds with extremely high opportunity costs.

Economic Impact

The UDF project has generated significant economic impact in *pueblos jovenes* areas to date. Survey results indicate that the average industrial enterprise created two new jobs at an average loan cost of $2,000 per job. In comparison, the cost of creating a job in the Peruvian modern industrial sector is about $36,500. The average service enterprise created 1.3 jobs at a loan cost of $4,500 per job, whereas commercial ventures created only 0.4 jobs per firm at a much higher loan cost of $7,800 per job. Large percentages of new jobs in industry and commerce (40 percent and 64 percent, respectively) went to family members, while services were more prone to hire those outside the family (only 9 percent of new jobs went to family members). If these figures are extrapolated using optimistic assumptions on loan disbursements (85 percent effective interest rate, 120 percent annual inflation, and 10 percent bad debt rate) to 1989, the project should create about 9,000 new jobs, of which 40 percent will be held by women.

Other indicators of the project's economic impact reveal that:

- Each sol generated 1.49 soles of value added among industries, 1.44 soles among services, and 1.40 among commercial enterprises. Under optimum conditions, extrapolating these results indicates that approximately $42 million in value added should be generated by assisted enterprises until 1989.

- Each sol generated 3.08, 4.39, and 1.77 soles of increased raw material purchases made by industries, commercial enterprises, and services, respectively. Under optimum conditions, extrapolating these results indicates that the project should generate about $36 million in indirect value added.

- The foreign exchange impact of the project has been insignificant.

- Consumer benefits have been in qualitative rather than quantitative terms. The UDF project has expanded the number of services and variety of goods available in pueblo joven target areas. Any price changes were the result of larger macroeconomic forces, not the project.

The project has a high benefit-cost ratio under both maximum and minimum case assumptions. Under the maximum case, extrapolating survey results to the entire loan portfolio until 1989 and using a 15 percent discount factor yields a benefit-cost ratio of 4.1 and a net present value of $32 million. The minimum case, based on a more quickly deteriorating loan fund, has a benefit-cost ratio of 2.2 and a net present value of about $10 million.

RECOMMENDATIONS

The evaluation team recommends the following actions (see Table Ex.1):

- AID/Peru should agree to waive BIP's obligation to recapitalize the UDF on a yearly basis. In return, AID/Peru should insist that BIP increase interest rates on loans to the BCR (central bank) ceilings, except for artisans, who could continue receiving concessionary conditions. These increases should be accompanied by improved efficiency in the processing, disbursement, and collection of UDF loans.

- BIP should monitor more closely its loan collection performance and implement strong measures to ensure timely collection of loans. It should also include data on the collection of UDF loans in its statistical analysis and within its reports to AID/Peru.

- Statistical data on UDF lending and other activities presented quarterly to AID/Peru should be prepared in constant soles or in equivalent U.S. dollars to make these data more meaningful.

- Feasibility studies completed for UDF applicants should be based on realistic assumptions of future production levels and capacity utilization resulting from the proposed investment.

TABLE EX.1

SUMMARY OF MAJOR EVALUATION FINDINGS AND RECOMMENDATIONS

Major Findings	Major Recommendations
Rapid decapitalization of the loan fund is occurring at current interest rates. BIP has not made any contributions to compensate for losses in fund value nor is it in a position to do so in the near future.	Waive BIP's obligation to recapitalize the UDF on a yearly basis. In return, AID should insist that BIP increase interest rates to BCR ceilings accompanied by improved efficiency in loan processing, disbursement, and collections.
Certain UDF branches have a poor loan collection record.	Monitor loan collection performance more closely and implement strong measures to ensure timely collection of loans.
Internal BIP analysis and monitoring of UDF project performance are inadequate.	Analysis of loan disbursements (by sector and loan size) should be presented in constant soles (or dollars). Quarterly reports should include data on loan collections and provide a listing of delinquent loans appropriately aged.
Internal inspection and control activities are insufficient.	Internal BIP inspections should be intensified and better internal controls enforced.
Financial performance on average deteriorated for sampled firms; 54% had high or unacceptable debt repayment burden ratios.	BIP should screen clients more carefully by using more realistic assumptions for feasibility studies.
Industries and services create more jobs at much lower cost than commercial enterprises.	Future lending programs to increase employment should emphasize industries and services rather than of commerce.
The UDF project has a high benefit-cost-ratio under both maximum and minimum case assumptions.	AID/Peru should examine the possibility of funding a future country-wide lending project for small-scale enterprises that includes a pilot informal sector loan window.

- Internal BIP inspections should be intensified and better internal controls enforced to ensure the efficiency of loan processing operations and the integrity of approval and disbursement procedures. These field inspections should involve interviewing a random sample of UDF clients.

- BIP should immediately implement its internal training program directed toward staff involved in the UDF program; this will ensure that at least some training benefits will be felt before all UDF funds are disbursed.

- BIP should carefully scrutinize constraints that have impeded UDF lending in a number of offices (Ica, in particular). Appropriate solutions should be proposed as soon as possible to ensure that loan funds are made available to those areas before all UDF loan capital is disbursed.

- Future lending activity should concentrate more on industry and services than on commerce, in view of their greater potential to generate positive economic impact.

Future projects that should be investigated carefully by AID/Peru include:

- Peruvian Enterprise Development Fund to provide loans to small enterprises located in disadvantaged areas throughout Peru that lack access to alternative formal sources of credit. To maximize the economic impact of scarce loan resources, the project should focus on enterprises that use loans to increase the productivity of existing assets or purchase new equipment when sufficient demand exists. UDF findings suggest that this project should exclude commercial enterprises that use working-capital loans exclusively to hoard price-controlled items. A thorough administrative and financial analysis of potential discount institutions should be conducted prior to writing the Project Implementation Document;

- Informal Sector Credit Pilot Project to provide credit and appropriate technical assistance to small informal sector enterprises. This project should be based on lessons learned by similar projects in Peru and around the world. The advantages and disadvantages of potential implementing institutions should be studied carefully prior to project design, with replication costs a major consideration. This pilot project could be incorporated as an independent activity under the Peruvian Enterprise Development Fund; and

- Small and Medium Enterprise Policy Analysis Project to analyze the policy constraints on small enterprises and their potential for growth. This project could become part of AID/Peru's proposed Private Sector Policy Planning and Institutional Development Project and draw on resources of the Employment and Enterprise Policy Analysis Project of the Bureau for Science and Technology.

CHAPTER ONE

ANALYSIS OF THE URBAN DEVELOPMENT FUND

PROJECT OBJECTIVES AND RATIONALE

The Urban Development Fund Project (UDF) was designed in early 1982 to replicate the Rural Development Fund Project (RDF) in coastal urban areas of Peru. The RDF had been launched in the mid-1970s to make credit available to small entrepreneurs in the mountains and high jungle areas. The project was implemented through the Banco Industrial del Peru (BIP) and received substantial capital infusions from AID/Peru from its inception to the early 1980s. Since this project was ably managed by BIP and was found to have had a positive economic and social impact in target areas, AID/Peru decided to replicate this model in other economically disadvantaged areas of the country.

Since the project's objective was to reach existing or potential entrepreneurs living in economically marginal areas and without access to institutionalized credit, urban shantytowns, pueblos jovenes, were selected as the project's target areas. The pueblos jovenes generally surround large coastal cities that were settled during the past twenty years by migrants coming from the highlands. While the RDF had been designed to increase job opportunities and standard of living in the highlands, thereby eventually reducing urban migration, the UDF was conceived to provide new economic opportunities to disadvantaged urban dwellers who had already migrated to the cities in the 1960s and 1970s.

As described in the Project Paper, UDF's purpose was "to institutionalize, through new policy and operational initiatives, a self-sustaining credit and technical assistance program for small urban enterprises. This was to be achieved by strengthening the long-term financial viability of the BIP and supporting the continued shift in the BIP's principal lending

focus from traditional large and medium-scale industry, to SSEs (small-scale enterprises), particularly the smallest within the latter target group. These objectives in turn would be attained through the following project outputs: (1) establishment of an Urban Small Enterprise Development Fund within the BIP with indexation and fixed nominal interest rate alternatives; (2) a savings mobilization program in the project areas; (3) expansion of BIP coverage to pueblo joven areas presently not serviced by the BIP; and (4) a technical assistance plan for BIP field level staff and subborrowers."[1]

OVERVIEW OF THE BANCO INDUSTRIAL

Overall Financial Situation and Performance

The Banco Industrial del Peru is a development bank set up by the government of Peru (GOP) to help promote industrial development through credit, technical assistance, and related services. As shown in Table I.1, its total assets amounted to 1.33 billion soles at 1983 year-end or approximately $586 million at the year-end exchange rate. Its financial structure has evolved substantially over the past two years because it has been relying increasingly on borrowed resources, from both national and international sources. As a consequence, its leverage (debt-to-net worth ratio) increased sharply from 6.9 in 1981 to 13.4 in 1983 (year-ends), reaching a high level for a development bank. Moreover, since the GOP is no longer in a position to supply fresh capital resources to finance the bank's ongoing lending activities, BIP has recently been facing a serious cash crunch. As a consequence, its liquidity ratio was down to .9 on November 30, 1984.

Although the evaluation team did not undertake a comprehensive evaluation of the bank, its low liquidity appears to result at least partially from its traditional focus on disbursements rather than collections. To compete successfully under new market conditions, BIP will need to improve notably its loan

Table I.1. - BIP CONSOLIDATED BALANCE SHEETS

(in millions of soles)

	12/31/82	12/31/83	11/30/84 (Interim unaudited)
ASSETS			
Cash & Banks	31,109	102,000	209,245
Short-term Loans	177,791	429,003	(1) 701,086
Other Current Assets	26,016	159,803	654,722
Total Current Assets	234,916	690,806	1,565,053
Long-term Loans	238,262	589,577	(1) 1,512,556
Other non-current Assets	19,606	50,064	108,551
Total Assets	492,784	1,330,447	3,186,160
LIABILITIES & CAPITAL			
Deposits in Soles	21,899	74,212	173,647
Foreign Currency Deposits	17,077	74,887	217,809
Current Debt to Banks	138,266	292,523	569,332
Other Current Liabilities	36,966	174,999	775,228
Total Current Liabilities	214,208	616,621	1,736,016
Bonds	4	2	2
Long-term Debt	158,622	447,467	790,284
Other Term Liabilities	75,514	173,846	336,896
Total Liabilities	448,348	1,237,936	2,863,198
Net Worth	44,436	92,511	322,962
Total Liabilities & Capital	492,784	1,330,447	3,186,160
RATIOS			
Debt-to-Networth	10.1	13.4	(2) 8.9
Liquidity Ratio	1.10	1.12	0.90

Notes:

(1) does not include provisions for bad debts for 1984.

(2) ratio would be 13.8 if provisions for bad debts were to be equivalent to 1983 provisions as percentage of outstanding portfolio.

(3) net worth would be reduced to S/.206.7 billion if provisions equivalent to 1983 provisions as percentage of outstanding portfolio were constituted.

collection performance in order to avoid a sharp curtailment of its lending operations. The quality of BIP's loan portfolio is at best mediocre. On June 30, 1984, 27.7 percent of its outstanding loan portfolio was overdue and another 11.4 percent was constituted by future installments on partially overdue loans. Thus a total of 39.1 percent of the portfolio was placed with partially or fully overdue clients. However, cumulated provisions for bad debts at that date represented only 26 percent of overdue loans and 17 percent of total outstanding loans with delinquent clients. This low percentage is a result of the bank's unusually lax approach to the constitution of provisions for bad debts. Since BIP only creates such provisions on the unsecured portion of a loan, it thereby assumes that it will realize the client's collateralized assets at full assessed value, which rarely occurs. Should the bank constitute provisions for bad debts according to more realistic criteria, its net worth would be seriously impaired.

Table I.2 summarizes BIP's income statements since 1982. The pretax income represented 1.3 percent of the average loan portfolio in 1982 and 1.5 percent in 1983. Again, the bank's policy with respect to yearly reserves for bad debts should be analyzed before evaluating its profitability, since a more standard policy would substantially reduce reported profits. Interest income represented 23 percent of average portfolio in 1982 and 25 percent in 1983. These loan yields are much lower than the inflation rate for those years, reflecting the bank's continued subsidization of interest rates.

Experience with other Small Enterprise Programs

BIP has been involved with SSE programs since 1974, when it became the RDF implementing institution. The bank recently has become involved in several other small enterprise programs. They include the IBRD-financed PROPEM, which covers the acquisition of fixed assets exclusively, and IDB-financed 99-IC-PE, which can also finance working capital through BIP's counterpart con-

Table I.2 -BIP CONSOLIDATED INCOME STATEMENTS

(in millions of soles)

	1982	1983	Jan. 1,1984 To Nov. 30, 1984 (1)
REVENUES			
Interest	69,352	182,410	318,299
Fees	7,095	10,723	16,117
Other	5,305	21,567	115,936
Extraordinary Income	917	3,630	9,075
Previous Year Adjustment	788	8,749	-
Total	83,457	227,079	459,427
EXPENSES			
Interest	43,606	128,229	293,743
Fees	344	463	796
Salaries	10,186	20,059	38,551
Administrative Expenses	3,800	7,910	17,109
Taxes	1,541	2,944	4,759
Provisions & Depreciation	20,191	56,439	63,759
Extraordinary Expenses	23	3	-
Total	79,691	216,047	418,717
PRETAX INCOME	3,766	11,032	(2) 40,710
Income Taxes	1,696	7,796	-
NET INCOME	2,070	3,236	-
RATIOS			
Interest Income as % of Average Portfolio	23.5%	25.4%	(3) 21.5%
Pretax Income as % of Average Portfolio	1.3%	1.5%	(4)

(1) Interim, unaudited
(2) Does not include provisions for bad debts
(3) Adjusted to yearly basis
(4) Not calculated, since pretax income for period does not include provisions for bad debts

tribution (see Table I.3 for a summary of BIP-managed SSE lines). Despite being more expensive than PROPEM and other similar lines, UDF is receiving more attention and currently disburses loans at a faster rate than such competing lines, mainly because of the UDF line's flexibility. PROPEM requires prior approval from COFIDE (an arm of the central bank) before disbursement of each loan. Besides, BIP only receives part of interest income in the form of points of spread, the remainder going to COFIDE, in addition, PROPEM provides funds to BIP in the form of a loan while AID's UDF funds become part of BIP's equity. IDB's line was not available for exclusively working-capital loans. As a result, both lines have been neglected by local BIP branches. Yet BIP has been disbursing substantial loan amounts to SSE's under other lending programs funded from its own capital resources, including the FONART (Fondo Artesanal), under which the equivalent of $2 million was disbursed in 1983. Also, a portion of loans disbursed under the FENT (Fondo de Exportaciones No Tradicionales) as well as other programs benefit SSEs directly.

MANAGEMENT STRUCTURE OF THE URBAN DEVELOPMENT FUND

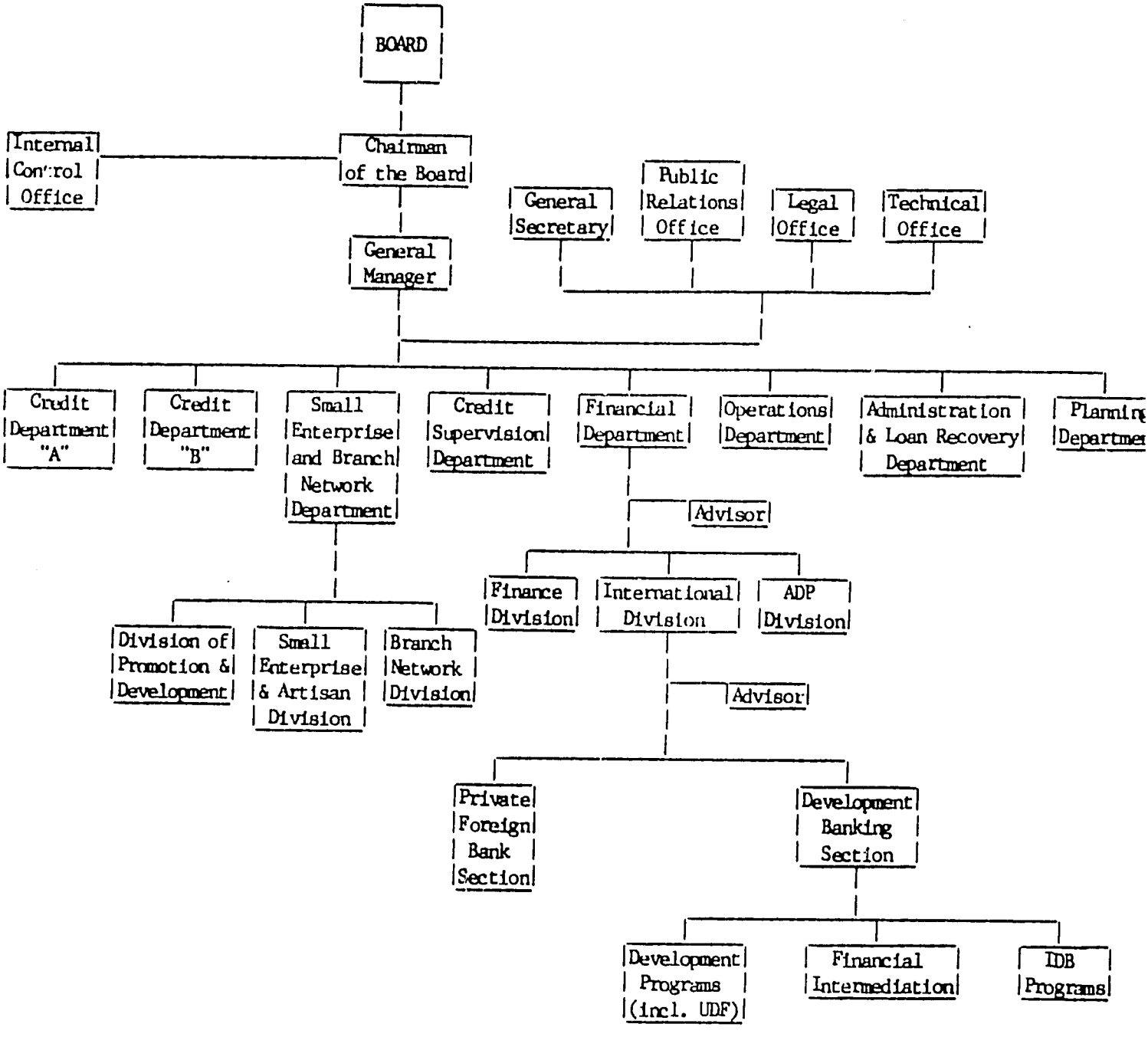
Location of the UDF within BIP's Organizational Structure

As shown in Figure I.A, overall responsibility for the management of the UDF lies within BIP's International Division, which itself is part of the bank's Finance Department. The adviser to the division chief is the manager of the program (the UDF will generally be referred to as a program from the bank's point of view and as a project from AID/Peru's standpoint). Only a small portion of the adviser's time is spent managing the UDF, however, because since April 1984 he is also head of the Public Relations Office and reports directly to the general manager. In effect, the program manager is involved in promoting the program, in overseeing program activities overall, and in dealing with AID/Peru as donor agency. Daily monitoring of lending and other

Table I.3 - BIP Programs Benefitting Small Enterprises

Name (acronym)	Donor	Line Amount (Donor Contribution) (000s)	Restrictions/ General Purpose	Loan Range	Loan Purpose	Interest Rate
UDF	AID/ Peru	$ 13,000 ($9,500)	To assist SSEs industry, commerce, services in urban coastal "pueblos jovenes."	max:$60,000	Working capital and fixed assets	effective: 8 million soles: 66.68 100 million soles: 84.95 360 million soles: 114.56
BID-GG-IC-PE	IDB	$ 100,000 ($41,000)	To promote artisans, industries & fishing, transport & small hotels.	min:$10,000 max BIP: $2,500,000 max IDB: $3,500,000	Working capital and fixed assets	66 + 3.5 com.
BID-377-OC	IDB	$ 70,000 ($30,000)	To finance installations and expand manufacturing, fishing and mining.	max: $1,000,000	Only fixed assets	66 + 3.5 com.
PROPEM	IBRD	$ 35,250 ($25,250)	For installations and expansion of private small enterprises with fixed assets under $350,000, maximum sales of $750,000 and project size of under $200,000.	max:$200,000	Working capital and fixed assets	66 + 3.5 com.
GEAR	IDB	$1,850,000	To generate employment in rural areas by working through associations of low-income people.	---	Determined by results of loan analysis	44
FRAI	AID/ Peru	$ 19,600 ($14,700)	To promote small and medium agribusinesses.	max:$750,000	Working capital and fixed assets	
FONCAP	BCRP	$ 5,000	To promote production of domestic goods.	min:$10,000 max: $2,000,000	Fixed assets	

FIGURE I.A - BIP ORGANIZATION CHART*



* Units responsible for UDF program carry bold lines.

activities lies with the International Division's Development Banking Section, which deals with all programs financed by foreign donor agencies, chiefly AID's UDF, IBRD's PROPEM, IDB's 99-IC-PE, and the Canadian International Development Agency's forest project.

Involved in the daily monitoring of the UDF are the head of the Development Banking Section, the individual responsible for development programs within that section, and a dozen junior professionals performing statistical and other tasks. Again, staff members of the section are only devoting a limited part of their time to the UDF, since it is just one program among several monitored by this section.

Special Features of the UDF within BIP

BIP has personalized the UDF as a separate lending program to the extent that it has appointed a program manager (the staff adviser to the International Division) and has installed separate monitoring and statistical systems designed to track project activities and keep AID/Peru adequately informed thereof. These systems include:

- Special credit procedures, which are summarized in the UDF's credit manual and are intended to comply with the terms of the agreement with AID/Peru;
- Special terms and conditions applicable to UDF subloans, including interest rate and fees, period of loan and grace period, and loan documentation and guarantees;
- A separate identity for all UDF loans whereby they are given a special code right at branch level allowing each to be labeled as such for accounting, credit monitoring, and other purposes;
- Individually tailored training activities, both for bank staff and for actual or potential borrowers; and
- Separate statistics on loan approvals, disbursements by economic sector (industry, artisans, commerce, and services), size of loan, and branch, among other categories

But the UDF has not, contrary to its predecessor the RDF, been managed as a separate activity receiving special treatment at branch level. In the case of the RDF, a supervisor was appointed to each participating branch to help promote the program and manage the portfolio. In the case of the UDF, the bank opted to have existing credit officers manage UDF as well as other loans as a pool in order to better integrate UDF activities in the bank's overall lending program. This new approach appears to have worked well and avoided the potential dangers involved in applying separate loan review, approval, and collection policies to a particular lending program. In such a case, credit officers responsible for a separately treated program may, because of their relative independence within the branch, become substantially more lax in analyzing the feasibility of the proposed investment, securing adequate guarantees, or applying rigorous collection procedures.

However, BIP's new policy to have local loan officers manage UDF loans as an integral part of their overall portfolio can work effectively only if these officers receive specialized training designed to familiarize them fully with the program's objectives, with the criteria to be applied during the loan review process, and with all other prerequisites. Also, credit officers as well as other professional branch staff should be trained to promote the program in order to insure its long-term success. Unfortunately, BIP's UDF internal training program has lagged seriously, thereby jeopardizing the program. Lending UDF funds has not been a problem to date since, as a result of the bank's current cash squeeze, BIP lending officers have had no choice but to use this line. In effect, the overwhelming majority of new lending activity in branches participating in UDF now involves UDF funds. But intensified training of branch staff is definitely required to preserve the character as well as basic soundness of the UDF.

