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Report No: 19423

PERFORMANCE AUDIT REPORT

INDONESIA

INDUSTRIAL RESTRUCTURING PROJECT
(Loan 3040-IND)

June 14, 1999

Operations Evaluation Department

Currency Equivalents (annual averages)

Currency Unit = Rupiah (Rp)

as of January, 1992	Rp 1 million = US$502
	US$1 = Rp 1,992
as of March, 1997	Rp 1 million = US$425
	US$1 = Rp 2,350
as of August, 1997	Rp 1 million = US$90.29
	US$1 = Rp 11,075

Abbreviations and Acronyms

BAPINDO	Bank Pembangunan Indonesia
BAPPENAS	National Development Planning Agency
BBD	Bank Bumi Daya
BDN	Bank Dagang Negara
BEII	Bank Ekspor Impor Indonesia
BI	Bank Indonesia
BNI	Bank Negara Indonesia 1946
BPPI	Agency for Industrial and Trade Research & Development, MOIT
BRI	Bank Rakyar Indonesia
BUN	Bank Umum Nasional
GOI	Government of Indonesia
IRP	Industrial Restructuring Project
LPPI	Indonesia Banking Development Institute
MOF	Ministry of Finance
MOIT	Ministry of Industry and Trade
NBFI	Non-bank Financial Institutions
PCB	Private Commercial Bank
PDFCI	Private Development Finance Company of Indonesia
PFI	Participating Financial Institutions
PTSI	Public Technology Support Institutions
R&D	Research and Development
SAR	Staff Appraisal Report
SCB	State-owned Commercial Bank
TA	Technical Assistance
TSG	Technical Services Group
UPPINDO	Indonesian Development Finance Company

Fiscal Year

Government of Indonesia	April 1 - March 31
Participating Financial Institutions	January 1 - December 31

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The World Bank
Washington, D.C. 20433
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Office of the Director-General
Operations Evaluation

June 14, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Performance Audit Report on Indonesia: Industrial Restructuring Project (Loan 3040-IND)

Attached is the Performance Audit Report on the Indonesia Industrial Restructuring Project (Loan 3040-IND, US$284 million equivalent, approved in FY89). The project was closed on June 30, 1996, two years behind schedule. US$49 million equivalent was cancelled.

The Industrial Restructuring Project (IRP) was the last of a series of financial intermediary loans to Indonesia, although when it was prepared it was envisaged that it would be the first of a series of restructuring operations which would eventually reach all of manufacturing industry. Preliminary Bank-financed studies had emphasized the importance of three key industrial subsectors (engineering, pulp and paper, and textiles), and these were targeted for restructuring by the IRP. The project had three major objectives: (a) assisting selected enterprises in the three subsectors to undertake viable and environmentally sound restructuring investments so as to help them adjust to ongoing policy reforms; (b) strengthening institutional capabilities and technical services supporting the three subsectors; and (c) identifying other industrial subsectors that would benefit from further similar Bank-supported restructuring efforts.

The credit comprised a US$265 million investment component to be lent to the Government and on-lent by it to 12 participating financial institutions (PFIs), a US$17 million technical assistance component, and a US$2 million subsector studies component. The PFIs would finance restructuring investments undertaken by selected enterprises. Restructuring investments would comprise wide-ranging activities such as equipment modernization, rationalization of product lines, improvements in product quality, improvements in pollution control techniques as well as strengthening organizational and managerial capabilities. Technical assistance would assist in strengthening subsectors' support institutions (identify required restructuring investments, develop product quality standards, help companies prepare feasibility studies, assist PFIs in appraisal and supervision activities, and help develop term lending). Subsector studies would identify other subsectors that could be candidates for Bank-financed restructuring activities.

Implementation of the investment component was unsatisfactory. Five of the 10 PFIs for which loan collection ratios were available fell far short of the target of at least 80 percent as specified in Bank conditionality. Collection ratios were below 50 percent for 4 of the 5 PFIs. PFIs on-lent to ultimate borrowers at rates well above the cost of funds. PFIs did not use the loans to set up a more diversified and solid customer base: they lacked information on 44 percent of the companies that had benefited from term lending. Appraisal reports upon which PFIs based their lending decisions were sketchy and formal exercises, completed for the purpose of getting the loan. Performance indicators for borrowing companies (economic or financial rates of return) were not available but questionnaires filled by PFIs suggest that although engineering companies (and to some extent paper and pulp companies) recorded an increase in profitability, the consolidated net profits of the surveyed textiles companies (the textile subsector received more than 80 percent of the allocated credits) exhibited a declining trend. While the need to aggressively penetrate foreign markets was perceived, no more than a third of the surveyed companies implemented related strategies.

Implementation of the other two components, technical assistance (TA) and studies, fell far short of expectations as well. Under the first subcomponent of TA—institutional strengthening—all involved institutes did purchase in due time the planned equipment but did not use it in an effective manner. The regional testing and calibration service centers were set up but did not function proactively, and their efficacy was undermined by domestic disputes concerning which institution (the research institutes or the Treasury) would receive the income generated by the research institutes activities. Under the second subcomponent of TA—technical services—three technical services groups were established to provide advice on restructuring, and preparation of feasibility studies, but instead of providing up-front their services to the related industries (as planned), they became effective well after the line of credit was substantially committed; only a few firms benefited. Ultimately these groups were disbanded. The third subcomponent of TA—provision of training to PFIs—was never implemented, and the amount allocated to it was canceled in 1994. Under the studies component five studies were undertaken but did not lead to any results in terms of actions or future operations.

The project was based on a complex design whose success depended on the smooth and simultaneous implementation of all its components. Interconnectedness meant that failure in one critical component could put the whole project at risk. Intensive supervision was, therefore, warranted during the first phases of the project, but the Bank supervised the project only weakly. By the time supervision was tightened, it was too late. The lack of an apex institution to monitor the credit line resulted in ambiguity in institutional responsibilities and misunderstandings between the Bank and the PFIs. The PFI training subcomponent of the TA was important in that its purpose was to assist financial intermediaries to master term lending techniques. Yet the Bank agreed to its cancellation. Subsequent to this project the Bank decided not to appraise any more industrial restructuring projects (contrary to initial expectations) and revised its strategy vis-à-vis the Indonesian financial system.

The Evaluative Memorandum for the IRP rated the outcome as satisfactory, institutional development impact as modest, sustainability as likely, and the Bank performance as satisfactory. For the reasons stated above, this audit rates the outcome as unsatisfactory, its institutional development impact as negligible, sustainability as unlikely, and Bank performance as unsatisfactory.

A number of lessons can be drawn: (i) Bank monitoring and supervision of complex projects needs to be tight especially in the initial phases of implementation; (ii) responsibilities for program implementation should be clearly established from the outset; (iii) credit components need to be accompanied by adequate economic and financial performance indicators to be provided by final borrowers and transmitted to the Bank for close monitoring.

Contents

The Task Manager for this report was Poonam Gupta. This report was prepared by Ivan Christin (consultant), who audited the project in 1998. Geri Wise provided administrative support.

Preface

This is a Performance Audit Report (PAR) on the Industrial Restructuring Project (IRP) in Indonesia for an amount of US$284 million. The loan (Loan 3040-IND) was approved in April 1989, and became effective in September 1989.

The loan's initial closing date was June 30, 1994. After extensions, the loan was eventually closed on June 30, 1996. Partial loan proceeds were canceled upon Borrower's request for a total amount of US$49.1 million. Final disbursements were made on November 1996. Cumulative disbursement amounted to US$234.9 million.

Partial cofinancing of the project was to be provided by the Government of Belgium for an amount equivalent to US$3.9 million, and by the Government of the Netherlands for an amount of US$42 million.[1]

This PAR is based on the President's Report, the Loan agreements, project files, the Implementation Completion Report (ICR) and discussions with Bank staff. An OED mission visited Indonesia in August/September 1998 and discussed IRP related issues with GOI's officials, representatives of the bank and companies involved. Their kind cooperation is gratefully acknowledged.

The draft PAR was sent to the Borrower for comments; no comments were received.

