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The Philippines Issues and Policies in the Industrial Sector

(In Three Volumes) Volume I: Main Report

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CURRENCY EQUIVALENTS

June 1987	=	US\$1.0 = P 20.45
		P 1.0 = 0.05
Average 1986	=	US\$1.0 = P 20.38
		P 1.0 = 0.05
Average 1985	=	US\$1.0 = P 18.6
		P 1.0 = 0.05
Average 1984	=	US\$1.0 = P 16.7
		P 1.0 = 0.06
Average 1983	=	US\$1.0 = P 11.1
		P 1.0 = 0.09

ACRONYMS

APT	-	Asset Privatization Trust
BMW	-	Bonded Manufacturing Warehouse
BOI	-	Board of Investment
BP	-	Batasang Pambansa (Parliament)
CB	-	Central Bank
DBP	-	Development Bank of the Philippines
EO	-	Executive Order
EPR	-	Effective Protection Rate
GATT	-	General Agreement on Tariffs and Trade
GFI	-	Government Financial Institution
GNP	-	Gross National Product
IFC	-	International Finance Corporation
IGLF	-	Industrial Guarantee and Loan Fund (Central Bank)
IPP	-	Investment Priorities Plan
LBP	-	Land Bank of the Philippines
L/C	-	Letter of Credit
MRR	-	Manila Reference Rate
MTI	-	Ministry of Trade and Industry (now Department of Trade and Industry)
NACIDA	-	National Cottage Industries Development Administration
NCSO	-	National Census and Statistics Office
NDC	-	National Development Corporation
NEDA	-	National Economic and Development Authority
NIDC	-	National Investment and Development Corporation
NLC	-	Net Local Content
NPA	-	Non-Performing Assets
NVE	-	Net Value Earned
PASAR	-	Philippine Associated Smelter and Refinery
PD	-	Presidential Decree
PNB	-	Philippine National Bank
PIDS	-	Philippine Institute of Development Studies
SME	-	Small and Medium-Scale Enterprises

PREFACE

This report is the result of an Industrial Sector Mission led by A. Bhattacharya and R. Mohan which visited the Philippines in August/September 1986. It also draws on a joint PIDS/World Bank study on trade liberalization funded by the East Asia Region and on subsector studies undertaken by the Philippine Government.

Volume I was written by Amar Bhattacharya and Homi Kharas. The mission members contributed to Volumes II-IV as follows: Rakesh Mohan (the performance of Philippine manufacturing and the Statistical Appendix); Amar Bhattacharya (trade policy); Peter Petri (incentives); Krishna Challa (finance); Yung Rhee (exports); Carl Dahlman (technology); Ashoka Mody (garments); Harry Choi (engineering); John Strongman (mining). Background papers were prepared by Gerardo Sicat (tax policy), Richard Hooley (factor productivity) and Carl Dahlman (technology). Valuable contributions were also made by Bitá Hadjimichael and Keun Huh.

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PHILIPPINES

ISSUES AND POLICIES IN THE INDUSTRIAL SECTOR

Volume I: Main Report

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MAP

PHILIPPINES

ISSUES AND POLICIES IN THE INDUSTRIAL SECTOR

Executive Summary

The industrial sector in the Philippines is at an important crossroads in its development. On the one hand, as a result of cumulative policy actions in the 1980s, the policy environment has been transformed from one characterized by pervasive distortions and a high degree of "rent-seeking" to a more open, transparent and neutral incentive regime. Although policy-induced distortions still remain, the degree of transformation is striking and represents a major achievement of the policy reform process. On the other hand, Philippine industry is in the midst of an unprecedented crisis, the magnitude of which surpasses any similar episodes in its history. Whether industry will be able to revive by meeting the challenge of external competitiveness, or whether it will become increasingly vocal in demands for renewed government protection will be a major factor affecting economic performance over the next decade.

The development of industry during the 1970s occurred within a policy environment that provided high and variable levels of trade protection, a distorted exchange rate, handsome incentives for new investment, and cheap and readily available long-term finance from public financial institutions. In addition, the Government itself became a large direct investor in major industrial projects. Although industrial growth was rapid, it was costly. Capital and intermediate good inputs grew faster than output, and total factor productivity declined systematically. The benefits of growth were also unevenly distributed. The share of employment in manufacturing remained low (at only 11%) and actually declined somewhat during the 1970s, as sizeable growth in medium and large firms was offset by an employment contraction in small-scale industry. Real wages in industry also declined, while the protection afforded the manufacturing sector caused an appreciation of the real exchange rate and a downward bias against rural incomes.

The structure of the industrial base that was created in the 1970s was brittle and largely uncompetitive. Nontraditional manufacturing export growth was narrowly concentrated in product mix (semi-conductors and garments) and destination (the USA). The remainder of industry, where the bulk of value added was created, was highly susceptible to domestic demand. This was, however, artificially inflated by protection, by heavy foreign borrowing and by infusions of credit and transfers from the government. The momentum given to industrial growth by these measures began to taper off in the late 1970s, when the scope for further expansion of import substitution under heavy protection was exhausted, and technological weaknesses and other inefficiencies fostered by the lack of competition began to take their toll. In addition, the financing requirements of high domestic demand could not be indefinitely sustained. Rapid changes in the international environment since 1980, high interest rates and a foreign exchange crisis led to forced austerity measures which further propelled industry along its downward

trend. Industrial output has declined by 25% in the last three years. The decline has been broad based, with construction registering the steepest cumulative fall in output of 63% between 1982 and 1986. Many firms have ceased operation and have declared bankruptcy. Even firms in operation limp along at 50-60% capacity utilization. Far from being a leading growth sector in the economy, it has been weak industrial performance that first heralded the onset of overall economic stagnation and that has continued to hold back the pace of recovery. While some expansion in industry is now evident, a sustained medium-term recovery is by no means guaranteed.

The lessons of the past have not gone unheeded. Since 1980, Government has undertaken a process of gradually removing the major sources of distortions within the system. Although the reform process has been far from smooth, or as yet complete, much has been accomplished as a result of cumulative actions over the past seven years. Paradoxically, the economic and financial crisis which derailed the trade reforms during 1983-85, provided the momentum for drastically reducing some of the more intractable government interventions in the industrial sector. Following the change in government in February 1986, the pace of reform has quickened and, with the resumption of import liberalization in 1986, significant progress has now been achieved in all of the key areas of needed reform:

- (a) a major tariff reform program was completed in 1985; the effects of this tariff reform will become more apparent with the progressive removal of quantitative import restrictions;
- (b) the protective elements of the indirect tax system have been largely redressed;
- (c) the original program of removal of import restrictions has been resumed; a significant proportion of the program was implemented in 1986, and a timetable has been set for removal of the remaining ones;
- (d) the system of exemptions from duties, except for exports, has been largely curtailed;
- (e) a major reform of Board of Investments (BOI) incentives was completed in 1983, which has made them more performance oriented and less discretionary;
- (f) interest rates have been fully liberalized, and the role of preferential and targetted credit--particularly from public financial institutions--has been virtually eliminated;
- (g) all restrictions on foreign exchange allocation for current account transactions have been removed (except on certain dividends) and the exchange rate has been allowed to float; and, finally
- (h) procedures to privatize public industrial assets, including both the nonperforming accounts and public corporations, have been instituted, and the program of major industrial projects has been discontinued.

All of these changes have added to a fundamental transformation in the policy environment away from a "rent seeking", inward-oriented regime. In fact, as a result of cumulative policy adjustments since 1980, the Philippine regulatory and incentive structure has fewer distortions than at any time since 1950, and is now comparably neutral with other East Asian countries. This has moderated the long-standing anti-export bias, has broken domestic monopolies and oligopolies and opened the economy to a far greater degree of international and domestic competition.

Although significant policy reforms have been undertaken, and there are now signs of recovery, several constraints may impede a sustained supply response from the industrial sector. First, private domestic demand is still weak, although higher copra prices and increased government spending have provided some stimulus. Private investment in particular remains adversely affected by excess capacity, high real interest rates, and labor unrest. Industrial investment is also hampered by lack of efficient financial intermediation, with high interest spreads and limited provision of term finance. Furthermore, the external export environment, while still providing considerable potential, is not as favorable as it was in the past; moreover, the existing export structure is enclave in nature, with few production or technology linkages to the rest of the economy. Second, a large number of enterprises in virtually every branch of industry appear to be facing moderate to severe financial difficulties, as their balance sheets have been debilitated by low revenues, high interest rates, and exchange losses on dollar denominated debts. This adversely affects their ability to obtain working capital or to add to or restructure productive capacity. Third, despite the appearance of substantial excess capacity, many firms face real, supply-side problems. In some cases, capacity installed under an umbrella of protected domestic markets is uncompetitive at current world prices. For these firms, existing assets must be completely written off. In other cases, enterprises must quickly adapt their physical plant and equipment and improve operating efficiency in order to survive. This need for technological modernization has been made more acute due to the precipitous decline in manufacturing investment since 1980. Yet institutions for promoting technological upgrading are weak at every level--public research activities, engineering consultancy firms and internal firm-level R&D departments.

All these factors suggest that the challenges facing the industrial sector in terms of medium-term growth, generating employment, raising real wages and distributing the benefits of growth more equitably through the country are considerable. The present Government is committed to a reliance on private sector industrial development with a minimum of public sector interventions, and to the elimination of special treatments and subsidies. It cannot afford to take a passive role, however, and be content with minimizing the negative consequences of its own regulations. It is faced with the need to provide support to industry without creating the kinds of distortions that will only repeat the inefficient pattern of development of the recent past. The real challenge lies in the formulation of new instruments and new institutional structures that respond flexibly to changing market conditions, and that promote industry in line with the outward orientation of the Government.

Policy Objectives and Recommendations

A concerted and well coordinated strategy will be required to sustain industrial recovery over the longer-term. In discussing recommendations for future actions, the report distinguishes between reforms to improve the openness and neutrality of the incentive system, on the one hand, and more active, growth promoting initiatives to support the private sector, on the other. Future reforms of the incentive system should be aimed at consolidating and reinforcing the on-going program. There remains a need to fine-tune the regulatory environment and improve the administration of existing laws governing trade policy, BOI regulations and financial sector operations.

Trade policy. There are two objectives of further trade policy reform: first, the neutrality, evenness and transparency of protection should be improved; and second, domestic oligopolies should be exposed to increased competition. To achieve these, the report recommends that:

- the current import liberalization program should be implemented on its agreed-upon or an accelerated schedule, with priority given to the liberalization of high cost upstream products;
- all remaining import restrictions should be reviewed and, wherever possible, eliminated and replaced by tariff protection;
- safeguard and anti-dumping measures be carefully administered to minimize unintended protection stemming from their implementation;
- as a medium-term goal, tariff ceilings should be lowered from 50% to 30%-40% to lower the level and dispersion of effective protection;

BOI regulations. The BOI should maintain a focus on using tax incentives to offset demonstrated market imperfections. It could increase its efficiency by simplifying cumbersome administrative practices still in place and devoting increased resources towards policy coordination and general industrial development functions. To these ends, it should:

- focus on functional interventions, such as for "learning" and "risk" activities, with equal treatment across firms;
- simplify regulations to attract more SMEs and regional producers;
- reduce the value of incentives as policy-induced distortions, such as trade barriers, are removed.

The new Omnibus Investment Code of 1987 does not, by and large, revise the incentive system along these lines. There appears to be little change in the thrust of the incentive system. Some administrative requirements may have eased, through the introduction of an income tax holiday and elimination of tax credits for the withholding tax on interest and the tax loss carry-forward. Others, however, remain. Registration procedures, measured capacity calculations and the new deduction for incremental labor expense will complicate administration of the code. A comprehensive review of

BOI incentives should still be undertaken, with particular attention paid to the impact on resource allocation, tax revenues and administrative capabilities, as a precursor to a final reform of the incentive codes.

Financial sector policies. Reforms in this area should aim at facilitating credit flows on appropriate terms to firms with viable new projects and at fostering a recapitalization of firms and financial institutions. This report does not provide a blueprint for immediate financial sector reforms. Rather, it highlights overall financial constraints faced by the industrial sector and identifies priority areas for further review. First, regulation of commercial bank loan/loss provisions should be modified to encourage banks to monitor loans more closely and to become more actively involved in restructuring programs with their clients. With such modifications, permitting tax deferment against general loan loss provisions may become feasible. Second, a comprehensive assessment of the capacity of the financial sector to provide industrial equity and credit should be conducted in light of the needs for restructuring and financing Asset Privatization Trust (APT) sales and the reduced operations of GFIs. Third, the potential for offering variable interest rate term financing through Central Bank (CB) rediscount windows should be reviewed, to popularize such instruments as mechanisms for expanding term finance.

For these reforms to be credible and effective, it is essential that the macroeconomic environment be kept stable. In the short-run this implies some stimulus of domestic demand to restore internal balance along the lines currently adopted by government. In the medium-term it implies restricting the overall public sector deficit to levels sustainable with non-inflationary financing. It also requires the maintenance of exchange-rate competitiveness relative to other East Asian manufactured good exporters.

These reforms would promote a more neutral, open and efficiently intermediated system. They provide the necessary, but not sufficient, conditions for sustained growth. They should be complemented through a series of active growth promoting measures in the areas of industrial restructuring, export promotion and technological improvement.

Industrial restructuring. The disposition of the nonperforming accounts and privatization of government corporations through the APT is a first step in the rehabilitation of a substantial segment of the manufacturing sector. Even approximate valuation of these assets is still subject to considerable uncertainty and should be expedited with the help of financial and technical experts. Although cash sales are desirable to return the assets as quickly as possible into private sector hands, government should also develop a program of credit, preferably with commercial bank guarantees, or other options, such as lease/buy-back schemes or management contracts, to obtain private operation without an excessive burden on industrial finance.

The private sector, too, faces a major restructuring challenge. The experience to date with subsector studies has been disappointing. These do not currently constitute an appropriate framework around which an overall action plan can be formulated. They should, however, continue as a mechanism for encouraging public/private sector dialogue, with a focus on broad

strategic issues facing subsectors rather than on identification of product and process specific comparative advantage. There are, however, two immediate steps that government can take to expand firms' options:

- facilitate firms' purchase of their external debts at a discount on international secondary markets, subject to applicable provisions of the rescheduling agreement with commercial banks;
- rewrite the Bankruptcy Code in order to allow more flexible use of assets in receivership.