DAILY MANAGEMENT OF THE UDF

Central-level Administration

The UDF is managed by the International Division's staff adviser, with the daily tracking of UDF activities the responsibility of that division's Development Banking Section. These assigned tasks correspond essentially to monitoring and reporting functions, however, because each UDF loan is processed and managed along the same lines as any other BIP loan. Thus every centrally located operational department of the bank is involved in administrating the UDF program. These departments include the following:

- Accounting Unit, which keeps track on a monthly basis of all disbursements, amounts outstanding, interest collected or accrued, overdue payments if any;
- Credit Department, which reviews loans beyond the approval authority of the branch managers and regional directors;
- Division of Promotion and Development, which is in charge of internal training and technical assistance to subborrowers and of carrying out promotional activities;
- Small Enterprise and Artisan Division, which actually disburses and manages UDF loans in eligible areas where there are no BIP branches;
- Branch Network Division, which is responsible for planning the opening of new branches and ensuring that branches are adequately staffed;
- Finance Department, which establishes new interest rates and other loan conditions according to BCR (central bank) policies; and
- Office of Internal Control, which reports directly to the Board and is responsible for reviewing the adequateness of UDF as well as other programs as part of its routine field inspections.

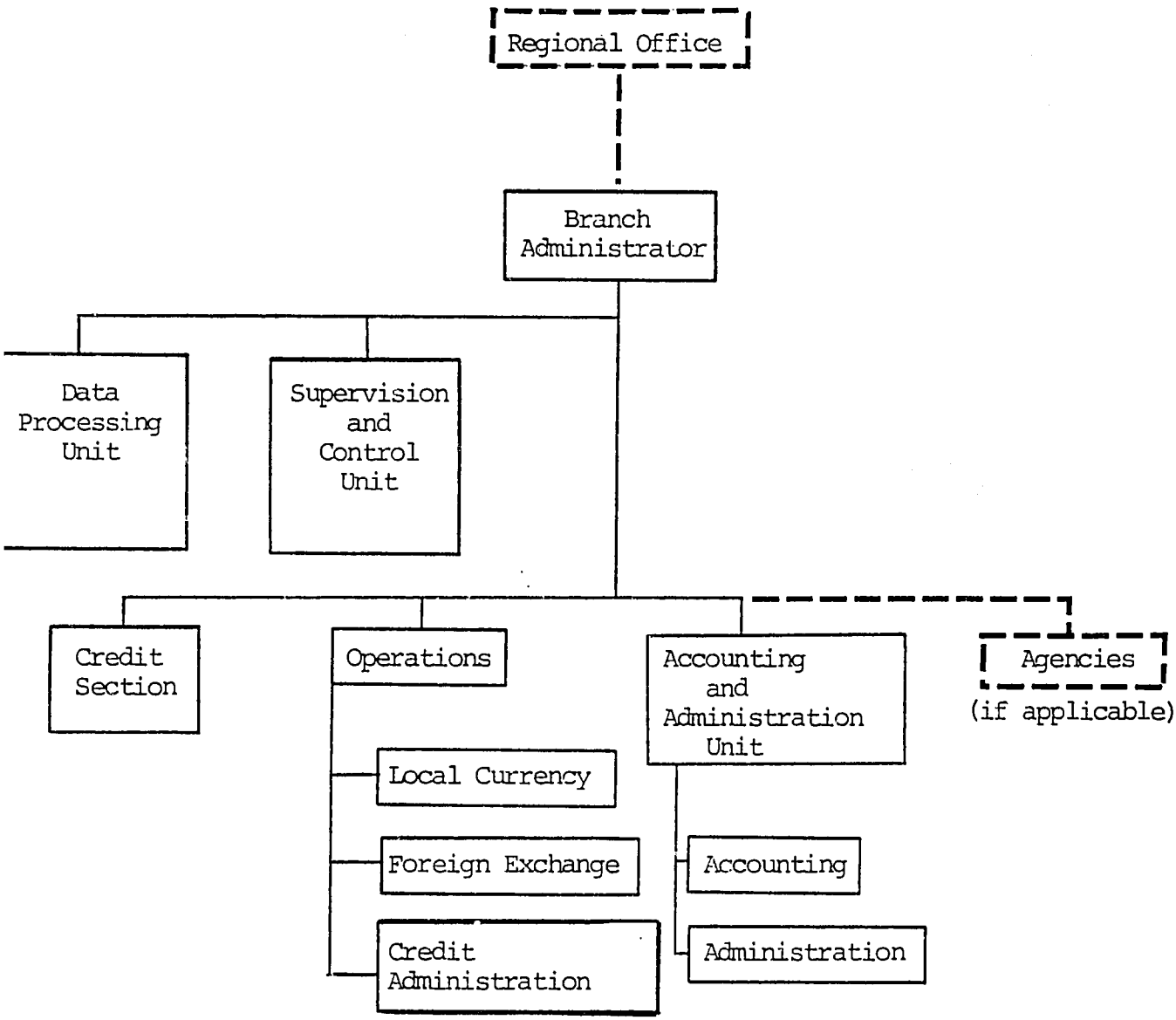
Branch-level Administration

Since the decentralization of the bank's operations in the early 1980s, basic responsibility for lending and other bank activities lies with field offices. They represent the critical link in the successful implementation of the UDF program. This decentralization brought about the delegation of substantial levels of authority to field managers to review and approve loans, which meant that competent and experienced professionals had to be assigned to the field as decision makers and managers. The decentralization also made it essential to establish tight internal controls in order to supervise the use of funds in the field.

Figure I.B shows the typical organizational chart of a BIP branch. The division of responsibilities within the branch is straightforward and needs no particular comment. In effect, the Credit Section is responsible for reviewing and analyzing loan applications submitted to the bank and presenting them to the appropriate approval authority. Once the loan is disbursed, it automatically falls under the aegis of the Credit Administration Unit within the Operations Section, which then monitors and manages the credit. This separation of credit review and portfolio management functions is basically sound, insofar as the responsibility for collection is clearly identified -- it should lie with credit administration. Loan collection represents a weak link at BIP, although because of its newness the UDF program has not yet been evaluated rigorously in this respect. An assessment of the branches' loan collection efficiency will therefore not be feasible before most of available funds are disbursed. Major branches also have a Supervision and Control Unit that reports directly to the Branch Manager.

FIGURE I.B

ORGANIGRAM OF TYPICAL BIP BRANCH



Management Information Systems

On the basis of the information provided by the Accounting Unit, the International Division's Development Banking Section has done a commendable job in tracking UDF activities as separate from other BIP programs. Up-to-date information was provided to the evaluation team on total loans extended, broken down by sector (industry, artisans, commerce, and services), size of loan and branch, as well as on other project activities. Also available was a comprehensive list of loans approved or disbursed by branch as of the end of September 1984, which greatly facilitated the process of selecting a random sample of enterprises to be interviewed by the team. Lists from some branches, however, contained redundancies or inaccuracies.

All aggregated figures are presented in nominal sol terms. Given current three-digit inflation levels, these statistics are hard to analyze or irrelevant. The chart providing the breakdown of loans by size, for example, lumps together two loans of say S.6 million, although one may have been made in January 1983 and the other in January 1985. In constant sol terms, however, the first is in fact 4.75 times larger than the second. Thus, it is strongly recommended that all statistics be converted into constant soles, using the consumer price index or another more accurate index, or be converted into dollars at the prevailing exchange rate.

The UDF has had a separate management information system practically since program inception, allowing program and bank management to monitor progress and provide timely information to AID/Peru. However, the project is bound to suffer from the problems hampering BIP's overall management information system, chiefly at the accounting level. The accounting system is clearly in a state of transition and disarray. Some branches have already computerized their accounting while others still perform accounting tasks manually. In some cases, both systems

are used, with discrepancies appearing between the two sets of figures. Among UDF branches, Chiclayo and Trujillo have a mini-computer but are supposed to receive a project-financed micro-computer in 1985. A third micro-computer will be financed for the Comas and San Juan de Miraflores agencies. Among other UDF branches, Chimbote, Ica, Piura, and Tumbes are already computerized with mini-computers, while Callao is not. These accounting system problems are acknowledged by bank management itself, and accounting has been identified as a major area of focus under IDB's $300,000 loan to BIP for institutional strengthening activities. A one-year effort is currently under way to overhaul the entire system, with assistance from U.S.-based Information for Investment Decisions and Price Waterhouse.

Management Performance

In broad terms, the UDF has gone through two distinct phases. Between November 1982 and March 1984, loan activity was slow, averaging under $120,000 per month over that 17-month period, or less than $1.5 million on a yearly basis. Although factors such as lack of training or guidance provided to BIP staff or unawareness of the program on the part of potential sub-borrowers may have contributed to a slow start, it appears that the single major factor was the absence of a real promoter for the UDF: The appointed UDF manager took a one-year leave of absence to undergo specialized training in the U.S. This UDF manager had, as former manager of the predecessor RDF program, relevant experience within the bank to manage the program. He would thus have been particularly useful as a promoter during early project phases. After he returned in January 1984, lending activity started to expand and reached more satisfactory levels as of June 1984.

BIP's performance in managing the fund from the head office has been quite commendable, taking into account existing problems such as deficiencies in the bank's overall accounting system. Performance has been uneven from one area to another, however,

with serious lags noted in the design and implementation of the internal training program in particular. Branch level performance in carrying out UDF activities has been uneven, with some branches, such as Ica, falling seriously behind others in terms of lending activity. In such cases, the principal causes appear to be management problems at branch level (Ica), too few staff at the branch, or lack of training related to the specific needs of the UDF program (Chiclayo in particular).

Promotional Activities

Central to the success of the UDF program were appropriate promotional activities designed to sell it to BIP field administrators and officers on the one hand, and to make it known to potential subborrowers on the other. The low level of lending activity during the first 17 months of the program is evidence that no serious promotional efforts were undertaken until early 1984. Since then, the UDF has been given better exposure although its appeal and success have again been vastly helped by its attractive financial and administrative features as well as BIP's shortage of cash. Specific promotional activities were undertaken for the savings mobilization campaign, for which BIP has been advertising the services offered by the bank as well as interest rates paid on deposits, particularly after rate adjustments. At the time of the evaluation the program appeared well known to small entrepreneurs in the project's target areas. In Chiclayo, for example, numerous potential applicants seeking information about the program recently visited the local branch.

Promoting the program to the bank's field staff has not been particularly difficult because of the severe restrictions on lending programs funded from the bank's own resources. Since the bank's own funds have been scarce and since field officers prefer to use UDF rather than IBRD or IDB funds also available for similar purposes, branch managers have been eager to extend UDF loans, an attitude that is not likely to change in the near

future. As a case in point, UDF lending represented as much as 75.9 percent of total disbursements in San Juan de Miraflores and 48.2 percent in Comas during the first nine months of 1984. Other figures were 26.7 percent in Trujillo, 23.8 percent in Chimbote, 9.6 percent in Ica, 6.2 percent in Callao, and 4.9 percent in Chiclayo and Tumbes.

OPERATIONAL PROCEDURES

Loan Review Procedures

The documentation required from UDF applicants is the same as that required under the bank's general lending program. Basic documentation normally required from each applicant includes:

- Credit application (two copies);
- Registration as an industry or artisan, or evidence that application has been made;
- Municipal license;
- For individuals: electoral as well as tax booklet, certificate of good conduct delivered by the police, certification of personal address, latest voucher related to the lease of business quarters or proof of ownership, plan showing outlay of workshop;
- For registered entities: enterprise's tax booklet, evidence of the enterprise's legal constitution, document evidencing shareholders' concurrence to apply for credit, original copy of registration, evidence of subsequent changes in capital, shareholders, or other (if applicable);
- Up-to-date balance sheet;
- Last two sets of financial statements presented to tax authorities;
- Pro forma invoices for machinery or equipment to be financed;
- Estimate for work to be performed; and
- Any other documentation that may be deemed necessary by the bank.

The bank's internal credit manual introducing the UDF program does not impose any particular restrictions or waivers applicable to UDF borrowers. Thus the above documentation is required from non-UDF as well as UDF clients. In view of the small size and lack of sophistication of most UDF borrowers, credit officers tend to be more flexible in the application of documentation requirements, often processing and approving loans before licenses or other documents have been obtained. However, most borrowers interviewed complained, seemingly rightfully so, about the excessive documentation required to secure a loan.

Collateral Requirements

The UDF loan applicant must have adequate collateral acceptable to the bank. Again, the UDF credit manual does not ease applicable bank requirements in this respect. But, the application of those requirements by field officers is somewhat more flexible in the case of small-scale, including UDF, clients. For instance, field officers accept the entrepreneurs' stated value of fixed assets offered as collateral without much questioning. Similar assets offered by larger firms tend to be valued at a sharp discount. Also, the amendment to the original UDF credit manual (dated November 9, 1983) limits guarantee requirements for very small enterprises by specifying that loans below one million soles should involve guarantees "compatible with the emergency situation in the area", thus implying a substantial easing of collateral required from enterprises in that category. All collateralized assets have to be insured by the subborrower; such insurance is available at the bank under a countrywide agreement with an insurance company at a cost of .7 percent, although subborrowers have the option of buying their own policies.

The bank views guarantees mainly as a method to keep the subborrower from moving to another location more than as a way to actually cover risk. Generally, real (or in their absence,

personal) guarantees required from subborrowers are valuable to BIP insofar as they give the bank a definite psychological edge on the small entrepreneur in case of nonrepayment. In most cases, personal assets such as housing, televisions, and refrigerators were provided as collateral, giving the bank that much more leverage to enforce repayment. This guarantee requirement should be maintained in one form or another as an important loan review criterion.

According to initial project design, BIP was also to make substantial use of FOGAPI (Fondo de Garantia para la Pequena Industria) and of the Fondo de Garantia Artesanal to fill the gap created by the anticipated dearth of collateral available to the small entrepreneur. BIP has not used these credit funds to any significant extent under the program. A limited number of guarantees were provided by FOGAPI only in cases where potential borrowers had neither real assets to offer as collateral nor legal title to their homes. However, BIP managers do not feel that the bank's agreement with FOGAPI is flexible enough to be conveniently used in ongoing lending activities, a feeling that seens to be shared by Peruvian financial institutions in general. And the Fondo de Garantia Artesanal has yet to be established.

Credit Analysis

Reflecting UDF's assimilation into the bank's overall loan program, the analysis of UDF loans generally followed existing loan review criteria. Summary feasibility studies of proposed investments were found in the vast majority of files reviewed, including simple projections based on the new turnover rate to be achieved from the machinery or raw materials to be financed. These projections were usually found to be unrealistic, however, since in most cases they were based on the assumption that the enterprise would be operating at 100 percent capacity throughout the year. Thus, surveyed enterprises showed performance

substantially below projections. In the future, BIP should provide more realistic guidelines to its field officers to prepare sales and cash flow projections.

Loan Approval and Disbursement

Loan amount under the UDF program is determined according to the following two criteria. First, up to 90 percent of the total cost of the project, and up to 100 percent of the cost of the machinery, can be financed if the entrepreneur contributes 20 percent of loan value for working capital. Second, loans can amount to 100 percent of the value of the collateral provided, versus 80 percent under BIP's general lending program. According to the loan agreement with the GOP, UDF loans with fixed-asset components cannot exceed $60,000 and exclusively working-capital loans can amount to a maximum of $10,000. The latter can be extended only in cases when this working-capital component has a demonstrated ability to increase capacity utilization. Loan terms can be up to six years including a two-year grace period when fixed assets are involved, and up to three years with a one-year grace period when only working capital is financed.

As a consequence of BIP's decentralization, the overwhelming majority of UDF loans are being approved in the field. Table I.4 shows the levels of approval authority granted to branch managers and other field managers. Managers of larger branches granted "A" status can approve loans up to $7,500, and managers of smaller "B" branches can approve loans up to $3,000. Since the average UDF loan size has been around $3,500, it is clear that most loans are being approved at branch level, or at most, by credit committees or decentralized credit committees, thereby eliminating lengthy loan reviews at the central office level. Of the two offices involved in the program that do not have branch status, only San Juan de Miraflores does not have the authority required to approve most UDF loans. Although Comas also has agency status, the seniority of its manager caused it to be designated as a "B" status branch for approval authority.

Table I.4. - UDF LOAN APPROVAL AUTHORITY
(in U.S. Dollars)

	FULLY SECURED LOANS	UNSECURED LOANS	DISCOUNT OF RECEIVABLES	OVERDRAFT FACILITIES
Branch/Agency Manager				
- Agencies(1)	1,500	-	500	-
- "B" branches (2)	3,000	-	1,000	500
- "A" branches (3)	7,500	-	2,500	1,000
Credit Committee (4)				
- Agencies & "B" branches	7,500	-	2,500	1,000
- "A" branches	10,000	-	3,000	1,500
Decentralized Committee (5)				
- "B" branches	10,000	-	3,000	1,500
- "A" branches	20,000	-	3,500	3,500
Regional Directors				
- "B" regional offices	20,000	-	3,500	3,500
- "A" regional offices	35,000	-	7,500	5,000
Head of Branch Network Div.	50,000	-	10,000	10,000
Branch Loan Sub-committee(6)	60,000	10,000	10,000	7,500
Director Small Ent.Div.	75,000	-	15,000	15,000
Small Enterprise Credit Committee (7)	125,000	30,000	30,000	-
General Manager	300,000	-	30,000	25,000
Credit Committee	1,000,000	500,000	100,000	-
Executive Committee	1,500,000	750,000	200,000	-
Board	Over $1.5M	Over $0.75M	Over $0.2M	-

Notes:
(1) San Juan de Miraflores
(2) Ica, Chimbote, Callao and Comas (the latter being an agency with the approval authority levels of a "B" branch)
(3) Trujillo, Chiclayo, Piura
(4) Comprises branch manager, head of credit section and legal officer
(5) Comprises members of above Credit Committee plus 2 or 3 respected local citizens from outside the bank.
(6) Comprises Head of Branch Network Division and Regional Director.
(7) Comprises members of above Sub-committee plus Head of Small Enterprise Division.

Loan disbursement procedures vary according to the loan purpose. For loans granted to acquire fixed assets, funds would normally be disbursed directly to the supplier on the basis of a pro forma invoice. In the case of a working-capital loan, funds would generally be made available to the entrepreneur, although again pro forma invoices would be required by the bank as part of loan documentation.

Loan Processing Efficiency

It has not been possible to determine the average number of days required to process a typical UDF loan from date of submission to date of disbursement, since many of the loan applications were still incomplete at the date specified in client files and required resubmission at a later date. However, based on comments of surveyed beneficiaries and on observations made in the field, services made available to UDF customers do not appear to be up to standard. Many customers complained of the long delays encountered for loan processing and approval. Substantial differences, however, have been noted among branches, with some less efficient than others.

Internal Controls

To reinforce the efficiency and independence of the internal supervision function, a separate Internal Control Unit which reports directly to the board has been created by the bank. Although this step is laudable, bank officers themselves pointed to serious staffing problems that have forced the unit to fall behind in the execution of its inspection program. Recently, it has not proven possible to carry out a comprehensive inspection of each office at least once a year -- a minimum requirement to keep abreast of branch operations and weed out management and other problems at their inception. It is thus recommended that

BIP's Internal Control Unit be adequately staffed and that appropriate inspection be carried out on a regular basis, including random interviews with clients.

LOAN ACTIVITY

Summary of Loan Fund Activity

The following table details total AID/Peru transfers to the credit fund as of December 31, 1984.

TABLE I.5 - NET AID/PERU TRANSFERS TO CREDIT FUND
(as of 1984 year-end)

Date	Dollar Amount	Exchange Rate	Sol Amount
04-30-83	1,117,890.71	1347	1,506,000,000
05-18-83	377,068.71	1456	549,012,045
02-06-84	373,379.83	2678	1,000,000,000
05-18-84	304,414.00	3285	1,000,000,000
06-21-84	291,545.19	3430	1,000,000,000
09-05-84	615,763.55	4060	2,500,000,000
10-03-84	714,285.71	4200	3,000,000,000
12-04-84	332,754.00	5685	1,891,706,490
Total	4,127,101.70	-	12,446,718,535

In mid-January 1985, AID/Peru made an additional transfer of S.3,108,293,510 to the credit fund. Advances are presently made on the basis of BIP's disbursements only. Since the fund should, according to the Project Agreement, be credited every six months with interest collections and eventually with reflows (loan collections) AID/Peru should credit these amounts to the fund before BIP determines the level of depletion of the fund and asks for replenishment.

Table I.6 shows the inflows and outflows of the UDF credit fund since its inception to November 30, 1984. As of that date, according to figures on accrued interest and loan collections

made available by BIP, the fund had a net credit (undisbursed loan funds) of around 1.4 billion soles. This figure reflects the understanding between AID/Peru and BIP that AID/Peru would, in effect, maintain a net credit in the fund, thereby helping alleviate BIP's current cash squeeze.

TABLE I.6 - SOURCES AND APPLICATION OF FUNDS OF UDF
(As of November 30, 1984, in Soles)

SOURCES OF FUNDS	
AID Contributions	10,555,012,045
BIP Contributions	3,903,908,563
Loan Collections to be credited to Fund	539,931,167
Interest Accrued to be credited to Fund	1,996,050,327
Total Sources	16,994,902,102
APPLICATION OF FUNDS	
Loans Disbursed	15,553,246,000
Total Applications	15,553,246,000
NET CREDIT OF UDF AS OF NOVEMBER 30, 1984	1,441,656,102

Analysis of UDF Disbursements

Table I.7 shows overall UDF loan activity between actual program inception in October 1982 and December 31, 1984. Loans extended over the period totaled 19,032 million soles. But, aggregating all loans throughout the period at their nominal sol value is not truly indicative of actual loan activity, since the cumulated inflation between November 1982 and January 1985 was estimated to be as high as 434 percent. Thus, Table I.7 also shows monthly disbursements converted to constant January 1985 soles, as well as the dollar equivalent of those loans at the applicable month's exchange rate. The program had a slow start, and during the 17-month period from October 1982 to February 1984, loans were disbursed at an average monthly rate of only $121,754 (such disbursement levels were still in line with the

Table I.7 - ANALYSIS OF UDF DISBURSEMENTS OVER TIME
Oct. 1982 to Dec. 1984

Month	UDF Loans Disbursed *	UDF Loans Disbursed in Constant Terms(1)*	Dollar Exchange Rate	Dollar Value(2)
Oct. 82	49,331	275,267	854	57,765
Nov. 82	162,656	868,583	911	178,547
Dec. 82	201,128	1,027,764	992	202,750
Jan. 83	130,426	619,523	1,064	122,581
Feb. 83	68,910	303,893	1,135	60,714
Mar. 83	139,620	559,876	1,242	112,415
April 83	175,199	651,741	1,347	130,066
May 83	180,062	635,620	1,464	122,993
June 83	164,209	538,604	1,590	103,276
July 83	275,928	836,062	1,732	159,312
Aug. 83	131,785	366,363	1,970	66,896
Sept. 83	130,213	339,855	2,046	63,643
Oct. 83	196,305	486,837	2,124	92,422
Nov. 83	370,127	877,200	2,200	168,240
Dec. 83	486,388	1,104,102	2,277	213,609
Jan. 84	272,043	576,730	2,324	117,058
Feb. 84	236,914	461,983	2,429	97,536
Mar. 84	422,160	772,553	2,590	162,996
April 84	651,758	1,127,541	2,801	232,688
May 84	856,583	1,396,230	3,030	282,701
June 84	1,230,455	1,894,900	3,242	379,536
July 84	1,011,337	1,486,666	3,461	292,209
Aug. 84	1,492,077	2,044,146	3,701	403,155
Sept. 84	2,077,474	2,700,716	4,067	510,812
Oct. 84	2,310,908	2,842,416	4,445	519,889
Nov. 84	2,129,250	2,448,637	4,824	441,387
Dec. 84	3,478,672	3,722,179	5,696	610,722
TOTAL	S.19,031,918	-	-	5,905,918

* In millions of soles

(1) In January 1985 terms, using the Consumer Price Index as deflator

(2) Actual UDF Loans Disbursed divided by exchange rate.

initial project plan). Lending activity accelerated substantially during 1984, and by year-end total disbursements reached $5.9 million, of which 69 percent had been disbursed during 1984 alone. Table I.8 compares actual disbursements to initial project projections from October 1982 to December 1984.