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[1] These amounts are those reflected in the Loan agreement. They differ from those indicated in the President's Report and the ICR. According to these documents, a total of US$6.2 million was cofinancing from Belgium. The Loan Agreement refers to the following amounts:

Grant from Belgium, BF	152, 000, 000.00
Exchange rate	39.40
US$ equiv.	**3,857,476.40**
Grant From Netherlands, Guilders	89,000,000.00
Exchange rate	2.12
US$ equiv.	**41,967,274.96**
Total Grant	**45,824,751.35**

Neither the Bank not the Borrower was able to explain the discrepancy to the audit mission.

Ratings and Responsibilities

Project Performance Ratings

Outcome	Unsatisfactory
Sustainability	Unlikely
Institutional Development	Negligible
Bank Performance	Unsatisfactory
Borrower Performance	Unsatisfactory

Project Key Responsibilities

	Task Manager	Division Chief	Director
Appraisal	J. Gamba	Nicholas C. Hope	Russell J. Cheetham
Midterm[a] Review	n.a.	Peter R. Scherer	Marianne Haug
Completion	Darius Mans	Peter R. Scherer	Marianne Haug

---Not applicable
[a]No formal midterm review. The most appropriate supervision has been substituted.

ICR prepared by: Darius Mans and Yuling Zhou, EA3IP

1. Background

1.1 During the late 1970s and early 1980s the Indonesian industrial sector grew in size and importance, steadily increasing its contribution to GDP and to employment growth. While real GDP increased by about 7 percent p.a., the sector grew by more than 12 percent p.a. These developments were achieved under very special conditions: rising oil revenues supporting an expansion in demand, public investment in import-substituting industries, a highly regulated and protectionist trade regime, a dominant role played by the public sector in manufacturing activities, a complex system of investment regulations, a government-controlled financial system, and subsidies. When oil prices steadily weakened from 1982, the Government tightened quantitative restrictions on imports, further introduced specific duties and increased non-tariff barriers. As a result, GDP growth during 1982-1985 declined to about 4 percent p.a. and the industrial economy ended-up being high-cost and inefficient.

1.2 Poor economic performance and prospects prompted the Government to reorient its strategy and embark, in 1986, on a reform program with the introduction of a series of "deregulation packages". These focused on liberalizing the trade and exchange rate regime, deregulating and liberalizing the investment process and liberalizing the financial sector. GDP growth accelerated to 6.3 percent p.a. (non-oil GDP to 7 percent p.a.) over 1985-1990. Non-oil manufacturing sector (especially the private sector) was characterized by a boom in investments, an accelerated annual growth (12.6 percent p.a. over 1985-1990), an increased share in GDP (15 percent in 1990 against 11 percent in 1985), and a doubling of the export output ratio (to 17 percent).

1.3 In spite of these favorable trends, in 1988 manufacturing industries were based upon low productivity activities producing low-grade consumer goods. In some segments of the industry little attention was paid to keeping up with technological advances in production, product quality and market standards. These subsectors needed to restructure their equipment, reorganize their product-mix, revise their management techniques both in terms of production and marketing, and improve the skill of the labor force. Another problem was that poorly controlled industrial development posed a major threat to the environment. The heavy concentration of manufacturing activities in Java (about 75 percent of total non-oil manufacturing value added in 1985) was a major issue.

2. Project Design

2.1 Since 1983, the Bank has supported the Government's policy aimed at promoting private investment, stabilizing the economy, liberalizing the trade regime and deregulating the industry. This support has materialized through several Bank-financed projects: the Third Small Enterprise Development Project (Loan 2430-IND, FY84) financing fixed investment and working capital of small enterprises in nearly all economic sectors; the First (Loan 2702-IND, FY86) and Second (Loan 2979-IND, FY89) Export Development Projects aimed at increasing productive capacity in export manufacturing sector; a (First) Trade Policy Adjustment Loan (Loan 2780-IND, FY87), and a Second Trade Policy Adjustment Loan (Loan 2937-IND, FY88) both aimed at supporting Government's efforts in liberalizing the trade regime. Prior to those operations, the Bank also financially supported Government studies focusing on key manufacturing subsectors: engineering, pulp and paper, and textiles (Loan 2277- IND, FY83, the Fifth BAPINDO Project). These subsectors had been selected because of (i) their impact on the economy, (ii) their market growth prospects, (iii) their potential economic viability, (iv) their structure in terms of suitability for adjustment and (v) their potential for restructuring in a policy environment that would be increasingly deregulated. These studies helped to identify the investment and technical assistance requirements at the enterprise level that would facilitate the restructuring process as well as the trade, regulatory and financial reforms needed to sustain improvement in subsectors' efficiency.

2.2 Against this background, the project was designed to pursue a very complex set of objectives. The project was organized around three major objectives: (a) to assist existing industrial enterprises in three selected subsectors—engineering, pulp and paper, and textiles—to undertake viable and environmentally sound restructuring investments consistent with the Government's related policy of deregulation and liberalization; (b) to strengthen institutional capabilities and technical services assisting the three subsectors; and (c) to evaluate the restructuring potential of other industrial subsectors.

2.3 **The Investment component** was designed to assist selected enterprises in restructuring investments comprising rehabilitation, modernization, rationalization of production line and product mix, improvements to product quality, upgrading of technology, strengthening of organizational and managerial capabilities, improvements in pollution prevention techniques, and expansion of existing operations related to one of the above restructuring activities. Its amount was set at US$265 million, to be on lent by the Government to 12 PFIs. The demand for credit for restructuring activities was deemed strong: surveyed trade associations reported a total demand for about US$1 billion over the next three years and PFIs exhibited loan request pipelines totaling about US$450 million. In addition, the demand for term finance was also deemed to be substantial since it was an unusual practice. Eligible subprojects had to satisfy several criteria. First, *financial management criteria*: (i) a long-term debt to equity ratio ≤ 70 :30, (ii) a current ratio ≥ 1.2, and (iii) a debt-service coverage ratio ≥ 1.5. Second, *assessment criteria* comprising: (i) evidence that investments would be of the restructuring type as defined above, (ii) feasibility analysis and appraisal reports covering all managerial, technical, marketing, financial and economic aspects, displaying, more specifically, financial and economic rates of return of investments of at least 15 percent. Third, evidence at the subproject level that appropriate *environmental criteria* would be satisfied, including, when relevant, the preparation of a survey to identify existing environmental problems and ways to overcome them. Fourth, *criteria related to the size of financing*: individual subloans would comprise between US$250,000 and US$10 million; however, a maximum of three subloans above the ceiling would be considered provided it was appraised (and further approved) jointly by the Bank and the PFI. The Government was to on-lend the proceeds of the loan to the twelve PFIs, in accordance with a predefined allocation schedule,[2] for a period of 15 years (with 3 years of grace). The PFIs would pay a variable interest rate equal to the weighted average cost of their deposits. The rate would be adjusted every six months and would be subject to a floor equal to the rate on the World Bank loan plus a minimum spread of1.75 percent.[3] The PFIs were to on-lend funds at prevailing market rates.[4] They also had to maintain a loan collection ratio of at least 80 percent.[5]

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[2] Annex C, Table 1.

[3] Annex B.

[4] However, here again there is a serious discrepancy between the SAR and the Loan Agreement. In the context of the SAR (pages 148-149), the relending rate refers to the rate at which the Government lends funds to the PFIs. Therefore, the floor (rate on the Bank loan plus a margin of 1.75 percent) applies to this rate. In the Loan Agreement (page 30), it is specified that the relending rate is that of (*not to*) "the Participating Financial Institutions", i.e. the floor "shall not be less than the interest rate on the Loan plus a margin of 1.75%"

2.4 **The Technical Assistance component** was aimed at strengthening existing institutions serving the three subsectors and at assisting both enterprises and PFIs in identifying relevant restructuring investments. Partner institutions, enterprises themselves and PFIs were targeted by this component. It had three subcomponents. First, was an Institutional Strengthening Program (ISP). Under this subcomponent: the IRDCLI (Institute for Research & Development of Cellulose Industries) was to purchase pollution monitoring and control testing equipment; the IRDTI (Institute for Research & Development of Textile Industries) was to replace its obsolete equipment for raw material and product testing related to textile products; the engineering activities were to benefit from the setting up of calibration and testing service centers organized by the BBLM (Metal Industries Development Institute), training in standards application and quality control practices under BBLM responsibility and the strengthening of standards preparation, promotion and monitoring activities undertaken by the Center for Standardization. The second subcomponent, a Technical Services Program (TSP) was to assist in the setting up of three Technical Services Groups (TSGs) which would provide enterprises with high-quality services in the areas of product and manufacturing technology, product and marketing strategies and environmental management. For concerned enterprises, the proposed TSGs would survey restructuring needs, examine alternatives based on cost-benefits analysis, set up long term plans when required, assist them in preparing TORs for selection of consulting firms that would draft feasibility studies, help prepare environmental impact assessments, assist in loan application procedures, provide assistance and advice upon request by both enterprises and financial institutions. The third component, a Training Program [TP][6] was specifically aimed at supporting PFIs in their activities of subprojects appraisal and supervision, and for providing term lending, since serious weaknesses had been detected in both areas. This program to be implemented over three years, had the objective of reaching about 200 PFIs' staff. Total Bank funding for the TA component amounted to US$17 million.