Export Promotion. Rapid export growth is not an objective in and of itself but a means of achieving rapid growth in overall manufacturing value added, in employment and in productivity. The major policy objective is to create a neutral and automatic system of export incentives, bolstered by institutional structures that support new product development and enhance marketing capability. Institutional support could be made more effective by coordinating the functions of several public agencies (PITC, CITEM, BSMI among others), by establishing a high-level Export Development Council to coordinate export policy design and implementation and by promoting local trading companies and exporters' associations. In addition, as international trade develops increasingly along strategic lines, the government should take a more aggressive attitude in negotiating concessions from trading partners, in the context of GATT and elsewhere, and should bind its recent liberalization efforts to obtain full credit for these in forthcoming international negotiations.

Specific recommendations to promote exports in the short and medium-term include:

- further simplification and streamlining of the duty exemption, fixed and individual drawback systems;
- extension of Central Bank export loans and duty exemption or drawback schemes to indirect exporters through the development of a domestic letter of credit system;
- development of a strong preshipment export finance guarantee agency; and
- increase in the annual allocation of garment quotas to new exporters and in the transferability of quotas to enhance utilization rates.

Technological Improvement. The country has considerable potential for advancing average technology based on its well-educated population. This "people" potential, however, is not being realized because of weakness in the institutional set-up. Overall technology upgrading can best be achieved through a focus on the dissemination of existing technology rather than on research into new or adapted techniques. Government objectives should be to provide a technological infrastructure which would induce individual firms to undertake more technological activities. The main elements of such an infrastructure that need attention are: technological information services,

technical education, R&D centers, the development of norms and standards and patent protection. In addition, there is scope for government to promote increased participation of firms in R&D; the dissemination of existing technology, particularly to small- and medium-scale firms; and the strengthening and development of industrial engineering consulting firms.

The Outlook

After liberalization in the Philippines was initiated in 1960-62, the manufacturing sector failed to respond, had a poor growth performance, and the reforms were aborted. To avoid a repeat of this outcome, this report argues for a comprehensive approach towards industrial policy, comprising a reduction of distortions with needed growth promoting activities. Many elements of a comprehensive approach have been individually articulated and implemented. Once the policy package as a whole is completed, the Philippines should be well placed to reap the rewards of industrial development that have so far proved elusive. It can establish itself as a low cost producer on the basis of the high quality and productivity of its labor force relative to existing wage levels. It can take advantage of existing pockets of well-developed technologies to bring up rapidly the average level of efficiency, and by restructuring its capital assets, it can expand capacity cheaply. All these augur well for sustained growth despite the severe fiscal and external resource constraints faced by the country.

PHILIPPINES

ISSUES AND POLICIES IN THE INDUSTRIAL SECTOR

I. INTRODUCTION

1.1 This industrial sector report focuses on the fundamental policy issue of what government might do to initiate industrial growth in the near term and to sustain it over the medium and long term. The report first reviews the industrial sector's current situation, recent trends in performance and in structural change and the major issues confronting policy makers. It then relates these developments to the pattern of government intervention in the economy. Particular attention is paid to the most recent reforms aimed at trade liberalization and the restoration of a more neutral and stable incentive system. Finally, the report recommends specific actions relating to the immediate recovery program and the longer-term development of the industrial sector. Six areas are identified for the primary policy focus of the report: (a) the protection regime and trade liberalization; (b) investment incentives and regulations; (c) industrial finance needs and constraints; (d) industrial restructuring; (e) export policies and institutions; and (f) technology development. The report also includes detailed case studies on the garments and metalworking subsectors.

1.2 Volume I of the report contains an overview and summary of the findings and recommendations. Volume II is comprised of chapters on the areas identified above and of two case studies on engineering and garments. These chapters provide analytical and statistical details to buttress the arguments advanced in Volume I. Volume III is the statistical appendix.

II. INDUSTRIAL SECTOR STRUCTURE AND PERFORMANCE

Industrial Performance

2.1 Philippine industry is in the midst of an unprecedented crisis--the sector has suffered absolute declines in real value added for three consecutive years, the culmination of an annual deceleration recorded systematically since 1977. Far from being a leading growth sector in the economy, it has been weak industrial performance that first heralded the onset of overall economic stagnation and that held back the pace of recovery in 1986 (Table 2.1). While it is now expected that rapid industrial growth will occur in 1987, its sustainability over the medium-term is still in doubt.

Table 2.1: GROWTH IN INDUSTRIAL VALUE ADDED
(%)

	<u>Shares</u>		<u>Growth rates</u>				
	1975	1986	1973-80	1980-83	1984	1985	1986
<u>Industry</u>	33.2	31.8	7.4	2.4	-10.6	-10.5	-3.7
<u>Manufacturing</u>	24.6	24.8	5.5	2.7	-7.2	-7.6	1.2
Mining	1.7	2.0	6.7	-3.1	-10.0	0.7	-9.6
Construction	5.9	3.3	16.8	2.7	-23.4	-27.6	-28.3
Utilities	1.0	1.7	8.8	10.1	0.0	1.6	3.6
<u>GDP</u>	100.0	100.0	6.1	2.6	-4.6	-4.0	0.2

Source: NEDA.

2.2 Industrial decline has been broad based, with construction registering the steepest cumulative fall in output of 63% between 1982 and 1986. It is, however, the poor recent performance of the manufacturing sector with which this report is most concerned. First, manufacturing is the largest component of industry, comprising 78% of industry value added in 1986. Second, the other components of industry are primarily driven by demand factors, both internal (utilities and construction) and external (mining). Growth performance in these areas is, therefore, related more to overall macroeconomic and international developments than with specific sectoral policies. Selected mining issues are, however, discussed in a companion report ("Mining Sector Review", Report No. 6898-PH (1986)).

2.3 The most salient feature of the growth performance of manufacturing is the sharp turn-around from a relatively robust annual growth of 5.5% in 1973-80 to a slow-down in the early 1980s and steep recession in 1984 and 1985 (Table 2.1). Although the recent weakness in the sector can be explained to some extent by transitory factors, such as the recession and weak export demand, structural features, elaborated on below, exacerbated the decline.

2.4 Throughout the 1970s, Government protection, subsidies and incentives for the industrial sector have been substantial. The extent of these has been revealed by the trend increase in government ownership of industrial assets, despite a long-standing policy of limiting direct government participation in productive activities. In addition, industrial growth was oriented towards sectors where profitability was artificially inflated by an unsustainable, overvalued exchange rate, by protection against imports and by extensive government demand, particularly for construction and other producer goods. Each of these has had negative side effects elsewhere in the economy and has been the subject of recent reforms, following which protected subsectors have suffered. The structure of exports, too, has been shown to be fragile. Nontraditional manufactured exports were concentrated in a few products, mostly (about two-thirds) destined for the United States. Weakness in this external market contributed to the difficulty of stabilizing the balance of payments.

2.5 Other evidence is also suggestive of inefficient manufacturing growth in the 1970s. Many firms producing behind high import barriers had negative value added at world prices. Calculations of the domestic resource cost of producing one unit of foreign exchange in different sectors shows that firms in bakeries, home appliances, paper, fabrics, yarns and fibers had negative DRCs in 1980. Similarly, the estimated cost of completely knocked down kits for the auto industry sometimes exceeded the cost of the assembled car. Clearly, in these instances, sectoral growth did not result in higher economic welfare.

2.6 Inefficient use of resources is also seen in the trends in total factor productivity.^{1/} The productivity slow-down of the 1970s is reflected in a fall in both profitability and real wages. It is principally associated with shifting resources to inefficient industries, particularly in the capital good and intermediate good sectors. As shown in Table 2.2, total factor productivity growth was negative between 1971-80 (-1.2% per year). However, within individual industries there was positive growth in productivity; the negative total reflects a shift from industries with high productivity to industries with low productivity. Since 1980, productivity has rebounded both as a result of greater efficiency within subsectors and as a result of the more outward-orientation of the economy. These trends can be expected to continue. The recent recession should further improve within-industry productivity by weeding out the least efficient firms, while trade liberalization and competitive exchange rate policy will continue to encourage resource shifts to more efficient sectors.

^{1/} Total factor productivity measures the difference between the change in output and a corresponding change in capital, labor and intermediate inputs, weighted by their contributions to output.

Table 2.2: ANNUAL GROWTH RATE IN TOTAL FACTOR PRODUCTIVITY (%)

	1956-70	1971-80	1981-83
All Manufacturing	0.56	-1.23	3.2
Within industry	0.77	0.34	3.0
Between industries	-0.21	-1.57	0.2

Source: Hooley (1985); 1981-83 new estimates.

Industrial Structure

2.7 The manufacturing sector in the Philippines consists of three types of firms with distinct characteristics: public, private organized and unorganized households. There is a sizeable publicly-owned sector, especially in the intermediate and capital good industries. Government owned firms produce industrial chemicals (alcohol, fertilizer, synthetics), petroleum (PNOC), nonferrous metals (copper, PASAR), fabricated metals (Philippine Plate Mills, National Tinsplate), nonmetallic products (cement, refractories) and basic metals (National Steel Corporation) among other goods. Many of these firms were set up as public investment levels accelerated during the 1970s to 6-8% of GDP. Others have come under government "ownership" as a result of ad hoc government financial interventions, joint ventures, foreclosures and sequestration. One estimate suggests that the share of government in nonfinancial manufacturing corporations increased from about 15% in the late 1960s to almost 30% by 1980-82.^{2/} While measures such as these are fraught with problems (both definitional and empirical) the broad trend of a rapid rise in the share of publicly-owned firms to a significant level is undeniable.

2.8 More recently, the size of the public sector may have expanded even more with the interim takeover of nonperforming accounts (NPAs) of the government financial institutions. There are 158 large manufacturing accounts (exposure over P 10 million) in the three largest GFIs (DBP, PNB/NIDC, and Philguarantee) with total claims amounting to about P 44 billion. Of this, perhaps P 25 billion represents booked exposure, with the remainder comprised of other claims such as unbooked accrued interest, penalty charges, and advances made for rehabilitation and maintenance of acquired assets. Booked

^{2/} See Hooley (1985). Hooley's data refer to firms with public equity participation of 51% or more. The "share" of government refers to the fraction of total manufacturing assets in public firms. 1980-82 estimates of public assets are inferred from income statements of these enterprises in those years and from detailed asset/income relationships available in earlier years.

exposure is over one-half of the P 48 billion book value of fixed assets in the whole manufacturing sector as recorded by the 1983 census.^{3/} Clearly, despite a long-term trend of government non-intervention, direct government participation in manufacturing has become a dominant feature of the sector through ad hoc financial support collateralized against real assets.

2.9 The private organized sector, together with public companies, produces over 90% of the value-added in manufacturing.^{4/} Manufacturing is dominated by food processing which accounts for about 40% of the sector (Table 2.3). Other light consumer goods represent a further 20%; 25% of value added is in intermediate goods and the remaining 15% is in the production of capital goods.

Table 2.3: STRUCTURE OF PHILIPPINE MANUFACTURING VALUE ADDED, 1970-85 (%)

	1970	1975	1980	1985
Light consumer goods	56.4	52.3	56.3	60.5
Of which:				
Food processing	30.0	25.7	36.3	40.0
Textiles	5.9	5.6	4.5	3.4
Footwear and clothing	3.8	3.6	4.4	6.0
Intermediates	30.3	35.1	26.1	24.0
Of which:				
Chemicals	7.9	13.1	10.2	7.9
Petroleum	7.3	7.4	5.9	5.3
Capital goods	13.3	12.6	17.6	15.4
Of which:				
Electric machinery	3.0	2.7	5.0	7.4
Transport	4.2	5.1	3.8	0.6
<u>Total Manufacturing</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Memo item: Manufacturing/GDP	22.5	24.7	24.4	24.2

Source: Table 1.2, Vol. II.

^{3/} The census figure should not be interpreted as providing a reasonable estimate of total economy-wide assets in manufacturing. Most censuses are only able to achieve partial coverage. Comparison of the census value added figure with national income accounts value added indicates that only about two-thirds coverage was achieved. One other source of information is the Business Day Survey of the top 1000 corporations. This reports net fixed assets in manufacturing in 1983 P 38.6 million.

^{4/} Assuming that value added per employee in small firms in the 1983 census (<10 employees) is the mean for all small firms.

2.10 The relative shares of these subsectors remained approximately constant from 1970-80. Since then, the structure of manufacturing has started to shift in response to two significant changes: the deep recession since 1983 during which manufacturing output fell by 14%; and the ongoing liberalization of trade and reduction of the bias against exports. Recent trends in industry sales are illustrated in survey data compiled by the Ministry of Trade and Industry (Table 2.4). Although the surveys are not comprehensive and the aggregation is not comparable to other sources, they provide useful confirmation of the direction of structural change. Most importantly, the robustness of outward-oriented light manufacturing over the crisis period clearly emerges: among all the groupings it is the only one to show higher sales in 1984 than in 1980. Inward-oriented sectors, especially textiles and transport (the automotive industry), have been most seriously affected and have dragged down with them domestic intermediate good supplies.

Table 2.4: VOLUME OF SALES BY INDUSTRY
(1980 = 100)

	1980	1981	1982	1983	1984
Primary export oriented	100	98	92	101	74
Primary import substitutes	100	83	109	95	87
Light manufacturing import substitutes	100	92	97	105	90
Light manufacturing export oriented	100	135	124	159	148
Intermediate goods	100	75	72	78	72
Capital goods	100	76	72	72	43
<u>Total Manufacturing</u>	<u>100</u>	<u>93</u>	<u>92</u>	<u>102</u>	<u>87</u>

Source: Ministry of Trade and Industry. For details on subsector industries in each category, see Table 2.15, Chapter I, Vol. II of this report.

2.11 The shift towards exports is a relatively recent phenomenon, occurring after decades of import substitution. During the 1970s, the contribution of foreign demand to total demand growth for manufacturing output was only 10%. Few industries exported more than half of their total output. In the manufacturing sector as a whole, exports in 1983 were only 13% of total sales (Table 2.5). In fact, other than the traditional processed sugar and coconut exports, only three manufactured items have been successfully exported in

large volume: garments, semi-conductors and handicrafts. And although export growth in these items has been impressive, their impact on the rest of the economy has been muted: first, because their absolute size is still comparatively small, and second, because of their heavy reliance on imported intermediates and their consequent failure to develop substantial forward or backward linkages. In fact, non-traditional manufacturing exports are concentrated in firms, mostly foreign-owned, operating on a consignment basis. This is reminiscent of the development of other traditional export industries in the Philippines--sugar, coconut and mining. The spin-off benefits, in the form of backward linkages, entrepreneurship development or technological advance, have been minor. Thus, the boost to industrial output from recent liberalization measures and exchange rate devaluation will initially affect only a small segment of manufacturing. The remainder is dependent on domestic demand that at present is only beginning to recover. Over the medium term, however, there is considerable potential for export growth over a broad range of products.