TABLE I.8 - COMPARISON OF ACTUAL AND PROJECTED UDF DISBURSEMENTS OCTOBER 1982-DECEMBER 1984 (in dollars)

	Year 1	Year 2	Year 3 (1)	Total
Actual Disbursements	1,380,958	2,952,962	1,571,998	5,905,918
Projected Disbursements	1,370,000	3,420,000	1,197,500	5,987,500
Actual to Projected	101%	86%	131%	99%

Note:

(1) Prorated according to number of months elapsed at 1984 year-end.

The program thus is on target as far as overall disbursements are concerned. BIP projections show that all funds should be practically disbursed by the end of 1985, or 3.25 years after project initiation, versus the originally projected 4 years. At current monthly lending levels, it is indeed probable that most of the funds remaining in the credit fund will be disbursed before 1985 year-end (The Project Completion Date is June 1986).

Analysis of Lending Activity

Overall lending activity was slow during the first 17 months of the project (October 1982 to February 1984) but has picked up substantially since then. Table I.9 shows UDF loan disbursements by BIP branch or office on a quarterly basis since project inception. Loan activity was concentrated in the Lima area for the first year of the project (93 percent of the total). Lending then increased substantially in Trujillo (and to a lesser extent

TABLE I.9 UDF LOAN DISBURSEMENTS BY BRANCH OR OFFICE - OCT.1, 1982 TO NOV. 30, 1984

(in millions of soles)

	4th Q 1982	1st Q 1983	2nd Q 1983	3rd Q 1983	4th Q 1983	1st Q 1984	2nd Q 1984	3th Q 1984	Oct/Nov. 1984	Total UDF Disbursements	% of Total	% of Total in Constant Terms (1)
Lima Office												
San Juan de M.	233	101	111	78	164	164	212	422	269	1,754	11%	14%
Comas	373	309	309	96	525	484	716	1,099	692	4,603	29%	35%
Callao	-	20	-	3	3	51	128	50	47	302	2%	2%
Non-Lima Office												
Ica	-	-	7	4	10	48	131	161	135	496	3%	3%
Chimbote	7	20	11	13	226	73	196	180	336	1,062	7%	6%
Trujillo	-	-	20	44	183	101	1,427	2,328	2,267	6,370	40%	30%
Chiclayo	-	-	-	-	28	19	163	105	271	586	4%	3%
Tumbes	-	-	-	-	-	-	-	10	-	10	-	-
Head Office	-	13	125	4	34	40	31	213	212	672	4%	4%
TOTAL	613	463	583	242	1,173	980	3,004	4,568	4,229	15,855	100%	100%

(1) Obtained by converting nominal disbursements for each quarter in constant Jan '85 terms.

Chimbote), so that Trujillo became, as of the second quarter of 1984, easily the most important UDF lending office -- a position it has held ever since. On a cumulative basis, as of November 30, 1984, Trujillo had disbursed as much as 40 percent of all UDF loans (but only 30 percent in constant soles because of its relatively late start compared with the Lima agencies), preceding Comas (29 percent) and San Juan de Miraflores (11 percent), both in the Lima area. Adding Callao and the head office to the last two agencies, Lima still came slightly ahead of Trujillo with 46 percent of all disbursements (55 percent of the total in constant terms). Aside from Trujillo the performance of other non-Lima branches has been rather disappointing, with Chiclayo, Chimbote, and Ica totaling barely 2.1 billion soles in disbursements on an aggregate basis. Piura, Sullana, Talara, and Tumbes were added to the program in November 1983, but the lending activity in those offices has been very limited to date.

Table I.10 indicates the distribution of UDF loans by economic sector, both in nominal and in constant terms. Industry, (including artisans) accounted for 68 percent of all loans disbursed (75 percent in constant terms, the 7 percent differential indicating that lending to industry started up earlier than lending to other sectors), while lending to commercial enteprises amounted to 21 percent (17 percent in constant terms), and lending to services was only 15 percent (8 percent in constant terms). In late 1984, BIP expanded the scope of the project to include doctors settling in rural and other disadvantaged areas. Also, project funds became available to finance the acquisition of buildings for the installation of workshops in the satellite city of Santa Rosa. Finally, UDF branches were to give special consideration to women applicants, although it was not possible to determine to what extent this actually occurred.

Table I.10 - DISTRIBUTION OF UDF LOANS BY SECTOR

October 1982 - September 1984

(in millions of soles)

	Nominal Soles	Constant Soles
Industry & Artisans (percentage)	6'688,562 (68)	16'163,698 (75)
Commerce (percentage)	2'073,939 (21)	3'638,602 (17)
Service (percentage)	1'034,984 (15)	1'791,137 (8)
TOTAL	9'797,487 (100)	21'593,438 (100)

FINANCIAL PERFORMANCE

Interest Rate and other Loan Conditions

Table I.11 summarizes the changes in nominal interest rates applicable to UDF borrowers that have occurred since the initiation of the project. It also shows the evolution of effective rates, defined as the actual yield to the bank after taking into account the period of interest collection as well as the additional fees charged, and real interest rates, defined as the differential between the effective rate and the local inflation rate over the period.

The lending program began with nominal interest rates of 40.5 percent (artisans) to 44 percent (larger borrowers). Between November 1982 and September 1983, effective interest rates charged to UDF customers (including the 2 percent yearly fee) ranged from 51.8 percent to 63 percent. Since inflation over the period ran at an annual compounded rate of 136.1 percent (based on the consumer price index), loan cost in real terms ranged from a negative 73 percent to a negative 84 percent in the case of artisans, reflecting a huge level of subsidization on the part of the bank.

UDF nominal interest rates were increased to 46.5-51.5 percent in September 1983, resulting in effective rates of return to the bank of 60.9-77.6 percent. Since inflation between September 1983 and December 1984 (the date of the next round of increases in nominal rates) was 105.3 percent, real interest rates over that same period ranged from a negative 27.7 percent to a negative 44.4 percent, still reflecting an unsustainable level of subsidization. On December 15, 1984, nominal rates were again increased to 52.5-56 percent, resulting in effective yearly rates of 70.4-87.1 percent.[2] Assuming inflation is still at the 105.3 percent level registered over the previous period

Table I.11 - EVOLUTION OF UDF NOMINAL, EFFECTIVE AND REAL INTEREST RATES AND OTHER LOAN CONDITIONS

Nov. 1982 to Jan. 1985

(figures in percentages)

	NOMINAL INTEREST RATES			EFFECTIVE YIELD (1)			YIELD IN REAL TERMS (2)		
	Nov.'82 To Sept '83	Sept.'83 To Dec.15 '84	Since Dec. 15 '84	Nov. '82 To Sept.'83	Sept. '83 To Dec. 15 '84	Since Dec. 15 '84	Nov. '82 To Sept. '83	Sept. '83 To Dec.15 '84	Since Dec. 15 '84
Artisans (3)	40.51	46.5	52.5	51.8	60.9	70.4	(84.3)	(44.4)	(34.9)
Small Enterprises									
- Provinces									
. Soles 0-15,000,000	42	48	55	59.4	70.6	85.0	(76.7)	(34.7)	(20.3)
. Soles 15-100,000,000	44	50	55	63.0	74.6	85.0	(73.1)	(30.7)	(20.3)
- Lima/Callao									
. Soles 0-15,000,000	44	50	56	63.0	74.6	87.1	(73.1)	(30.7)	(18.2)
. Soles 15-100,000,000	44	51.5	56	63.0	77.6	87.1	(73.1)	(27.7)	(18.2)
Larger Small Enterprise above Soles 100,000,000	52	60	66	78.6	84.8	114.6	(57.5)	(20.5)	9.3

Notes:

(1) Including yearly loan fees of 2% (except 3% for the larger small enterprise as of Sept. 1983 and 3.5% since Dec. 15, 1984)

(2) Based on yearly compounded inflation rates of 136.1% between Nov.'82 and Sept.'83 and 105.3% since Sept.'83 (based on CPI)

(3) Were classified as artisans subborrowers receiving loans of up to S.3 million (Nov.'82-Sept.'83), S. 5 million (Sept.'83-Dec. '84) or S.8 million (since Dec.84).

(there is evidence that inflation has somewhat accelerated as of January 1985), the current level of interest rate subsidization would range from 18.2 percent to 34.9 percent.

However, as a consequence of the central bank's 6 percent increase in interest ceilings, due to take effect in February or March 1985, UDF as well as other BIP rates are similarly being increased by 6 percent across the board. The following chart shows the resulting nominal and effective rates.

	Nominal Rate	Effective Rate[a]
Artisans (0-8 million soles)	58.5%	80.4%
Small Enterprises		
• Branches (8-100 million)	61.0%	98.5%
• Lima/Callao (" ")	62.0%	100.9%
• over 100 million soles	72.0%	130.9%

a Including 2% fee for artisan and other loans under 100 million soles and 3.5% above that amount

Of course, real rates of interest will be dependent upon actual inflation levels in the future. If inflation can be contained at or around 120 percent as predicted by the GOP in 1985, the level of interest subsidization will be in the 20-25 percent range, comparable to its 1984 level. If, on the contrary, inflation accelerates substantially as predicted by a number of private sector economists, then the level of subsidization would reach alarming levels and lead to rapid decapitalization of the fund, unless interest rate ceilings are adjusted accordingly by the central bank.

The Project Agreement stated that BIP would aggressively promote the use of indexed rates of interest by UDF subborrowers. Since indexed rates of interest are pegged to inflation, their

use would actually prevent the fund from being decapitalized. However, this scheme has not been used in the UDF, or in other BIP lending programs, as they have not been perceived as attractive to either the bank or its customers. From the bank's point of view, indexed rates as applied in the Peruvian context entail unfavorable cash flows (reflows) during the early years of the loan. For the subborrower, accepting these rates implies great uncertainty about the cost of the loan several years down the line. For these reasons, indexed rates will be applied only if they are made compulsory for certain categories of clients. Without indexation, the loan fund is anticipated to decapitalize quickly.

Quality of UDF Loan Portfolio

Since most outstanding UDF loans were disbursed during 1984, it is still too early to evaluate the quality of the UDF loan portfolio on the basis of BIP's collection performance. Typically, it takes several years for an unfeasible project to lead the borrower to default on a loan, especially when used to finance the acquisition of fixed assets.

Table I.12 shows collection performance to date as measured by the repayment rate (percentage of principal maturities fallen due that were actually collected) as well as the percentage of the UDF portfolio that was constituted by overdue loan amounts as of November 30, 1984. At that date, the aggregate repayment rate since program inception was 43.2 percent, a low figure given the program's youth. About 14 percent of the outstanding UDF loan portfolio was constituted by overdue amounts, as compared with 23 percent for the bank as a whole. However, the evaluation team was not able to determine the seriousness of the collection problem, since overdue loans were not aged. Loans overdue by only one day were considered delinquent.

TABLE I.12

UDF LOAN COLLECTION PERFORMANCE AS OF NOV. 30, 1984
(in millions of soles)

	Total Loans Disbursed (1)	Loan Principal Maturities to Date (2)	Loan Principal Actually Collected (3)	Repayment Rate (3)-(2)	% of Port. Overdu (2-3)-(1-3
LIMA					
Head Office	633,150	74,137	43,803	59.1%	5.1%
Callao	253,171	117,261	20,696	17.6%	41.5%
Comas	4,188,738	875,624	606,587	69.3%	7.5%
San Juan de Miraflores	1,780,015	314,083	225,349	71.7%	5.7%
PROVINCES					
Chiclayo	570,550	65,634	23,602	36.0%	7.7%
Chimbote	1,488,944	875,667	184,098	21.0%	53.0%
Ica	458,705	78,407	62,561	79.8%	4.0%
Piura	446,358	148,221	125,577	84.7%	7.1%
Trujillo	6,716,396	1,234,228	341,782	27.7%	14.0%
TOTAL	16,536,027	3,783,262	1,634,055	43.2%	14.4%

Whether the delinquency rate under the UDF program will slowly increase over time to reach levels similar to that of the bank's other lending programs or will remain within acceptable limits cannot be predicted at this point. Collection performance of UDF loans is not encouraging since repayment rates should be high at this early stage of the project. Eventually, satisfactory collection will depend on the bank's care in selecting subborrowers and reviewing the feasibility of the projects submitted, and on the efficiency of the bank's collection policies. In this respect, BIP has been traditionally lax in enforcing repayment of its loans since the only real pressure applied by the bank is the imposition of a delinquency surcharge of 3-5 percent added on to interest. A change in attitude and focus on the part of management, including at the local branch level, will be required if the UDF project is eventually to be successful.

The evaluation team strongly believes that success of this project should not only be measured through the financial and economic impact of UDF loans but also by the financial viability of the loan program. BIP's collection performance as measured by the repayment rate should be carefully monitored in the future and be included as a major criterion in determining project success. To make this possible, the bank should set up a system to monitor collection performance on UDF loans according to a format similar to that shown in Annex 3, Tables 2, 3, and 4, and include such data in the quarterly reports submitted to AID/Peru.

Financial Viability of the Fund

Since UDF lending is just part of BIP's overall lending program and no special unit was established for the program either at the head office or in the field, it is not possible to estimate the program's actual administrative costs, a necessary step to determine the fund's viability. For instance, it is not possible to specify what percentage of field credit officers'

time is spent analyzing UDF files as part of the cost of the program. The same applies to most other costs of this program, including staff expenses at the head office and in the field, transportation, communications, internal control, among others. In trying to analyze the viability of the Fund, the evaluation team therefore could work only on the basis of general assumptions inferred from BIP's average cost of conducting business.

Overall, BIP's operating costs represented approximately 4.3 percent of the average loan portfolio in 1983. Since UDF loans are much smaller than most loans managed by the bank, one can safely assume that the cost of managing UDF loans is substantially higher. Eight percent of the portfolio is the actual estimated cost of managing UDF loans. This cost would be lower on a marginal basis, if one took into account only the additional costs incurred by BIP as a result of the program. On the revenue side, only loan fees can be considered as actual income for the fund, since interest revenue is to be treated as a reflow intended to compensate for inflation and help maintain fund value[3]. Based on that figure of 8 percent, an example of BIP's income and expenses for a $.100 loan follows.

Loan portfolio	100
Revenues (fees)	2
Costs	
Operating costs	8
Bad debts (estimate)	10
Total costs	18
Operating loss	(16)

It thus appears that the fund is not financially viable under current conditions. Furthermore, the 16 percent loss does not take into account the decapitalization of the fund from an effective interest rate substantially lower than inflation, a problem that will be analyzed separately.

Long-term Sustainability of the Fund

To determine the long-term sustainability of the fund, a financial model was developed, using a Supercalc 2 program, to determine the extent to which the Fund will be decapitalized over the coming years as a consequence of BIP's current subsidization of interest rates. A number of assumptions were made to analyze the decapitalization of the fund over the 1985-1989 period. Once this base-case analysis was completed, a sensitivity analysis was undertaken by modifying certain key variables such as inflation rate, effective interest rate charged by the bank, and the default rate in order to determine what impact these changes would actually have on the level of decapitalization of the Fund.

The following assumptions were made in the base case:

- The inflation rate as well as devaluation of the sol against the dollar will remain at 120 percent throughout the period, a conservative assumption based on the current rate;
- The effective yield (interest rate) will be 85 percent, following the interest and fee rate structure currently applied by BIP (see Table I.11); and
- The default rate registered each year under the program will be 10 percent of total disbursements each year, probably an underestimate in view of the bank's low collection performance overall.

Based on these assumptions, the model produced projections to 1989 that are summarized in Table I.13. As can be seen, the fund would suffer from rapid and dramatic decapitalization, falling from its initial $13 million value in October 1982 to $4.6 million at 1989 year-end, a loss of 65 percent of its original value. Table I.14 shows the yearly decapitalization of the fund based on different sets of variables adopted for the period. Assumption #2 analyzes the effect of a rate of inflation of 200 percent, coupled with an increase of the effective loan

Table 1.13-PROJECTED DECAPITALIZATION OF UDF
1985-1989

	Nov30'84 Dec30'84	1985	1986	1987	1988	1989		
1.UDF Portfolio (in milli								
1.1.Starting Portfolio	15013	18625	95805	235064	421416	755503		
1.2.Maturing Loans	6029	7480	38476	94403	169244	303415	0	
1.3.New Capital Loaned(1)	3479	48666	49363	0	0	0		
1.4.Total Disbursements	9508	56146	87839	94403	169244	303415	0	0
1.5.Bad Debts(2)	951	5615	8784	9440	16924	30341	0	0
1.6.Year-end Portfolio(3)	17541	61677	136384	225624	404492	725162		
1.7.Interest Collected(4)	1084	34128	98680	195793	351011	629283		
1.8.Year-end Fund Bal.(5)	18625	95805	235064	421416	755503	1354444		
2.Dollar Value of Fund								
2.1.Exchange rate (6)	5696	12531	27569	60651	133432	293551		
2.2.Dollar equiv. of Year-end Fund Bal.	3270	7645	8527	6948	5662	4614		
2.3.Unused Portion(7)	8130	2462	0	0	0	0		
2.4.Adjusted Fund Value(8	11400	10107	8527	6948	5662	4614		

Notes:
(1) According to BIP Projections
(2) 10% of total disbursements
(3) 1.1 + 1.4 - 1.5
(4) Average Portfolio (1.1 + 1.6)/2 x 85%
(5) 1.6 + 1.7
(6) Based on 120 percent yearly devaluation of the Sol
(7) Equals starting fund balance ($8.7 million in 11/84) - 1.3
(8) Equals 2.2 + 2.3

yield to the bank to 120 percent. It is assumed that if inflation accelerates dramatically, the BCR will allow rates to trail further behind inflation than they do currently, thereby leading to an increase in the level of interest rate subsidization. Studied next was the effect of an increase in the bad-debt rate to 20 percent and then to 30 percent (assumptions #3 and 4). Next, a combination of changes was contemplated, with the inflation rate increasing to 150 percent and the bad debt rate to 20 percent, the latter being a likely scenario at this time. Finally, a worst-case (but not unrealistic) scenario was adopted, with an inflation rate of 200 percent and a 30 percent bad-debt rate.

TABLE I.14 - SENSIVITY OF UDF DECAPITALIZATION TO CHANGE IN VARIABLES (1985-1989)
(figures represent residual value of fund in thousands of U.S.$)

Assumption (Inflation Rate/ Effective Interest Rate/Bad Debt Rate)	1985	1986	1987	1988	1989	Percentage of original UDF value (1)
1. 120/85/10 (2)	10107	8527	6948	5662	4614	35%
2. 200/120/10	8891	5963	4245	3022	2152	17%
3. 120/85/20	9333	7461	5886	4644	3663	28%
4. 120/85/30	8567	6444	4916	3750	2861	22%
5. 150/100/20	8892	6498	4885	3673	2761	21%
6. 200/120/30	7609	4522	3026	2024	1354	10%

Notes:

1 Original fund value: $13 million.

2 This first assumption represents the base case.

As can be seen, the value of the fund is particularly sensitive to the differential between effective yield (interest rate) on loans and level of inflation. The fund is reduced to 35 percent of its original value when the differential is only 35 percent (#1); it falls to 10 percent of its original value when the differential is 80 percent and the bad debt rate is 30 percent (#6).

Under the Project Agreement between AID/Peru and the GOP, it was clearly stated that BIP would "maintain the value of the UDF during the loan repayment period (25 years) at an amount of Soles equivalent to the U.S. dollar value of the Fund upon initiation of activities and make annual capital contributions to the Fund to compensate for any losses in value during the previous year." Yet, not only has BIP not made such contributions at 1983 and 1984 year-ends but, because of severe cashflow problems, is not in a position to make such contributions in the foreseeable future. Indeed, the bank is intent on approaching AID/Peru to obtain a waiver of that particular clause.

It appears that the most pragmatic approach is indeed for AID/Peru to grant that waiver. Since an increase in interest rates is the only alternative to reduce partially the long-term decapitalization of the fund, the evaluation team recommends that, in return for this waiver, BIP agrees to increase nominal interest rates applied to UDF customers to the authorized BCR ceiling (except for artisans who would still benefit from a 2.5-3.5 percent interest rate differential compared with other UDF subborrowers). Thus, taking into account the latest round of increases in BCR ceilings now being implemented, all nonartisan UDF clients would be charged nominal interest rates of 72 percent (effective rate of 130.9 percent) and artisans nominal rates of possibly 69 percent (effective rate of only 95.6 percent, since interest is not charged in advance).

However, such increase in interest rates should be accompanied by decreasing hidden transaction costs to borrowers. The actual cost of UDF loans is without doubt substantially higher than the effective interest rates now charged by BIP and the 8 percent GOP tax on interest. To this declared cost one must add the hidden cost involved in numerous trips to the local UDF branch and in possibly lengthy delays for approval of the loan, resulting in business uncertainty, cost increments for the equipment financed, untimely availability of funds, and so forth. Thus if nominal interest rates are to be increased, this increase should be coupled with a substantial easing of loan requirements and improved efficiency in processing and approving loan applications, and in disbursement and collection procedures. This goal will not be achieved easily or speedily, but it should be an integral part of BIP and AID/Peru's strategy to keep the program attractive to UDF subborrowers.

SAVINGS MOBILIZATION

Rationale for Program

Before project initiation, BIP had been concentrating its efforts on the mobilization of time deposits. Since it did not have a network of branches in the Lima area, BIP did not feel it could make available the services required by passbook savers. Since the UDF project involved opening BIP offices in the *pueblos jovenes*, it was assumed that the bank could offer adequate services to potential savers in the area. Moreover, since banking services to SSEs in target areas were scarce any savings BIP mobilized would represent new resources captured by the financial system. (In traditional business districts at least a portion of new savings are mobilized at the expense of other banks). Finally, a savings mobilization campaign related to the project was seen as contributing to BIP's overall resource base, thus enabling it to fund its UDF and other lending programs.

Promotional Efforts and Incentives

BIP's principal promotional efforts with respect to savings mobilization emphasized the high rates and yields offered by the bank to potential depositors. As a bank aggressively seeking new deposits, BIP has been offering the highest rates permitted by law for savings and close to the ceiling for term deposits. In December 1984 the BCR increased interest rate ceilings on all types of deposits to 66 percent. BIP then increased its nominal rates to 66 percent on passbook and other savings, to 61.5 percent on deposits of 90-179 days, and to 51.9 percent on deposits of 180 days and more. Interest was compounded daily on passbook savings, however, and was payable respectively three and 12 months in advance for deposits of 90-179 and of over 180 days. The effective rates of return to the depositor, thereby, were increased to, respectively, 93.4 percent on savings, 95.0 percent for 90-179 day deposits, and 108 percent for deposits beyond 180 days.

In early February 1985 the BCR announced that it was increasing its ceilings to 68 percent on passbook and 72 percent on other savings and term deposits. But since it felt that the effective rates offered to term depositors would be too high and would dangerously expose the banks should local conditions change, the BCR also changed the existing rules applicable to the compounding of interest. According to new regulations, interest on savings will only be compounded monthly, which coupled with the increase in nominal rates will leave the effective rate basically unchanged at 93.8 percent. Interest on term deposits can only be compounded daily (instead of being payable in advance), which reduces the effective rate to 103.3 percent for deposits of 90-179 days and to 105.3 percent for deposits beyond 180 days.

The bank has been actively promoting the rates offered depositors throughout the country through radio, the press, and other media. In its campaign in pueblos jovenes the bank has

been promoting the services offered to depositors through flyers, and talks with subborrowers. Efforts have been made to open savings windows in the newly opened agencies in Comas and San Juan de Miraflores and to give depositors a sense of security for their deposits. It is the team's assessment, however, that the bank's performance has been uneven in this respect, with some offices being substantially more responsive or better organized to service their clients than others.