2.5 **Subsector studies**, the third component of the project, was aimed at assisting in the preparation of subsequent Bank restructuring operations. They would primarily target packaging, agro-based, and electronics industries, and possibly rubber processing and semi-precious stones and jewelry production. Such studies would survey the existing state and trends of these industries, identify the policy constraints, assess their restructuring needs and recommend related reforms. A study of Technology Development, with specific reference to the engineering subsector, was also to be financed under the project. Total Bank funding for the component amounted to US$2 million.

3. Implementation

3.1 PFIs were committed to maintaining collection ratios (CRs) of at least 80 percent (77.5 percent for BAPINDO). By December 1993, while all private commercial banks and BNI maintained CRs above the floor, all other PFIs recorded deteriorating CRs below the 80 percent

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[5] The loan "collection ratio" was defined in the Project Agreements signed with the PFIs (p. 5, Section 3.03). They were defined as being the "*total cash collection in the last twelve month period as a percentage of amounts past due at the start of the period plus billings of current amounts due, net of amounts due but rescheduled*". This ratio (at least 80 percent) applied to all subloans and other lending operations made by the [PFIs] under prior lending operations (Loan Nos. 2702-IND, 2979-IND and 3040-IND).

[6] In parallel, there was a specific obligation for BAPINDO (Bapindo Project Agreement, June 1, 1989, Section 3.07, p. 7) which had to retain the services of an advisor with the objective of advising BAPINDO's management on banking and financial matters.

floor.[7] This became a major issue between the Bank and the PFIs. The Bank identified several reasons for arrears accumulation: (a) implementation of a tight monetary policy and rising interest rates which constrained the availability of working capital and led concerned enterprises to operate below their installed capacity; (b) serious weaknesses in feasibility studies and appraisal reports that resulted in implementation delays and cost overruns; (c) recession in Indonesian trade partner countries which caused textile companies difficulties in exporting their products. Bank recommendations were sent to concerned PFIs with the objective of improving the CRs through setting up specific action plans, strengthening the subprojects monitoring and supervisory process. PFIs undertook more frequent site visits, rescheduled some loan repayments, and helped companies to find new investment partners and marketing channels. However, with the exception of BEII, the situation did not substantially improve: at end 1995, BDN, BRI, and BBD recorded deteriorating CRs, BAPINDO's and UPPINDO's CRs stabilized at very low levels (35 percent and 29 percent, respectively).

3.2 The PFIs charged the borrowing firms excessively high interest rates largely unrelated to the cost of funds. The interest rate charged to PFIs by the Central Bank remained at about the same level until June 1991 and increased by 3-4 percentage points in the next two years before declining to pre-June 1991 levels (about 12 percent). On the other hand, interest rates charged by selected PFIs to their clients[8] increased steadily between 1990 to 1993 and by December 1993, the interest rate charged by them was 21 percent, more than 9 percentage points above that charged to PFIs by the Central Bank (Table 3.1). This may explain the fifth supervision's observation of slower than expected commitments of the credit line.[9] But this was six months before project completion and one year before the planned loan closing date. By that time it was too late to make the relevant corrections.

[7] Annex C, Table 3.

[8] At least those rates which have been provided to Bank's mission by some PFIs.

[9] According to the ICR the Government's tight monetary policy in May 1990 (resulting in increases in interest rates) was a major factor that affected both the commitments and the actual disbursements but this argument is unconvincing. Discussions in the field with both bankers and industrialists lead to the conclusion that, despite the tightening of monetary policy, there was always a substantial demand for term financing (a facility which did not exist outside this operation in Indonesia).

Table 3.1: Interest Rates Charged by the Central Bank (BI), by the MOF to PFIs, and to Subprojects by Some PFIs

	Interest rates charged by BI & MOF	*Discount rate*	*Interest rates charged (by selected PFIs)*	*Spread*
June/Dec 89	12.82%	12.02%		
Jan/June 90	12.10%			
June/Dec 90	12.85%	21.20%	18.41%	5.56%
Jan/June 91	13.13%			
June/Dec 91	16.51%	14.91%	19.77%	3.26%
Jan/June 92	18.20%			
June/Dec 92	17.39%	11.95%		
Jan/June 93	15.77%			
June/Dec 93	11.97%	8.74%	21.58%	9.61%
Jan/June 94	11.27%			
June/Dec 94	9.88%	9.74%		
Jan/June 95	9.62%			
June/Dec 95	10.83%	13.56%		
Jan/June 96	12.64%		17.75%	5.11%
June/Dec 96	12.98%	14.06%		
Jan/June 97	12.54%		22.25%	9.71%
June/Dec 97	12.27%	33.63%		
Jan/June 98	15.18%			
June/Dec 98	27.10%			

Source: based on data provided by Bank Indonesia, Ministry of Finance and PFIs.

3.3 The lack of an apex institution to monitor the credit line,[10] the inadequacy of Bank supervision and the neglect by the Bank and the borrower to fully implement the training component resulted in ambiguity in institutional responsibilities and misunderstandings between the Bank and the PFIs. In retrospect the double extension of the original deadline for submission of subloan applications (from June 30, 1992 to June 30, 1993) and the credit reallocation (made in early 1993, based on the review of PFIs' status of commitment and subproject pipeline) appear as desperate rescue measures aimed at rehabilitating an otherwise inconsistently implemented credit line.

3.4 The bulk of allocated credits went to the textiles subsector (about US$180 million or 81.5 percent) while the engineering subsector received only US$29.6 million (13.5 percent) with the pulp and paper receiving the rest (5 percent), even though the strategic importance of the engineering sector was well known.[11] Nobody, in the field, was able to explain to the mission why the credit component was not more evenly distributed.

[10] During the field mission, an MOF official recognized that, ex post, he was still unable to *"find out who in fact was responsible for the specific tasks"* related to the project.

[11] Appraisal Report, pp. 9-10. It mentions that the engineering subsector accounted for about 14 percent of the country's total manufacturing value added, whereas textiles industries accounted for about 10 percent of manufacturing value added.

3.5 A questionnaire sent to the PFIs before the arrival of the audit mission and filled by them[12] revealed that out of the 78 companies that benefited from the Bank's funding, 8 PFIs were able to provide information for only 44 of the 78 companies (32 textile companies, 6 engineering companies and 6 pulp & paper companies).[13] The information provided was also less than satisfactory and in many instances inconsistent. The PFIs had completely lost track of the other 34 companies. In a very limited number of cases the companies were liquidated. The major reason given by the PFIs for lack of records was that these companies had swiftly repaid their loan and were no longer clients of the PFIs. But this also means that: (i) for these companies, the loan was a one shot and short-lived operation (in fact not a term funding), and (ii) PFIs were neither eager to monitor and follow-up their clients nor interested in setting up a solid customer base.