**Table 2.5: EXPORTS AS A PROPORTION OF GROSS OUTPUT
(percent)**

Selected subsectors	1974 <u>/a</u>	1979 <u>/a</u>	1983 <u>/b</u>
Foods and beverages	24.0	24.9	10.3
Textiles	6.1	12.9	2.6
Clothing and footwear	9.3	29.3	43.6
Chemicals	2.5	5.0	4.1
Machinery and transport	1.3	4.0	3.6
Electrical equipment and components	1.7	45.6	93.8
Furniture	36.6	33.3	95.3
Wood	28.3	39.3	35.3
All manufacturing	14.2	15.3	12.9

/a 1974 and 1979 figures are taken from NEDA, The Interindustry Accounts of Philippines.

/b The 1983 gross output was calculated in the following way: gross output obtained from NCSO divided by value added from NCSO multiplied by the value added from NEDA, National Accounts Staff. Exports are taken from the balance of payments.

2.12 The third category of manufacturing firms is comprised of small, unorganized units typically located within a household. While very small in terms of its share in total value added, this informal sector is dominant in its contribution to employment (about two-thirds) and, hence, to the evolution of real wages.

2.13 As shown in Table 2.6, overall employment growth in manufacturing since 1970 has been slower than in the economy as a whole, with the result that manufacturing currently employs only 9% of the economy's labor force. The declining trend has been mostly due to an acceleration in overall labor force growth, as a result of increasing participation rates, rather than a slow-down in manufacturing employment growth. The unorganized manufacturing sector has played a major role in absorbing employment and has grown only slightly slower than the total manufacturing labor force. However, there have been large variations between factory and unorganized employment over time. In the 1970s, investment in organized manufacturing doubled as compared to the 1960s, and labor force growth was correspondingly rapid, especially in the burgeoning export industries--garments, footwear and electrical machinery. Much of the supply of labor appears to have originated in the unorganized sector, and to have returned to that sector during downturns, as in the 1980s. To some extent, this may be simply a statistical phenomenon, as unorganized employment is measured as a residual. The data, however, do suggest that firms in the unorganized sector have not developed as subcontractors for large factories, as in Korea for example, but as final good producers competing with the factory sector.

Table 2.6: EMPLOYMENT STRUCTURE AND GROWTH IN MANUFACTURING, 1956-86
(% per year)

	<u>1956-70</u>	<u>1970-80</u>	<u>1980-85</u>	
<u>Growth</u>				
Total manufacturing	2.5	2.6	1.2	
Factory	4.6	7.8	-5.7	
Household	2.0	-0.3	6.0	
All labor force	2.4	4.3	4.3	
	<u>1960</u>	<u>1970</u>	<u>1978</u>	<u>1985</u>
<u>Structure</u>				
Mfg./labor force		12.1	10.6	9.0
Household/total mfg.	76.0	71.1	41.9	66.9

Source: Table 2.26, Chapter I, Volume II of this report. 1985 factory employment is estimated from survey data on recent trends in employment by subsector, weighted by the subsector share of total factory employment in 1983.

2.14 Partly as a result of the large pool of workers in the unorganized sector, changes in factory demand for labor have not had major impact on real wages. Real wages in 1970 were approximately equal to their level a decade before. By the mid-1970s, real wages had fallen by about 30% and stabilized at that level through the early 1980s, despite government legislation in 1979

to raise the minimum wage by 20%. Low real wage growth seems to be closely linked with low productivity growth. Estimates of labor productivity in Philippine manufacturing show an annual decline of 2.2% between 1970 and 1981--a cumulative decline of 27%. Over the same period, the NCSO index of average real total compensation paid to employees shows a decline of 28%.

2.15 Low overall employment growth has been the consequence of an increase in capital/labor ratios across manufacturing and is not the result of high real wages. Capital deepening is evident in most subsectors, notably in food, beverages, chemicals, cement, iron and steel, fabricated metal and transport equipment. This may be associated with government policies aimed at cheapening capital costs through subsidized credit and investment-based fiscal incentives. But it has also been linked with a government push in highly capital-intensive sectors. These firms have typically been large. The trend of capital-deepening is, therefore, exemplified by the increased domination of large firms, despite official attempts to promote small and medium enterprises. Large firms (over 200 employees) accounted for 79% of industrial value added in 1983, compared with 53% in 1960. In a counterfactual scenario, if capital had gone into more labor-intensive outward-oriented sectors, or into small and medium enterprises, employment growth would have been higher.

The Current Situation: Key Constraints to Sustained Industrial Growth

2.16 As noted above, the causes of industrial distress are several. First, demand has been weak, both on the domestic and external fronts. Second, many firms have financial problems resulting from exposure to market-determined prices and interest rates. Third, other firms have real, supply problems with high costs based on inefficient technology and poor management practices making them vulnerable to competition. Each subsector is affected to varying degrees by these constraints. The following paragraphs briefly survey the constraints to future growth and the situation in selected subsectors.

2.17 Demand Constraints. During the recent recession, demand fell across the board in consumer items, investment and exports. The fall in consumption has particularly affected subsectors such as consumer durables, textiles and furniture. In judging future prospects, there are two offsetting factors to be considered. On the one hand, medium-term growth must be led by investment expenditures, with domestic consumption lagging in order to restore savings rates to past levels and to sustain an equilibrium in the balance of payments. On the other hand, because of the length of the recession, the average age of consumer durables has probably increased and replacement orders should be forthcoming. This latter factor is likely to dominate in textiles and transport equipment, for example.

2.18 The export and investment sectors will be the most buoyant in the near term, and have already exhibited considerable growth albeit from a very low level in the case of investment goods. As the government-led expansion in investment takes hold, subsectors such as cement, brick and iron and steel will benefit first. On the external side, the impact of the exchange rate adjustment of February 1986 is starting to be fully felt. Nontraditional manufactured exports grew by 15% in the fourth quarter of 1986 and have surged

ahead in 1987, led by garments, electronics, furniture and wood manufactures. While these are encouraging signs, they are not representative of the economy's capacity for sustained growth. Two constraints must yet be overcome through a restructuring of financial balance sheets and physical capacity.

2.19 Financial Constraints. The poor industrial performance indicated by macroeconomic statistics has left a legacy of substantial deterioration in the financial structures of individual firms. Some areas (such as sugar mills, mining, construction, wood-working) have been especially hard hit, but financial distress is a more general phenomenon, broadly observed across all subsectors. This has contributed to widespread underutilized capacity as firms face difficulties in obtaining minimum levels of working capital. It has also resulted in the bankruptcies of firms with technologically-efficient plant but high financial debt/equity ratios, and the idling of their capacity under receiverships. For example, in the engineering subsector, capacity utilization in plants that are still operating may be well below 50%. This sector has also witnessed the closure of many of the more modern foundries, which had still to finance initial investment costs, while older more primitive plants with lower debt/equity ratios have survived. Thus, it is not always the case that the recession has squeezed out the most technologically inefficient firms. This will pose additional constraints on a sustained recovery.

2.20 Three principal factors have caused the financial problems facing firms: first, low revenues, often associated with falling international commodity prices (as in mining and sugar mills) or with the domestic recession (automobiles, cement); second, high real and nominal interest rates, especially in the stabilization period; and third, valuation changes associated with the peso devaluation, which particularly affected firms with large external debts. Instances of less-than-prudent business practice, in some cases under political pressure, also contributed to financial problems in some firms.

2.21 The doldrums experienced by the manufacturing sector are illustrated in Table 2.7. The table shows that the average rate of return in manufacturing (the ratio of net income/net worth) was 5 percent during 1979-85, below the real international interest rate. It is noteworthy that although the worst years in terms of net income (and stock price) performance were 1980-83, these were also years of strong growth in assets, largely because of revaluation. Thus, indicators of solvency such as liabilities/net worth and liabilities/assets did not worsen markedly during this period. Since then, however, as interest rates have risen, company exposure to debt has been revealed, and a sharp deterioration in solvency indicators is observed.

Table 2.7: FINANCIAL PERFORMANCE OF MANUFACTURING, 1979-84 /a

	1979	1980	1981	1982	1983	1984	1985
Net income (P billion)	1.92	1.20	1.04	(0.11)	0.70	2.54	2.48
Net income/net worth (%)	9.97	5.60	3.88	(0.39)	2.16	7.26	6.69
Liabilities/assets (%)	68.46	71.53	68.43	68.40	70.88	73.83	72.71
Liabilities/net worth	2.17	2.51	2.17	2.16	2.43	2.82	2.66
Memo item:							
Manufacturing stock price index (1978-100)	93.8	78.1	63.4	52.8	61.5	61.1	55.7

/a Top 1000 corporations only.

Source: Business Day, 1000 Top Corporations in the Philippines various editions. Central Bank of the Philippines, 1985 Annual Report.

2.22 Aggregate data on financial problems often disguise the dimensions of the crisis facing particular firms and subsectors. A few examples illustrate the nature of the financial burden faced by specific firms. The six major mining companies had annual average after-tax profits of about P 690 million during the 1970s. In 1983-85, they lost P 3.1 billion per year. A large portion of these losses is attributable to rising interest costs facing these firms. Using copper production as an example, interest charges rose from 1.5 US cents/lb of refined copper in 1975 to 32.2 cents/lb in 1985. Even after deferrals and postponements, interest amounted to 14 cents/lb. By contrast, interest was a much lower proportion of production costs elsewhere in the world--2.9 cents/lb in 1975 and 6.6 cents/lb in 1985.

2.23 Currency devaluation has also raised costs and financing charges for some companies in an environment where output price increases could not be passed through because of decreasing protection and sluggish demand conditions. Nonfinancial private institutions in the Philippines have about \$3.5 billion in nonguaranteed external debt. Devaluation since 1983 has increased these liabilities by P 22.4 billion. Exchange-rate losses are thought to be a significant factor in raising the cost of production of the country's only polyester fiber producing company, Filsyn, 20-40% above world levels.

2.24 Technology and Production Costs. As noted, technical change in the Philippines has been slow. One of the central reasons is the limited resources devoted to improving technology. Inputs into "technological effort" are notoriously difficult to measure. Two proxies are expenditures on R&D as a percent of GNP and the number of scientists and engineers per million population. Cross-country comparisons are shown in Table 2.8 below. The Philippines clearly emerges at or close to the bottom of the table with respect to both categories.

Table 2.8: INPUTS INTO TECHNOLOGICAL EFFORT, 1983

	R&D Expenditures as percent of GNP	Scientists and Engineers per million population
United States	2.7	3,107
Japan	2.6	4,458 <u>/a</u>
Korea	1.1	804
Brazil	0.6 <u>/b</u>	256 <u>/b</u>
Indonesia	0.4	116 <u>/b</u>
Singapore	0.3 <u>/c</u>	296 <u>/c</u>
Turkey	0.3 <u>/b</u>	167 <u>/b</u>
Philippines	0.2 <u>/b</u>	156 <u>/b</u>

/a 1984

/b 1982

/c 1981

Source: Table 6.3, Chap. VI, Vol. II

2.25 There are several problems in the data reported in Table 2.8 caused by cross-country differences in the definition of R&D. Furthermore, most innovation and improvements in technology are minor and result from ideas that emerge during the course of production. These inputs are clearly not captured by formal R&D measures. Nevertheless, the aggregate data strongly suggest that the Philippines devotes little effort to technological improvement. In addition, most of the formal R&D effort (two-thirds) is undertaken by government, with a heavy bias towards weather forecasting. A tiny three-hundredths of one percent of GNP is the estimated private sector expenditure on R&D.

2.26 One consequence of low inputs of technical effort is that the average level of technological development is low, and the variance amongst firms within a subsector is high. There are several firms that display excellent investment, production and innovation capability. These include both local subsidiaries of multinationals and domestic firms. The main problem in the Philippines, then, is not lack of access to technology, but the limited assimilation of technology. There are two components to this. First, technology already in place is not well used. That is, productivity in many firms could be increased via minor adaptations or modifications to existing equipment. This kind of technological upgrading should receive top priority.

2.27 The second component of poor assimilation is in the failure of firms to choose the most appropriate technology at the time of investing in new equipment. Five groups of firms, numbered 1 to 5, are shown in Table 2.9, each with different

technologies.^{5/} As shown, there is substantial variance in the unit cost of production amongst these groups of firms using different technologies in both spinning and weaving (Columns 1 and 3). In spinning operations, there is a 77% total cost difference between the highest and lowest cost producers, using technologies 5 and 2 respectively. The table also shows what the unit cost would be if the technology were properly used (at 85 percent efficiency relative to best practice use with the same vintage equipment). Thus, with constant relative efficiency in operating each technology, the cost difference would be only 29% (145 less 116); the remaining 48 percentage points are attributable to improper operation. In weaving, there is a 142 percent total unit cost differential between technologies 1 and 4, of which 86 percentage points are from operating inefficiency and 56 percentage points are due to technological differences. Thus, choice of technique explains only about 40% of the cost differences between firms in this sample.

Table 2.9: UNIT COSTS IN SPINNING AND WEAVING /a

Technology	Spinning		Weaving	
	Unit Cost (1)	Cost with RTFP=0.85 (2)	Unit Cost (3)	Cost with RTFP=0.85 (4)
1	170	150	100	61
2	100	116	147	103
3	140	119	238	146
4	154	123	242	117
5	177	145	106	105

/a All figures are expressed as indices relative to the plant with lowest cost.

RTFP = Relative Total Factor Productivity

Source: Table 6.5 and 6.6, Chap. VI, Vol. II

2.28 How can firms survive with such large differences in operating efficiency and unit costs? To some extent, this is because of the general economic environment within which firms have operated. In several manufacturing subsectors, large firms have a substantial share of the market. With sizeable protection from imports based on tariffs and quotas, many industries could be classified as oligopolistic. Table 2.10 gives some indication of market structure. It shows the number of large firms in each subsector (those with more than 200 employees), the share of these firms in total sales in 1983, and the market share of the "average" large firm. Clearly, in leather, petroleum and coal, professional and scientific equipment and

5/ See Volume II, Chapter VI for a more detailed discussion of the technology groupings and the methodology employed.

metal furniture, a few large firms dominate. Even in other sectors, however, where there would appear to be more scope for competition, it is probable that firms substantially differentiate their products and have power in small market niches. This is the conclusion of a textile sector study (Pack, 1987) which also attributed low efficiency levels to lack of product specialization associated with producing for a small, segmented market.