Performance to date

Overall, BIP has been quite successful in mobilizing savings and other deposits over the past years. At 1982 year-end, BIP had only 6 percent of total savings deposits in the entire financial system and 4.9 percent of term deposits. While its share of term deposits remained basically unchanged (4.9 percent at 1983 year-end and 4.4 percent on September 30, 1984), its share of the savings market increased substantially to 2.9 percent in 1983 and 5 percent on September 30, 1984. Overall, sol deposits increased by an impressive 101.7 percent in real terms between December 31, 1982 and September 30, 1984, a 49 percent annual compounded rate.

As for BIP's performance in UDF target areas, Table I.15 shows the particular amounts mobilized by the various branches taking part in the project. As of September 30, 1984, UDF branches had a total of 36,319 deposit or savings accounts with a cumulated balance of 40.7 billion soles (approximately $10 million). UDF branches represented at that date 30 percent of the number of accounts held by BIP countrywide and 26 percent of the total amount deposited. There is no evidence that the UDF project had any substantial impact on savings mobilized by the BIP, since these percentages were actually lower than at 1982 year-end.[4] Overall, savings and other deposits mobilized by UDF branches had increased by 212 percent in dollar terms between

TABLE I.15

SAVINGS MOBILIZED BY UDF BRANCHES(1)
(in millions of Soles)

	Dec. 31, 1982		Dec. 31, 1983		Sept. 30, 1984	
	# Accounts	Amount	# Accounts	Amount	# Accounts	Amount
Lima Office						
San Juan de M.	476	113	2,220	838	3,303	1,662
Comas	647	183	2,225	727	3,101	1,884
Callao	441	393	2,580	3,788	3,815	6,767
Non-Lima Offices						
Ica	466	206	3,014	1,403	4,910	3,895
Chimbote	749	501	1,567	1,664	3,668	6,408
Trujillo	723	271	3,138	1,504	6,353	7,467
Chiclayo	943	637	2,555	1,938	3,386	3,797
Tumbes	467	348	1,782	1,059	3,155	2,372
Piura	787	522	2,797	2,689	4,628	6,405
Total UDF branches	5,699	3,174	21,878	15,610	36,319	40,657
TOTAL BIP	18,248	11,400	72,698	57,824	120,723	155,525
UDF branches as % of total	31.2%	27.8%	30.1%	27.0%	30.1%	26.1%

(1) Including demand deposits, savings, term deposits and foreign-currency deposits

1982 year-end and September 1984. Among UDF branches, Trujillo had mobilized the largest amount of deposits as of September 1984 and had increased its deposits tenfold since 1982. Other offices particularly successful were Callao, Chimbote, and Piura.

Financial Implications for BIP

Despite the substantial increase in deposits registered by BIP since 1982, they still represented only 12 percent of its total resources as of September 30, 1984. The impact of deposits on the bank's lending program, therefore, is quite limited and should remain so in the foreseeable future. Moreover, these resources are expensive for the bank. In addition to interest costs, the bank is liable to reserve requirements of 15 percent on passbook savings and deposits of less than 30 days, and of 6 percent beyond 30 days. These reserves, which carry a 66 percent interest rate, actually increase the cost of those resources to the bank by one to three points according to the type of deposit. Based on the structure of deposits on September 30, 1984 and on new effective rates paid to depositors, the weighted cost of BIP's deposits (excluding foreign currency deposits) has been calculated at 98.4 percent. Since the effective rate charged by the bank on its UDF loans is in the 80 percent range, the viability of a savings mobilization campaign linked to the project is, at best, questionable.

TECHNICAL ASSISTANCE

Summary of Expenditures

Together with the $9.5 million credit fund, AID/Peru provided BIP $500,000 in grant funds for technical assistance and other activities. The following chart, in thousands of U.S. dollars, described the intended breakdown.

Activity	Year 1	Year 2	Year 3	Year 4	Total
Training BIP staff	10	20	15	0	45
Training subborrowers	30	90	120	50	290
Evaluation	0	10	0	15	25
Short-term technical ass.	20	10	0	0	30
Commodities (vehicles/office equip.)	110	0	0	0	110
TOTAL	170	130	135	65	500

In October 1984 BIP approached AID/Peru to increase funds available for a selected number of activities. The following changes were agreed upon by AID/Peru:

- Funds available for technical assistance to subborrowers would be increased from $290,000 to $443,600;
- Funds for evaluation of the project would be increased from $25,000 to $95,000 for the completion of a comprehensive mid-term project evaluation; and
- Approximately $90,000 would be made available to BIP for the purchase of computers for a number of UDF branches.

The project funds actually disbursed by AID/Peru to date are as follows:

- $27,053.92 for 10 observation trips -- three to Mexico, four to Brazil, and three to the Dominican Republic and Spain completed in 1983;
- $7,290 to cover the cost of a seminar and study undertaken by the International Center for Research on Women; and
- $107,250.92 for the purchase of eight Chevrolet Malibus in 1983 and two Ford Club-wagons in 1984.

In addition, the bank has claimed reimbursement for an amount of 9,656,216 soles (approximately $1,500) for a training course organized in Lima for BIP staff in November 1984.

Internal Training Program

BIP has fallen far behind in the implementation of its program designed to provide special training to field officers involved in the UDF program. One reason is that the Promotion and Development Division of the bank belatedly decided to redesign the training plan that had originally been conceived by the bank's internal training center. According to the new plan, first the bank is to train field officers from branches with excess staff capacity that were not included in the project; these officers would then be temporarily assigned to UDF branches, thereby allowing the branches to release their agents involved in UDF activities for intensive training in Lima. Unfortunately, this plan has not yet been implemented, as only one two-week course has been organized to date, chiefly for officers from branches with excess staff capacity. Since most UDF credit funds will have been disbursed by the end of 1985, the UDF internal training program will unfortunately follow rather than precede the UDF lending program.

Technical Assistance to Subborrowers

As of 1984 year-end, BIP had helped to train, according to its own estimate, as many as 1,250 existing or potential small entrepreneurs in 1984, by organizing 50 short-term courses throughout project areas. In general, these courses were organized by the GOP's SENATI with bank participation. But because coordination between departments at the bank is lacking, the UDF project unit has still not been informed of the actual expenses involved and has therefore not been in a position to claim them from AID/Peru. A more stringent control system will be introduced by the bank this year, whereby no expense related to the project will be committed by any division without prior approval of the project unit. In 1985 the bank again intends to train small existing and potential entrepreneurs in conjunction with SENATI. The courses are to focus on the acquisition of

managerial techniques and marketing skills by small entrepreneurs, providing them with the tools to plan a new investment or, in the case of would-be entrepreneurs, start new operations. Up to 1983, the emphasis of BIP's Promotion and Development Division was on training would-be entrepreneurs, hoping to promote the creation of a class of entrepreneurs in economically disadvantaged areas of the country. Since then, the focus has shifted to training existing entrepreneurs, following BIP's assessment that technical assistance was usually more effective in the case of an established, as compared with a newly created, firm. Also, BIP felt that some traditional sectors in which it was providing training were close to saturation.

Short-term Technical Assistance to the Project

Also included in the project were funds to provide technical assistance from outside the bank. Savings mobilization ($25,000) and the implementation of an indexed interest rate scheme on loans ($5,000) were the two areas specifically identified for such assistance. Neither of these two consultancies have been carried out or planned for at this time. Since the project is facing more immediate issues than that of mobilizing savings in *pueblos jovenes*, the evaluation team recommends that the consultancy of a savings mobilization specialist be dropped from the agenda. Yet the application of an indexed rate of interest to UDF loans would be particularly valuable in view of the alarming projected decapitalization of the fund, and specialized advice in this area is worthy of consideration.

Vehicles and Equipment

A total of 10 vehicles were purchased for the project. Of these, eight Chevrolet Malibus were purchased in 1983. Unfortunately, upon arrival those cars were found to be unsuitable to the harsh driving conditions in the *pueblos jovenes*, and several were sent to BIP branches with better roads

while older four-wheel drive vehicles from the former RDF project were sent to UDF branches. The other two vehicles (two Ford Club-wagons) were reportedly assigned upon arrival to the head office and are not being used in connection with the project. Such misselection or misallocation of project vehicles is counterproductive, and at least two of the offices the evaluation team visited (one of which had actually been assigned a Malibu) complained of a lack of adequate vehicles.

Such problems could have been avoided through more careful selection of project vehicles. The evaluation team recommends that light, fuel-efficient, and locally serviceable four-wheel drive vehicles be selected for these types of activities in the future and that AID/Peru then monitor more closely their actual distribution.

In accordance with the recent increase in grant project funds, AID/Peru will also finance the purchase of two micro-computers for the Trujillo and Chiclayo branches, and a third one to be shared by the San Juan de Miraflores and Comas offices. This equipment should help the bank complete the computerization of its field offices and contribute to the efficient management of UDF offices, particularly as it relates to accounting.

REPORTING AND EVALUATION

BIP's International Division has generally performed well in keeping AID/Peru abreast of project activities and expenses. Fairly comprehensive quarterly reports were sent to AID/Peru, including statistical data on loan disbursements broken down by office, sector, and size of loan. In the future the evalaution team recommends that BIP's quarterly reports include data on:

- A summary of UDF inflows and outflows that include principal as well as interest collections (Annex 3, Table 1);

- Collection performance relating to principal repayments only (Table 2);
- Collection performance including interest and principal repayments (Table 3);
- An aging of delinquent loans (Table 4); and
- A breakdown of disbursements by loan size and activity in constant soles (Table 5).

Although BIP has expressed interest in performing internal evaluations of the impact of UDF and other lending programs on beneficiary enterprises, it has not developed such capacity to date. Since BIP is a regular recipient of loan funds from AID/Peru and other donor agencies, it would seem appropriate for them to conduct such investigations in the future, possibly using a methodology and questionnaires similar to those used in this evaluation. This exercise could give the bank ongoing feedback on its way of conducting business and help sensitize its field as well as head office staff members as to the opportunities and constraints characteristic of the Peruvian small enterprise.

NOTES

1 Urban Enterprise Development Project Paper, AID/Peru.

2 The range is wider for effective rates than for nominal rates because artisans are charged interest monthly in arrears, which reduces the effective cost of the loan as compared with other loans where interest is payable quarterly in advance.

3 Eight percent of the portfolio is the actual estimated cost of managing UDF loans. Such cost would be lower on a marginal basis, if one took into account only the additional costs incurred by BIP as a result of the program.

4 At that time, UDF branches represented over 31 percent of number of accounts and close to 28 percent of amounts deposited.

CHAPTER TWO

PROJECT IMPACT ON SUBBORROWERS

SURVEY METHODOLOGY

To evaluate the qualitative and quantitive impact of the existing UDF program on small-scale enterprise borrowers, a sample was drawn from the loan portfolio and comprehensive interviews were conducted with each selected enterprise. Enterprises were randomly chosen from three sectors represented in the portfolio (industry, commerce, and services) and from four geographic areas (Chiclayo, Chimbote, Lima, and Trujillo). A minimum of 25 enterprises was required for each sector so that results could be extrapolated to the portfolio. Selected enterprises, in addition, were limited to those that had received loans by January 1984. This criterion helped to ensure that data would reflect the loan's long-term effect rather than its initial boost. Such restrictions also limited the number of service enterprises that were available for the sample, since relatively few had received loans prior to January 1984. The survey included 84 enterprises: 33 industries, 26 commercial enterprises, and 25 services.

A nine-page questionnaire (see Annex Two) was designed to gather data on each enterprise's financial and operating performance as well as general background information, constraints as perceived by the entrepreneur, technical assistance needs, credit history, qualitative changes, pricing policies, impact on employment, and foreign exchange costs and benefits. Questions were designed to be explicit and literal, and checks and balances were introduced within the flow of the interview to verify preceding responses.

Preloan and current balance sheets and income statements were reconstructed from information obtained both from credit files and during the interview, using quadrants imbedded in the

questionnaire to quantify production costs and output. All figures were converted into constant soles using an inflator based upon the consumer price index. Although inflation affects each sector and region differently, the evaluation team believes that the consumer price index was the best available inflator to assess changes in the financial performance of interviewed urban enterprises (see monthly indexes in Annex 1). The value of fixed assets was determined by learning their purchase price, approximate date of purchase and useful operating life. Fixed assets were then revalued into constant (January 1985) soles and depreciated using a straight-line method. This method may have resulted in overstating the true value of fixed assets, but since many entrepreneurs did not know the current sale value of their assets, it was the only practical, consistent course of action.

Two BIP professionals helped the three team members gather data from firms. The team first pretested and revised the questionnaire and then conducted interviews during the subsequent three weeks. Completed questionnaires were cross-checked by team members to establish consistent and uniform results. Great care was taken to ensure the integrity of financial data, given the constraints encountered. In a few cases, for example, BIP files lacked financial data on subborrowers, and rarely did selected enterprises keep financial records. In such cases, past financial performance was reconstructed during interviews with firm owners.

Interviews began in the two agencies established by loan agreement terms in Lima's northern and southern cones (Comas and San Juan de Miraflores), which between them accounted for about 49 percent of the loans disbursed by November 1984 (in constant terms). Loan officers were provided a list of selected enterprises and a rough time schedule and requested to advise enterprise owners of the impending visit at least one day in advance. Because of the geographic dispersion of selected enterprises and logistical constraints, an average of two enterprises were visited by each team member per day. Loan officers

accompanied interviewers to the enterprise site and, before leaving, explained the purpose of the visit. Evaluation team members believed strongly that a frank discussion of the enterprise's status required that loan officers not be present.

Upon return to Lima, the responses to the questionnaires were coded and entered into a computer. Data were then aggregated and analyzed by sector. Results per sector have been weighted according to their share in the portfolio, enabling survey results to approximate the actual characteristics and performance of enterprises participating in the entire UDF program. All figures are in January 1985 soles (or dollars) unless otherwise stated.

DESCRIPTION OF UDF ENTERPRISES

The vast majority of sampled enterprises were actually owned and managed by the individual who initially applied for the UDF credit. Total assets ranged from $9,000 to $34,000 with average total asset size, weighted to reflect portfolio composition, of about $16,000. Net worth, as shown in Table II.1, was about $14,000, substantially larger than average loan size. Average total yearly sales in 1985 (extrapolating from and weighting January 1985 results) were estimated to be about $41,000 and operating profits (sales minus raw materials, supplies, paid salaries, rent, depreciation, and interest charges) to be about $10,600. Operating profits, or the return to family members, were lowest among commercial enterprises ($6,200) and highest among industries ($11,636).

Most companies surveyed were relative newcomers to the market place: more than one-half (53 percent) had been operating since 1980, and 37 percent had been founded within the past three years. Eighteen percent of the sample (15 enterprises) used loans to help start new enterprises, 11 percent added new product lines, and 71 percent expanded existing production, services, or inventory.

TABLE II.1

CURRENT PROFILE OF SAMPLED ENTERPRISES
(in dollars)

	Industry	Commerce	Services	Weighted Average
Assets	14,713	21,807	15,612	15,991
Net Worth	13,097	19,932	12,498	14,211
Sales	40,819	43,665	32,579	40,644
Operating Profits	11,636	6,203	9,765	10,563

Exchange rate: Soles 6,000 per U.S. dollar.

About 60 percent of enterprise owners said that they had been employed in other companies prior to starting their own firms. Contrary to team members' expectations, few loans were received by individuals who had previously engaged in agricultural activities (merely 6 percent of the total sample). Perhaps the personal resources and legal requirements for successful loan application precluded the participation of recently arrived rural immigrants. About 30 percent of the sampled owners registered their firms, thereby passing from the informal to the formal sector, to receive UDF funds. Five companies were not legally constituted at the time of the interview.

Many of the firms operated within the homes of the proprietors and almost all drew upon family members for labor needs: husbands and wives often shared management burdens while other immediate or extended family members assisted on a part- or full-time basis. Since family members usually drew no income, such arrangements contributed to enhancing the enterprises' net income.

Average family size was 6.8 individuals, more than half of whom were adults (3.7 per enterprise). While 43 percent of the sample indicated that at least one adult within the household worked in other income-generating activities, 82 percent revealed that income from the recipient enterprise was the most important source of revenue for the family. On average, one working person within the family unit supported 2.6 family members, a fairly low dependency ratio.

UDF LOAN SPECIFICS

Of the 84 firms sampled, 22 received two loans under the program and one received a third loan for a total of 107 loans amounting to $370,633 and averaging $3,464 per loan. The average firm (weighted to reflect portfolio composition) received $4,038 in UDF loan funds.

An analysis of the differences between the initial loans and second loans reveals variations among sectors for financing needs and indicates general trends that can be expected to materialize as the UDF continues to deliver loans to SSEs in the pueblos jovenes. The average initial loan received by sampled firms was $3,550; 45 percent of loans was used for working capital and an equal percentage for fixed assets and buildings (see Table II.2). The remainder was used to cover interest payments, insurance, and other miscellaneous items. Not surprisingly, commercial enterprises primarily used initial loans to provide working capital, while industrial and service enterprises were more prone to purchasing fixed assets accompanied by working capital.

Inflation and decreased demand in the interim, however, probably transformed what could have been a permanent working capital investment into a transitory infusion of capital that, in most cases, quickly evaporated. Considering the debt burden of the UDF loan on commercial enterprises in particular and the widespread market saturation in the commercial sector as a whole, it is not surprising that some commercial sector entrepreneurs are experiencing constraints to growth. Indeed, because of debt repayment problems on their first loan, only 2 of the 22 repeat borrowers were from the commercial sector. The project's working capital loans carried a shorter maturity and higher initial effective repayment as well, compounding the commercial sector's dilemma.

Since second loans were, on average, only eight months old and the sample size of repeat loans (22) is small, it is difficult to make any generalizations with confidence. Conversations with entrepreneurs and a review of the data, however, reveal that some shifts have occurred that may signal future trends. Most of the repeat loans in the sample were delivered to services (11 out of 22) and industries (9 firms). While services used a higher percentage of repeat loans for equipment purchases and construction (61 percent), industries have begun to seek

TABLE II.2

LOAN PURPOSE FOR SAMPLED ENTERPRISES
(figures in percentages)

	Industry			Commerce			Services			Weighted Average		
	First Loan (n=33)	Repeat Loans (n=9)	Average (weighted)	First Loan (n=26)	Repeat Loans (n=27)	Average (weighted)	First Loan (n=25)	Repeat Loan (n=11)	Average (weighted)	First Loan	Repeat Loan	Average (weighted)
Equipment	49	26	44	1	42	4	47	41	45	41	30	39
Buildings	1	0	1	6	0	6	6	20	10	2	2	2
Working capital	39	51	42	81	45	78	37	15	30	46	47	46
Interests payments	7	9	7	9	13	9	10	11	10	8	10	8
Refinancing	1	14	4	3	0	3	0	12	4	1	11	3
Other	2	0	2	1	0	1	1	0	1	2	0	2
Total	99 (1)	100	100	101 (1)	100	101 (1)	101 (1)	99	100	100	100	101 (1)
Average loan period	2.6 years	-	-	1.9 years	-	-	2.5 years	-	-	2.4 years	-	-

(1) discrepancy due to rounding

greater amounts of working capital, no doubt to help ease their increasingly illiquid condition. Working capital is consuming 50 percent of repeat industrial loans on average, fixed-assets funding has dropped to 26 percent, and refinancing previous loans is accounting for 14 percent of all loans on average.

UDF sampled borrowers' initial loans carried repayment terms of 2.5 years, with shorter maturities for commercial enterprises (1.9 years) and longer terms for industries and services (2.6 and 2.5 years, respectively). The shorter term and higher working capital share of loans to commercial enterprises reflected a widespread tendency to speculate on stock. Grocery stores, for example, would buy basic items at controlled prices and store them until the controlled sale prices had risen. The average maturity period for industry has since shortened to reflect a switch from fixed asset acquisition to working capital loans, falling from 2.6 years for the first loan to 2.1 for the second.

These findings suggest that as the UDF program ages and more loans go to repeat borrowers, a higher percentage of loan value can be expected to be used for working capital. The advantage of this trend for BIP would be that loans would have a quicker turnover. Insofar as substantial reflows are generated as a result of high collection rates, more entrepreneurs should be receiving loans in the future.

No grace periods were granted by BIP. This may have created liquidity problems for firms, notably industries, financing the acquisition of fixed assets with attendent lags in cash flow from the new investment. In a high inflation environment, the initial repayments for borrowers are much more burdensome in real terms. Borrowers not benefiting from a grace period are compelled to amortize the bulk of their loan at the very time when they may least be able to come up with such high payments. Financial mechanisms to address this problem -- such as capitalizing interest and extending grace periods -- may merit consideration to ensure that borrowers have sufficent initial liquidity to prevent a serious cash squeeze.

Arrearage rates for the sample were high, indicating that BIP should take measures to improve collection performance. Sixty percent of sampled borrowers had missed at least one payment; 26 percent had been late only once, and 34 percent had missed two or more payments. Of these, nearly 12 percent indicated repeated inability to pay their installments; they ranged from four to six payments in arrears. The service sector performed best, with only 12 percent falling behind on more than two payments, while industry exhibited the highest tendency for arrearage with 27 percent of the total falling more than two payments in arrears.

Most borrowers did not meet their payments because of cash flow problems; some, however, complained about the long delays encountered when trying to make payments. These borrowers said that they could not afford to take such time away from their business during peak season. Often, borrowers declared they would have to wait several hours in long lines at certain BIP branches. These delays represent a hidden, but sometimes high, cost to loan recipients.

NON-UDF CREDIT HISTORY

The decision to finance investments with borrowed capital in the initial stages of small enterprise development is without doubt a difficult one. The inability or reluctance to secure outside financing can be a major impediment to growth and success. More than 32 percent of the enterprises would not have applied for credit elsewhere and would have been unable to proceed with their investment as planned. Among those who would have sought alternative financing sources (45 percent), most were confident they could have received financing at another bank. BIP loan officers, however, were skeptical about whether they would have been successful.

The credit history of the sample group, as shown in Table II.3, illustrates that few had received credit from non-UDF formal or informal sources. Most subborrowers with credit histories (55 percent of the sample) had obtained loans from family members at zero or no interest cost (17 percent of the total sample). A fairly high number (14 percent) had had recourse to cooperative credit unions, an outgrowth of the Velasquez government's cooperative program in the 1970s. Ten percent had received short-term loans with high effective annual interest rates (one recorded 672 percent annual compounded interest rate) from private money lenders. Merely 6 percent had borrowed from banking institutions, belying the earlier confidence many expressed at being able to enter the formal financial markets.

CAPACITY UTILIZATION

Capacity utilization at the small enterprise level cannot be compared to capacity utilization figures of medium and large-scale industry. SSE capacity utilization levels are generally lower because of their fewer operating shifts and their lower threshhold of experience and technical capabilities as well as constraints related to marketing infrastructure and working capital. For purposes of the survey, capacity utilization figures were only included for the industrial sector where optimum production figures ostensibly can be derived from machinery specifications. Even in this case, other constraints typically interfere with optimum output in such an environment (labor laws, social and cultural norms, lack of infrastructure) and render a textbook or a machine manual definition irrelevant.

Accordingly, interviews with subborrowers sought first to define how much a company could produce if it had no market or working capital constraints. After an output figure was established for optimum conditions, the entrepreneur was queried on current operating levels. The ratio between these two figures thus established a rough approximation of capacity utilization.

TABLE II.3

CREDIT EXPERIENCE OF SAMPLED UDF ENTERPRISES

Source of Credit other than UDF	No. Recipients of Non-UDF Credit	Percentage of Recipients to surveyed sample [n=84] (1)
Family	14	17
Cooperative	12	14
Moneylender	8	10
Other Bank	5	6
Other (friends)	5	6

Notes

(1) Represents the percentage of total surveyed entrepreneurs who have actually had access to that particular source of credit.