3.6 Most of the subprojects aimed at expanding production capacity in parallel to modernizing equipment, upgrading technology and improving product quality. It was assumed that in addition to improving their "hardware" (equipment), the borrowing companies would also improve their "software" (managerial and/or marketing techniques for instance). All companies applying for a loan had to submit a comprehensive appraisal report covering all these aspects. A review of the appraisal reports kept in the Bank's project files indicates that, with minor exceptions, most of these reports were very sketchy. When critical calculations (e.g. FRRs and ERRs) had to be presented, there was neither supporting evidence allowing an assessment of the reliability of the calculations, nor supporting assumptions. The "subproject appraisals did not adequately address management, technical and marketing issues, resulting in unexpected implementation delays and cost overruns".[14] Field interviews of bankers and concerned industrialists revealed that most appraisal reports were drafted as purely formal exercises (in order to comply with Bank's requirements) by consulting firms hired for this purpose. Lax monitoring of subborrowers by PFIs exacerbated the problems. Actual performance indicators for PFIs' clients (not only, ex-post FRRs and ERRs, but also output, export, employment indicators) were not made available to assess the Project component efficacy with adequate reliability.

3.7 The **Technical Assistance** component recorded several crucial implementation problems. Concerning the ISP, all involved institutes (IRDCLI, IRDTI, BBLM) did purchase in due time the planned equipment (pollution control, textile testing, engineering testing and calibration devices) but did not use it as required or in an effective manner. The regional testing and calibration service centers were set up, but failed in several respects: they were unable to operate as a network, to function in a proactive manner, to perform adequately staff training, and to establish linkages with neighboring R&D institutes. The ISP component was further undermined by (i) domestic disputes concerning which institution (the Research Institutes or the Treasury) would recover the income generated by the Institute's activity[15]; and (ii) wage disputes stemming from more favorable financial terms provided to foreign advisors.

3.8 With respect to the second subcomponent, the TSP, the three TSGs were established after considerable procurement delays. As a result, instead of providing up-front their services to the related industries (as originally planned), their availability became effective well after the line of

12 Annex D.

13 BBD, BRI, BNI, BEI, Bank Bali, BAPINDO, BDN and Bank Niaga.

14 ICR, para 12, p.4.

15 Ultimately the income went to the Treasury so the Institutes had little incentive to be more proactive.

credit was substantially committed. Initially, the TSG failed to be proactive towards their potential clients. It was only in mid 1993 when, with Bank's encouragement, they started to address industries' needs (through surveys, identification and marketing) however with little success. Only few firms benefited and that too in part because there was a substantial subsidy element[16]. Ultimately, the TSGs were disbanded.

3.9 The planned provision of training to improve the PFIs' project appraisal capabilities was never implemented and it was 1994 (about five years into the project) when the related allocated amount was canceled. Even though the related amount was modest (US$400,000), the component was essential since it involved the acquisition (and the implementation through the credit component) of basic methodologies in project appraisal and supervision, with the objective of "reducing the incidence of bad projects due to deficient appraisal and improving the health of PFIs overall portfolio". The audit mission discovered that, from the beginning, involved parties (the Bank, the PFIs and to a much lesser extent IBI)[17] treated this component with neglect. With Bank's approval, the initial training course was conducted by a consultant and not (as planned) by Bank staff.[18] This approach considerably reduced the attractiveness of the training program because even though the course was qualitatively good, it signaled to the participants that the Bank was not strongly involved. It is therefore not surprising that, IBI failed to persuade PFIs to send their staff to attend the training program. The Bank also failed to closely follow-up the issue: it was only in April 1992 when a Bank supervision mission mentioned a "slippage in the training program" without suggesting any positive remedy. In July 1992, in order to cut short emerging diverging views concerning the use of the funds, the Bank suggested to IBI to request the cancellation of the unused portion of the US$0.4 million. After June 25 1992, two years before the planned closing date of the loan (and four years before the actual closing date), the training program was indefinitely shelved.

3.10 Five studies were undertaken during the project's life,[19] one for engineering industries (designing a technology development plan), two for the electronics industry (one emphasizing the development potential and restructuring needs of the subsector, the other developing plans to boost its competitiveness and its export potential), one for agro-industries (a strategy for the subsector and identification of the restructuring needs), and one for the packaging subsector (definition of strategies and related implementation plans). The implementation of this component was characterized by a lack of ownership by the Government and weak supervision of consultants by both the Government and the Bank.[20] As a result these studies failed to generate operational conclusions.

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[16] Firms were charged only 10 percent of the cost of services, bills did not reflect effective consultant time spent, and customers' collection rates remained low.

[17] IBI (*Indonesia Bankers Institute*) is the new name of the former LPPI (*Lembaga Pemgengangan Perbankan Indonesia*, or *Indonesia Banking Development Institute*).

[18] The cost of the initial training course (US$53,628) was borne by LPPI. LPPI has given evidence that it sent related expense statements for repayment. It complained that it has never been reimbursed of this amount.

[19] ICR, Table 7, p. 18.

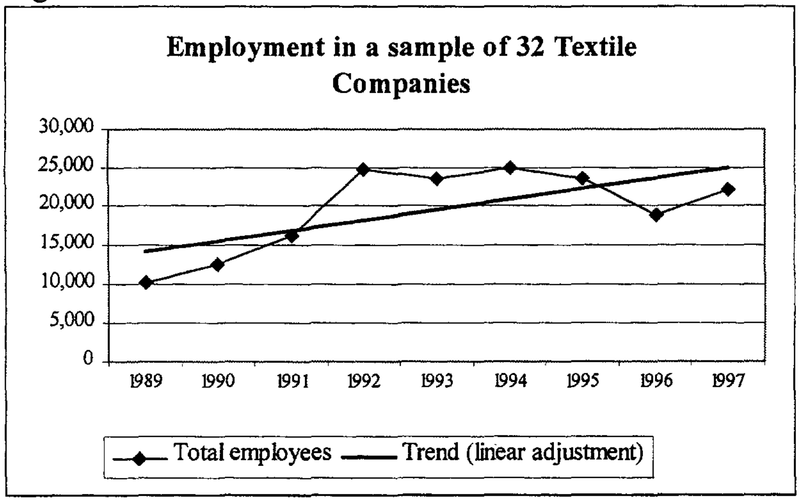
[20] ICR, op. cit. p. 7, para. 22.

4. Outcome

Outcome of the Investment Component

4.1 The performance and achievements of the borrowing companies during the period of the loan has been (and to some extent is still) difficult to assess. Since the ICR did not document its assertion that "[the beneficiary firms] have grown substantially and increased exports",[21] the mission drafted a questionnaire to be filled by the PFIs. Data collected was of uneven quality[22] indicating that most PFIs' have been deficient in monitoring and following-up the subborrowers. Trends in surveyed textile companies' (32) employment and turnover showed an expansion from 1989 to 1997 (Figures 4.1 and 4.2) but it is unclear if this expansion was cost effective since PFIs neither systematically calculated FRRs and ERRs nor collected appropriate data for such calculations. The only available indicator is the trend for consolidated profits which is not encouraging (Figure 4.3). Even if 1997 is excluded because of the depth and the severity of the crisis, the trend remains downward. For the sample as a whole, consolidated profits steadily declined from 1989 to 1993 (being negative in 1993), turning positive during 1994-1996.[23] In the latter period several companies went bankrupt.

Figure 4.1



[21] ICR, op.cit., page 11, para. 34.

[22] Some PFIs did not responded at all (Bank Umum, PDFCI, UPPINDO), some other returned unusable data, many banks were unable to provide data covering the whole 1989-1997 period, but only fragments of this period.

[23] The Borrower's Evaluation Report notes that "even though the credit might not (have) directly contributed to the competitiveness of the industry, the project has promoted the increase of production capacity" (ICR, p. 35, para. A). Obviously this cannot be the major objective of a restructuring project as it is clearly recognized in the ICR Evaluation Summary ("helping (the subsectors) to become more efficient competitors in an increasingly market-oriented economy", p ii, para 2.)