Table 2.10: INDICATORS OF MARKET STRUCTURE, 1983

Sample Subsector	Number of large firms	Sales of Large firms/ total sales	Sales of the "average" large firm/total sales
Food	114	0.65	0.01
Textiles	82	0.84	0.01
Footwear and Clothing	87	0.80	0.01
Leather	3	0.45	0.15
Wood and furniture	84	0.66	0.01
Paper and printing	28	0.64	0.02
Petroleum and coal	3	0.99	0.33
Metals and minerals	67	0.72	0.01
Machinery and transport	94	0.85	0.01
Professional equipment	2	0.30	0.15
Metal furniture	1	0.17	0.17

Source: Appendix table 5.1

2.29 Another reason for the survival of high cost firms is the wedge that has been driven between technological cost and private financial cost by fiscal incentives. For example, the bias towards large firm size associated with BOI incentives has probably contributed to the low operating efficiency of industry. As size expands, more complex organizational structures are required to match best-practice productivity. These have not been developed by firms. Yet although productivity may be raised by smaller-scale operations, firms would then benefit less from certain incentives, such as tax credits. Similarly, because of the protection and incentives given to domestic intermediate good production, downstream firms have been faced with erratic supplies of raw materials. Firms with preferred access could survive even in the face of technological cost disadvantages. Inventory control, rather than productive efficiency, has dictated profitability. As discussed in Volume II, Chapter I, a major part of negative total factor productivity growth in the Philippines can be attributed to steady increases in output/intermediate input ratios.

2.30 New technologies are typically embodied in net new capital formation. But while the Philippines had high average investment rates during the 1970s, capital formation and inventories have declined precipitously since 1980. Overall investment rates have fallen from an average of 30% of GNP

(1976-80), to 14% in 1986 (Table 2.11). The bulk of the decline has been borne by the construction sector, particularly public construction. After accounting for depreciation, as recorded in the national income accounts, the total capital stock in the economy has probably continued to rise even through the recent recession. However, depreciation figures do not take into account the deterioration of many nonperforming assets. Nor do they measure the substantial obsolescence that has been triggered by recent reforms. It is probable that after proper accounting for these factors, the net real value of capital stock has declined over the past few years.

2.31 It is noteworthy that the sharp fall in real investment in manufacturing had already started well before the collapse in economy-wide investment. Even before 1983, investment going into the manufacturing sector was only 45% of its levels in the late 1970s. A part of this reflected the completion or cancellation of several large government investment projects in intermediate and capital goods (chemicals, non-metallic minerals, and metals), but sizeable decreases were also observed in the textile, clothing, food and beverage sectors. Thus, although substantial underutilized capacity clearly exists, there is the danger that much of it may be obsolete under current conditions (sugar mills, pulp and paper, automobiles) and that the remainder may have deteriorated through lack of appropriate replacement.

Table 2.11: CAPITAL FORMATION IN THE PHILIPPINES
(as a % of GNP)

	<u>1971-75</u>	<u>1976-80</u>	<u>1981-83</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Total Investment	22.9	30.2	28.9	19.2	16.3	14.0
Changes in stocks	4.5	5.3	3.3	-0.9	-0.2	-0.3
Fixed capital formation	18.4	24.9	25.6	20.1	16.4	14.3
Construction	7.2	13.5	15.0	12.1	9.5	7.1
Durable equipment	11.2	11.4	10.7	7.9	7.0	7.2
Depreciation	9.3	9.5	10.2	10.5	11.0	11.0
Net capital formation	13.6	20.7	18.7	8.7	5.3	3.0
Memo: Manufacturing investment (billion 1972 pesos) /a	7.8	10.1	4.4	n.a.	n.a.	n.a.

/a Covers only establishments covered by census or survey.

Source: NEDA, National Income Accounts; NCSO Annual Survey of Establishments, 1978, 1983 Census of Establishments.

Selected Subsectoral Issues

2.32 The engineering subsector produces a wide spectrum of diverse products, which mainly involve mechanical engineering processes and whose princi-

pal raw material is metal. In recent years, this sector in the Philippines has been doing poorly. Most plants have not been able to sustain production of their main product lines. Many have shut down and others have diversified their product mix or switched to jobbing. Capacity utilization in the plants that are still operating may well be averaging substantially below 50%.

2.33 The progressive manufacturing programs for cars, trucks, motorcycles and diesel engines have, to all intents and purposes, been abandoned and replaced (in the case of cars and trucks) by less ambitious development programs. The core subassembly plants making engines, transmissions and car bodies have mostly shut down, and the sharp drop in motor vehicle production has had serious negative impact on other, smaller, parts suppliers. Within the appliance industry, the largest maker has shut down its compressor plant and only one of three or four air-conditioning equipment makers is still operating. In the foundry area, out of some 150 large and small foundries in the Metro Manila area, an estimated 30% may still be operating.

2.34 The only machine-tool plant in the country making general-purpose lathes has shut down. In the important agricultural-machinery area, the largest maker has suspended operation. Others are surviving by doing general fabrication work and even then may not be operating much above break-even.

2.35 There are some apparent bright spots. As the domestic market has shrunk, some makers of foundry products and auto parts have begun to export in small quantities. However, as presently structured, the makers of engineering products in the Philippines are not competitive in world markets, and there is some question as to how long these exports can be sustained without access to financing to modernize the plants and improve tooling.

2.36 At best, the engineering industries in the Philippines have been oriented largely toward consumer goods, such as cars, appliances and household items. The automotive industry was largely an assembly operation. The result is that the bulk of Philippine engineering products are not linked either to one another or to any upstream or downstream manufacturer. Capital goods production has not been developed: there is very little machine building activity of the original equipment type. Yet there is a wide variety of products in the light capital goods category that are not technically complex and that can be produced economically on a labor-intensive basis on a relatively modest scale. With a revival of investment demand, and with a more neutral set of incentives now in place, there is potential for a revival of the sector along more economically efficient lines, with improved employment prospects.

2.37 The cement industry has been long standing in the Philippines, with the oldest plants dating to the early part of the century. The industry has suffered from a chronic problem of overcapacity and has been heavily regulated by the Government. In the past the industry achieved some success in exporting but is no longer competitive with the far larger and more efficient plants in Korea and Taiwan. The industry was, therefore, extremely vulnerable to the drastic fall in construction activity in 1984 and 1985, which itself has resulted from cuts in Government expenditure and high interest rates due to more restrictive macroeconomic policies. Production has fallen overall

from an average of 4.3 million tons from 1980-83 to just over 3 million tons in 1985. At the end of 1986, capacity utilization in operating plants was rated at about 55%. Plants which have closed down or have been mothballed account for about 45% of original capacity.

2.38 On the supply side, this industry has the highest energy intensity in its production process. It is probably the case that without the heavy regulation of Government, some of the older and inefficient mills would have been phased out earlier; and the remaining mills could have utilized more appropriate plant size and hence been more efficient and competitive. The cement industry was identified by the BOI in the early 1980s as one requiring rehabilitation. Firms were urged to undertake individual rehabilitation programs, involving moving from wet process plants to dry process ones, aimed at conserving energy. Credits were made available from DBP to finance this rehabilitation. The industry was regulated by the Philippine Cement Industry Authority (which worked closely with the BOI) which set the cement price and allocated production quotas among operating mills. The Government sponsored energy conversion program proved to be expensive, and contributed to the insolvency of firms in recent years. Without the availability of such a program and preferred loans from DBP it is likely that many of the firms would not have gone into these expensive investment programs.

2.39 In terms of future prospects, the industry is very dependent on the level of construction activity. The 1983-86 shake out has eliminated most of the more inefficient plants--and reduced effective capacity. Thus, the revival of construction demand in early 1987 has now created a shortage of cement. Cement imports continue to be regulated, and prior to 1987 were effectively banned. Relaxation of the ban on cement imports would be preferable to encouraging inefficient firms to resume production.

2.40 The textile industry is another industry which has experienced severe problems, with many plants closed down completely and others in relatively poor condition. The problems in the industry have long been recognized. There are too many integrated mills supplying a small domestic market and subject to import controls at both the input and output sides. Many of the mills suffer from poor and ill maintained equipment and there is insufficient specialization between products. Domestic production was also adversely affected by imports which accounted for almost 20% of total demand in the early 1980s. The textile industry did not gain from the surge in garment exports in the 1980s because it was simply uncompetitive with duty-free imported fabrics. Analysis of the trade structure reveals that import restrictions on both synthetic and cotton fibers and yarns raises the cost of these mills to uncompetitive levels such that it is impossible for them to compete. The problem has been compounded by the difficulty of availing incentives for indirect exporters. Even where domestic goods were competitive in quality and price, the existing arrangements make it easier for an exporter of garments to source his inputs abroad. Moreover, the procedure of consignment arrangements militates against the building of backward linkages from exporting garment industry to the textile industry.

2.41 The fall in final demand since 1982, and particularly since 1984, has given the final push to the more inefficient plants, and only the the more

efficient mills remain in operation. There is also evidence that, given inputs at competitive prices, at least half of the existing spinning capacity in the Philippines would be competitive in price and quality. Other sections of the industry (denims, knitting) are also competitive and can benefit from supplying the exporting garment industry and from expansion of direct exports. It is important therefore that the import liberalization program is accompanied by appropriate arrangements which improve the availability of inputs to the sector and make indirect and direct exports easier. Some measures have already been taken in this direction. Suppliers to Bonded Manufacturing Warehouses or Export Processing Zones now receive the same tax treatment as direct exporters. Inclusion of net local content provisions in the garment quota allocation system should also foster greater linkages between garments and domestic textiles.

2.42 The mining sector is an important part of total industrial output, and accounts for about 10% of Philippine exports (1986). The Philippines is one of the top ten world producers of gold, copper, nickel and chromite. The copper segment of the subsector has suffered from an overexpansion of investment induced by high copper prices during the late 1970s. With the fall in copper prices since 1980 and continued depressed conditions in the industry world-wide, a large number of mines have closed and many firms are either bankrupt or operating with losses. On average, Philippine production costs for copper are slightly above world averages, so that it becomes a marginal producer when conditions are depressed. Within the industry, some firms have retained a sound financial position largely because their output includes a significant amount of gold as a co-product; in some cases this amounts to two-thirds of total revenue. A number of other firms continue to operate only because of government tax concessions and deferment of debt service. Mines with a capacity of about 130,000 tons per year have closed; these represent about 40% of the sector's capacity.

2.43 In contrast to copper, world prices for gold have been significantly higher than production costs in the Philippines, which are slightly above world averages. While most of the gold is produced in association with copper, about 40% of output comes from primary producers. In addition, a large number of small scale panners account for a significant portion of the sector's employment. During the past year, with a more favorable exchange rate and higher world prices, it is estimated that the number of panners has increased by 10,000 to 90,000.

2.44 Because of past financial involvement in the mining sector, about P 41 billion of the P 140 billion of nonperforming accounts come from the mining sector. Many of these projects were based on poor geological analysis and poor project planning. Others could be profitable with some rehabilitation investment, and with some improvement in world prices. Unless market conditions improve markedly, however, it will be difficult for the Government to dispose of most of these investments. Included in the NPA portfolio are the Nonoc Nickel Processing plant and the PASAR copper smelter. These two large investments have both experienced technological and financial difficulties. Nonoc has closed down and cannot compete with present low world nickel prices. PASAR has been able to operate at a small profit, in part because it has resolved early technical problems and is more competitive now with

Japanese smelters because of the appreciation of the Japanese yen. While it has been able to meet interest costs of its debt, it is not yet in a position to repay its outstanding loans.

Major Issues and Objectives

2.45 In the light of its historical performance, the role envisaged for the manufacturing sector in the government's five year plan (1987-92) is challenging. Broadly, manufacturing would contribute in three main areas: growth in value-added, employment and net foreign exchange earnings. In the plan, manufacturing growth would average 6.8% per year through 1992, a performance more reminiscent of the early import substitution period of the 1950s than of more recent times. These rates, however, may be feasible in light of the current low level of activity in manufacturing which stands at a level 12% below its 1983 peak. Even if the Plan targets are realized, real manufacturing value added in 1990 would only be 12% above its historical high.

2.46 In order to achieve these growth objectives, several issues must be addressed in the short- and medium-term. First, the status of companies in financial distress must be rationalized. The organization of the disposition of the nonperforming accounts and privatization of government corporations through the Asset Privatization Trust (APT) is a first step in the rehabilitation of a substantial segment of the manufacturing sector. It is not in itself, however, a sufficient condition for the restoration of profitability and growth in these enterprises. Legal issues as to the rights of minority shareholders and other creditors must still be tested. In large part, the financial structure of enterprises will need to be overhauled and new arrangements made for equity and working capital finance and for plant renovation. In many cases, new management teams will also need to be installed. On a case-by-case basis, such restructurings could be accomplished fairly quickly. In the Philippines, where restructuring needs are so widespread across industry,^{6/} the dearth of a restructuring "infrastructure", in terms of both human and financial resources, is likely to be a constraint on the speed with which companies in distress can be turned around. This applies equally to companies in the APT and those remaining in the private sector.

2.47 In the absence of financial and physical restructuring, it is unlikely that the near-term recovery of the manufacturing sector will be very robust and long-lasting. Until restructuring is undertaken, the incentives faced by firms' managers are not conducive to long-term profit maximization. Failure to recognize and deal with loan problems causes a situation of

^{6/} Evidence on the incidence of financial difficulties across private companies is scarce. What exists suggests that a significant proportion (one-quarter to one-third, perhaps) of companies of all sizes face debt servicing problems. Almost one-half of private development banks had arrearage rates of 20% or more on their portfolio, with a quarter having arrears in the 30-90% range. Problem firms exist across all subsectors, although some, (e.g., cement, leather goods) have been particularly hard hit.

ambiguous ownership and encourages management to "cash in" existing assets and their own talents in a number of self-enhancing ways, rather than to focus on efforts to revive efficient productive operations.