Results indicate that the SSE industrial sector is operating significantly below optimum production levels. While only one sampled industry had ceased production -- as opposed to 12 commercial and service companies that have suspended operations (15 percent of the total sample) -- 15 were found to be operating at 50 percent or less than their installed capacity. Such a high percentage (45 percent of industries sampled) indicates that new equipment purchases may not have been a wise investment for many.

In the commercial and service sectors, a proxy for the capacity utilization figure was derived by comparing the sales figures projected by BIP loan officers for loan analysis and actual sales. It is evident that loan officers tended to be more optimistic about firm performance than the actual statistics bear out. Results indicate that projected sales in the commercial and services sectors were, on average, 25 and 32 percent above actual performance.

Of greater concern is the evident oversaturation in sectors with fewer barriers to entry, such as neighborhood grocery stores, shoemakers, printing shops, and bakeries. No evidence was found to indicate that selection of economic activity is monitored within sectors, much less directed (via promotion efforts) toward activities that close gaps or fulfill needs within the economy at large.

BIP should adopt a more discriminatory approach toward loan appraisal to improve the distribution and quality of the UDF portfolio. Certainly in economic terms, the opportunity cost of delivering credit to oversaturated sectors is high when compared with alternative productive activities.

CONSTRAINTS TO SSE DEVELOPMENT

Entrepreneurs are the catalytic force for economic development, transforming materials and providing services that meet society's needs. Their products generate income for themselves, their suppliers, and buyers who incorporate such products into other goods. Peru has a pool of residual entrepreneurs that will emerge spontaneously given a modicum of incentives. The origin of most entrepreneurs is at the small-scale level, and in developing countries -- where large companies that generate high employment at low investment costs are relatively scarce -- their contribution to economic and social well-being is palpable.

Team members designed one portion of the questionnaire to determine what constraints exist on respondents' production. The sample does not represent most Peruvian small-scale enterprises since it was comprised of individuals that had already passed the initial hurdles of entrepreneurial success. Indeed, those constraints normally limiting initial entrepreneurial activity (for example, experience in legal matters, a willingness to take risks, the paperwork and time required to become formal, and lack of technological expertise) seemed to have had little effect on deterring the entrepreneurs that were interviewed. Perhaps the greatest psychological challenge to the small entrepreneur -- undertaking a financial obligation with all the attendent risks -- had already been taken on by these individuals, although many still experienced anxiety at having done so.

The sample results seem to affirm the presence of constraints that are replicated in most developing countries. The overwhelming majority of the sample listed lack of both credit (76 percent) and working capital (82 percent) as impediments to growth, which should be no surprise since they are critical constraints restricting small enterprises throughout the world. UDF's contribution to Peru's SSE sector has been important since it is one of the few credit lines available for financing working-capital requirements of the smallest-scale enterprises.

Heavy competition was the next-most-often cited constraint (52 percent of the total), especially for the industrial sector (56 percent), followed by commerce (50 percent) and services (40 percent). Industrial firms seem to be competing with large companies that enjoy economies of scale and greater market penetration, while commerce and service companies are countering the combined effects of price controls and oversaturation because of relative ease of entry. Depressed demand affects 46 percent of the sample, led by the service sector (54 percent), which is probably suffering from its relative youth as a whole and the problems associated with starting operations in the midst of the deep recession of the early 1980's. Almost one-half of the industrial companies are affected by lack of demand as well, and 36 percent of commercial enterprises also had this problem. The comparatively more favorable demand conditions indicated by commerce may be because most of their products are either staples (milk, noodles, sugar, flour) or in heavy demand (soft drinks, beer, cigarettes). Other problems cited by the clients were lack of marketing skills, financial expertise, and, for some, ignorance of basic record-keeping procedures.

Other potential constraints covered in the questionnaire were unambiguously refuted by most entrepreneurs. Eighty-nine precent stated they had no problems with either technology or machinery, and 85 percent said that repairs were no problem, which is fully in keeping with generic definitions of entrepreneurs as innovative and resourceful. Most are conversant in all stages of the productive process and have learned to repair and maintain their equipment to decrease expenses and down time. In addition, since equipment purchased with loans was relatively new, few production problems would be expected to appear at this time.

Finding qualified labor presented problems to only 17 percent of the sample, because of the low technology levels typical of SSE enterprises. Inputs were relatively easily

obtained (81 percent concurred) since almost all were of local origin. Inadequate infrastructure appeared to affect operations for 27 percent of the sample, though most sites appeared to be located in pueblos jovenes that were well-advanced in terms of community organization and the provision of basic services such as water, electricity, road networks, and an established pole of commercial activity. Transport inefficencies were cited by 21 percent of the respondents, no doubt because of inadequate maintenance, unpredictable delivery times, and unreliable carriers.

TECHNICAL ASSISTANCE NEEDS

Technical assistance, while provided for in the Loan Agreement, has been promoted unevenly to date. Some branches have offered ad hoc tutorials on various aspects of financial analysis and record-keeping, but outreach into the community is still tentative and selective. Loan supervision at the branch level is cursory at best, usually prompted by consistent arrears in the client's account, and does not generally include an overview of the client's operations. An analysis of this problem should be undertaken since it may affect present and future UDF clients.

Sampled firms indicated an interest in receiving technical assistance -- 49 percent indicated a need for marketing assistance, 45 percent would like to learn how to plan future investment projects, and 43 percent desire assistance in finance and accounting. Roughly the same proportion of the sample indicated a willingness to pay for any assistance (44 percent) and another 15 percent were willing to pay part of the cost. Evidence from other projects has shown that entrepreneurs who pay for technical assistance are more inclined to actually integrate this new knowledge in their operating procedures.

PRODUCT QUANTITY AND VARIETY

The high share of loan proceeds allocated to working capital (43 percent of total loans) was used to offset, perhaps only temporarily, the ruinous impact of inflation on the cash flow of many SSEs. Raw material purchases rose for 73 percent of the respondents, and 95 percent of those affirmative answers indicated the change was directly related to the loan received. Similarly, total production increased for 65 percent of the sample (primarily from the industrial sector), 98 percent of whom in turn indicated the result was linked to the loan (see Table II.4).

Product variety rose for 53 percent and product quality rose for 40 percent of the respondents. The vast majority (82 percent to 96 percent) cited loan proceeds as fundamental to these increases. These somewhat lower percentages stem from the nature of the sectors involved: commerce and service industries were not affected by these qualitative measures to the same degree and number that the industrial sector was affected. Product quality, for example, did not change for 49 percent of the respondents; the slightly lower percentage of respondents who noted no change in product variety (37 percent) was probably due to the influence of commercial enterprises, since grocery and hardware stores stocked new product lines with proceeds of the loans. Competition increased for 56 percent of those surveyed, but only 10 percent thought it was due to the UDF loan project.

FINANCIAL PERFORMANCE OF BORROWERS

Introduction

The Peruvian economy is experiencing the third consecutive year of the worst recorded recession in its history. Small-scale enterprises have not escaped unscathed. The economy is operating at levels far below capacity, unemployment levels are the highest

Table II.4 - Changes in Key Indicators from before to after UDF Loan (1)

Variable	Increase	Same	Decrease	Not Applicable	Total	Increase Due To UDF Loan (2)
Purchase of Raw Materials	73%	12%	15%	-	100%	95%
Total Production	65%	18%	13%	4%	100%	98%
Product Quality	40%	49%	1%	10%	100%	82%
Product Variety	53%	37%	10%	-	100%	89%
Number of Clients	73%	17%	10%	-	100%	82%
Capacity Utilization	58%	24%	04%	14%	100%	96%
Level of Competition	56%	37%	04%	3%	100%	10%

Notes

(1) Figures indicate the percentage of entrepreneurs who declared that particular variable had increased, decreased or remained static (or that variable was not applicable).

(2) Percentage of entrepreneurs who saw an increase and declared that this increase was directly due to the UDF Loan.

in fifteen years, real per capita income is currently 10 percent below its 1970 level, and foreign exchange pressures have pushed inflation to triple digit figures. The costs in terms of foregone consumption, depressed demand conditions, narrowed profit margins, and illiquidity have been high for businesses trying to stay solvent.

The following analysis of borrowers' financial performance is based on data disaggregated by sector. It was not possible to analyze performance by subsector economic activity, since the sample was too small. However, performance no doubt varied, in some cases greatly, from one subsector to another. Any conclusions drawn from the analysis of a particular sector (services for example) should therefore not be blindly accepted as applying to specific subsectors (for example, restaurants or repair shops).

Growth Rates

Enterprises sampled have, in general, enjoyed high annual growth rates of assets, net worth, and sales -- growing respectively at average annual compounded rates of 35 percent, 34 percent, and 38 percent (see Table II.5). Part of the increase in the first two indicators however, may be because of the evaluation team's method of revaluing equipment into constant soles. Such revaluation was based on the increase in the consumer price index, a method that may have resulted in overstating the true value of older fixed assets. Yet value added (sales minus raw materials and fuel) and operating profits have not kept up with sales increases, substantiating the complaint voiced by many entrepreneurs -- that they are not able to pass on increases in raw material prices to their customers because demand is low.

As shown in Table II.5, about two-thirds of the industries sampled increased their total assets, net worth, and sales -- with about one third achieving high annual compounded increases of over 50 percent.

TABLE II.5

ANNUAL COMPOUNDED CHANGES IN KEY GROWTH INDICATORS OF SAMPLED UDF
(distribution by tranche and average change per sector, based on constant Soles)

Net changes in percentage	Industry	Commerce	Services	Total
	(# of enterprises in parenthesis)			
Total Assets				
-100≤TA<-75	0% (0)	0% (0)	0% (0)	0% (0)
-75≤TA<-50	0% (0)	0% (0)	0% (0)	0% (0)
-50≤TA<-25	13% (4)	4% (1)	8% (2)	9% (7)
-25≤TA<0	19% (6)	28% (7)	20% (5)	22% (18)
0≤TA<25	23% (7)	24% (6)	16% (4)	21% (17)
25≤TA<50	13% (4)	12% (3)	16% (4)	14% (11)
50≤TA<75	6% (2)	8% (2)	12% (3)	9% (7)
75≤TA<100	10% (3)	0% (0)	4% (1)	5% (4)
100≤TA<250	13% (4)	12% (3)	24% (6)	16% (13)
200≤TA	3% (1)	12% (3)	0% (0)	5% (4)
Total	100% (31)	100% (25)	100% (25)	100% (81)
Average change	35%	28%	54%	35%**
Net Worth				
-100≤NW<-75	0% (0)	0% (0)	0% (0)	0% (0)
-75≤NW<-50	10% (3)	0% (0)	4% (1)	5% (4)
-50≤NW<-25	7% (2)	12% (3)	13% (3)	10% (8)
-25≤NW<0	20% (6)	40% (10)	29% (7)	29% (23)
0≤NW<25	24% (7)	8% (2)	8% (2)	14% (11)
25≤NW<50	3% (1)	12% (3)	13% (3)	9% (7)
50≤NW<75	10% (3)	4% (1)	13% (3)	9% (7)
75≤NW<100	3% (1)	4% (1)	4% (1)	4% (3)
100≤NW<250	14% (4)	8% (2)	8% (2)	10% (8)
250≤NW	7% (2)	12% (3)	8% (2)	9% (7)
Total	98%* (29)	100% (25)	100% (24)	99% (78)
Average change	39%	18%	25%	34%**

TABLE II.5 (Continued)

Net changes in percentage	Industry	Commerce	Services	Total
	(# of enterprises in parenthesis)			
Sales				
$-100 \leq S < -75$	0% (0)	0% (0)	0% (0)	0% (0)
$-75 \leq S < -50$	4% (1)	13% (3)	5% (1)	7% (5)
$-50 \leq S < 25$	7% (2)	13% (3)	14% (3)	11% (8)
$-25 \leq S < 0$	22% (6)	8% (2)	10% (2)	14% (10)
$0 \leq S < 25$	19% (5)	21% (5)	19% (4)	19% (14)
$25 \leq S < 50$	11% (3)	4% (1)	10% (2)	8% 6
$50 \leq S < 75$	7% (2)	17% (4)	14% (3)	13% 9
$75 \leq S < 100$	7% (2)	0% (0)	0% (0)	3% 2
$100 \leq S < 250$	15% (4)	8% (2)	19% (4)	14% 10
$250 \leq S$	7% (2)	17% (4)	10% (2)	11% 8
Total	99%* (27)	98%* (24)	101%* (21)	100% (72)
Average change	43%	13%	35%	38%**

* Discrepancy due to rounding error.

** Average change in the "Total" column is weighted according to UDF portfolio distribution.

Commercial enterprises, on average, experienced a more modest growth in performance indicators than industries or services. On average, assets increased by 28 percent and net worth and sales by 18 percent per annum; gross income (identical to value added for commercial ventures) remained stagnant in constant terms and operating profits increased by only 6 percent per year. Some commercial enterprises said that they had substituted family for outside labor, thereby improving the enterprise's operating profits. A review of compounded changes by tranche indicates that many commercial enterprises suffered declines in net worth (52 percent), sales (34 percent), gross profits (46 percent) and operating profits (41 percent). Many appear to have used loans as a one-time working capital infusion. The ensuing initial impetus could not be maintained, however, and the performance of many commercial borrowers declined or remained fairly stagnant. Also, heavy competition among neighborhood grocery stores that dominated the sampled commercial sector restrained their sales and profits.

The service sector appears to have parlayed loan proceeds to its advantage with slightly more success than the other sectors insofar as growth is concerned, averaging a high 54 percent yearly compounded rate of growth in total assets and a respectable 35 percent rate for sales. Analysis of changes by tranche shows that about 30 percent suffered actual declines in sales. Yet certain activities within the service sector demonstrate a strong potential for growth, including auto repair shops and clothing and shoe repair activities, which possibly reflects the tendency of consumers to repair rather than replace items during recessions. Services selling luxuries rather than basic services -- restaurants and beauty parlors, for example -- find it more difficult to survive during periods of contraction.

Profitability

Given the nature of the firms interviewed, the evaluation team did not attempt to estimate the income paid to owners and family members; other surveys have demonstrated that this figure is typically subject to great distortion. Owners take what they need when they can, rather than paying themselves a fixed salary. Thus the team could not estimate a true net profit figure for interviewed firms. Instead a net operating profit figure (hereafter referred to as operating profit) was used to estimate the return to owners; it is defined as sales minus the cost of goods sold, fuel, labor wages, depreciation, and interest payments. Depreciation was subtracted so that the important hidden cost of using equipment was valued. Consequently, the operating profit is lower than actual cash to the owner.

The key profitability ratios, on average, fell for all three sectors. Sample results suggest that enterprises were not able to increase prices as fast as the rise in the cost of their raw materials. The price squeeze was especially notable in activities where competition is strong, demand is flagging, and prices are government-controlled (for example, grocery stores, bakeries, shoemakers, printers). Demand conditions favor the pricing policies of certain other activities (automobile repair, tire services, crafts, certain construction-related activities, and machinery repair). Still other activities are freer to increase prices because of inadequate supply, product quality, and uniqueness (for example, clothing and furniture construction).

Among the three sectors, services suffered the greatest drops. Value added (sales minus raw material purchases and fuel) and operating profits only increased by 24 percent and 11 percent respectively on a compounded annual basis (see Table II.6). Moreover, average gross margins fell from 51 percent to 31 percent of sales, and more seriously, return on sales dropped from 29 percent to 9 percent (see Table II.7). Although the

TABLE II.6

ANNUAL COMPOUNDED CHANGES IN KEY PROFITABILITY INDICATORS OF SAMPLED SUBBORROWERS
(distribution by tranche and average change per sector, based on constant Soles)

Net changes in percentage	Industry	Commerce	Services	Total
	(# of enterprises in parenthesis)			
Value Added				
-100≤VA<-75	0%(0)	13%(3)	0%(0)	4%(3)
-75≤VA<-50	7%(2)	8%(2)	11%(2)	9%(6)
-50≤VA<-25	15%(4)	17%(4)	21%(4)	17%(12)
-25≤VA<0	26%(7)	8%(2)	0%(0)	13%(9)
0≤VA<25	7%(2)	8%(2)	21%(4)	11%(8)
25≤VA<50	11%(3)	0%(0)	5%(1)	6%(4)
50≤VA<75	7%(2)	21%(5)	11%(2)	13%(9)
75≤VA<100	0%(0)	4%(1)	5%(1)	3%(2)
100≤VA<250	19%(5)	4%(1)	11%(2)	11%(8)
250≤VA	7%(2)	17%(4)	16%(3)	13%(9)
Total	99%*(27)	100%(24)	101%*(19)	100%(70)
Average change	31%	0%	24%	25%**
Operating Profits				
-100≤OP<-75	4%(1)	9%(2)	7%(1)	7%(4)
-75≤OP<-50	17%(4)	9%(2)	0%(0)	10%(6)
-50≤OP<-25	13%(3)	18%(4)	21%(3)	17%(10)
-25≤OP<0	17%(4)	5%(1)	14%(2)	12%(7)
0≤OP<25	4%(1)	14%(3)	21%(3)	12%(7)
25≤OP<50	13%(3)	5%(1)	7%(1)	8%(5)
50≤OP<75	8%(2)	18%(4)	7%(1)	12%(7)
75≤OP<100	0%(0)	0%(0)	7%(1)	2%(1)
100≤OP<250	8%(2)	9%(2)	7%(1)	8%(5)
250≤OP	17%(4)	14%(3)	7%(1)	13%(8)
Total	101%*(24)	101%*(22)	98%*(14)	101%*(60)
Average change	8%	6%	11%	8%

* Discrepancy due to rounding

** Average change in the "Total" column is weighted according to UDF portfolio distribution.

TABLE II.7

PRE-LOAN AND PRESENT
KEY PROFITABILITY RATIO OF SAMPLED UDF SUBBORROWERS

	Industry		Commerce		Services	
	Pre-Loan	Present	Pre-Loan	Present	Pre-Loan	Present
1. Sale-Raw Material/Sale	.45	.40	.27	.23	.51	.31
2. Value Added/Sales	.45	.38	.25	.21	.47	.28
3. Value Added/Assets	2.69	2.20	1.33	.65	2.07	1.60
4. Return on Sales (Operating Profit/ Sales	.34	.25	.16	.16	.29	.09
5. Return on Equity (Operating Profit/ Networth	2.80	1.83	1.36	.66	1.15	1.65
6. Return on Assets (Operating Profit/ Assets	2.16	1.36	1.13	.55	1.58	1.18

Note:

Number of observations:

- industry: 27 for lines 1,2,3 and 4, 25 for others
- commerce: 23
- service: 21

sample size for services with satisfactory information on operating profits before and after the loan is too small to draw any significant conclusions, a high proportion (42 percent) have not been able to maintain profit levels in real terms.

Declines in these ratios, although still disturbing, were not so dramatic among industries and commercial enterprises. Among industries, about half of the sample suffered a decline in value added and operating profits, reflecting impaired profitability at the higher levels of postloan activity. Successful enterprises pulled up the general average for industries, so that value added and operating profits increased by 31 percent and 8 percent respectively on a compounded annual basis (Table II.6). Industry's precipitous drop in return on equity (2.8. to 1.8) and return on assets (2.2 to 1.4) can be explained at least partly by industries' use of loans to purchase fixed assets, which the evaluation team revalued upward to reflect constant soles (this revaluation method helped boost equity and assets). Thus, declines in profits only accounted for part of that change.

Ratios of return on equity and assets also fell sharply for commercial enterprises, from 1.36 to .66 and from 1.13 to .55 respectively, which indicates that turnover ratios for the commercial sector are below acceptable levels and that inflation has eaten away not only profit margins but ultimately eroded equity as well. Most commercial enterprises invested in stock to hedge inflation, but competition has prevented them from recouping costs when stocks were once again depleted and inventory had to be reconstituted. The low profitability of the commercial sector can be expected to deteriorate further, as increasing illiquidity prevents entrepreneurs from restocking inventory to in turn boost sales.

Industry's precipitous drop in return on equity (2.8 to 1.8) and return on assets (2.2 to 1.4) is probably best explained by the fact that industries used loans to purchase fixed assets,

which the evaluation team revalued upwards to reflect constant soles. Thus, declines in profits probably did not account for most of this change.

Indebtedness and Debt Servicing Ability

SSE's typically have low debt levels because of their inability to secure credit, fear that future insolvency might threaten their ability to repay, and ignorance regarding the benefits that can be realized through debt financing. Since the UDF credit was the first loan that most in the sample had received, debt-to-equity ratios before the loan would be meaningless. Likewise, liquidity ratios were of little comparative value since only 33 percent of the sample had any short-term debt before the UDF credit. Since noninstitutional short-term debt is so expensive, few SSEs are able to afford it given existing market conditions.

Debt-to-equity figures are low for the commercial sector (15 percent), given that commerce mostly finances inventory, and slightly higher for industry (18 percent), which invests proportionally more capital in fixed assets (see Table II.7). The average ratio for the service sector was higher at 45 percent, reflecting the fact that this sector is investing more heavily in fixed assets or building improvements. The relative youth of service companies may also explain the higher debt-to-equity ratios in services compared with industry. Fixed assets of established firms were revalued by the evaluation team to reflect the diminishing value of the Peruvian sol, whereas debt is fixed in nominal terms. Over time, therefore, high inflation would automatically reduce the leverage ratio, all things being equal. New firms -- such as those in the service sector -- would not reflect this situation to the degree that older companies would.

Although debt-to-equity ratios are fairly low, an analysis of the debt repayment burden, which reflects the ability of firms to meet both interest and principal payments from cash income (ratio of interest plus principal loan payments to operating profit plus depreciation and interest) indicates that a high proportion of enterprises find it difficult to meet loan payments from their cash income. As shown in Table II.8, the debt repayment capacity was high or unacceptably high for about 54 percent of enterprises (weighted to reflect UDF portfolio distribution). Commercial and service enterprises seem to have the highest proportion of firms facing difficulties in loan repayment, but 30 percent of industries are also in this category. Whether enterprise profits will be able to sustain this cash burden is difficult to determine, since many of the sampled enterprises, particularly in the service sector (60 percent) are less than three years old and are doubtless still in the start-up phase of operation. Since many have more than one source of income to sustain the household (43 percent of the total sample have family members working outside the firm), outside income will very likely be used to help meet loan payments. Nevertheless, a sound loan should generate enough income to cover its repayment, at a minimum, which is not the case for a high proportion of UDF subborrowers.

Debt service burden, or the ability of firms to meet interest payments from cash, was determined by calculating the ratio of loan interest payments to operating profit, interest, and depreciation. This ratio was moderate for about three-fourths of enterprises. Income generated by the firms sampled generally seems to provide sufficient funds in the short term to enable entrepreneurs to pay interest and support households.