Figure 4.2

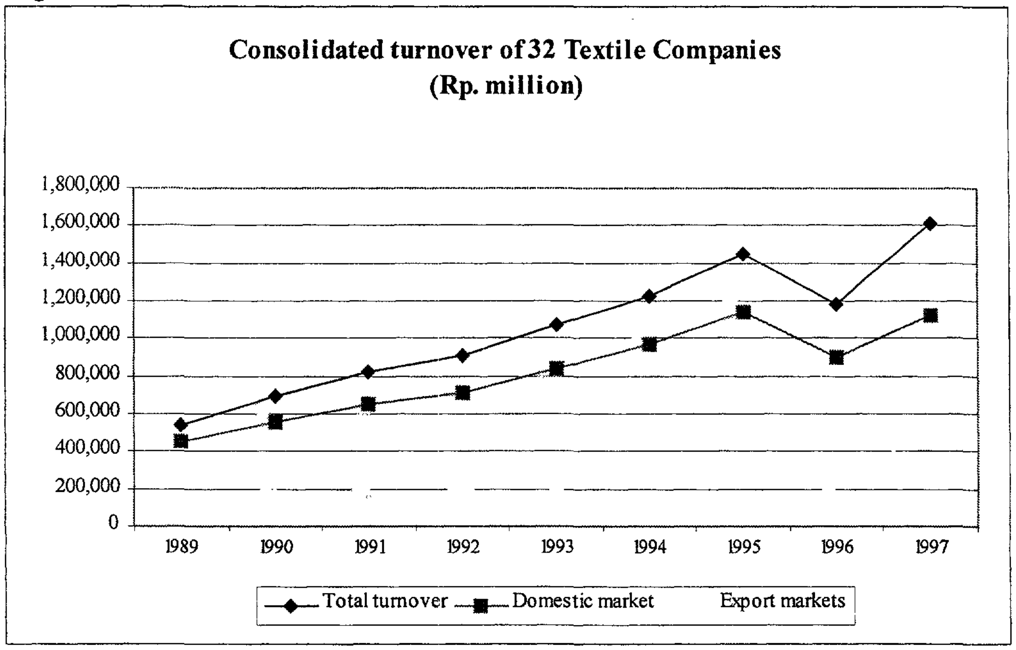
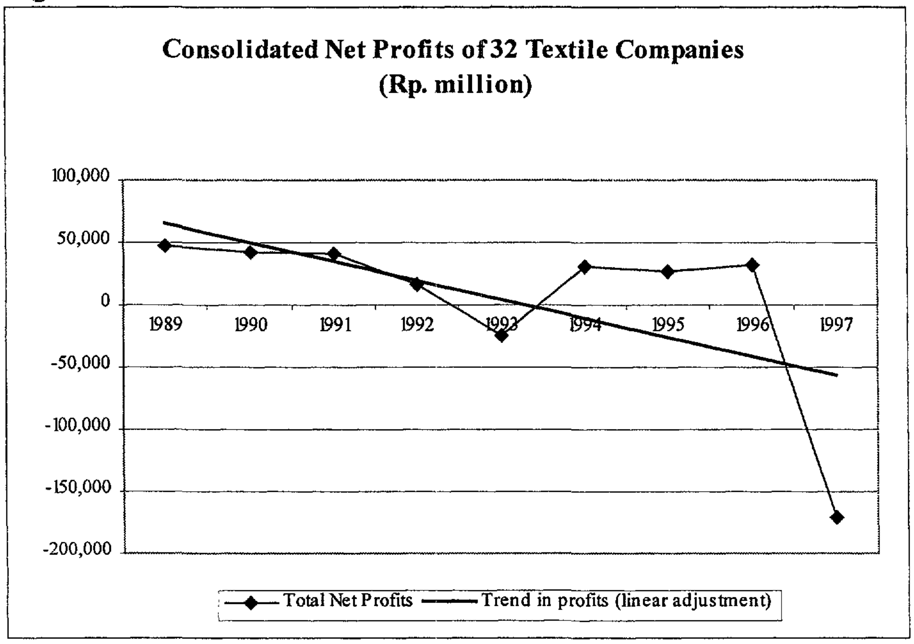


Figure 4.3



4.2 Data collected for a small number of engineering and pulp & paper companies showed results somewhat different from those of the textile companies. Employment and turnover expanded but consolidated net profits of surveyed engineering companies also increased exponentially over 1989-1996 before plummeting in 1997 (Figure 4.4). Net profits of surveyed pulp and paper companies were cyclical, but maintained an increasing trend over the period (Figure 4.5).

Figure 4.4

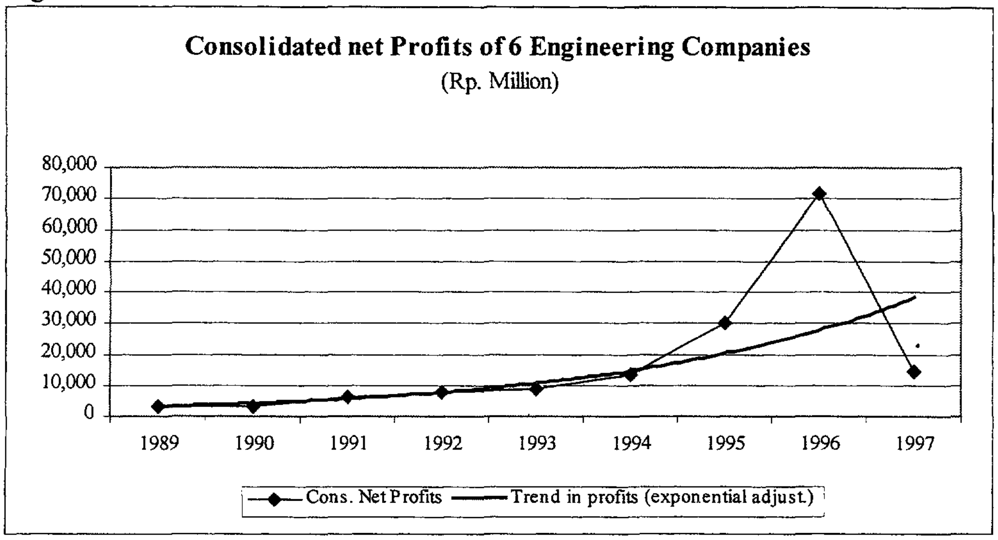
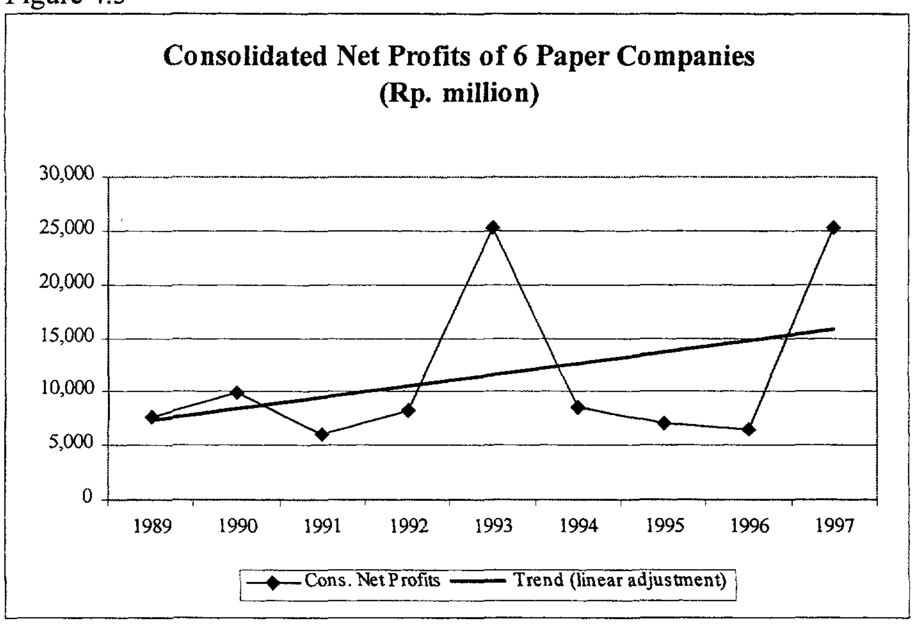


Figure 4.5



4.3 Concerning the "software" (organizational, managerial, marketing, etc) improvements expected from the project, results indicated that the interest in introducing substantial changes at various levels of the company (managerial, technical, marketing) was not widespread (Table 4.1). On average companies continued business as usual and only a few took the opportunity to enhance their technological efficiency other than by purchasing new equipment. No more than a third of the surveyed companies implemented new techniques for export marketing.