2.48 The challenges facing the industrial sector in terms of generating employment, raising real wages and distributing the benefits of growth more equitably through the country are considerable. Real wages in the 1970s were consistently below those in the 1960s, and are likely to have slipped further in the recent recession. In fact, the Philippines is now amongst the lowest cost countries in terms of productivity-adjusted labor costs. In the apparel sector, Philippine labor costs were about \$0.50 per hour equivalent in 1982, versus \$6.50 in the US and \$1.25 in Korea (see Table 2.12).^{7/} Even when adjusted for productivity, which is one-half of US levels, the Philippines is more competitive than most East Asian and Caribbean countries--only Haiti and China appear more cost competitive. Thus, the country should be able to expand its manufactured exports based on the high quality and productivity of its labor force relative to existing wage levels.

Table 2.12: APPAREL INDUSTRY WAGE RATES IN SELECTED COUNTRIES, 1982

	Hourly wage	Wage & fringe	Index	Produc- tivity index	Labor cost index
US	\$5.20	\$6.50	100	100	6.50
<u>Far East countries</u>					
Hong Kong	1.80	2.05	32	80	2.56
Taiwan	1.50	1.75	27	75	2.33
Korea	1.00	1.25	19	75	1.67
Singapore	0.90	1.35	21	NA	NA
Philippines	0.40	0.50	8	50	1.00
China (PRC)	0.20	0.30	5	40	0.75
<u>Latin America</u>					
Jamaica	0.75	0.95	15	70	1.36
Costa Rica	0.60	0.80	12	60	1.33
Haiti	0.30	0.40	6	50	0.80
<u>Other Countries</u>					
Portugal	1.20	1.50	23	NA	NA
Egypt	0.40	0.55	8	50	1.10

Source: AAMA, "Apparel Manufacturing Strategies," 1984, pp. 42, 51.

^{7/} Although the most recent comparable data are from 1982, trends since then in wage rates, productivity and exchange rates would likely reinforce the conclusion that the Philippines is very cost-competitive in this sector.

2.49 Ironically, the goals of fostering small scale and labor-intensive enterprises conflict with the goals of regional dispersion of industry. According to the census of manufacturing establishments, some 70% of the output of small- and medium-firms (less than 100 employees) originates in Metro Manila, while only 45% of the output of large firms (200 + employees) is concentrated in the capital. This is due to the proliferation of large firms in food processing, beverages and chemicals in the countryside close to their raw material source. Small firms, of which the largest group is in paper, printing and publishing, have typically followed a strategy of trying to expand in existing markets, rather than developing new markets or new products. Thus, the urban centers are a natural attraction. In addition, the tendency for small- and medium-sized firms to play a countercyclical role relative to organized factory employment suggests that as the latter recover, the former will shrink. Because of the employment substitution between small, medium and large enterprises, the net impact of manufacturing on overall employment and real wage growth is likely to remain modest.

2.50 Manufacturing is expected to contribute substantially to a future trade balance surplus which is required to deal with the country's external debt overhang. Throughout the 1970s, the Philippines relied heavily on mineral and agricultural exports to finance imports. Although manufacturing exports grew at a rapid rate in the 1970s (from \$94 million in 1970 to \$2.1 billion by 1980), imports also grew fast (Table 2.13). Partly this was the result of the heavy reliance of manufactured exports in the garment and semi-conductor industries on imported intermediates. The level of imports of intermediates specifically for export production rose to \$900 million by 1983, or 36% of exports in that year. In addition, manufacturing activities for the home goods market were also based on imported intermediates, partly as a result of the cascading structure of tariffs. Finally, much manufacturing capacity has made intensive use of imported capital equipment.

Table 2.13: NET SECTORAL CONTRIBUTIONS TO THE BALANCE OF TRADE, 1978-85
(US\$ million)

	1978	1980	1983	1985
Minerals (net)	489	1,094	585	346
Agricultural products (net)	1,260	1,532	875	567
Energy (net)	-1,000	-2,158	-1,976	-1,406
<u>Manufacturing</u>	<u>-743</u>	<u>-604</u>	<u>-422</u>	<u>661</u>
Exports	1,067	2,073	2,449	2,829
Intermediate imports for export	-340	-691	-905	-780
Other intermediate imports	-1,307	-1,740	-1,766	-1,111
Imports of non-food consumer goods	-163	-246	-200	-277
Other sectors	88	183	154	138
Capital goods imports	-1,401	-1,986	-1,698	-788
Balance of Trade	-1,307	-1,939	-2,482	-482

Note: Net sectoral figures refer to exports less consumer and intermediate imports of each sector.

Source: Appendix Table.

2.51 Manufacturing has become, and will be in the future, the "swing" sector that determines the adequacy of external performance. In 1980, the manufacturing sector used \$600 million more foreign exchange than it produced, while the mining and agricultural sectors were in large surplus. More recently, both minerals and agricultural exports have been hard hit by declining world markets and collapsing commodity prices. Prospects for these commodities are at best mixed. At the same time, the need for foreign exchange has risen as net resource transfers from foreign borrowing have fallen. Much of the trade improvement since 1983 has been associated with a fall in intermediate and capital goods imports, tied to the sharp decline in manufacturing output and inventories. These imports cannot be indefinitely held in check if the economy is to resume rapid growth. In the future, the sector must rely on switching its input mix more towards home goods if it is to contribute adequately to the balance of trade. This can be achieved partly by encouraging the current "big three" manufactured export sectors to increase the local content component of their output and partly by developing a broader range of nontraditional exports to include sectors such as food processing with low direct import requirements.

III. THE INCENTIVE SYSTEM AND POLICIES

Legacy of Industrial Policy: 1950-1980

3.1 Industrial policy in the Philippines since 1950 can be divided into three distinct periods: a first phase of import substituting industrialization in the 1950s under rising protective barriers; a major shift towards a more open and liberal trade regime in the early 1960s but which was not sustained; and a reversal towards more interventionist policies beginning in the late 1960s with increasing recourse to protective barriers, large public sector led or supported investments and generous Board of Investment (BOI) incentives and industrial finance.

3.2 The origins of protection of domestic industry in the Philippines can be traced to the severe balance of payments crisis in 1950 that followed a sharp decline in US economic assistance. Initially, the purpose of the import control system was to ration foreign exchange in accordance with "essentiality" criteria. However, the emphasis soon shifted solely from balance of payments considerations to the protection of domestic industry to foster import substitution. The use of import licenses as the primary protective device is attributable to the Bell Trade Act, which prohibited tariffs vis-a-vis the US--the major source of manufactured imports. The import control system was linked to an overvalued exchange rate (reflected in high black market premia) and very high implicit levels of protection. Following agreement with the US, substantial tariffs on imports were introduced in 1957. The new tariff regime mirrored the protection stemming from import controls, i.e., with considerable protection to import-substituting industries in terms of both high tariff levels and escalation in the tariff structure. The objective of the tariff adjustments was to transfer the excessive "rents" to the government rather than initiate import liberalization, and the import and foreign exchange control system remained in place. By the end of the 1950s, the scope of further import substitution had been largely exhausted and foreign exchange reserves severely depleted. The underlying weakness in the balance of payments and pressures from the export lobbies paved the way for liberalization of import controls and devaluation of the exchange rate.

3.3 The full liberalization of import controls was completed by 1962, when tariffs were further raised to protect domestic industry from some of the effects of the decontrol of imports. Despite the cumulative effects of tariff adjustments of 1957 and 1962, the complete dismantling of foreign exchange and import controls had an important effect on domestic industry, reflected in a large fall in implicit levels of protection and complete elimination of the black market premium (Albuero and Shepherd, 1986). These measures initially had a strong positive effect on the balance of payments, but rapid increases in import volumes after 1963 and declines in terms of trade led to large balance of payments deficits by the late 1960s. Moreover, the manufacturing sector was quite adversely affected by the import liberalization with the average rate of growth dropping from 7.7% during 1957-59 to 3.7% in 1960-65. Import controls on consumer goods were resumed in the late 1960s. At the same time, several nontrade measures were introduced to support domestic industry including BOI incentives, targeted lending by the Development Bank of the Philippines and controls on entry in "crowded" industries.

3.4 Balance of payments pressures eventually led to the floating of the peso in 1970. There was also increasing recognition of the bias against exports and agriculture stemming from the protection regime. New policies aimed at promoting nontraditional exports through various subsidies and exemptions were adopted, and greater government support was directed to agricultural growth. The main thrust of trade and industrial policy, however, remained unchanged. A tariff rationalization program was undertaken in 1973, but the basic protective character of the tariff structure was preserved. At the same time, import restrictions increased steadily during the 1970s. Thus, while 1,301 consumer goods were banned in 1970 (or 26% of the 7-digit PSCC classification), at the end of the decade 1,850 items (or 40% of total items) were either banned or regulated. The indirect tax system was also used to favor domestic industry through much higher taxes on many consumer goods imports than on close substitutes of domestic origin, as well as through the imposition of a substantial advance sales tax on imports. Finally, ad hoc exemptions from import duties became prevalent since the mid-1970s, not only for export activities but for import oriented BOI supported investments and a variety of special cases.

3.5 Government intervention led to a protective structure that was much more restrictive, and with much greater and often unintentional variability, than implied by nominal tariffs alone. They also led to the need for additional programs to support adversely affected sectors. These, in turn, created further complications and distortions. For example, the system of export incentives was successful in increasing the share of nontraditional exports quite substantially in the 1970s but the growth was narrowly concentrated in semiconductors and garments, both of which remained heavily import dependent. Similarly, support for small and medium-scale enterprises was identified as a mechanism for promoting employment, given the capital-intensive nature of formal manufacturing growth. Incentives were offered through NACIDA and BOI, but few entrepreneurs made use of them. Government financing schemes were also targeted at SMEs through DBP, IGLF, and GFSME. Despite the long history of these schemes (over 10 years) and the favorable loan default record, private formal lending institutions have not become involved in SME financing because of perceived risks, high administrative costs and high support services required to evaluate loans and supervise projects. Financial support for SMEs has failed to address the binding constraints on these enterprises, such as the price and availability of raw materials, which were affected by regulations governing intermediate imports.

3.6 The distortionary influence of the trade regime was reinforced by nontrade interventions. BOI incentives and investment regulations were arbitrary and distorted factor choice to favor capital intensive production. This tendency was supported by a regulated financial system, producing negative real interest rates over most of the 1970s on the one hand, and a system of preferential access to credit from public financial institutions on the other.

3.7 Government's tendency to shield the domestic economy from external pressures was reinforced following the first oil shock. Domestic price controls were widespread and their adjustment subject to political factors. The price controls affected the performance of the domestic wage goods industries, and also covered construction materials, such as cement and

steel. Even when controls on these latter were formally lifted, they still remained under industry authority restraints. Partly as a result of price controls, government became involved in institutionalized wage-setting negotiations and hence in the determination of real wages. Overall, the various interventions in industry combined to produce an opaque incentive environment, characterized by high variance of inter- and intra-sector incentives. This resulted in an inefficient and brittle industrial structure and also had an adverse effect on the development of agriculture. Quantitative import restrictions were particularly important in creating monopolistic industrial structures. By the end of the 1970s, the period of moderate growth in industry had come to an end and the detrimental effects of the trade and incentive regime were laid bare.

Policy Adjustments in the 1980s: Actions Taken and the Remaining Agenda

3.8 Momentum for reform was provided by the onset of the second oil price shock, the world economic recession, the surge in interest rates and the weakening in primary commodity prices. The Government accordingly initiated a broad range of structural reforms with the support of two Structural Adjustment loans. Among the policy initiatives taken were: (a) a major trade liberalization program; (b) reform of BOI incentives; and (c) financial sector reforms. As discussed below, many of these policy initiatives were derailed by growing macroeconomic imbalances and the economic and financial crisis of 1983. An important policy adjustment since then has been the macroeconomic stabilization program that had to be adopted in response to the crisis.

Trade Reform

3.9 Overview. The trade reform measures initiated in 1980 marked a fundamental shift from the protective policies of the previous three decades. Unlike the efforts of the early 1960s and 1970s, which were aimed at redressing balance of payments disequilibria and providing partial support to exports, recent trade reforms aimed at correcting in a more comprehensive manner the adverse incentive effects of the trade regime by reducing the level and variability of protection. These trade reforms accordingly included actions in all the key areas affecting the protection regime: tariff reform, removal of import restrictions, removal of the protective elements of the tax system, and curtailment of exemptions to import substituting industries.

3.10 Tariff Reform. The tariff reform program was a central element of the overall trade policy package. It spanned a five year period and was completed largely on schedule in 1985. The principal objectives of the tariff reform program were: to reduce the range of nominal tariffs from 0-100% in 1980 to 10-50% by 1985; to lower in parallel the average rate of protection from 45% to 28%; and to reduce the degree of tariff escalation, i.e., the cascading nature of tariffs. This, in turn, was achieved through a number of steps. First, peak rates imposed on nonessential consumer (NEC) and unclassified consumer (UC) goods (as classified by the CB) were reduced from a ceiling of 100% to a ceiling of 50%. This affected 177 tariff lines. Second, tariff rates were revised to conform to a more uniform structure within 14

selected key industries.^{8/} The changes within these sectors reduced rates of 295 tariff lines and increased the low duties of 100 tariff lines. Third, rates within some ten residual sectors were modified. Within these sectors, rates of 128 tariff lines were reduced and 13 tariff lines were increased. Finally, a review of the 33 items with tariffs below 10% has been completed recently and the decision taken to raise them to 10%.

3.11 While major reductions in tariffs were undertaken in 1981 and 1982, a surcharge of 3% was imposed on all imports in December 1983 as a temporary revenue measure. This duty was raised to 10% in June 1984, but then reduced to 5% in early 1985 before finally being phased out.

3.12 As shown in Table 3.1, the average level, dispersion and escalation of tariffs have all been substantially reduced. The average nominal tariff level is now 28% compared to 43% in 1980. The standard deviation is also much lower indicating greater uniformity in the tariff structure. Finally, because the largest declines occurred for consumer goods compared with intermediate products and raw materials, the escalation in the tariff structure has also been moderated. As a result of these changes, the tariff and protection regime in the Philippines is now comparable to that in other countries of the region (Table 3.2), whereas in 1980 the Philippines was much more heavily protected.

Table 3.1: AVERAGE NOMINAL RATES OF PROTECTION, 1980-85

Sectors	1980	1983	1985
Consumer goods	67.7	42.7	38.0
Intermediate products	33.3	25.4	24.1
Raw materials	35.6	23.0	21.7
Capital goods	21.1	19.2	21.2
Automotive products	35.3	33.6	33.6
Miscellaneous	42.5	30.0	30.0
Overall average	43.1	29.9	28.1
(Standard Deviation)	(32.6)	(18.5)	(15.1)

Source: SYNTIA Tariff File.