Since the operating profit figures used to calculate debt repayment capacity include income to families, it is difficult to know the extent to which enterprises could shoulder higher interest rates. Clearly, many are already in trouble at existing

TABLE II.8 - DEBT TO EQUITY, DEBT REPAYMENT AND DEBT SERVICE RATIOS OF UDF BORROWERS

Debt to Equity Ratios

Industry	Commerce	Services
.18	.15	.45

Debt Repayment Burden

	Commerce	Industry	Services	Weighted Average[1]
0 -34% (Normal)	8 (38%)	16 (49%)	10 (42%)	46%
35%-64% (High)	3 (14%)	7 (21%)	5 (21%)	20%
65%-up (Unacceptable)	9 (43%)	10 (30%)	6 (25%)	32%
Negative (Unacceptable)	1 (5%)	0 (0%)	3 (12%)	2%
T O T A L	21 (100%)	33 (100%)	24 (100%)	100%

Debt Service Burden

	Commerce	Industry	Services	Weighted Average[1]
0 -25% (Normal)	14 (67%)	25 (76%)	15 (62%)	73%
26%-50% (High)	5 (23%)	3 (9%)	4 (17%)	12%
51%-up (Unacceptable)	1 (5%)	5 (15%)	2 (8%)	13%
Negative (Unacceptable)	1 (5%)	0 (0%)	3 (13%)	2%
T O T A L	21 (100%)	33 (100%)	24 (100%)	100%

[1] Weighted by distribution of overall UDF portfolio by sector

rates. For others, higher interest charges would lower the family's standard of living and affect the firm's future viability. However, the evaluation team believes that firms that cannot shoulder positive real interest rates are poor investments. Lending to such firms results in an economically inefficient use of funds with extremely high opportunity costs. Thus, the solution to the interest rate question is not to subsidize rates in order to keep alive ventures that would otherwise be unviable, but to carefully select subborrowers by making sure that, on the basis of realistic projections, they will be in a position to shoulder debt obligations at non-subsidized rates. The evaluation team feels strongly that this selection is possible among the much larger pool of potential subborrowers whose credit needs have not yet been met, and is highly desirable, since such loans would generate higher value added and thus higher economic benefits overall.

CONCLUSION

The UDF project was launched in the midst of the worst recession in Peru's history. Depressed market demand coupled with triple digit inflation are not favorable breeding grounds for enterprise development. It is not particularly surprising, thus, that many UDF clients are faring poorly.

Although sampled subborrowers, on average, experienced substantial growth rates in assets, net worth, sales, and (to a lesser degree) operating profits, all profitability indicators have declined since loan receipt. Over half of the sampled industries and 40 percent of commercial and service enterprises suffered declines in net operating profits.

Since the evaluation team was unable to compare the performance of UDF subborrowers with nonloan recipients of similar size and activity, it is not possible to determine whether these subborrowers were better off than they would have been without access to BIP credit. However, survey results

indicate that, in some cases, investments were made to expand capacity without adequate product demand. Negative real interest rates induced many SSEs with poor investments to approach BIP. Unfortunately, BIP analyses generally were rather cursory and did not adequately screen out loans to enterprises seeking to expand in already saturated subsectors. But many UDF loans did help establish some thriving businesses and improve the financial performance of sampled enterprises. Such UDF loans provided an important source of both working capital and fixed-asset financing that otherwise would not have been available to many of the recipients.

The industrial sector appears to suffer from illiquidity and impaired production efficiencies because of demand conditions, but most are expected to persevere through these difficult times. Some service enterprises (for example, repair shops) exhibit high growth rates since they cater to basic needs; others that sell luxury goods (for example, restaurants) have a dimmer future if the recession continues. The commercial sector, while providing needed income and employment to owners, suffers from stiff competition and erosion of its equity base. Commercial enterprises are destined for greater difficulties if controlled sales prices do not keep pace with controlled raw material prices.

CHAPTER THREE

ECONOMIC IMPACT OF UDF PROJECT

UDF ECONOMIC OBJECTIVES

The main rationale for establishing the UDF project in urban centers was to provide a cost-effective means to create employment and improve the socioeconomic conditions of the urban poor. Institutional strengthening of the BIP and improvements in the financial performance of assisted SSEs were both means to achieve this goal. While previous chapters analyzed these two groups from the perspective of a banker and loan recipients' financial interests, respectively, the economic analysis focuses on gains and losses to society as a whole. Gains accruing to one group -- small-scale enterprises -- for example, can overcome losses to another -- BIP.

The chief potential economic benefits of the project may include job creation, net increases in direct and indirect value added, consumer benefits, and foreign exchange savings or net earnings. It should be remembered that economic benefits may bear little similarity to financial profitability; however, without a profit, benefits cannot be maintained.

EMPLOYMENT GENERATION

Survey results indicate that UDF loans helped generate a significant number of new jobs to date. As shown in Table III.1, small-scale industries and services created far more jobs than commercial enterprises. The average industrial enterprise created two new jobs at an average loan cost of about $2,000 per new job. The average service created 1.3 jobs at a loar cost of $4,500 each, while the average commercial enterprise created only .44 jobs at a much higher cost of $7,800. (All jobs have been converted into full-time job equivalents.)

TABLE III.1

Survey Results
Number of New Jobs Created by UDF Loans[1]
(n = 84)

	Industry (n=33)			Commerce (n=25)			Service (n=26)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Owner	2	1.5	3.5	1	0	1	2.5	(1)	1.5
Family Members	15.5	6.75	22.25	2.25	4.75	7.00	1	2	3
Salaried Workers	23.5	17	40.5	0	3	3	20.5	2.6	23.1
Part Time[1]	.5	2	2.2	0	0	0	5.5	.5	6
Total	41.5	27.25	68.75	3.25	7.75	11	30	4.6	34.6
Average New Jobs Per Firm	1.26	.73	1.99	.13	.31	.44	1.15	.18	1.33
US$ Loan Per Firm			3,978			3,482			5,915
US $ per job			1,999			7,777			4,447

Note: 1) in full-time job equivalents

This cost per job compares favorably with the investment cost of creating a job within large Peruvian enterprises. The cost of creating a job within the modern Peruvian industrial sector has been estimated at approximately $36,500 the average economywide cost is estimated at about $22,000.[1] Comparisons with the modern industrial sector, however, must take into account that many of the jobs created by UDF borrowers went to family members that may be underemployed in their current capacity.

Survey results also compare favorably with the cost of creating a job in the SSE sector - both within Peru and abroad. In 1981 the Ministry of Industries estimated that the cost of creating a job within a new SSE was $2,015 but jumped to $13,100 when an investment was financed within an existing SSE -- the bulk of UDF borrowers. The fixed asset cost of creating jobs among small enterprises in Columbia and Mexico is $3,000 and $3,700, respectively, in 1978.[2]

Large percentages of the new jobs in industry and commerce (40 percent and 64 percent, respectively) went to family members. Services were more prone to hiring those outside the family (only 9 percent of new jobs went to family members). Although commerce did not account for many new jobs in absolute terms, it did have the highest proportion of new jobs for women (70 percent). Industry followed, with about 40 percent of new jobs being taken by women, while services -- dominated by automobile repair stations, printing shops, and restaurants -- employed relatively few new women (13 percent).

Extrapolating these results to the entire $13-million loan fund (reflows not included), the project should create about 5,400 new jobs of which 40 percent will be held by women. Since industries are expected to receive 75 percent of the loan funds and have a higher job creation per loan dollar ratio than other

sectors, the small-scale industrial sector will account for the bulk of new jobs (4,877) with commerce and services generating 284 and 234 jobs, respectively.

If reflows into the loan fund are included under best-case assumptions then about 9,000 jobs will be created by the project by 1989. Assuming a 120 percent inflation rate, an 85 percent effective interest rate and a 10 percent default rate on disbursements, total loans disbursed to industry, commerce and services are expected to be $16,315,000, $3,698,000 and $1,740,000, respectively. Given the cost per job calculated through survey results ($1,999, $7,777, and $4,447 per sector), industries, commerce, and services can be expected to generate about 8,162, 476 and 391 jobs, respectively or a total of 9,029 new jobs. Under less optimistic assumptions, about 6,300 jobs would be created. Assuming a 200 percent inflation rate, 120 percent effective yield, and 30 percent default rate on disbursements, total loans disbursed to industry, commerce and services is expected to be $11,374,000 $2,578,000, and $1,213,000. Using the job creation to loan dollar ratio calculated from survey results, industries, commerce, and services, would generate 5,690, 331, and 273 jobs, respectively.

These figures compare favorably with projections made in the Project Paper. It was anticipated at that time that the UDF would create about 3,570 new jobs.

These results indicate that if employment generation is a prime consideration of future project designs, the participation of commercial enterprises should be minimized. Loan funds to commerce will help to sustain jobs but not have a noticeable impact upon new job creation.

The survey team did not attempt to estimate salaries paid to owners and family members. Often, these salaries vary tremendously with cash on hand and are figures subject to great distor-

tion. In terms of income to outside employees, survey results indicate that salaries to employees of commercial enterprises declined in real terms (see Table III.2). Interviews with some small traders indicated that they had substituted family members for outside employees to cut costs. Another explanation is that wages simply did not keep pace with inflation for those employed by commerces -- many of which are having financial difficulties.

The $13-million loan fund should generate about $1.6 million in new salary payments (see Table III.2). However, many of the new employees receiving salaries would have been otherwise employed. The demand for skilled mechanics, for example, is very high. But, many unskilled laborers probably have few alternatives; some might have been otherwise unemployed. Based upon interviews with surveyed clients and unemployment statistics for the pueblos jovenes, the evaluation team estimates that about 50 percent of salaries represent a net economic gain to society -- or about $800,000.

VALUE ADDED

Definition

The sum of the value added generated by all Peru's productive units roughly constitutes Peru's gross domestic product. Thus value added generated by this project is an important measure of its contribution to national growth. Value added is defined as the value of a firm's output minus the value of externally purchased inputs. What remains is the return to the firm's factors of production -- capital, labor, and land.

Direct Value Added

Value added of surveyed enterprises was defined as sales minus the cost of their raw material inputs, supplies, and fuel (electricity, gasoline, gas). It therefore equals income to the owner and employees plus interest payments, rent, depreciation,

TABLE III.2

NET CHANGE IN SALARY PAYMENTS MADE BY ASSISTED FIRMS
(in US. dollars)

	Net Change Per Firm	Average Size of Loan	Salary/ Size of Loan	Salaries Generated by $13 million Loan Fund in '000s of dollars
Industry	808	3,978	.20	1,980
Commerce	(652)	3,422	(.19)	(421)
Service	310	5,915	.05	55
Total	-	-	-	1,614

Exchange rate January 1985 = S.6000 = US $1.00

and taxes. Given this definition, certain sectors are naturally high in value added. Services which have few inputs purchased outside the firm traditionally generate high value added, while commerce is a typically low source.

Survey results in Table III.3 show that industry generated the greatest amount of value added per sol loaned; each sol to industry generated 1.49 soles of value added followed by 1.40 soles to commerce and 1.44 soles to services. (Calculated by subtracting preloan value added in constant terms from current value added for each firm for which information was available from both periods, not excluding any outliers. Value added for commerce did not increase on an annual compounded basis, as discussed in Chapter Two, because large outliers had been eliminated.)

Extrapolating these results roughly to the $13-million loan portfolio (of which $9,750,000, $2,210,000, and $1,040,000 are expected to go to industry, commerce, and services, respectively) means that approximately $19 million in value added should be generated by assisted enterprises.

Under the favorable assumptions used for the maximum case of the benefit-cost analysis discussed at the conclusion of this chapter, the project is expected to generate about $42 million in net value added by 1989. Under minimum case assumptions (outlined in the section on benefit-cost), the project will generate about $15 million in value added.

Indirect Value Added

Indirect value added refers to the net change in value added from backward and forward linkages to assisted SSEs. Backward linkages refer to the new value added created by firms supplying the purchased inputs of assisted firms. Forward linkages include the net value added generated by enterprises purchasing assisted

TABLE III.3

VALUE ADDED SURVEY RESULTS AND CRUDE EXTRAPOLATIONS
(in US Dollars)

Sector	Average Change per Firm	Average Size of Loan per Firm	Value Added/Loan	Value Added Generated by $13 million Loan Fund	Maximum Case	Minimum Case
				(in '000s of US$)		
Industry	5,917	3,978	1.49	14,528	33,362	27,174
Commerce	4,800	3,422	1.40	3,094	5,013	1,780
Service	8,514	5,915	1.44	1,498	3,340	2,471
TOTAL	-	-	-	-	41,715	31,426

Exchange rate January 1985: S.6000 = U.S. $1.00

firms' output. Since the vast majority of firms sold directly to the public, the project did not generate any significant forward linkages to other firms.

The survey team did not have sufficient time to quantify changes among assisted firms' input suppliers. The idle capacity demonstrated by assisted firms, however, provides a strong argument that their increased raw material purchases did generate indirect benefits.

Table III.4 shows that loans had their strongest effect on the raw material purchases of commercial firms, reflecting the fact that 80 percent of loans to commercial enterprises were for working capital to build up stock. Each loan dollar to commerce generated $4.39 of goods purchased; in industry and services the ratios were 3.08 and 1.77, respectively.

To estimate the backward value added, raw material purchases made by commercial firms have been excluded since it is unlikely that traders caused a net increase in their suppliers' value added. If UDF-assisted neighborhood grocery stores had not bought their suppliers' products (basic commodities, cigarettes, carbonated beverages), other stores would have purchased these goods. The enormous competition in this field suggests that wholesalers would have made these sales in any case. The total amount of new raw material purchases made by firms aided by the project, excluding commercial enterprises and extrapolating from the $13 million loan fund, is about $32 million. Although this figure represents the net change in sales to raw material suppliers rather than net change in value added, it may be justified to include this entire sum if the ratchet effect is assumed, that is, the process of creating value added continues ad infinitum, with the sum close to $32 million.

TABLE III.4

INDIRECT VALUE ADDED SURVEY RESULTS
AND CRUDE EXTRAPOLATIONS
(in U.S. dollars)

Sector	Net Increase in Raw Materials Purchases	Average Size of Loan per Firm	Increase/ Loan	Raw Material Purchases Generated by $13 million Loan Fund (in '000s of US$)	Raw Material Purchases Generated by Maximum Case (in '000s of US$)
Industry	12,246	3,978	3.08	30,030	34,363
Commerce	15,008	3,422	4.39	-	0
Service	10,484	5,915	1.77	1,843	2,054
Total	-	-	-	31,873	36,417

A more conservative assumption would be that some suppliers were operating at capacity. Additional purchases from assisted firms do not, in this case, result in net increases in value added. A more cautious approach, thus, would discount the indirect value added by 50 percent. Under this approach, the $13-million loan fund would generate about $16 million.

The maximum case presented in the UDF benefit-cost analysis assumed that only 50 percent of increased raw material purchases during 1982-1989 resulted in net additions to indirect value added. The other major assumption of the maximum case (aside from standard maximum case assumptions on loan disbursements, cited under employment generation) was that benefits would continue for three years after loan disbursal (for specifics see benefit-cost section). Under the maximum case assumptions, about $36.4 million in indirect value added will be generated by the project.

The minimum case assumes that the project will not generate any increases in indirect value added, that is, suppliers did not increase their value added because of increased purchases from UDF firms; suppliers would have sold their output to others instead.

FOREIGN EXCHANGE EFFECT

The UDF project has had a negligible effect on foreign exchange earnings and costs to the Peruvian economy. Only two of the 84 sampled firms sold more than 50 percent of their goods to tourists, thereby earning foreign exchange. Both were involved in handicraft production. An additional eight firms said that they sold less than 10 percent of their goods to tourists or for export.

Firms were not competing directly with imported goods, but rather with larger, domestic firms. Thus the import substitution effect of the project was considered to be extremely low, and was not taken into account.

CONSUMER BENEFITS

The effect of the UDF project has been to expand the number of services and variety of goods available in pueblo joven areas. Thus a major intangible benefit to consumers has been to increase the convenience of their shopping and the supply of goods. However, given the large number of enterprises involved in these activities in large cities relative to the small size of the loan fund, this project has not resulted in lowering prices to consumers. Price changes were due to larger macroeconomic forces at work, and have not been included as project benefits.

Many of the major basic commodities sold by trading establishments are price controlled. Thus loans often are used to purchase goods, which are then hoarded until the official price increases. This practice has few economic benefits to society.

Gaining significant consumer benefits, such as consumer surplus, would be more likely if loan funds were destined for rural enterprises. Loan funds in such cases could increase competition among firms and perhaps result in lower prices.

BENEFIT-COST ANALYSIS

Two benefit-cost analyses were conducted for this project: a maximum case that adopted rather favorable assumptions, and a minimum case that used more stringent assumptions. Since neither adopted wildly optimistic or pessimistic assumptions they reflect two poles along a moderate course.

The major assumptions for both cases follow.

- Survey results of project impact are valid representatives of the entire loan portfolio;

- Impact is due to the loan and not exogenous factors;

- The future distribution of total loan funds by sector will approximate past performance;

- Administrative costs represent eight percent of the average yearly portfolio;

- Each loan to industries and services will generate direct and indirect value added benefits for three years after loan disbursal, rising and declining gradually according to the following assumptions:

  -- It will take six months before loan investments reach their full potential; thus, benefits will increase from 0 in month 0 to 100 percent of maximum benefits in month 6;

  -- One hundred percent of benefits will be realized during a nine-month period (between month 6 and 15);

  -- Benefits will decrease from 100 percent to 50 percent of maximum benefits during the next 6-month period (between month 15 and 21);

  -- Fifty percent of maximum benefits will be enjoyed for 9-months (month 21 to 30);

  -- Benefits will decrease from 50 percent to zero in a linear fashion during the final six months of benefits (month 30 to 36);

  Benefit ratios were then calculated for each year -- based on the average length of time that had elapsed since loan disbursal to the sampled group and applied to projected disbursements;

- Each loan to commercial enterprises will generate direct value added for two years, evenly divided between the two years (since turnover is substantially quicker than that among industries and services), with no indirect value added;

- Calculations were based upon average loan disbursements and treated as though they all had been disbursed in mid-year; thus benefits for loans disbursed in 1985 continue through 1988.

In addition, the maximum case has the following assumptions.

- Inflation will increase by 120 percent per year, the effective yield on loans will be 85 percent, and bad debts will constitute 10 percent of yearly disbursements;
- Reflecting the above assumptions and the average loan period that had elapsed at the time of the survey, direct value added generated by industries is .27, 1.05, .65, and .31 of the loan amount each year over four years. Only 50 percent of indirect value added calculated on the basis of survey results is included. Indirect value added is .28, 1.09, .67 and, .32 of loan value over four years;
- Direct value added generated by commercial enterprises is .70 of loan value during the first year and .70 during the second year after loan disbursal. No indirect value added was generated by commercial enterprises;
- Direct value added generated by services is .26, 1.02, .56, and .30 of the loan amount each year over four years. Indirect value added is .16, .63, .34, .18 over four years;
- The opportunity cost of owners' and family members' salaries is about 50 percent of the minimum wage (about S.220,000 or $37 per month);
- The opportunity cost of salaried labor is 50 percent of new salary costs generated by loans.

As shown in Table III.5, these rather optimistic assumptions result in an extremely high 4.1 benefit-cost ratio and net present value of $32 million using a 15 percent discount factor. Benefits are still impressive with a 20 percent discount factor.

Minimum case assumptions are the following.

- An inflation rate of 200 percent, 120 percent effective yield on loans, and a 30 percent default rate on new loan disbursements;
- Only 50 percent of maximum case value added for commercial enterprises is included; and
- No indirect value added is generated by any sector.

BENEFIT-COST ANALYSIS OF THE UDF PROJECT: MAXIMUM CASE
(in US dollars)

	10/82-12/83	1984	1985	1986	1987	1988	1989	SUM
BENEFITS								
DIRECT VALUE ADDED								
INDUSTRY	378.56	2293.56	5365.65	8168.17	7836.87	5600.11	3719.09	33362.01
COMMERCE	221.17	703.75	1216.66	1255.52	776.51	462.63	377.00	5013.24
SERVICE	39.08	236.76	543.49	820.49	774.48	553.55	371.92	3339.76
SUM	638.81	3234.06	7125.80	10244.18	9387.86	6616.28	4468.01	41715.01
INDIRECT VALUE ADDED								
INDUSTRY	389.92	2362.36	5526.62	8413.22	8071.98	5768.11	3830.67	34362.87
COMMERCE	.00	.00	.00	.00	.00	.00	.00	.00
SERVICE	24.03	145.60	334.25	504.60	476.30	340.43	228.73	2053.96
SUM	413.95	2507.97	5860.87	8917.82	8548.28	6108.54	4059.40	36416.82
TOTAL BENEFITS	1052.76	5742.03	12986.67	19162.00	17936.14	12724.82	8527.41	
COSTS								
FIXED ASSETS								
INDUSTRY	665.02	1452.28	2208.75	1570.59	767.25	625.25	509.51	
COMMERCE	24.60	53.72	81.70	58.09	28.38	23.13	18.85	
SERVICE	85.33	186.35	283.41	201.53	98.45	80.23	65.38	
SALARIES								
OPP COST OF OWNER								
INDUSTRY	8.08	33.82	78.02	123.32	150.78	167.02	180.48	
COMMERCE	.81	3.39	7.94	12.56	15.51	17.28	18.70	
SERVICE	.32	1.35	3.38	5.26	6.72	7.62	61.87	
OPP COST OF FAMILY								
INDUSTRY	15.58	65.19	150.42	237.76	290.69	322.00	347.94	
COMMERCE	1.70	7.12	16.67	26.38	32.57	36.29	39.27	
SERVICE	.19	.81	2.03	3.15	4.03	4.57	37.11	
OPP COST OF LABOR								
INDUSTRY	25.74	155.96	364.86	555.44	532.91	380.81	252.90	
SERVICES	.70	4.26	9.78	14.77	13.94	9.96	6.69	
SUBTOTAL SALARIES	53.14	271.90	633.10	979.64	1047.14	945.56	944.97	
BIP ADMINISTRATION	74.20	238.26	531.66	631.72	453.52	325.24	233.24	
SUBBORROWER TECH. ASS'T, VEHICLES COMPUTERS, TRIPS, ETC.	134.31	340.00	340.00	75.00	75.00	75.00	75.00	
TOTAL COSTS	1036.59	2542.51	4078.61	3515.56	2469.74	2074.40	1846.93	
NET ANNUAL BENEFIT	16.17	3199.52	8908.06	15646.44	15466.40	10650.42	6680.48	

BENEFIT/COST @ 15%	4.10
NET PRESENT VALUE	32041.90
BENEFIT/COST @20%	3.99
NET PRESENT VALUE	26582.84

Even under these stringent assumptions, the project is estimated to have a benefit-cost ratio of 2.2 and a net present value of about $10 million, using a 15 percent discount rate (see Table III.6). The benefit-cost ratio is only slightly lower when a 20 percent discount factor is applied.

Although these economic statistics are impressive, they should not overshadow the financial analysis results. A firm verging on bankruptcy and unable to meet high loan repayment expenses may still, from an economic point of view, generate healthy benefits. Once the enterprise is dead, however, the economic benefits end. Thus this economic analysis should not create a sense of complacency; firms that are in financial danger will jeopardize future project benefits.

NOTES

1 Peru, Major Development Policy Issues and Recommendations, International Bank for Reconstruction and Development, June 1981, p.30.

2 Employment and Development of Small Enterprises, Sector Policy Paper, International Bank for Reconstruction and Development, February 1978, p. 64.