Table 4.1: Results of the Survey Conducted with PFIs Concerning the Borrowing Companies, 1989-1997

During the period 1989-1997, did the related company :	*Yes*	*No*	*Total*
(i) Under took any major managerial change	23.9%	76.1%	100%
(ii) Introduced any major technical change			
* a new production process ?	30.4%	69.6%	100%
* a new product ?	26.1%	73.9%	100%
* a new product mix ?	17.4%	82.6%	100%
* a new pollution control technique ?	23.9%	76.1%	100%
* Other ?	2.2%	97.8%	100%
(iii) Introduced changes in its marketing techniques			
* For domestic market ?	15.2%	84.8%	100%
* For export markets ?	34.8%	65.2%	100%
* Other ?	2.2%	97.8%	100%

46 companies covered by this survey

4.4 To summarize, despite limited success in enhancing their equipment, expanding production and employment, the beneficiary companies (concentrated mainly in the textile subsector) did not overall use the loan proceeds to increase their net consolidated profits. Hence, the outcome from the borrower perspective is rated **unsatisfactory**.

4.5 The investment component can also be evaluated from its "credit line" aspect. Out of the US$265 million initially allocated for this component, US$219.5 million was disbursed (i.e. 83 percent) while the remaining portion (US$45.5 million or 17 percent of projected lending) was canceled. Several questions are relevant:

- First, was there (is there still) such a shortage in term finance in the banking system?
- Second, did the tight monetary policy (with high interest rates) substantially modify the conditions (through the interest rate formula) of availability of term finance?
- Third, did the PFIs make every effort in promoting and marketing to their clients the credit line made possible with the Bank loan?

4.6 The answer to the first question is definitely positive and is argued convincingly by the ICR. Discussions in the field with industrialists indicate that there were a large number of entrepreneurs with keen interest in term funding. They also were of the view that such a demand still exists for export oriented companies.

4.7 The answer to the second question is more complicated. Much depends on *ex ante* and *ex post* project-related FRRs and ERRs. Export-oriented projects should have exhibited FRRs and ERRs well above 30 percent, leaving enough margin to absorb the increase in interest rates. Projects with FRRs and ERRs of between 15 percent and 25 percent should have been much more difficult (if not impossible) to finance. As mentioned in the ICR, sensitivity tests were done in a mechanical fashion, without genuine analysis. Collected data make it impossible to assess the *ex post* values of FRRs and ERRs since most PFIs[24] did not give them sufficient importance (and even sometimes lacked knowledge of these indicators). The interest rate formula did not initially (i.e. until end 1991) reflect the tightening of the monetary policy[25] and therefore cannot be held responsible for companies' reluctance to borrow on a long term basis; on the contrary, the very high spread between PFIs' cost of funding (reflected by the interest formula) and the "market" rate (the rate charged by them to subborrowers) was possibly a deterrent: 556 basis points in December 1990, narrowing to 326 basis points in December 1991, and steadily expanding to 961 basis points in December 1993. In retrospect it would have been wise to cap the interest rate charged to subborrowers or, at least, to link by another formula both interest rates. Financially, term financing benefited more the PFIs and less the subborrowers.

4.8 The answer to the third question is more straightforward. The ICR has pointed out that PFI's day-to-day management, loan recovery procedures, loan supervision activities, etc. were deficient, and resulted in their neglect in promoting the line of credit. In addition, since PFIs did not benefit from the planned training program, they were insufficiently knowledgeable of related term lending techniques, to efficiently promote and market the Bank's credit line. Field discussions with PFIs' staff confirm this assessment.

4.9 Therefore, from the lending side also, the project outcome is rated as **unsatisfactory**.

Outcome of the TA Component

4.10 TSGs were ultimately disbanded. The Government did not eventually adopt a decisive policy regarding the incentive structure of R&D institutes that would have enabled them to become commercially more proactive. In June 1996 it was decided that the R&D institutes could freely receive and use the revenues generated by their activity, but then a new law enacted in 1997 removed this possibility. The attempt at strengthening testing and calibration services for the engineering subsector also fell short of expectations. It is easier to adopt ISO standards (about 500 such standards were adopted), but more difficult to successfully go through the whole process of accreditation for both the products and the processes related to the engineering subsector. The industry's awareness concerning this topic is low, the national standards system is still fragmented, and the country lacks appropriate labs to certify that firms meet international standards. Only major Indonesian companies seem to appreciate the importance of ISO 9000 certifications.[26] The outcome of the TA component was **unsatisfactory**.

Outcome of the Studies

4.11 The study on a *Technology Development Plan for the Engineering Industries* has contributed to the setting up of a new Bank-financed project but the outcome of this project is still unclear. The study on the *Industrial Restructuring of the Electronics subsector in Indonesia* and the study on the *Packaging Sector* have served to emphasize the importance of these sectors,

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[24] One major exception is Bank Dagang Negara (and to a lesser extent Bank Bumi Daya) which systematically followed up the related FRRs and ERRs and provided them to the field mission.

[25] As reflected in the level of the discount rate (rate on Bank Indonesia Certificates, SBIs).

[26] During visits to Indonesian companies, only one (belonging to the Texmaco group) recognized the importance of such certification and went through the whole process. Other companies did not express any interest.

without further action. The audit mission was struck by the poor analytical content of the study on the Electronics subsector which consisted of (at best) two "analytical" pages, the rest being photocopies of transparency films used for speeches and conferences related to the topic. This study is unusable for further analytical work. The other studies did not result in practical and operational measures. Overall the outcome of the studies is **unsatisfactory**.

5. Overall Assessment

5.1 The project was based on a complex design whose success depended on the smooth and simultaneous implementation of all its components. The project was like a precision machine in which all parts had to function at a carefully pre-programmed speed: PFIs' training was critical for the availability of adequate and accurate subproject appraisals and to ensure that subprojects would be monitored and supervised appropriately over time. Technical Assistance had to be carefully timed with the investment component; restructuring enterprises had to be clearly identified, their needs assessed, efficient plans for their restructuring drafted, operational support put in place for their activities so that PFIs could benefit from such information in appraising subprojects. The interconnectedness meant that the project was at risk for the "domino effect": failure in one (or several) critical component (e.g. the PFIs' training component, or the TA component) would result in a partial and/or global failure of the project. Given these features, intensive supervision was warranted during the very first phases of the project.

5.2 The project was based on some implicit assumptions that in retrospect needed greater analysis. One such assumption was that the demand for credit was fully reflected in volume figures provided by trade associations and PFIs. Price conditions (interest rate level) and the elasticity of demand for credit with regard to the interest rate were neglected. Another implicit assumption was that the current rates would not change[27] and that spreads (interest rates charged to subborrowers versus those charged to PFIs by the Central Bank or the Ministry of Finance) would remain reasonable. Finally, it was assumed that the PFI training component would assist financial intermediaries to master term lending techniques. Yet, the Bank agreed, without apparent resistance, to its cancellation.

5.3 **Overall the project outcome is rated as unsatisfactory**. Five PFIs (three major State Commercial Banks, the State Development Finance Institution and a Non-bank Financial Institution) were systematically unable to maintain a collection ratio of at least 80 percent as agreed with the Bank. PFIs in general, failed to efficiently promote and market the Bank's credit line. They generally on-lent to ultimate borrowers at rates well above the cost of funds and acted as mere conduits without seizing the opportunity of using the loan to set up a more diversified, consistent and solid customer base. Appraisal reports upon which PFIs had to base their lending decisions were generally sketchy and superficial. Many of them were formal exercises by consulting firms hired for this purpose. As a result, it became impossible to systematically assess the Project component efficacy with adequate reliability. Monitoring (by the Government and the Central Bank) and supervision (by the Bank) of the project was deficient or inconsistently done.

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[27] "...existing relationship between financing cost and return to aggregate investment in Indonesian industry indicate that enterprises are obtaining satisfactory returns under current rates." (SAR, op. cit., p.20, para. 4.5). Present indications are that the interest rates to the final borrowers initially would be in the range of 18-21%" (SAR, p.35, para 5.10)

5.4 Questionnaires filled by PFIs during the field mission suggest that although the engineering companies (and to a lesser extent pulp and paper companies) recorded an increase in profitability, the consolidated net profits of 32 surveyed textile companies (in the sector that was the largest beneficiary of the loan) exhibited a declining trend. In addition, most companies neglected to parallel their efforts in physical investments with corresponding organizational and managerial restructuring. Although the need to aggressively penetrate foreign markets was perceived no more than a third of the surveyed companies implemented related strategies. On balance, the outcome of the investment component was **unsatisfactory**.