^{8/} Namely food processing, textile and garments, leather and footwear, pulp and paper, cement, iron and steel, automotive, wood and wood products, cycles, glass and ceramics, furniture, domestic appliances, machineries and capital equipment, and electrical goods.

**Table 3.2: COMPARATIVE TRENDS IN TRADE POLICY REFORM
(percent)**

	Year	Average Nominal Tariffs	Proportion of import items subject to import restrictions
Indonesia	1980	28.0	--
	1985	23.0	25.1
	1987	23.0	15.6
Korea	1980	25.0	31.4
	1985	21.9	12.3
	1988	n.a.	4.6
Malaysia	1980	11.6	} less than 5%
	1985	13.5	
Philippines	1980	43.1	37.0
	1984	28.1	36.1
	1986	28.5	16.7
	1988	--	10.0 <u>/a</u>
Thailand	1981	31.0	} less than 5%
	1985	34.0	

/a of which 4.7% are due to health, safety and security reasons.

3.13 Indirect Taxes. Until recently, the indirect tax system effectively served as an instrument for protection of domestic industries. This protective effect stemmed from a number of factors. First, higher nominal rates were levied on imports of "semi-essential" and "non-essential" goods than on corresponding goods produced domestically; this applied to the advance sales tax as well as to the excise taxes. Second, while the local sales tax was payable within 20 days after each quarter, the advance sales tax and the compensating tax on imports ^{9/} were payable upon release by customs. Third, the tax base for the calculation of the advance sales tax was inflated by a variable mark up, i.e., 25, 50 and 100% respectively for ordinary/essential, semi-essential and nonessential goods. The differential nominal rates, valuation and mark up practices, and differences in timing of tax payments all reinforced the import-substituting orientation of the protection system.

9/ The local sales tax applies to domestically produced goods, whereas the advance sales tax applies to goods that are subject to further processing or resold. Final use importers (i.e., consumers and capital equipment importers) are subject to a compensating tax).

About one-third of the effective protection accorded to the manufacturing sector was due to the protective effect of indirect taxes. For many consumer goods industries, the protection effect was considerably higher because of the differential nominal rates.

3.14 Various tax measures introduced since 1983 have redressed the major protective aspects of the indirect tax system. As a result of a series of executive orders, the present sales tax rates on all imported and domestic goods are equal, with the sole exception of those on automobiles. One side-effect of these modifications, however, is that the overall commodity tax system is now more regressive. This implies that, except for automobiles, the protective effect of the indirect tax system now comes only from additional capital holding costs (because of earlier tax payments for imports) and the 25% mark up provision for the advance sales tax. The incremental protective effect of both of these factors is relatively minor.^{10/}

3.15 Effective Protection. The impact of tariff and tax reform on effective rates of protection for 1979 and 1985, are shown in Table 3.3. These estimates are from the PIDS/Tariff Commission study,^{11/} and are based on an input-output framework which incorporates the effects of tariffs, taxes and subsidies (but not import restrictions).

Table 3.3: AVERAGE EFFECTIVE RATES OF PROTECTION
(percent)

	1979	1985
All sectors	24	12
Exportables	-3	-3
Importables	44	25
Primary and agriculture	1	-1
Manufacturing	40	23
Exportables	1	1
Importables	58	33

Source: John Power and Erlinda Medalla, "Trade Liberalization in the Philippines: Assessment of Progress and Agenda for Future Reform", 1986.

^{10/} Manasan, Rosario. 1986. "Indirect Tax Reform: A Complementary Measure to the Tariff Reform Program." Manila: Philippine Institute of Development Studies.

^{11/} Details of methodology and results are found in Medalla (1986). Effective protection measures the impact on value added of tariffs on both outputs and inputs.

3.16 Average EPR for all sectors declined from 24% in 1979 to 12% in 1985. This was due wholly to the decline in the average for importables from 44% to 25%, as the average for exportables remained at minus 3%. The average for primary and agricultural goods remained at about zero because of the preponderance of exportables. Manufacturing importables had the highest average, of course, but this declined significantly from 58% to 33%.

3.17 The major part of the decline in effective protection came from the reduction in peak tariff rates. On the other hand, the tariff reform failed to raise the low EPR's of penalized sectors and even lowered them in some cases. Thus while escalation was reduced, it remains substantial. Indeed, the principle of escalation was used by the Tariff Commission as a guideline in restructuring rates. Among importables, three sectors are still estimated to have negative free trade value added. For the rest, the range of EPR's has been reduced from 22% to 299% to a narrower one of 18% to 144%.

3.18 Import Restrictions. Import restrictions have had a long history in the Philippines. They were the primary instrument of protection in the 1950s but were completely dismantled during the liberalization of 1960-62. Import controls were reinstated in the late 1960s, first for non-essential consumer goods, but then for a progressively wider range of manufactured goods during the 1970s. Moreover, since new import restrictions were introduced often to protect specific investments, there was a tendency towards growing variance in the structure of protection. In addition, beginning in 1976, the import of all investment goods was subject to BOI approval, to prevent investment in "overcrowded" industries.

3.19 Excluding the regulation of investment goods, direct import restrictions covered 40% of the 7-digit PSCC classification and 27% of total imports in 1980. As noted, two kinds of restrictions were applicable: commodities classified as NEC and UC according to "essentiality" criteria,^{12/} were "banned;" the remaining commodities (about 30%) were "regulated", or could only be imported with prior approval. These latter included a range of intermediate goods on protective grounds, goods regulated for health, safety or security reasons, investment goods in certain sectors and items covered by the Progressive Manufacturing Programs.

3.20 The ban on non-essential consumer goods was approximately equal to a zero quota, hence its effect on protection can be calculated in a conventional way. The impact of the import restrictions on regulated items, however, was not as straightforward, as there were no binding quotas. Price comparisons for sample restricted commodities indicate that not only the import bans but also the import regulations were quite restrictive, and led to high implicit levels of protection. For 62 items where such price ratios are available for 1980, implicit protection was higher than the corresponding nominal tariff in

^{12/} This classification was as follows: EP--essential producer goods; EC--essential consumer goods; SEP--semi-essential producer goods; NEP--non-essential producer goods; SEC--semi-essential consumer goods; NEC--non-essential consumer goods; UP--unclassified producer goods; and UC--unclassified consumer goods.

50 cases and exceeded 100% protection levels for 18 commodities.^{13/} This indicates that import restrictions strongly reinforced the adverse effects of the tariff structure by raising even further the nominal levels of protection as well as increasing the variability and escalation of the protective structure.

3.21 Import restrictions were even more damaging than tariffs, because in addition to augmenting the anti-export bias of the tariff regime and supporting the production of luxury consumer goods whose consumption they sought to discourage, they were biased against small producers, induced substantial "rent seeking" behavior, and created local oligopolies by insulating domestic firms from external competition. The costs of these restrictions were borne by consumers in the form of high prices and by the economy as a whole in the form of inefficient resource allocation. In view of their broad coverage, liberalization of import restrictions was the most pressing need for trade policy reform. The trade policy reform package of 1980 accordingly included a comprehensive program of import liberalization. As a first step, 960 items of a total of 1,301 items in the "banned" or NEC/UC list were to be liberalized between 1981 and 1983. Second, through Monetary Board Resolution No. 702 of April 1981 covering regulated items, a timetable of liberalization spanning 1982-85 was set for 321 items regulated for protective reasons. In addition, under this resolution, alternative mechanisms for regulating items for health, safety or security reasons were to be established, and the scope and effectiveness of import restrictions relating to the various Progressive Manufacturing programs were also to be reviewed.

3.22 The liberalization of the NEC/UC or banned items was completed largely on schedule. Only 36 items from the 1983 list of 87 items (and of the total list of 960 items) were not liberalized, although they were the more significant items that were to be liberalized in that year. In contrast to the relatively successful implementation of this part of the program, the liberalization of the regulated items never went into effect. Only 3 items were liberalized between 1982 and 1983, while 897 items were added to the regulated list, offsetting the liberalization of the banned items (see Table 3.4).

3.23 In April 1983, Monetary Board resolution 591 was issued to complete the liberalization of NEC/UC items, including items not liberalized under the earlier plan. Under this new plan, 36 items were to be liberalized in 1984, 201 in 1985 and 145 were to remain restricted for reasons of national defense, health and safety. This plan too was aborted in the face of the growing economic and financial crisis.

^{13/} If the effects of the import restrictions are taken into account, the estimates of 1979 effective rates of protection in Table 1.2 would be much higher.

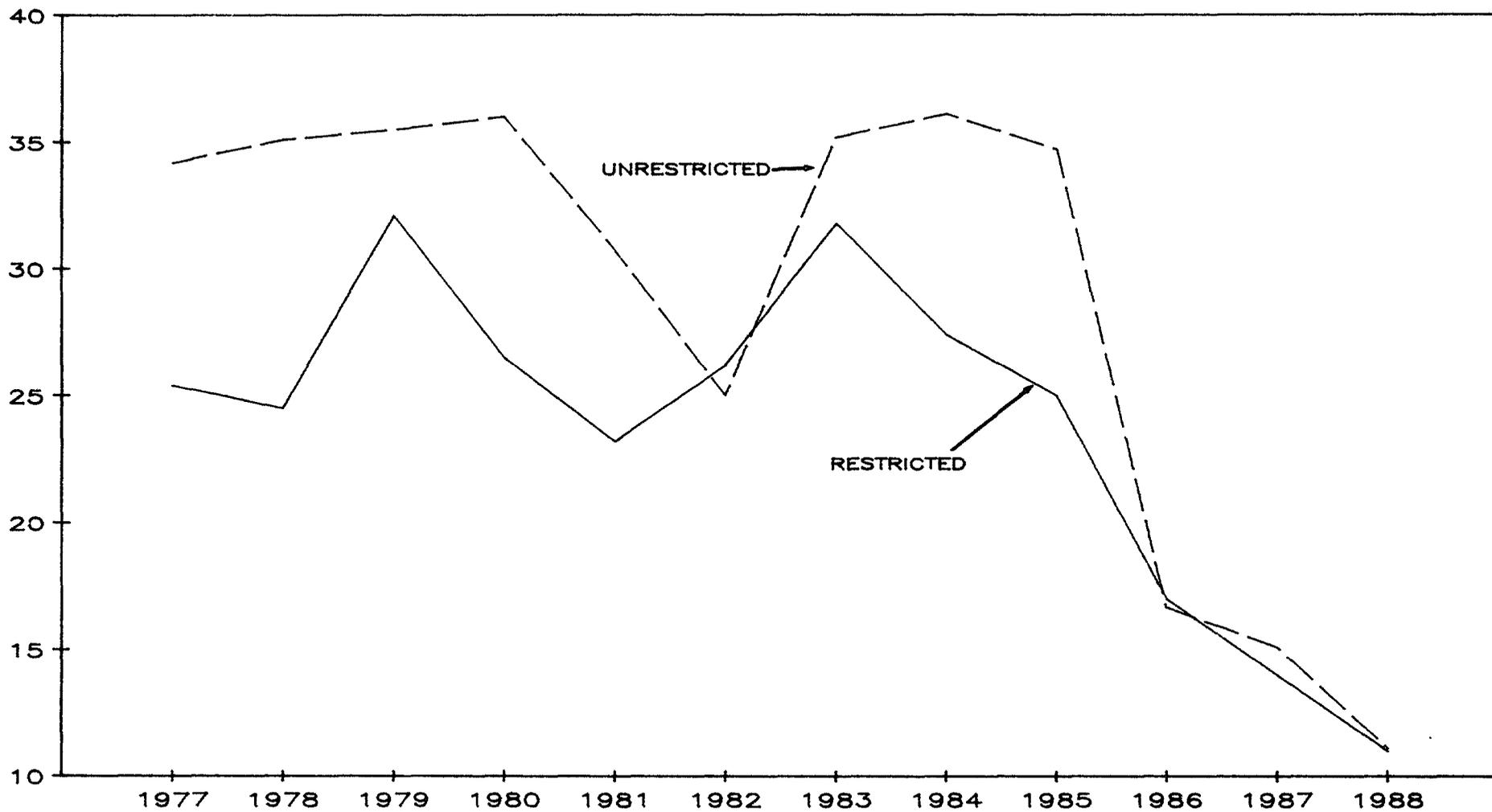
Table 3.4: NUMBER OF ITEMS REGULATED BANNED AND LIBERALIZED PER YEAR FROM 1970 TO 1986

Year	Regulated		Banned	Liberalized
	No. of PSCC lines	Cumulative	No. of PSCC lines	No. of PSCC lines
1970	2	-	1,301	-
1971	-	-	1,301	-
1972	23	25	1,301	-
1973	156	181	1,301	-
1974	115	296	1,301	-
1975	100	376	1,301	-
1976	54	430	1,301	-
1977	50	480	1,301	-
1978	46	526	1,301	-
1979	17	543	1,301	-
1980	6	549	1,301	-
1981	20	557	1,038	263
1982	312	869	428	610
1983	585	1,451	380	48
1984	45	1,496	380	-
1985	-	1,470	334	72
1986	-	675	193	936

3.24 In November 1983, in response to the balance of payments crisis, all foreign exchange receipts were pooled and allocations were limited to payments for crude oil, essential grain imports, raw materials for export products and certain other imports considered vital. Lesser priority items were allowed through a scheme of "no-dollar" imports and pre-paid letters of credit. The liberalization program was officially suspended at the end of 1984. The foreign exchange rationing system was gradually relaxed beginning in late 1984, although the import restrictions introduced during the crisis remained in place.

3.25 Available evidence suggests that the early liberalization efforts were not effective. By the end of 1984, regulated items had increased to 1496 from 549 in 1980. The total number of restricted items numbered 1876 in 1984 compared with 1850 in 1980. Together they covered 27.4% of imports in 1984 compared with 26.5% in 1980 (see Figure 3.1). Trends in the share of imports in restricted classes, however, are not a satisfactory measure of the impact of import restrictions. Clearly, the more binding the restrictions, the lower the import levels. Price comparisons for restricted items relative to world prices are a potentially better indicator. The available price ratios, though, are subject to considerable variability and no clear trend can be discerned. For 20 items in the sample, implicit protection appeared significantly lower in 1984 compared to 1980 and for 18 items the level of implicit protection was higher than in 1980.