TABLE III.6 BENEFIT-COST ANALYSIS OF THE UDF PROJECT: MINIMUM CASE
(in US dollars)

	10/82-12/83	1984	1985	1986	1987	1988	1989	SUm
BENEFITS								
DIRECT VALUE ADDED								
INDUSTRY	378.56	3058.07	6799.98	6750.38	5445.40	3166.50	1575.25	27174.15
COMMERCE	110.37	351.41	530.16	436.56	201.46	90.18	60.34	1780.47
SERVICE	39.08	236.76	516.07	674.14	534.90	312.99	157.52	2471.45
SUM	528.01	3646.24	7846.21	7861.08	6181.76	3569.67	1793.11	31426.08
INDIRECT VALUE ADDED								
INDUSTRY	.00	.00	.00	.00	.00	.00	.00	
COMMERCE	.00	.00	.00	.00	.00	.00	.00	
SERVICE	.00	.00	.00	.00	.00	.00	.00	
SUM	.00	.00	.00	.00	.00	.00	.00	
TOTAL BENEFITS	528.01	3646.24	7846.21	7861.08	6181.76	3569.67	1793.11	
COSTS								
FIXED ASSETS								
INDUSTRY	665.02	1452.28	1742.05	888.31	325.53	217.80	145.73	
COMMERCE	24.60	53.72	64.43	32.86	12.04	8.06	5.39	
SERVICE	85.33	186.35	223.53	113.98	41.77	27.95	18.70	
SALARIES								
OPP COST OF OWNER								
INDUSTRY	8.08	33.82	72.35	103.69	117.68	123.90	128.18	
COMMERCE	.81	3.39	7.36	10.59	12.15	12.85	13.31	
SERVICE	.32	1.35	3.12	4.48	5.32	5.72	43.94	
OPP COST OF FAMILY								
INDUSTRY	15.58	65.19	139.48	199.90	226.88	238.87	247.12	
COMMERCE	1.70	7.12	15.45	22.24	25.51	26.99	27.95	
SERVICE	.19	.81	1.87	2.69	3.19	3.43	26.36	
OPP COST OF LABOR								
INDUSTRY	25.74	207.95	462.40	459.03	370.29	215.32	107.12	
SERVICES	.70	4.26	9.29	12.13	9.63	5.63	2.84	
SUBTOTAL SALARIES	53.14	323.89	711.32	814.74	770.66	632.72	596.81	
BIP ADMINISTRATION	74.20	238.26	468.42	485.24	301.92	202.00	135.12	
SUBBORROWER TECHNI ASS'T, VEHICLES COMPUTERS, TRIPS, ETC.	134.31	340.00	340.00	75.00	75.00	75.00	75.00	
TOTAL COSTS	1036.59	2594.50	3549.75	2410.13	1526.92	1163.53	976.74	
NET ANNUAL BENEFIT	-508.58	1051.74	4296.46	5450.95	4654.84	2406.14	816.37	

BENEFIT/COST @ 15%	2.21
NET PRESENT VALUE	9956.04
BENEFIT/COST @20%	2.16
NET PRESENT VALUE	8326.00

CHAPTER FOUR

FUTURE PROJECT INITIATIVES FOR AID/PERU

OVERVIEW

Results of the UDF evaluation have been used to identify three possible project initiatives. They include a small enterprise lending project throughout Peru, an informal sector assistance project, and a policy analysis project involving both studies and a policy dialogue to analyze and address problems facing the small- and medium-scale private enterprise sector.

The following sketches of potential project designs are based upon a cursory examination of relevant issues. Each requires further in-depth analysis before any action is taken by AID/Peru. Each description, thus, concludes with suggestions for the scope of work of follow-up studies and the required qualifications of appropriate analysts.

PERUVIAN ENTERPRISE DEVELOPMENT FUND

Rationale

Exclusive reliance upon Peru's traditional sectors -- agriculture and mining - will not, in the short term, generate sufficient growth and jobs required by the economy. The experience and potential of the rest of the industrial sector is mixed. Inefficient public enterprises continue to absorb resources from government coffers, employing large numbers at low efficiency levels. The private industrial sector is recovering from the crippling blow dealt by the 1983 recession; AID/Peru's $60-million FRI project is dedicated to reactivating these larger enterprises. Perhaps the most vibrant part of the economy is the small enterprise sector. Peruvian SSEs, as a whole, have proven to be more resilient than their larger counterparts during

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economic recession. They generate direct income and employment at low investment costs and improve the standard of living of lower income groups.

During the past decade, AID has financed innovative small enterprise development projects with impressive results. Evaluations of AID's Rural Development Fund (1974-1982) and the Urban Development Fund (1982-1985) have demonstrated that these projects:

- Introduced and institutionalized small enterprise lending programs within BIP;
- Contributed to a decentralization of BIP procedures, increasing the efficiency of overall bank operations;
- Created an internal commitment and capability to manage future small enterprise projects;
- Generated significant increases, on average, in value added of assisted enterprises and income to owners; and
- Created a relatively large number of new jobs at low investment cost.

Highly negative effective interest rates, however, have caused the rapid decapitalization of both funds. Few resources remain within the RDF and the $13-million UDF portfolio is expected to dwindle to $4.6 million by 1989, using conservative estimates (see section on financial performance). The IBRD-financed PROPEM project does not fill this gap since it services larger enterprises, with an average loan size of about $50,000. According to survey results, the average loan size for the UDF, in comparison, is about $3,500.

Demand for credit among SSEs remains strong. Currently, credit-worthy borrowers can be categorized into three groups:

- New borrowers seeking loans within regions where RDF funds are now depleted;

- Past RDF borrowers that were introduced into the formal financial sector through these AID programs, expanded and, thereby, acquired a need for additional financing; and

- Small enterprises located in areas not covered by either the RDF or UDF funds, for example, Arequipa city, or nonpueblo joven areas of UDF coastal cities.

As the UDF portfolio dwindles in real terms, this group will be enlarged by new and existing SSE borrowers seeking new credit.

Given this scenerio, the DAI evaluation team strongly recommends that AID/Peru consider funding a new project that would provide credit to small enterprises throughout Peru. The need is immediate, demand is high, and positive economic impact is expected to be significant.

Project Goal and Purpose

The goal of a future nationwide small enterprise lending project should be to increase the productivity, income, and employment of assisted enterprises. The project purpose should be the institutionalization of efficient small enterprise lending programs within selected development banks, financieras and/or commercial banks throughout Peru.

Target Group

Small enterprises located in disadvantaged areas throughout Peru that lack access to alternative formal credit sources should be eligible to receive loans. To maximize the economic impact of scarce loan resources, the project should focus on enterprises that:

- Use loans to increase the productivity of existing assets or purchase new equipment to expand production when sufficient demand exists;

- Demonstrate strong backward and/or forward linkages within the economy; and

- Have high direct and indirect employment generation potential.

Priority sectors might include cottage industries (artisans as well), small-scale industry, agroindustry, fishing, services, and commercial enterprises located in rural areas. UDF evaluation findings suggest that if employment generation is to be a major objective, the new project should exclude urban grocery stores; such loans were found to produce few economic benefits to society.

Suggestions for Project Design

Discount Facility

The evaluation team considered two possible options for project implementation. The first was to establish a discount facility within an existing financial institution to onlend to intermediary credit institutions. The second alternative was to provide funds directly to ICIs.

The advantage of working through a discount window serving a variety of ICIs is that funds are allocated according to demand. The discount fund can provide a centralized management of funds and enable AID/Peru to deal with only one institution rather than several. The disadvantage of establishing a discount window is that, unless ICIs advance their own funds and do not wait for refinancing, lengthy delays may be encountered before loan disbursal. Another consideration is that the relationship between Peruvian wholesale and retail fund outlets has been conflict-ridden in other projects. However, the team was not able to identify a suitable legal mechanism and efficient administrative system whereby AID/Peru could work directly with ICIs. AID/Peru may wish to explore this option in-depth if it appears feasible. This section will outline a possible design for the first option.

The two obvious candidates to serve as the discount facility are the BIP and COFIDE. Further in-depth analysis is required to determine which would be the most appropriate institution. BIP's experience with the FRI project indicates that the wholesale banking institution should not also serve as the retail outlet for subloans. Setting up an autonomous unit that does not owe primary allegiance to its home base is easier in theory than practice. The discount unit staff may be pressured into granting preference to refinancing requests presented by members of the same institution, to the annoyance and detriment of other retail outlets.

The discount unit should be established as a separate unit within either BIP, COFIDE or directly within BCR dedicated to promoting the use of SSE funds among ICIs. About 80-90 percent of each subloan could be discounted, depending on the results of further analysis, so that ICIs would also commit some of their own funds to the project. Short and/or long-term technical assistance to the discount unit may also be required.

A discount mechanism for small enterprise loans of RDF/UDF size can only work well if refinancing requests are efficiently processed and disbursed. Personnel within the discount fund need not study in detail the credit worthiness of each subloan; lending institutions merely would send a list of approved subloans that included data conformity to project criteria (location, sector, size, and type of loan). Personnel from the discount fund could make periodic verifications of ICIs and checks with subborrowers to verify this information and determine whether subloans contribute to achieving project goals.

Intermediary Credit Institutions

Ten years ago AID established a project that transformed the IDB from a lender to only medium and large enterprises into the sole institutional source of very small enterprise loans in Peru. This project should attempt to broaden the range of institutions

offering small enterprise loans. Potential ICIs should include development banks, financieras, and commercial banks. Since the last two groups may have to be enticed to lend to this new clientele, the project will have to offer appropriate incentives to induce their participation. In particular, it will have to attempt to change these institutions' lending approval criteria from exclusively relying upon collateral to analysis of subproject viability and debt repayment capacity.

The principal objections that ICIs may have to SSE lending projects of the UDF scale is that they entail heavy administrative costs and excessive risk. The spread offered to ICIs, thus, must at a minimum cover estimated administrative costs. Risk aversion can be overcome by either of two mechanisms:

- The establishment of an autonomous loan guarantee mechanism that partially covers ICI risk; or
- Increasing the return on loans to ICIs.

The advantage of a loan guarantee fund that holds ICIs' confidence is that it will reduce their risk to acceptable levels. However, it would also add yet another layer in the loan approval process and thereby delay loan disbursement. The loan guarantee institution currently charged with guaranteeing small enterprise loans, FOGAPI, may require restructuring to serve as an efficient and self-sustaining guarantee fund.

The second option, that of increasing the spread to ICIs, has the advantage of eliminating a third party in the loan approval process. An in-depth study would be needed to determine the likely default rate, based on similar programs, as well as ICIs' risk and return expectations. It is at this point still unknown whether a generous spread can overcome ICIs' qualms about SSE lending.

Size of Credit Fund and Length of Project

Demand for small enterprise loans is expected to be high if a nationwide program is launched. The evaluation team estimates that this project could easily absorb $15-20 million. However, a demand analysis is needed to determine what actual demand for credit may be at different subloan interest rate levels.

Given the innovative nature of this project and the desire to change commercial bank lending procedures, this project may be expected to have a slow start until efficient administrative systems are in place. The RDF evaluation revealed, for example, that BIP did not begin to promote its rural small enterprise line actively until two years after project initiation. Lessons learned during the early years were critical for project success during the later project years. Thus, this project should have at minimum a five-year time frame to ensure that institutional capacity will have sufficient time to develop.

Technical Assistance

RDF/UDF experience has shown that implementing institutions are reluctant to accept short- and long-term technical assistance. The evaluation team strongly recommends, however, that such technical assistance be a non-negotiable, important part of project design. To ensure that technical assistance will actually be used, AID/Peru may require that such contracts be a part of the conditions precedent to the loan.

If BIP is selected to be the discount window (thereby preventing it from disbursing loans directly to subborrowers), then technical assistance should be provided to assist the establishment of an efficient project management unit. This unit will require the presence of long-term technical assistance.

If BIP is one of the ICIs, then long-term technical assistance will be required to:

- Change its focus from loan disbursement to collection;
- Improve the efficiency of its loan processing and loan disbursement operations; and
- Strengthen its internal audit function.

Technical assistance to other participating ICIs should also be included. One purpose would be to help commercial lending institutions improve project appraisal techniques as applied to SSEs.

Also technical assistance should be carefully structured to meet subborrower needs. Rather than have the discount institution or ICIs provide this assistance, AID/Peru may want to consider contracting these services to institutions that dedicate themselves to providing technical assistance to SSEs. The effectiveness of this assistance depends not only on the subject matter but also on the ability to communicate effectively with subborrowers.

Subloan description

The following recommendations are based upon results of the RDF and UDF evaluations and require further analysis.

Loan size: To maximize the number of SSEs that can be reached through this project and yet meet their credit needs, the evaluation team estimates that the maximum loan size should possibly be $100,000.

Interest rates: To prevent decapitalization of the loan fund and ensure efficient use of loan resources, AID/Peru may choose to index interest on loans over a certain size ($15,000, for example). The indexation method proposed in the UDF Project

Paper could serve as a model for this project. Indexation is preferable for subborrowers to the method of discounting interest to increase the effective interest rate since it allows borrowers to make lower payments during the early loan years when enterprise revenues may be weakest. AID/Peru should expect strong resistance to this idea, however, and must be prepared to remain firm. Otherwise, this nationwide SSE fund, too, will evaporate within a few years.

To introduce this concept slowly, loans under a certain size might be handled according to current practices. AID/Peru should insist, however, that such loans be charged the maximum BCR rates plus administrative fees. Interest should be collected according to current discounting methods to increase the effective interest rate. Lending institutions should have legal agreements with subborrowers that allow them to increase their rates throughout the life of each loan according to BCR levels.

Loan term: The RDF/UDF experience suggests that loans should be from one to six years.

Loan Purpose: The UDF evaluation indicates that almost all enterprises are working seriously below capacity levels. Although lack of sufficient demand is the cause among certain glutted activities (bakeries and shoemakers, for example), in many cases this is due to insufficient working capital. This project, thus, should provide:

- Permanent working-capital loans to expand production, to enhance capacity utilization, and to repair old equipment and purchase spare parts; and
- Long-term investment loans to purchase used and new equipment for enterprises that demonstrate strong demand for their products.

Grace period: A grace period on loans should be offered, as considered appropriate by the lending institution.

Pre-Project Implementation Document Studies

All the suggestions offered above should be subject to careful scrutiny. Initially, a three-person team should analyze the adminstrative and financial capability of potential discount mechanisms, BIP, and COFIDE; the interest and capability of *financieras* and commercial banks to participate in the project; and the demand for credit among different SSE sectors and locations. These studies should be an integral part of the initial project design and would require about five calendar weeks each.

Financial and Administrative Analysis of Discount Mechanism

This study would review potential efficient project implementing mechanisms with the BCR, COFIDE, BIP, *financieras*, and commercial banks. This analysis would result in recommendations as to the appropriate channel for management of project funds and activities. The assigned analyst should also undertake a comprehensive analysis of the BCR, COFIDE, and BIP from an administrative as well as financial viewpoint and determine the appropriateness of using each as either a wholesale or a retail financial institution. The administrative analysis should review BIP's technical assistance needs and propose a plan to strengthen the institution.

The qualifications of the banking specialist should include wide-ranging banking experience, knowledge of discount mechanisms as applied to development programs, familiarity with commercial bank operations, and prior experience with small-scale enterprise development projects.

Analysis of Prospective ICIs

This analysis would review ICIs' interest in and capability to manage a small-scale enterprise lending portfolio. The analyst should identify which institutions show interest in the project,

their capability to provide loans to the target group given current procedures, and their expectations. The study should analyze carefully the spread required to overcome ICIs' risk aversion and shift to lending to SSEs. ICIs' technical assistance needs should also be identified. Finally, the analyst should investigate the idea of reorganizing FOGAPI or establishing a new guarantee fund to cover ICIs risk partially.

The study should be conducted by a second banker-financial analyst working in tandem with the first.

Economic Analysis

The third study required to prepare a project design is an analysis of SSEs' demand for credit at various rates of interest including real postive rates, and a determination of whether any sectors should be given priority or excluded. The economist should analyze existing secondary data and conduct a quick informal survey to identify the project's target group in terms of economic sector, geographic location, scale, and potential financial and economic benefits. This analysis should also review constraints restricting SSEs and identify credit purpose and size. These results should be extrapolated to give an idea of the demand for credit and loan fund size. Technical assistance needs and entrepreneurs' willingness to pay for such assistance should also be investigated. The analyst should be an economist experienced in designing SSE lending projects and analyzing SSE financial and economic performance.

INFORMAL SECTOR LENDING PROJECT

Description of the Informal Sector and Project Rationale

A broad definition of the informal sector includes commercial, service, and industrial enterprises that are not legally constituted. Peruvian informal sector enterprises operate in highly competitive markets and predominate in activities

characterized by easy entry with low capital start-up costs. Since they lack access to cheap, donor-financed loans and are not subject to legislated minimum wage, social security, and other employee benefits, they are typically highly labor intensive. Often, they produce cheap goods destined for the lower classes, thereby relying upon domestic inputs. Studies in other countries have shown that the informal sector often thrives during recessionary periods as consumers switch from imports and formal sector products to cheaper, sometimes inferior, goods produced by the informal sector. Strong linkages exist between formal and informal firms, with the latter often producing the most labor-intensive inputs used by the former.

The range of Peruvian informal sector enterprises is extremely diverse, as analyzed by the Institute for Liberty and Democracy (ILD). Informal sector enterprises range from vendors that wander through the streets selling products to fairly large-scale enterprises that assemble automobiles, trucks, motors, bicycles, mining equipment, ovens, and even instruments for the Peruvian Air Force.[1]

Informal sector enterprises rely upon personal savings and moneylenders to finance their ventures; the latter charge interest at about 30 percent per month, relying principally upon the character of the loan recipient. Since only about 10 percent of informal sector enterprises hold property title in Lima, they can offer few legally recognized guarantees. Moreover, lack of legal status also inhibits their ability to secure larger contracts.

Recent studies indicate that this sector is an extremely important part of Peru's urban economy. According to the ILD, the informal sector reportedly produces 65 percent of Lima's gross domestic product with heavy domination in certain activities. It accounts, reportedly, for about 65 percent of Lima construction. For example, during 1950-1982, the informal sector

constructed housing for 2.7 million people at a cost of U.S. $7.2 million -- about 20 times that constructed by the public sector. Informal sector enterprises were also responsible for building 196 public markets in Lima, providing infrastructure and security for those previously vending their goods in the street. They are said to produce 85 percent of Lima's clothing, about 74 percent of shoes, and 78 percent of furniture. In addition, 85 percent of bus transportation and 95 percent of total public transportation are claimed to be in informal sector hands. While government-managed bus service runs at a loss, those operated by the informal sector earn handsome profits.

The importance of this sector to urban centers, its vibrance in an economy characterized by lackluster performance during recent years and its high employment generation capacity make it an appropriate target for external assistance. AID/Peru has already recognized this fact by providing a grant to Accion Communitaria del Peru that provides small loans to informal sector activities. But, the need for assistance is much greater.

Project Options

Two basic project options exist. The first would focus upon changing policies and bureaucratic constraints that inhibit informal sector enterprises from becoming legal. It could also fund studies to determine the economic importance of the informal sector and on its specific needs. AID has already funded the ILD to work at this level. However, such policy changes are expected to take several years, particularly if they involve changes in formal sector employee benefit packages. Some assistance to this sector is needed until such changes are made.

The second project option would be to provide credit and appropriate technical assistance to the informal sector. This should be an experimental, pilot project that provides grant funds to the implementing institution to help draw up interest and develop its capabilities to deal with this sector in a flexible

way. The project should probably be no larger than $2 million at the outset and could be a component of the previous Peruvian Enterprise Development Fund described previously. After this type of project has gained acceptance and become institutionalized, future add-ons from AID/Peru, if appropriate, should be made on a loan basis.

AID has had significant experience in implementing these types of projects throughout the world. Since project experience has been mixed, a key prerequisite would be to incorporate lessons learned elsewhere as well as in Peru. An interesting successful model, for example, is the AID-funded Badan Kredit Kecamatan microenterprise lending project in Indonesia.

Project Goal and Purpose

The goal of an informal sector credit project should be to increase the productivity, income, and employment of assisted enterprises and induce their entry into the formal sector. The project purpose should be to identify a cost-effective method to provide credit and appropriate technical assistance to informal sector enterprises on a financially self-sustaining basis.

Informal Sector Credit Project Design

Potential Implementing Institutions

Three potential institutions might serve as an implementing institution for the project: the Banco Industrial del Peru, Accion Communitaria, and Empresas Administradoras para los Fondos Publicos. A superficial overview of these organizations indicates that each has distinct advantages and disadvantages that should be studied further.

Banco Industrial del Peru

Since BIP is the financial institution charged with lending to small enterprises, it is a logical possible implementing agency. Its large infrastructure of branches and staff located throughout Peru provides assurance that, if successful, the project could be replicated at a relatively low marginal cost. This project could be an important new part of BIP operations, similar to the effect the RDF project had 10 years ago. Lessons learned through the pilot project implied that changes in loan analysis, approval, disbursement, and collection procedures, for example, could improve bank efficiency in formal sector lending as well. Moreover, the stipulation of charging positive real interest rates could induce their adoption for other lines of credit. Indeed, this pilot project could be a part of the nationwide small enterprise lending project described in the previous section.

Working through BIP may also have several distinct limitations. First, it is unclear whether BIP management is truly interested in pursuing an informal sector lending project. Second, the bureaucratic procedures and loan criteria used for the RDF and UDF projects are inappropriate for an informal sector loan project. BIP would have to create an autonomous unit staffed by a manager familiar with lending to the informal sector and by banking professionals that believe in the concept. This unit should also be complemented by possibly two long-term technical assistance advisers who have worked in informal sector lending projects. Project staff should begin by reading evaluations done of informal sector lending projects and then visit similar projects in Peru and other parts of Latin America. The project should begin in one branch office on an experimental basis and then expand slowly based on successful implementation.

Accion Communitaria del Peru

By January 1985 ACP had provided 1,000 and 1,500 loans to microindustries and commercial operations, respectively. Loans range from about $13 (S.100,000) to a maximum of $1300 (S.10 million) per person. Charging real positive rates of interest, the commerce portfolio reportedly has a delinquency rate less than 1 percent (loans more than one week overdue including interest and principal) while the microindustry portfolio has a delinquency rate of about 20 percent (loans overdue by 60 days or more). Commerce loans are for an eight-week period and are payable weekly, while industry loans are for six months and are payable monthly. Borrowers must form solidarity groups composed of five borrowers that guarantee repayment of the loan. This method, successfully used by other informal sector lending projects elsewhere, cuts administrative costs and improves collection performance. Almost all loans are for working capital.

ACP's distinct advantage is that it has a demonstrated capability in this type of program and eagerly wishes to expand beyond the Lima area. The disadvantage of using this nonprofit organization is that the marginal cost of expanding the project to other areas is high because of a lack of existing infrastructure. Also, AID/Peru may not wish to create a parallel nonfinancial institution to compete with the formal financial lending sector, particularly one dependent upon grant funds. In any case, AID/Peru has already given a matching grant to ACP.

Rather than use ACP as the credit source for this pilot project, AID/Peru might consider using ACP staff and other outside consultants to provide technical assistance to subborrowers.

Empresas Administradoras para los Fondos Publicos

The evaluation team was unable to investigate the possibility of working with this institution. It has been constituted to work with the informal sector and reports to CONASEV in the Ministry of

Economy and Finance. It currently holds lotteries among informal sector enterprises to raise funds but is chartered to provide a variety of services including, reportedly, credit.

The advantage of this institution is that it is familiar with the informal sector. A strong disadvantage, however, is that it has no previous experience in such lending projects and concentrates on welfare-type activities.

Subborrower and Lending Group Characteristics

Because of the limited resources available, the evaluation team recommends that loans be restricted to productive enterprises. These enterprises have a greater potential to generate significant economic benefits, such as increased value added and employment, and loans to commercial enterprises will have a limited effect outside the entrepreneur's immediate family. Microenterprises should band together in groups (five-member groups as used by ACP) that have a legal and moral responsibility to repay loans. Group members would not necessarily have to be from the same sector, but they should be from the same community and know each other prior to the loan process.

Loan Application, Approval and Disbursement Process

The project must establish an efficient credit mechanism to attract informal sector entrepreneurs, which would involve using a simple loan application form for borrowers that cites their needs and available personal and enterprise assets (used more for psychological than actual collateral reasons). The depth of loan analysis would vary greatly with loan size; extremely small loans would not merit much analysis. Loan disbursement should occur quickly after loan application, which means that loan approval authority must be delegated entirely to the implementing branch office.

Interest Rates

Previous experience elsewhere has shown that informal enterprises are willing to pay high positive interest rates if transaction costs to borrowers are low. This means that loans must be disbursed quickly without much paperwork, the loan office must be conveniently located near borrowers, and repayment procedures should be fast and simple. If these requirements are met, then the informal sector lending project should charge interest rates adequate to cover inflation, defaults, and administrative costs. Although project funds would be in form of grant, revenues from interest collections should still be sufficient to cover salaries, other expenses and bad debts.