5.5 The outcome of the TA component and studies component were on balance also unsatisfactory. Government did continue to implement (although with some delays) liberalization and deregulation measures but these were part of the Government's own reform agenda and were not an objective or condition of the project. While continuation of these reforms provided the policy environment important for the success of the project, they were not by themselves enough to ensure its success.[28]

5.6 The project was intended to strengthen the participating institutions. The delayed start up of the TSGs and their ultimate dissolution, the failure of the involved R&D institutes to adopt new operational schemes (business plans, management, incentives to get close to the clients, etc.), the failure of regional testing and calibration units to operate as a network with adequate linkages with neighboring R&D institutes, the continued lack of internationally accredited certification labs, and lastly the failure to strengthen the appraisal and supervision capabilities of PFIs, all lead to the conclusion that the **institutional development impact of the project has been negligible**.

5.7 **Overall Bank performance is rated as unsatisfactory.** While project preparation was based on previous studies it was deficient in analyzing the factors that would shape over time the demand for long-term credits. It focussed on too many target groups and relied excessively on their capability/willingness to participate in the implementation of the project. Initial responsibilities were highly fragmented. The project would have benefited from the existence of an apex institution in charge of monitoring and supervising PFIs' activities. In addition, performance indicators for TA components were ill defined. Bank supervision was initially loose and led to subsequent delays, extensions and/or cancellations. It was only in 1993 (the year of the planned loan completion date) when major slippages were identified and when supervision was tightened. But by then it was too late to effectively rescue the project.

5.8 **Borrower performance is rated as unsatisfactory**. While all involved parties participated quite well during project preparation, most of them remained quite passive during the crucial initial phases of implementation. PFIs were by and large satisfied with doing business as usual with their existing clients, and failed to really improve their appraisal and supervision capabilities. This made the loan collection issue difficult to solve and in some cases (BBD and BAPPINDO) led to the cancellation of uncommitted funds. TSGs were not granted sufficient autonomy to adopt a proactive behavior and therefore failed to structure their services on a demand-driven fashion. Conflicts between TSGs and R&D institutes contributed to implementation problems. The Government's global monitoring and supervision of the project was weak. Lack of borrower ownership was evident in several instances (e.g. providing guidance to consultants for the studies, enforcing more strictly environmental standards).[29] The only area

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[28] During discussions with Bank staff in Washington, the argument has been expressed that "as long as the Government materialized its commitment to liberalize, the Bank should have been satisfied

[29] Even the task of drafting the Borrower's evaluation report was inappropriately delegated to the Technology Test Research Center, within the Ministry of Industry and Trade.

of positive achievement was the Government's adherence to its commitment to further deregulate and liberalize both the economy and some aspects of the subsectors targeted by the project.

6. Project Sustainability

6.1 **This project** is **not sustainable** even though the policy environment in which it was implemented was progressively liberalized.

6.2 Rehabilitation of subproject "hardware" was neither matched by an equally necessary modernization of their "software" (management, technical and marketing capabilities),[30] nor strengthened by the technical support from the R&D institutes. Acceptable assessments of the borrowers' economic and financial performance are still weak and is reflected in poor quality of appraisal reports and loan collection problems. Subproject supervision and follow up by banks is also weak. PFI's failed to benefit from the planned training program. The unsustainability of this project is also evident from the Bank decision to not to appraise any more industrial restructuring projects (contrary to initial expectations) and to revise its strategy vis-a-vis the Indonesian financial system.

6.3 We concur with the ICR that TA components aimed at strengthening technical services for the concerned subsectors are not sustainable.

7. Lessons of Experience

7.1 Foundations and justifications of a credit component need to be thoroughly assessed *via* a solid analysis (for instance, in this case, elasticity of demand for credit with respect to the interest rate should have been considered). They should not be based only on statements made by borrowers.

7.2 Responsibilities for program implementation should be clearly established from the outset and the chain of supervisory tasks set up in such a way that failures can be quickly identified and addressed early on.

7.3 Bank monitoring and supervision for complex projects needs to be very tight especially during the first phases of implementation. Slippages need to be addressed early in the project's life and corrective measures adequately implemented; if corrective measures appear to be inappropriate with regard to the structure of the project, Bank staff should consider early cancellation.

7.4 For complex credit components, an apex institution needs to be responsible for implementation and supervision and for liaising with Bank staff. Large numbers of heterogeneous (public, private, commercial, development, etc.) PFIs can neither be left on their

[30] A Bank report dated September 28, 1993 ("Indonesia Industrial Policy – Shifting Into High Gear", Report No. 12153-IND) mentions that: (a) in the textile industry, deficiencies in management and technical operations contribute to low productivity, there is little or no design activity, quality requirements by the customers are hardly met, etc.; (b) the engineering industry is still characterized by variable quality, low productivity, low local sourcing and poor export performance.

own in the field nor expected to directly communicate with Bank staff, especially in complex projects, involving many different participating institutions.

7.5 Support through TA should be demand driven. However, even in that case, information concerning the availability, the objectives and the expected benefits of a TA support should be provided beforehand to the final beneficiaries. When TA assistance is a key element for the success of a whole project, special incentives should be devised to urge end users to effectively use the support that is provided. The experience with the TSGs has shown the need to reassess the strategy of providing technology support services to the Industry. It also showed the need to address the institutional and incentive structure of the R&D institutes if the objective is to make them more demand driven and commercially proactive units.

7.6 Credit components need to be accompanied by adequate economic and financial performance indicators to be provided by the final borrowers to PFIs and further transmitted to the Bank for analysis. These indicators need to be closely monitored and followed up during implementation.

7.7 When projects' components address regulations the enforcement of such regulations is critical. This is valid not only for environment regulations but also for financial regulations.

Basic Data Sheet

INDUSTRIAL RESTRUCTURING PROJECT (LOAN 3040-IND)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*
Total project costs	506.1	636.0
Loan amount	284.0	234.9
Cofinancing	6.2	5.0
Cancellation		49.1

Cumulative Estimated and Actual Disbursements

	FY90	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*	*FY96*
Appraisal estimate (US$M)	11.0	110.0	190.0	240.0	284.0	284.0	284.0
Actual (US$M)	9.97	125.13	203.18	217.74	227.02	233.45	234.88
Actual as percent of appraisal	91%	114%	107%	91%	80%	82%	83%

Date of final disbursement: November 15, 1996

Project Dates

	Original	*Actual*
Identification – Initial EPS	12/15/87	12/15/87
Second EPS to Preappraisal	04/28/88 to 02/15/88	06/07/88 to 03/14/88
Preappraisal	05/12/88	06/21/88
Appraisal	08/15/88	09/05/88
Negotiations	01/16/89	03/15/89
Letters of Development Policy		03/10/89
Board presentation	03/20/89	04/25/89
Signing		04/25/89
Effectiveness	08/01/89	09/28/89
First Tranche Release	N.A.	N.A.
Mid-Term Review	N.A.	N.A.
Project Completion	12/31/93	06/30/96
Closing date	06/30/94	06/30/96

Staff Inputs (staff weeks)

Stage of Project Cycle	*Planned or Revised*	*Actual Weeks*	*Actual US$*
Through Appraisal	N.A.	116.2	321.4
Appraisal - Board Approval	N.A.	12.4	136.0
Board Approval - Effectiveness	N.A.	2.0	n.a.
Supervision	N.A.	42.6	411.8
Completion	N.A.	6.0	49.3
Total	N.A.	179.2	918.5

Mission Data

	Month /Year	*No. of persons*	*Days in field*	*Specializations represented*	*Performance Rating*		*Types of problems*
					Performance rating	*Development Objectives*	
Identification	n.a.	n.a.					
Preparation	03/88						
Pre-Appraisal	06/88	4					
Appraisal	09/88						
Supervision 1	10/89	3	5	Ind. Spec.	1	1	None
Supervision 2	3/90	2	12	Ind. Spec.	2	1	Delays
Supervision 3	2/91	2	5	Ind. Spec.	1	1	Delays
Supervision 4	4/92	3	10	Ind. & Fin. Spec.	1	1	Slippage in Training
Supervision 5	5/93	4	10	Ind. & Fin. Spec.	2	2	Slow commit.
Supervision 6	12/93	2	11	Ind. & Fin. Spec.	2	2	Collection Problems.
Supervision 7	5/94	1	15	Industry. Spec.	S	S	TA implement
Supervision 8	2/95	1	5	Industry. Spec.	S	S	Overdue audits
Supervision 9	1/96	1	5	Industry. Spec.	S	S	Credit non disbursed; TSGs not sustain.
ICR Mission	8/96	2	10	Industry Specialist & Fin. Analyst			