Figure 3.1: TRENDS IN IMPORT RESTRICTIONS
%



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3.26 A few import restrictions were liberalized in 1985. Circular 1060 in May delisted 46 previously banned items covering certain vegetables and fruits, beverages, textile fibers, cork and wood, a few articles of apparel and clothing accessories, metal manufactures and some miscellaneous manufactures. In August, Circular 1074 deregulated dairy products and empty bottles and containers. A new liberalization program was also drawn up at the end of 1985 to liberalize 1232 of the remaining 1804 import restrictions.

3.27 The program covers about 14% of 1985 imports, and includes:

- (a) 169 of 281 NEC/UC items;
- (b) liberalization of the regulated items that were to be liberalized originally under Monetary Board Resolution 702, with the exception of portland cement; and
- (c) liberalization of items that were restricted during 1981-83.

The program includes most of the important inputs and intermediate goods under import restriction (such as iron and steel products, basic chemicals, glass and refractories, synthetic resins, fibers and yarns, fabrics and textiles, and paper and paper products) as well as the bulk of consumer goods under restriction. Completion of this liberalization program would thus constitute a major step in achieving a more open and transparent trade regime. The original schedule called for liberalization of 1153 items on December 31, 1986, and 79 items by June 30, 1987. By end of December 1986, the Government had liberalized 936 items, about 75% of the original program. The remainder of items are scheduled to be liberalized by April 1988.

3.28 So far, the bulk of consumer good imports included in the program have been liberalized (about 93%), including the high tariff items and some sensitive products such as tires. A much smaller proportion of raw materials and intermediate goods have so far been liberalized (less than 50%). But this is precisely where import liberalization could have a beneficial effect even in the short run, by easing costs for higher value added and more employment oriented downstream industries. Liberalization of high cost upstream products therefore needs to be undertaken without delay.

3.29 In addition to the ongoing liberalization program for banned and non-investment regulated items, the general restriction on investment goods--covering an additional 848 items and about 20% of imports--has also been liberalized. Through Circular 1029 of October 1984, controls on the import of capital goods and machinery had already been liberalized to the extent that prior Central Bank approval and prior favorable endorsement of the government agencies was limited to the importation of machinery export-oriented enterprises registered with CB, BOI/GTEB and EPZA. Other imports of investment goods required only the approval of the Central Bank, if they exceeded a value of \$10,000 per month. The purpose of this restriction was to encourage importers to make use of existing export credit and official assistance credit lines. Through a new circular issued by the Central Bank on August 1, 1986 (No. 1110), both of these strictures have been removed and the importation of machinery and equipment is now fully liberalized.

Remaining Issues in Trade Policy

3.30 While current attempts to reform the import regime are largely on track, it must be remembered that the Philippines has had a history of aborted trade reforms. One consequence of this history is that credibility in the Government's willingness and ability to carry through liberalization must be established. Furthermore, the impact of trade reform will be delayed if there is uncertainty as to the scope, direction and timing of further reforms. Such uncertainty hampers the reallocation of factors away from affected sectors in an orderly manner with minimum adjustment costs. Under the present decontrol program, a schedule has been announced for the timing of decontrol of the remaining 292 items initially identified. However, this covers only a portion of existing import restrictions and does not cover further tariff reform. Even after the ongoing program is fully implemented in April 1988, there would still be about 525 items covered by quantitative restrictions. Some of these reflect genuine health, safety and security considerations. But about 300 restrictions offer protection to intermediate goods (including some iron and steel products, and basic refractories) and to final goods covered by the progressive manufacturing programs (cars, trucks, motorcycles, electronics, diesel engines). The remainder represent consumer durables and some intermediate products (notably cement and newsprint) excluded from previous programs of liberalization.

3.31 Although it is difficult to stipulate a detailed blueprint for further reform when the effects of relatively large changes remain unclear, it is important for government to delimit the scope of future policy changes. This report recommends that all remaining restrictions in place on protective grounds be reviewed in the near term with the aim of eliminating them and providing protection only through tariffs. This is an opportune moment for completion of import liberalization. First, the progressive manufacturing programs are largely inoperative and are anyway in the process of being removed. Second, the balance of payments situation is favorable. Adequate funding seems assured for 1987 and 1988 even if imports rebound strongly in the wake of a recovery. Thus, announcements that liberalization will shortly occur are likely to be credible and will not affect the protected industries too severely. They would be important ingredients in the restructuring of downstream processes that are currently penalized by the high effective cost of intermediates.

3.32 The schedule of liberalization could be accompanied by an adjustment in tariffs. The government has stated that no tariffs will exceed the present ceiling of 50%. It should also affirm that no tariffs will be raised, with the exception of items still to be liberalized. For these items, there remain some practical difficulties in preannouncing tariffs. One issue is that there exist classification differences between PSCC (on which imports are based) and the BTN (on which tariffs are based). Another issue is to determine the protection element that will be provided by the new tariffs. The Tariff Commission is presently studying the most important items to be liberalized. These studies should be extended to cover the remaining import restrictions; the results of the new tariff ranges should be presented as quickly as possible.

3.33 Adoption of the recommendations above would essentially complete an important stage in trade policy reform. The shift to a system of complete tariff-based protection would make the trade regime fully transparent, less discretionary and also less vulnerable to "rent seeking." It would end the current fragmentation of trade policy and allow the Tariff Commission to be solely responsible for trade policy implementation. Although distortions would remain, the regional comparison above (Table 3.2) suggests that the level of these distortions would not preclude rapid and efficient industrial growth. Consequently, government should announce that upon completion of the import liberalization program, it would allow for a period of consolidation before undertaking any further trade or tariff reforms.

3.34 Revenue Issues. As noted above, sustainable trade reform can only be accomplished in the context of controlled fiscal deficits. Trade reform itself, however, will have effects on fiscal revenue. Overall fiscal receipts in the Philippines are strongly dependent on import taxes (Table 3.5). In the first phase of liberalization, no significant reduction of fiscal revenue is anticipated. Typically, the replacement of quantitative controls with tariffs leads to a rise in import tax receipts. Future tariff rationalization, however, may well cut into revenue from this source. It is important that government use the period of consolidation to improve its fiscal position so that the revenue implications of further tariff reform are not overriding concerns.

Table 3.5: SHARES OF ACTUAL DUTIES COLLECTED (1984)
(percent)

Philippines	Import Duties	
	As share of total imports	As share of total tax revenue
Indonesia	3.9	4.0
Korea	7.8	17.3
Malaysia	7.8	16.1
Philippines	11.0	29.8
Thailand	12.5	22.8

Source: Government Finance Statistics Yearbook and IFS.

3.35 One area where revenue concerns conflict with microeconomic efficiency goals is in the area of tariffs on intermediate and capital goods. In the early tariff reform program, a more uniform tariff structure was arrived at by reducing tariff ceilings to 50% and raising the floor rate to 10%. This helped minimize the revenue effect of tariff changes. In future, however, reducing the variability in effective protection should be achieved by lowering tariff ceilings, rather than raising the floor. Simulations of the impact of a ceiling reduction to 40% and 30% are shown in Table 3.6. Both the average level and standard deviation of nominal protection would decline across various categories. This achieves the goals of reducing protection

without the undesirable side effects of taxing inputs. High tariffs on inputs, such as trucks, raise costs and distort the choice of technology and overall production efficiency. In the Philippines, high intermediate costs may be a significant factor explaining the variability of technologies within subsectors and the inadequate assimilation of new cost-effective production processes.

Table 3.6: SIMULATIONS ON NOMINAL RATES OF PROTECTION

Sectors	1985 /a	Simulation 1 /b	Simulation 2 /c
Consumer goods	38.1	32.8	26.2
Intermediate products	24.2	23.3	21.7
Raw materials	21.8	20.4	18.5
Capital goods	21.2	20.7	20.0
Automotive products	33.6	31.4	29.1
Miscellaneous	30.0	25.0	20.0
Overall average (Standard deviation)	28.2 (15.0)	25.8 (11.7)	22.1 (8.7)

/a Assuming the floor of 10% is fully implemented.

/b Simulation 1--Reducing ceiling to 40% and leaving floor unchanged at 10%

/c Simulation 2--Reducing ceiling to 30% and leaving floor unchanged at 10%.

Source: SYNTIA Country File.

3.36 Another revenue issue is to ensure well functioning safeguard mechanisms to address concerns on underinvoicing. Such mechanisms are already relatively well developed in the Philippines, but there is a need to ensure that the monitoring, valuation and safeguard measures do not become forms of administrative protection. Of course, as the structure of revenue becomes less dependent on trade taxes, and tariff reform lowers high tariff ceilings, the problems of underinvoicing will become progressively less severe.

3.37 At present, the customs administration is using a home consumption value reference price system (based on home market prices in various countries) for valuation purposes. Although home consumption values can provide some indication of dumping, they are not appropriate benchmarks to check underinvoicing. One major problem with HCV is timing, particularly for certain commodities where prices fluctuate or exchange rates are volatile. Recently, the Société Générale de Surveillance has been hired for preshipment valuation, using direct checks in East Asian and other ports as well as their international information network, which could provide a more timely and less arbitrary system to check underinvoicing. The use of two different systems has given rise to certain inconsistencies in the tariff imputation for similar commodities from different sources. In such cases, importers have recourse to an inter-agency Import Valuation Committee which considers tariffs on a case-by-case basis.

3.38 A good reference price system can be used to assess the magnitude of underinvoicing, but this should not be used as an all-encompassing check. In particular, to control underinvoicing, spot checks with high penalties should be used rather than complex or comprehensive administrative procedures. As an additional threat, the Government could establish the right to buy imports at invoiced prices. In some instances, where commodities are fairly homogeneous (tires, flour and sodium hydroxide), specific tariffs have been imposed. The specific rate is calculated to yield the same tariff revenue as the ad valorem rate applied to a price based on that prevailing in Singapore. The specific rates are to be reviewed and updated every six months by the NEDA board.

3.39 In response to the import liberalization underway, central mechanisms for monitoring of imports are also being strengthened. BOI and the Central Bank are monitoring imports of liberalized items based on opened letters of credit, and the Tariff Commission is also strengthening its monitoring capability using import data on an arrivals basis. While the Government may wish to assess the impact of the import liberalization program, and address the genuine issues of valuation and dumping, it is important to ensure that the monitoring and valuation systems do not become mechanisms of administrative protection.

3.40 Dumping. Compared to other developing countries, the Philippines has a well established system of anti-dumping procedures which attempts to provide an impartial assessment of the case and make clear the trade-off between the import competing and using industries. Indications of dumping can be assessed through the reference price system. The existing procedures comply with the rules on transparency, proof of injury and consultations required under the GATT Subsidies and Countervailing Tariff codes for taking action on imports from other signatories. In practice, though, there is considerable leeway to use anti-dumping procedures as a protective device, particularly since legal procedures are extremely complex. The implementation of anti-dumping procedures on sound principles, therefore, depends very much on the neutrality of the Tariff Commission in balancing the interests of producers and users of imported products.

BOI Incentives

3.41 The fiscal incentive system administered by the Board of Investments (BOI) has been second only to trade policy as an instrument of industrial policy. Parallel to the trade policy reforms initiated in the early 1980s, the Government undertook a major review of the system of BOI incentives and introduced a new law in 1983 (BP 391) to redress the deficiencies of the earlier law (PD 1789). The passage of BP 391 represented a substantial change in both the philosophy and instruments of the incentive system. Prior to BP 391, the incentive system had a very broad and somewhat confusing agenda, including increasing "national income at least cost," employment and distributional objectives, the establishment of "pioneer foreign enterprises that are capital intensive," and "self-reliance in the basic requirements for food and raw materials." The law was also specific about which sectors would be eligible for incentives, based on the concept of so-called "measured capacities". Once the measured capacity of an industry was "filled", incentives would no longer be extended to further entrants.

3.42 The pre-1983 incentive system was widely criticized for four main reasons. First, the measured capacity approach restricted domestic competition and did not penalize inefficiency in "full" industries. Second, the objectives and the implementation of the law tended to favor import-substituting activities over export activities. Third, the incentives provided were largely "capital cheapening," and encouraged capital intensive investment projects. Fourth, the incentives tended to focus on the act of investment, rather than on the efficient operation of the newly-established capacity. Detailed analysis of Philippine industrial development in the 1970s provides compelling evidence that these biases had contributed to serious inefficiencies in the sectoral structure of the economy.

3.43 These criticisms had considerable impact on the amendment of PD 1789 by BP 391. The incentive system was made simpler as well as sounder from an economic perspective. BP 391's policy section explicitly cites exports and excludes self-sufficiency as an objective. It also specifies that the incentive system should be "devised to compensate for market imperfections, reward performance of making contributions to the economic development, be cost-efficient and simple to administer." Although there is still mention of the measured capacity approach, its use is de-emphasized. In recent administrative practice, the measured capacity concept has been completely abandoned. The selection of industries for the Investment Priority Program (IPP) is to be based on quantifiable economic considerations including the real internal rate of return. BP 391 also simplified and revamped the incentives available to BOI-registered firms. The number of different incentives was cut from 14 to 8. Table 3.7 provides an overview of the incentives provided by BP 391, as recently amended by EO-1045 (1986). This latest amendment eliminated preferences extended under PB 391 to export producers.

3.44 Several capital- and investment-based incentives, including accelerated depreciation, have been replaced by tax credits tied to performance-based indicators which cover profits, wage payments, and the value of domestic nontraditional inputs. Under past law, the user cost of capital was cheapened by anywhere from 31% to 64%, but under BP 391 the capital-cheapening effect is reduced to the range of 7% to 24%.^{14/}

3.45 The last three years have seen a steep decline in both the absolute level and the relative importance of BOI-approved projects. In 1985 the BOI approved 221 projects, with a total project cost of P 2,742 million. It is not known whether all of these projects were actually undertaken, but even if they were, they would have represented less than 3% of Philippine gross investment and less than 20% of gross investment in manufacturing. Three years earlier, in 1982, projects totaling P 14,497 million had been approved,

^{14/} Manasan, op. cit., 1987, Table 20.