Loan Size

Other informal sector lending projects have indicated that a major factor behind high repayment rates is the expectation of receiving another, larger loan. Thus the lending agency might begin new groups with small loans to limit its risk and then graduate clients upwards. Although further study is needed, the evaluation team suggests a minimum loan size of $150 per person (or $750 per group) and a maximum loan size of $5000 per person (or $25,000 per group). Each group member should not necessarily receive an equal loan size.

Beyond a certain loan size or after having received two loans, group members might be required to enter the formal sector to continue receiving credit. This idea should be analyzed carefully prior to incorporation in the project design to determine whether loan terms would provide sufficient motivation to enter the formal sector, and not endanger loan repayment performance.

Loan Purpose

One comparative advantage of informal enterprises is their ingenious use of old equipment and the labor-intensive nature of their products. Loans should not be used to distort these characteristics. Thus loans should be available to repair equipment and to purchase motors, spare parts, and used equipment; new equipment loans should be encouraged only when appropriate. Working capital loans should form an important part of the portfolio.

Loan Term

Experience from other projects indicates that loans used exclusively for working capital should be for a maximum of one year. Loans that involve fixed assets (plus working capital) should have a maximum term of three years.

Technical Assistance to Subborrowers

Technical assistance projects to the informal sector are characterized by having having high cost-effectiveness ratios. Often, the technical assistance agency provides the assistance that its staff regards as necessary, and borrowers accept that assistance as an unavoidable intrusion they must bear to receive financing. After they have repaid their loans, the technical advice is usually ignored.

To avoid this common scenario, AID/Peru should investigate carefully the type of technical assistance that is needed on the spot by informal sector members. Technical assistance should not be mandatory to receive a loan and entrepreneurs should pay for such assistance. This will ensure that the technical assistance responds to client needs.

The agency administering the credit fund need not necessarily be the technical assistance provider. Indeed, it may be more efficient to keep these functions separate since distinct skills are required. Funds should be available to hire outside consultants to provide advice on production techniques or legal matters.

Some examples of potential technical assistance activities include:

- To facilitate group formation to secure loans;
- To assist group members to purchase raw materials in bulk and market their products in common;
- To provide advice on how to enter the formal sector;
- Explain how to analyze production costs and set prices; and,
- Analyze production problems and recommend appropriate technology;

Other Required Preproject Implementation Document Studies

Further analysis is required prior to project design. The two key components of a future study include an examination of the institutional mechanism to be used to implement the project and an analysis of constraints on informal sector enterprises and their demand for credit at positive real rates of interest.

Institutional Analysis and Credit Fund Design

This analysis would involve evaluating the administrative and financial capability of possible project implementing agencies and recommending the most appropriate vehicle. Then, the analyst assigned to this task should specify the key characteristics of the project unit needed to manage the project: how it should interact with its mother institution, the professional and administrative staff required to manage the loan portfolio,

long- and short-term technical assistance needs, and an estimate of the optimal portfolio size for pilot project given administrative constraints. The analyst should analyze what interest rate would be required to cover the project unit's administrative costs, loan defaults, and inflation. Finally, the analyst should identify a mechanism to provide technical assistance to subborrowers.

This analysis is expected to require five person-weeks and should be conducted by a credit specialist familiar with micro-enterprise lending projects.

Informal Sector Constraints and Demand for Credit

This study would involve an in-depth examination of constraints on the informal sector, and suggest which economic sectors should receive funds based upon their potential financial performance and economic impact. Informal sector demand for credit should be analyzed by loan amount, purpose, and ability to shoulder positive real interest rates. The cost of credit to the informal sector made available by moneylenders, raw material suppliers, and other sources should be analyzed, including transaction costs to borrowers. Prospective borrowers' willingness to form credit groups, their technical assistance needs, and an efficient technical assistance mechanism should be researched. Finally, the analyst should attempt to estimate the economic benefits -- value added, employment -- of this project. This study would require about five weeks from an economist familiar with informal sector policy issues and projects.

SMALL AND MEDIUM ENTEPRISE POLICY ANALYSIS PROJECT

Rationale

The emergence of a new government in mid-1985 provides an opportunity for AID/Peru to engage in a dialogue about the future role of private enterprise in Peru's economy. Given the high

employment potential and income benefits that small-scale enterprises generate to lower income groups, AID/Peru may wish to emphasize this part of its private sector strategy. Better information about the policy constraints inhibiting the performance of SSEs, however, is required prior to such a policy dialogue.

AID/Peru is in the midst of designing a private sector policy planning and institutional development project. The evaluation team recommends that a thorough analysis of the small enterprise sector -- formal and informal -- be included in the project. In addition, the Science and Technology Bureau of AID has recently begun a worldwide Employment and Enterprise Policy Analysis Project whose resources could be used to complement AID/Peru funding.

Project Description

It is recommended that the SSE analysis project have three components:

- Short-term studies to identify problems and counterpart agencies and to define a more in-depth research agenda;
- Long-term research on a few key issues conducted by economists located within the Peruvian policy analysis unit; and
- Academic training in the United States for Peruvians with potential to become involved in providing policy guidance.

The short-term studies should identify issues for further study but also provide guidance on specific issues critical to a policy dialogue with the Peruvian government. Examples include:

- The effect of trade policies on SSE growth;
- The economic costs and benefits of government pricing policies;

- The employment effect of providing subsidized credit to small and medium enterprises and the extent to which negative interest rates promote capital-intensive technology;
- The ability of SSE borrowers to shoulder positive real interest rates;
- The liquidity of Peruvian financial markets and attendant problems; and
- The effect of the industrial crisis on the health of financial institutions, particularly development banks;

The longer range studies should be carefully designed so that they respond to needs expressed by the GOP. This research effort should involve expatriate economists specialized in macroeconomic policies and their effect on small-scale enterprises. However, these outsiders should be carefully incorporated into a cadre of Peruvian economists, preferably working within a government policy unit rather than a university.

Experience has shown that the most effective, though long-range, means to influence policy is to be involved in long-term training of a country's future leaders and policy analysts. Results may not be felt for some time and are somewhat unpredicable, but this training has tangible results if structured carefully.

Further Project Design Studies

Analysis of this project idea could be incorporated within the Project Paper for AID/Peru's private sector policy planning and institutional development project. These issues should be examined by macroeconomic policy analysts, international trade economists, financial market specialists, microeconomists, small enterprise policy analysts, and labor economists. Approximately three to four weeks of each expert's time would be required to identify policy planning studies.

ANNEX 1

DEFLATOR INDEX

ANNEX 1

DEFLATOR INDEX(1)

(used to convert from nominal to constant Soles)

Base: 1.00 for January 1985

Multiplier :

Dec.	79	:	24.54	Aug.	83	:	2.78
Dec.	80	:	15.27	Sept.	83	:	2.61
June	81	:	10.95	Oct.	83	:	2.48
Dec.	81	:	8.84	Nov.	83	:	2.37
June	82	:	6.81	Dec.	83	:	2.27
July	82	:	6.53	Jan.	84	:	2.12
Aug.	82	:	6.25	Feb.	84	:	1.95
Sept.	82	:	5.97	Mar.	84	:	1.83
Oct.	82	:	5.58	Apr.	84	:	1.73
Nov.	82	:	5.34	May	84	:	1.63
Dec.	82	:	5.11	June	84	:	1.54
Jan.	83	:	4.75	July	84	:	1.47
Feb.	83	:	4.41	Aug.	84	:	1.37
Mar.	83	:	4.01	Sept.	84	:	1.30
Apr.	83	:	3.72	Oct.	84	:	1.23
May	83	:	3.53	Nov.	84	:	1.15
June	83	:	3.28	Dec.	84	:	1.07
July	83	:	3.03	Jan.	85	:	1.00

(1) Based on the Consumer Price Index as published monthly by the Banco Central de Reserva.

ANNEX 2

SURVEY QUESTIONNAIRE

Direccion:

No. del Cuestionario: _____
No. del Préstamo: _____
Nombre de la Empresa: _____

Fecha: _____
Por: _____
Otros: _____

ANNEX 2

SAMPLE OF QUESTIONNAIRE
USED FOR UDF SUBBORROWERS

I. INFORMACION SOBRE LA EMPRESA Y EL EMPRESARIO:

001 1. Sucursal:

1. Comas
2. San Juan de Miraflores
3. Callao
4. Trujillo
5. Chimbote
6. Chiclayo

002 2. Sector/Actividad

Industria y Artesanía

I1 Panaderías
I2 Carpinterías
I3 Confecciones
I4 Zapaterías
I5 Talleres Maquinas
I6 Fabric.Tejas
I7 Mueblería
I8 Fabrica Metallica
I9 Textiles
I10 Tallado de Piedras
I11 Velas y ceras
I12 Alfombras
I13 Joyería
I14 Tallados
I15 Construccion
I16 Otros _____

Servicios

S1 Talleres de mecánica
S2 Reparación radios
S3 Talleres de Impresión
S4 Hostales
S5 Talleres Bicicletas
S6 Restaurantes
S7 Sasterías
S8 Otros _____

Comercio

C1 Farmacias
C2 Bodegas
C3 Abarrotes
C4 Prod.Agrícolas
C5 Ferreterías
C6 Otros _____

Otra Actividad

O1 _____

003 3. Quien es el dueño de esta empresa?

1. Yo
2. Otro

004 4. En que año inició la empresa?

_____

005 5. Por qué se constituyó la empresa legalmente:

1. Para conseguir el préstamo del BIP
2. Para aprovechar otras ventajas del Gobierno
3. Otras razones _____

006 6. Para qué se usó el préstamo del Banco:

1. Para iniciar esta empresa
2. Para iniciar una nueva línea de productos (o servicios)
3. Para incrementar el nivel de producción

007 7. Qué hacía el dueño antes de tener este negocio?

1. Trabajaba en un negocio familiar
2. Tenía otro negocio
3. Trabajaba en otra empresa
4. Era agricultor
5. Otro _____

008 8. En caso de No. 4 (agricultor), era:

1. propietario de la tierra
2. arrendatario
3. obrero
4. otro _____

009

9. a. Cuántas personas viven en su casa (empresario incluído)? _____

010 i Cuántos son adultos? _____

011 ii Cuántos son menores? _____

012 10. De las personas que viven en su casa:

013 a. Cuántas trabajan? _____

014 b. Cuántas trabajan en su empresa? _____

c. Cuántas trabajan fuera? _____

015 11. Cuál es la fuente de ingresos más importante para su familia?

1. Esta empresa
2. Trabajo afuera
3. Igual

016 II. INFORMACION SOBRE LOS PRESTAMOS DEL BANCO INDUSTRIAL:

12. Cuántos préstamos recibió Ud. del Banco Industrial? _____

	Primero	Segundo	Tercero	Cuarto
13. Cual fue la fecha del desembolso	017	028	039	050
14. Cual fué la tasa de interes?	018	029	040	051
15. Para cuántos años fue el préstamo?	019	030	041	052
(período de gracia)	020	031	042	053
16. Cuánto fué el monto del préstamo? (total miles):	021	032	043	054
1. Activos Fijos?				
2. Capital de Trabajo.	022	033	044	055
3. Edificio	023	034	045	056
4. Intereses	024	035	046	057
5. Refinanciamiento de otro prestamo	025	036	047	058
6. Otro	026	037	048	059
7. TOTAL	027	038	049	060

061

17. Cuántas veces no ha podido pagar a tiempo sus amortizaciones (pagos) del préstamo BIP? _____

18. En caso de morosidad, cuáles son las causas de la mora?

062 19. Ha tenido que sacar Ud. un préstamo fuera del Banco para poder pagar al Banco Industrial.

1. Si 2. No

III. OTRAS FUENTES DE CREDITO

03] 20. Sin el (los) préstamo(s) del Banco Industrial, qué habría hecho?

1. Habría pedido un préstamo a otra fuente.
2. No habría hecho la nueva inversión.
3. Otro _____

04] 21. En caso de No. 1, cuál hubiera sido esta otra fuente?
1 Familia 3. Prestamista 5. Cooperativa
2. Otro Banco 4. Proveedores 6. Otros

22. Ha recibido un préstamo de: (en miles de soles)

Fuente	Año	Cuánto recibió?	Cuánto reembolsó?	Período del Préstamo (días)	Interés Efectivo	Ventajas de esta Fuente Ver Código
Familia	065	066		067	068	069
Otro Banco	070	071		072	073	074
Prestamista	075	076		077	078	079
Proveedores	080	081		082	083	084
Cooperativa	085	086		087	088	089
Otros	090	091		092	093	094

CODIGO:

1. Más cerca de su casa;
2. Más rápido
3. No se necesita documentos
4. Más tiempo para repagar
5. No tuve alternativa
6. Más barato

IV. CAPACIDAD DE PRODUCCION DEL ESTABLECIMIENTO

LLENAR EL CUADRO PARA INDUSTRIAS Y SERVICIOS:

23. Cuáles son sus principales líneas de producción?
24. Cuál es su producción en un día/mes normal?
25. En caso de fábrica:

Si pudiera vender todo lo que produce, cuánto podría producir al día (mes) con la maquinaria existente?

(23) Líneas de Producción	A (24) Producción Actual Unidades	B (25) Producción Capacidad	A%B
			095
			096
			097
			098

26. Cuáles son los problemas que restringen la producción de su empresa?

		1. Sí	2. No
a.	Hay falta de crédito?	099	
b.	Hay falta de capital de trabajo? (dinero)	100	
c.	Hay falta de materia prima?	101	
d.	Hay falta de repuestos?	102	
e.	Hay problemas técnicos con el equipo?	103	
f.	Hay falta de técnicos capacitados?	104	
g.	Hay problemas de infraestructura?	105	
h.	Hay problemas de transporte?	106	
i.	Hay falta de demanda?	107	
j.	Hay demasiada competencia?	108	
k.	Otras causas:		

108 _____

1. Descripción de los problemas: _____

V. DEMANDA DE ASISTENCIA TECNICA

27. Necesita Ud. asistencia técnica en:

		1. Sí	2. No	3. No aplicable
a.	Contabilidad	110		
b.	Mercadeo	111		
c.	Proceso de fabricación	112		
d.	Planificacion de nuevo inversion	114		
e.	Otro	114		

112

28. Podria Ud. analisar su situacion financiera? 115
1. Si 2. No

116

29. Pagaría Ud. por asistencia técnica? 116

1. Si
2. Una parte
3. No

VI. IMPACTO SOBRE EMPLEO

117

30. Cómo cambió el número de sus empleados a tiempo completo? 117
1. Disminuído 2. Quedado igual 3. Aumentado

118

31. En consecuencia del crédito del BIP? 118
1. Sí ____ 2. No ____ 3. No aplicable ____

119

32. Cómo cambió el número de sus empleados a tiempo partial? 119
1. Disminuído 2. Quedado igual 3. Aumentado

120

33. En consecuencia del crédito del BIP? 1. Sí ____ 2. No ____ 120
3. No aplicable ____

34. Número de empleados de su empresa:

	Dueño		Miembros de la Familia		- Asalariados		Trabajadores de Aprendizaje		Total	
	H	M	H	M	H	M	H	M	H	M
Actualmente	121	122	123	124	125	126	127	128	129	130
Al tiempo de solicitud										
Dif.	131	132	133	134	135	136	137	138	139	NO

1 = 1 año

35. Cuál es el salario que los nuevos empleados reciben por mes? 140 _____

36. Cuál fue el salario que ellos recibieron antes de trabajar para Ud?

1. Menos que ahora
2. Igual
3. Más

a. Monto 142 _____
b. Ano 143 _____

VII IMPACTO SOBRE INGRESO

37. Desde que Ud. recibió su préstamo del BIP, cómo cambió?

1. Disminuído
2. Quedado igual
3. Aumentado 4. N/A

En consequencia de su prestamo?

1. Si 3. No aplicable
2. No

		1. Disminuído / 2. Quedado igual / 3. Aumentado	En consequencia de su prestamo? 1. Si / 2. No
		144	145
a.	el volumen de materia prima	146	147
b.	la producción total	148	149
c.	la calidad del producto	150	151
d.	la variedad de sus productos	152	153
e.	el número de sus compradores	154	155
f.	la capacidad de utilización	156	157
g.	la competencia		

158 38. Si otro empresario quisiera empezar el mismo tipo de empresa en esta área, podría vender sus productos?

1. Sí _____ 2. No _____ 3. No sé _____

159 39. Podría Ud. vender más, si quisiera hacerlo?

1. Sí _____ 2. No _____ 3. No sé _____

160 40. Cual es el precio de su producto principal en este momento? _____

161 41. Cual era el precio del mismo producto en Julio 1984? (o otro fecha mas confiable) (Mes: _____

162 42. Cual es el precio de su insumo principal en este momento? _____

163 43. Cual era el precio del mismo insumo en Julio 1984? (o otro fecha mas confiable) (Mes: _____)

44. En el ultimo ano, ha comprado los siguentes articulos con sus propios recursos?

		1. Si	2. No
1.	Equipo para esta empresa	164	
2.	Equipo para otra empresa	165	
3.	Inversion en su casa (techo, cuarto, etc.)	166	
4.	Compra de televisión, refrigerador, radio)	167	
5.	Otro 168		

45. a. Cuál es el porcentaje de ventas que hace fuera del Perú o a turistas? 169

b. Cuál ~~es~~ fue el ~~valor~~ porcentaje de estas ventas? (mes) y año 170

al tiempo de solicitud (~~mes~~ %) 171

46. a. Cuál es el porcentaje de materias primas y suministros importados de otros países? 172

b. Cuál ~~es~~ fue el valor de las materias primas importadas? (mes) y año 173

(~~mes~~ %) 174

47. Costos de Produccion Actuales

Para producir Producto	Cantidad	Insumo requirido Producto	Cantidad	Precio/ unidad	Gastos Totales

48. Produccion Actual y Antes del Prestamo del Producto Principal 175

a. Produccion Proyectada por el BIP (mes): _____
(unididades/industrias; ventas/servicios y comercio)

b. Cual es su volume de produccion del producto principal:
(ventas para servicios y comercio)

Producto	Numero de meses	Produccion por mes 176	Total 177

PARA INDUSTRIAS:

c. Antes del prestamo, cual fue su volume de produccion del producto principal: (solamente industrias)

Producto	Numero de meses	Produccion por mes 178	Total 179

49.

INGRESOS Y GASTOS
(en miles de soles)

Fecha (Mes, Año) 180

	(BIP FILE) ANTES DEL PRESTAMO Por Mes	Total	EN LA ACTUALIDAD Meses Buen Tiempo No. Mes	Monto Cada Mes	Total	Meses Mal Tiempo No. Mes	Monto Cada Mes	Total	TOTA AÑO
GASTOS		181							192
A. Costo Materia Prima									
B. Costo Suministros		182							193
C. Costo Electricidad, Gasolina		183							194
SUBTOTAL:		184							195
D. Salarios		185							196
E. Renta		186							197
F. Interés Pagado		187							198
G. Depreciacion		188							199
TOTAL GASTOS:		189							200
VENTAS		190							201
UTILIDAD NETA:		191							202

50.

BALANCE GENERAL

(en miles de soles)

	Año de la solicitud (Ano _____ Mes ____) 203	Presente
ACTIVOS:		
Caja		
Cuentas a cobrar		
Inventario		
Total Activos a Corto Plazo:	204	211
Activos Fijos: (Si quisiera venderlos)		
Equipo		
Edificios		
Tierra		
Total Activos Fijos:	205	212
TOTAL ACTIVOS	206	213
PASIVOS:		
Corriente		
Cuentas a pagar		
Total a corto plazo:	207	214
Deuda a largo plazo		
Banco BIP		
Otro		
Total Pasivo a largo plazo:	208	215
TOTAL PASIVO	209	216
PATRIMONIO	210	217

51. Si Ud. quisiera vender su empresa hoy, por cuanto podria venderla?

_____

EQUIPO:

Tipo	Año Comprado	Precio	Años de Vida

52. Cual es el nombre y direccion de su competencia principal (local)?

Nombre Direccion

53. Si tiene un distribuidor de sus productos, cual es su nombre y direccion?

Nombre Direccion

54. Comentarios adicionales y observaciones:

ANNEX 3

PROPOSED BIP REPORTING FORMS

ANNEX 3

TABLE 1 - SUMMARY OF UDF INFLOWS AND OUTFLOWS(1)

	Last Quarter	Cumulative to Date
OUTFLOWS (UDF Loan Disbursements)	. . .	. . .
INFLOWS		
Amounts received from USAID	. . .	. . .
BIP counterpart contribution(2)	. . .	. . .
Principal collected	. . .	. . .
Interest collected	. . .	. . .
Total inflows	. . .	. . .
NET DEBIT (Credit)	. . .	. . .

(1) All amounts in nominal (actual) terms, Credit Fund only

(2) 27% of loan disbursements

TABLE 2 - UDF COLLECTION PERFORMANCE / PRINCIPAL ONLY
(figures apply to UDF Loans only)

Branch or Office	Loan Principal Maturities During Quarter (A)	Loan principal Collections During Quarter (1) (B)	Cumulated PrincipalMaturities Since Project Inception (C)	Cumulated PrincipalCollections Since Project Inception (D)	Repayment Rate forPast Quarter (B/A)	Overall Repayment Rate (D/C)
Total						

(1) excluding principal collected on loans overdue from previous quarters.

TABLE 3 - UDF COLLECTION PERFORMANCE INCLUDING PRINCIPAL AND INTEREST
(figures apply to UDF Loans only)

Branch or Office	Principal and Interest which fell Due During Quarter (A)	Principal and Interest Collected During Quarter (B)	Cumulated Principal and Interest Which Fell Due Since Project Inception (C)	Cumulated Principal and Interest Collected Since Project Inception (D)	Repayment Rate forPast Quarter (B/A)	Overall Repayment Rate (D/C)
Total						

(1) excluding amounts collected on loans overdue from previous quarters.

TABLE 4 - ANALYSIS OF QUALITY OF UDF PORTFOLIO
(as of _____)

Aging of Overdue Loans:

Loans overdue:(1)	Amount
0-1 month	- - -
1-3 months	- - -
3-6 months	- - -
6-12 months	- - -
12-24 months	- - -
24-36 months	- - -
Over 36 months	- - -
Total overdue	- - -

Quality of portfolio

Total outstanding UDF Loans	- - -
Total overdue as percentage of total outstanding	- - - %

(1) principal only

TABLE 5 - BREAKDOWN OF UDF LOAN DISBURSEMENTS BY LOAN SIZE

QUARTER: from _____ to _____ (in constant October 1982 Soles)

Loan Size(1) (in October 1982 Soles)	Artisan		Industry		Commerce		Services		Total This Quarter		Cumulative Total	
	Amount(1)	#Loans	Amount(1)	#Loans	Amount(1)	#Loans	Amount(1)	#Loans	Amount(1)	#Loans	Amount(1)	#Loans
Tranche No.												
1 (0-1 million)												
2 (1-5 million)												
3 (5-10 million)												
4 (10-15 million)												
5 (15-20 million)												
6 (Above 20 million)												
Total												

(1) in October 1982 Soles, using the average consumer price index for each quarter as a deflator.

For example: since the average CPI for the last quarter of 1984 was 4.7 times the October 1982 CPI, the loan size tranches would have been the following:

0 - 4.7 million (for 0-1 million tranche)
4.7 - 23.5 million (for 1-5 million tranche)
23.5 - 47.1 million (for 5-10 million tranche)
47.1 - 70.6 million (for 10-15 million tranche)
70.6 - 94.2 million (for 15-20 million tranche)
above 94.2 million (for above 20 million tranche)

Note: Same methodology could be used for disbursements by branch or office and all other analysis of UDF loan activity.