Formula for Calculation of Relending Rate from the Government to Participating Financial Institutions (PFIs)

1. The interest rate payable by all PFIs to the Government on funds out of the Bank loan will be a variable interest rate per annum equal to the average weighted cost of the PFIs' loanable funds arising out of their customer deposits (i.e., excluding free funds from government and parastatal agencies) over a six-month period. This rate will be determined according to the following formula and adjusted every six months:

$$I = (1/6)\left[\sum_{t=1}^{t=6} \frac{(r_t^T * T_t) + (r_t^S * S_t) + (r_t^D * MD_t)}{(T_t + S_t + D_t) - (R_t^T + R_t^S + R_t^D)}\right]$$

Definitions:

t	=	the last day of each of the most recent six months prior to an Interest Period for which BI has consolidated data on the deposit base of the PFIs (1).
r_t^D	=	interest rate payable on PFIs' demand deposits, at time t,
r_t^T	=	interest rate payable on PFIs' time deposits, at time t,
r_t^S	=	interest rate payable on PFIs' savings deposits, at time t,
D_t	=	the amount of PFIs' demand deposits, at time t,
T_t	=	the amount of PFIs' time deposits, at time t,
S_t	=	the amount of PFIs' savings deposits, at time t,
MD_t	=	minimum average balance on PFIs' demand deposits outstanding during month immediately preceding time t,
R_t^D	=	reserves on demand deposits of PFIs, at time t,
R_t^T	=	reserves on time deposits of PFIs, at time t,
R_t^S	=	reserves on savings deposits of PFIs, at time t,
I	=	interest rate applicable on the Subsidiary Loan (from the Borrower to all PFIs) for each interest period.

2. Notwithstanding the above cost-of-funds formula, the relending rate will not be less than the interest rate on the Bank loan plus a margin of 1.75%.

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(1) In this formula, PFIs do not include BAPINDO, PDFCI and UPPINDO.

Table 1: Credit Allocation and Utilization by PFIs
(US$' 000)

Participating Financial Institution	Initial Allocation	Final Allocation	Cancellation	Disburse-ments	%	No of Subloans	%
BNI	63,000	62,600	4,819	57,781	26.33	11	14.67
BDN	40,000	40,000	16,721	23,279	10.61	7	9.33
BEEI	35,000	20,000	459	19,541	8.9	2	2.67
BAPINDO	29,500	34,500	7,079	27,421	12.49	9	12.00
BRI	25,000	30,200	19	30,181	13.75	9	12.00
BBD	20,000	20,000	9,757	10,243	4.67	11	14.67
PDFCI	20,000	22,500	1,458	21,042	9.59	8	10.67
BUN	11,500	11,200	37	11,163	5.09	4	5.33
Bank Bali	8,000	5,700	2,724	2,976	1.36	3	4.00
UPPINDO	5,000	6,500	1,806	4,694	2.14	3	4.00
Bank Duta	4,000	4,000	443	3,557	1.62	1	1.33
Bank Niaga	4,000	7,800	220	7,580	3.45	7	9.33
TOTAL	**265,000**	**265,000**	**45541.96**	**219,458**	**100**	**75**	**100**

Source: *The World Bank*, ICR, February 20, 1997, p. 24.

Table 2: Subsector Distribution of Subloans

Subsector		No of Subloans	%	IBRD Subloan Amount ($' 000)	%
Textiles		51	68.00	178 972.5	81.55
Engineering		14	18.70	29 551.8	13.47
Pulp & Paper		10	13.33	10 933.8	4.98
TOTAL		**75**	**100**	**219 458.1**	**100**

Source: The World Bank, ICR, February 20, 1997, p. 25

Table 3: Loan Collection Ratio by PFIs

	Dec. 91	Dec. 92	Dec. 93	Dec. 94	Dec. 95
State Commercial Banks					
1- BNI	100%	100%	80%	97%	100%
2- BDN	80%	91%	45%	31%	35%
3- BRI	100%	84%	77%	71%	65%
4- BBD	78%	56%	24%	20%	17%
5- BEII	100%	100%	63%	75%	100%
State Development Finance Institution					
1- BAPINDO	26%	15%	14%	33%	35%
Private Commercial Banks					
1- Bank Niaga	100%	100%	100%	100%	100%
2- Bank Duta	100%	100%	100%	Fully repaid	Fully repaid
3- BUN		100%	100%	100%	100%
4- Bank Bali	n.a.	n.a.	n.a.	n.a.	n.a.
Non-Bank Financial Institutions					
1- UPPINDO	1	0.33	0.3	0.14	0.29
2- PDFCI	0.52	0.97	0.68	0.96	0.9

Source: The World Bank, ICR, February 20, 1997, p. 26

PFI Survey

	All companies		Textiles		Engineering		Pulp & Paper	
	Number of companies financed	o.w. surveyed companies	Number of companies financed	o.w. surveyed companies	Number of companies financed	o.w. surveyed companies	Number of companies financed	o.w. surveyed companies
Reporting PFIs								
Bank Bumi Daya	11	10	9	8	1	1	1	1
Bank Rakyat Indonesia	10	9	8	7	0	0	2	2
Bank Negara (BNI)	10	6	8	5	2	1	0	0
Bank Ekspor Impor (BEI)	2	2	2	2	0	0	0	0
Bank Bali	3	1	1	1	2	0	0	0
Bapindo	9	7	7	6	2	1	0	0
Bank Niaga	6	5	3	3	1	0	2	2
Bank Dagang Negara	7	7	2	2	3	3	2	2
Bank Duta	2	1	0	0	1	0	1	1
Total reporting PFIs	***60***	***48***	***40***	***34***	***12***	***6***	***8***	***8***
Non reporting PFIs								
BUN	4	0	4	0	0	0	0	0
PDFCI	8	0	4	0	4	0	0	0
UPPINDO	5	0	2	0	1	0	2	0
Total non reporting PFIs	***17***	***0***	***10***	***0***	***5***	***0***	***2***	***0***
Total all PFIs	**77**	**48**	**50**	**34**	**17**	**6**	**10**	**8**

First questionnaire to be filled by each PFI and for each company

	1989	1990	(...)			1997
a) Textiles						
* Name of the Company						
* Employees (No)						
* Turnover						
* domestic						
* exports						
* Investments						
* o.w. financed by new borrowing						
* FRR of the Project [very important]						
* ERR of the Project [very important]						
* Net cash flow						
* Net Profits						
* Short term debt						
* M & LT debt						
* Loans in Arrears						
a) Engineeering						
Same information as above						
a) Pulp and Paper						
Same information as above						

Second questionnaire to be filled by each PFI and for each company

In addition to the previously requested statistical information, each bank or Financial Institution is requested to provide, for each relevant borrowing company,a short note, with the following information:

Name of the bank (or PFI)
- Name of the Company
- date when the equipment financed with the IBRD loan has been completed and became operational:
  1°- General remarks of the bank concerning the overall situation of the company.
  Important events that characterized the company's life over the period 1989-1997.
  (3 lines of comments)
  2°- During the period 1989-1997, did the related company :

	Yes	No	Comments
(i) Undertook any major managerial change			
if Yes, comment (1 line)			
(ii) Introduced any major technical change			
* a new production process ?			
* a new product ?			
* a new product mix ?			
* a new pollution control technique ?			
* Other ? (explain)			
(iii) Introduced changes in its marketing techniques			
* For domestic market ?			
* For export markets ?			
* Other ? (explain)			
(iv) Experienced major changes in its financial situation			
* Equity capital increase ?			
* Incurred any overindebtedness ?			
* Used a new financing techn. or a new fin. instrument ?			
* Other ? (explain)			
(v) Experienced substantial changes in its economic situation			
* market position has improved ?			
* prices of the products are more competitive ?			
* the cost-effectiveness of the company has improved ?			
* Other ? (explain)			