Table 3.7: SUMMARY OF THE BOI FISCAL INCENTIVES /a
(As of 1986)

Incentives	Rate and eligibility		Condition
	Pioneer	Nonpioneer	
Tax credit on net value earned /b	10%	5%	Available only for new or expanded capacity. Tax credit earned for the first five years of commercial production.
Tax credit on net local content of exports /c	10%	10%	Available for years in full, and additional five years base on increment of local content. For existing producers /d tax credit payable on increment of local content only.
Tax credit for taxes and duties paid on raw materials, supplies used in export production	Yes	Yes	Available for an indefinite period to all export producers.
Exemption from export taxes and fees	Yes	Yes	As for incentive (3).
Exemption from taxes and duties on imported capital equipment	100%	50%	As for incentive (3). Recovered by reducing future tax credits on net value earned and net local content.
Tax credit for locally purchased capital equipment (equal to value of taxes and duties which would be waived for imported equipment)	100%	50%	As above.
Net operating loss carry-over	Yes	Yes	Losses incurred in any of the first 10 years of operations may be carried over as a deduction from taxable income for a maximum period of 6 years following the period in which the loss was incurred.
Tax credit for withholding tax on interest on foreign loans	Yes	No	Available for loans taken during the first five years of registration or operation.

/a Based on PD 1789, as amended by BP 391 and EO 1945.

/b Net value earned is calculated as value of sales minus purchase of raw materials, supplies, utilities and some specifically excluded commodities.

/c Net local content is calculated as value of sales minus imported raw materials and supplies, depreciation of capital equipment and some specifically excluded commodities. To be phased out by 1990 under EO 1045.

/d Registered enterprises already engaged at the time of registration in the production, manufacture or processing.

representing 15% of national investment, and probably close to the total of manufacturing investment.

3.46 The composition of BOI's approvals has also changed dramatically. In 1985, 74% of the projects approved (by value) were export projects: three years earlier, the share of export projects had been only 19%. No doubt, these changes reflect a decline in "demand" for investment incentives, especially for domestic industries, due to the deep recession and wrenching structural change recently experienced by the Philippine economy. But hopefully the increased importance of export registrations also reflects a new approach to the "supply" of incentives by the BOI. Aggressive support for high-cost, capital-intensive, import-substitution projects had adverse effects on Philippine industrial development in the past, and is not consistent with efficient recovery or with the articulated objectives of the new Philippine incentive law.

3.47 The shift in composition of BOI approvals is likely to have a significant bearing on subsectoral growth. A rough estimate of the importance of BOI incentives can be gleaned from a survey of the financial records of 164 firms. In this sample, BOI incentives represented approximately 30% of value added, and ranged up to 100% for firms in the basic metals industry. In manufacturing, total incentives were 10 times as large as income taxes due in 1985, although the latter were severely depressed on account of the low profit levels during the recession. Overall, BOI incentives were equal to 55% of corporate income taxes in 1985. Most of these incentive availments, however, are comprised of historical BOI programs which the new government has committed itself to honor. They largely explain the low level and buoyancy of corporate taxes. In the future, however, the decreased scale of BOI operations will limit the drain on fiscal revenue.

3.48 The BP 391 amendments had made the incentive system an excellent antidote to the anti-export bias of other industrial policies--at least for registered exporting firms. However, recent modifications of BP 391 by EO 1045 have eliminated the export orientation of the incentive scheme. This executive order resulted from the recent accession of the Philippines to the GATT subsidies code. Prior to EO 1045:

- (a) exporters did not have to repay tariff and tax exemptions on imported machinery; and
- (b) export trade companies received tax credits equal to 20% of total export sales.

A third provision of EO 1045 extends net local content benefits for exports to all enterprises registered as domestic producers; these benefits will be phased out by 1990. Thus, the ability of the system to compensate export industries selectively will be sharply eroded. This raises the very fundamental issue of whether the BOI system of incentives can continue to play the role envisaged at the time of the reform of 1983.

The New Omnibus Investments Code

3.49 The Philippine government has recently (July 20, 1987) adopted a new Omnibus Investments Code. The changes that would be introduced into the incentive system do not appear to be significant, and are mostly concerned with reducing the administrative complexity of the code (Table 3.8). The most salient features are the removal of performance based incentives for net local content and net value earned and their replacement with an income tax holiday. Although this primarily benefits capital, it is unclear whether there would, overall, be a net bias towards capital-intensity, as was the case under PD 1789. It does appear, however, that giving incentives to all inputs is a cumbersome, indirect method of providing a net value-added incentive. Thus, the change would most likely create additional administrative complexity. Furthermore, it would also be less suited to interface with the recently introduced value-added tax.

3.50 One disturbing feature of the new code is the high degree of discretion in the availment of incentives that is implicit in the reaffirmation of the concepts of measured capacity and the Investment Priorities Plan. Although these concepts are also in the current system, in practice they have not been accorded much weight. The implementation spirit and philosophy of the new code cannot, of course, be prejudged. The explicit statement that measured capacity shall not be used to restrict trade and fair competition is commendable. Nevertheless, it is unfortunate that the opportunity to remove such administrative controls has not been seized. On a more positive note, the elimination of the post-operative tariff protection is an encouraging sign that administrative mechanisms will not be used to increase the overall level of protection.

3.51 The fiscal impact of the new code cannot be easily established as it depends critically on the administration of the IPP and on the recovery of investment activity. Individually, new firms are likely to receive greater incentives, largely because of the income tax holiday, but this could be offset by a reduction in the number of firms availing of incentives and by the elimination of the tax loss-carryover provision.

**Table 3.8: COMPARISON OF KEY FISCAL INCENTIVES UNDER THE
OLD AND NEW (1987) OMNIBUS INVESTMENTS CODES**

Fiscal incentives	New	Old
A. Tax Exemptions		
Income tax	4-6 years from commercial operation (nonpioneer/pioneer)	none
Tax/duty on imported equipment	5 years from effectivity of Code	50-100%; 5-year deferred payment
Tax/duty on imported spare parts	5 years from effectivity of Code	none
Contractors tax	All BOI-registered firms	none
B. Tax Credits /a		
Domestic capital equipment	100% of taxes/duties on import-substitute. 5 years from effectivity of Code	50-100% deferred payment; 5 years from registration. /b
Imported raw materials	Direct/indirect exporter	Direct/indirect exporter
Net value earned and Net local content	none	5-10%. 5 years commercial operation
C. Tax Deductions		
Labor expense	50-100% of incremental wage bill. Expansion projects. 5 years from registration	none
Net operating loss carryover	none	6 years from year of loss

/a Tax credits are valid for 10 years from date of issuance in both Codes.

/b Deducted from credits on net value earned and net local content.

Source: BOI

3.52 It is instructive to compare the proposed Philippine code with incentives offered by other Asean countries. These latter are summarized in Table 3.9. In comparison, the previous Philippine system (BP391) offers generous, but relatively well-structured incentives. The level is similar to that of the more interventionist countries (such as Thailand, Japan, Korea, Malaysia and Indonesia) but the instruments used are substantially less distortionary. The new code in the Philippines appears to compare less favorably with other East Asian countries. Most do not have tax holidays--indeed, Indonesia and Korea have recently eliminated these incentives--and those that do typically have a far shorter-time horizon. Similarly, while almost all other countries have a tax loss-carryover provision, which helps stabilize the value to a firm of tax credits, the Philippine proposal would remove this deduction. Broadly, whereas incentives are generally available to all firms in other countries, they are restricted to BOI-registered firms in the Philippines.

3.53 Overall, it seems that the three main problems identified with BP391, namely, the degree of discretion, the bias with respect to firm size and the differing ability to utilize tax credits across firms, would have little or no improvement under the new code. A comprehensive study of the BOI incentive system still needs to be undertaken, as called for under the Economic Recovery Loan. It is evident that the present system is by no means perfect, and several changes, elaborated on below, could be introduced to make it simpler, more transparent and more accessible to small and medium firms. It should also be recognized, however, that as policy-induced distortions are reduced through liberalized trade and exchange rate policies, the rationale for discretionary tax incentives is also correspondingly reduced. Thus, over time, the BOI should reduce its regulatory role while enhancing its promotional responsibilities, especially with regard to exports.

Recommendations for Incentive Reforms

3.54 There are two areas of change that warrant a systematic review and discussion of BOI's objectives. The first relates to the rather cumbersome administrative practices still in place and associated problems caused in selected areas. The second requires a more basic review of objectives in light of the general decline in the volume of BOI incentives, the difficulties in maintaining export-oriented financial incentives consistent with GATT regulations and the need for greater policy coordination and industrial development functions.

3.55 Administration. BP 391 and the new Omnibus Investments Code favor the market, but are also written to be flexible. What ultimately matters are the philosophy and day-to-day policies of the BOI. The BOI should avoid the temptation of supporting all viable or promising new industry. Instead, it should recognize market imperfections as its main enemy, and focus its operations on combatting them in whatever form they arise. With this in mind, it should be stressed that the role of BOI is to tilt relative incentives and not to increase absolute incentives across the board.

3.56 In the case of domestic producers, the market imperfection approach implies close attention to the "learning" and "risk" criteria introduced by BP 391. These criteria are now used only in determining whether an activity

Table 3.9: INVESTMENT INCENTIVES IN ASIAN DEVELOPING COUNTRIES

Incentive	Hong Kong	Indonesia	South Korea	Malaysia	Philippines /a	Singapore	Taiwan Province	Thailand
Corporate tax rates	18.5%	35%	30%	45%	35%	40%	30%, reduced to 20-25% for preferred enterprises	30-40%
Tax holiday	-	-	-	-	-	5 years for pioneer and export firms	5 years for preferred enterprises	3-8 years for preferred enterprises
Tax/duty exemption on capital goods	-	On approval basis, except for automatic exemption from VAT	Exemption for foreign and selected enterprises	Certain types of equipment not available locally	5-year deferral for BOI firms	No tax levied	Exemption for preferred sectors and for R&D	50% reduction of duty for preferred enterprises
Tax/duty exemption on raw materials	-	2-year exemption or reduction	Duty drawback for exporters	Duties reduced to 2% for exporters	Tax credits for BOI firms; drawback for exporters	Exemption for exporters	Exemption for exporters	Exemption for exporters; reduction for preferred enterprises
Accelerated depreciation	Generally available	Somewhat generally available	Available for multiple-shift equipment	Generally available for 3 years, at declining rates	-	Generally available; 1-year write-off for computers	Available with restrictions	-
Tax loss carry forward	Generally available	Available for 5 years	Available for 3 years	Available after tax holiday	Available for BOI firms	-	Generally available	Generally available
Organizational and preoperative expense deduction	-	Generally available	Generally available	-	-	Generally available	-	-
Investment allowance	-	-	10% tax credit depending on activity	Generally available, also for reinvestment	-	Generally available	Automatic 5-15% credit	-
Other significant provisions	-	-	Deductions for facilities for technical development	Double deduction for export promotion	Net value earned and net local content tax credits	Patents qualify as capital expenses	Extra deductions for R&D expenses	-

/a Current system governed by PD 1789 as amended by RP 391 and EO 1045.

Source: SGV Group.

should be registered as a pioneer activity. They should be used more broadly in determining the composition of the IPP, and in judging the eligibility of any project for domestic producer benefits. Access to non-pioneer domestic producer registration should be more limited than in the past, and should be restricted to projects affected by demonstrable market imperfection.

3.57 A simpler way to put this is that the BOI should seek to focus its interventions on exports and other areas where the greatest distortions obtain. At present, exporters continue to face significant distortions as a result of tariffs and quantitative restrictions. There is also evidence that market imperfections associated with learning and risk are especially frequent in export production. Furthermore, there are economies of scale in providing export market information. The possibilities for learning are enhanced in export industries because exporters are in close communication with foreign buyers and under intense pressure to keep up with foreign competitors. Risks in international markets may be greater because they are less well known, and because they may be inherently more volatile. Thus, a greater proportion of exporters should be expected to qualify for pioneer designation than domestic producers, and more generally, exporters should enjoy relatively easy access to BOI incentives.

3.58 Despite recent improvements, the incentive system is still too complicated and cumbersome for small and medium enterprises. In a recent survey, only 5% of SME's had availed of BOI incentives, despite 1981 legislation supposedly increasing access to these incentives. While cottage industries can benefit through NACIDA, and larger industries through the BOI, medium-sized firms fall between these two stools. Government should investigate much simpler mechanisms to support SMEs. For example, they might offer the option of a single, standard incentive, which combines the value of the income tax holiday with tax credits applicable to normal requirements for imported machinery and intermediate inputs. This single rate could be applied directly to the sales and/or exports of the registered firm. At first glance, the single-rate approach seems to defeat a valuable secondary function of the incentives--to "tilt" operations in a given line of business toward local sourcing. But if an enterprise misunderstands how the system works, or fails to start up in the first place, then the purpose of the incentives is entirely defeated. Standard rates should be coupled with simplified, routine registration procedures, and their availability should be aggressively publicized.

3.59 Another distortion that needs attention is the restriction of the transferability of tax credits. This restriction is particularly relevant in times of recession, when companies have little income to shelter. Data show that approximately 23% of tax credits have gone unused. This restriction is also selectively biased against one-business companies that produce for export on a consignment basis. There is no reason to discount the value added contributed by such companies to the economy. At present, tax credits are transferable to input suppliers up to the full amount of inputs. There is currently a discount of about 40% on such transfers. Small firms, however, cannot use these as they procure from marginal producers who are not in the tax net. Similarly, transferability is limited for firms using imported intermediates, such as in garments, or those using few intermediates, such as in mining. Government should investigate expanding the transferability of tax

credits. This would yield three desirable benefits: (a) a reduction in uncertainty about the value of BOI incentives; (b) elimination of erratic inter-firm differences in the value of BOI incentives; and (c) an increase in the value of incentives during periods of low profitability, when tax credits have low value, but are especially desirable for their macroeconomic effect. Expanding transferability can be done in several ways. The most extensive is to make tax credits freely tradeable. This would lose tax revenue, but the effect would be minimized by restricting sales to new availments, which have been much more modest in scope than in the past. An alternative, more limited reform would be to extend transferability to more inputs, such as electricity or fuel, which are widely utilized by all firms.

3.60 A third area deserving scrutiny is the concentration of BOI incentives to firms in the Metro Manila area. The combination of export-orientation and large-scale bias effectively precludes many firms outside of Metro Manila from enjoying access to BOI incentives. In order to reach regional areas more effectively, the incentives offered under the investments code should be made available to firms at a variety of DTI regional offices, including the Bureau of SME and NACIDA offices. Staff in each office should be in a position to advise firms of eligibility for incentives under any of the different schemes offered by government.

3.61 The recommendations sketched so far focus on administrative practice and require no significant changes in law. They would be significant in extending BOI incentives to small and medium enterprises and to regional producers, counteracting the anti-employment bias of past BOI practices. With these adjustments, the Philippine incentive system is well positioned to support the economy's industrial recovery in the near term. It is useful, nevertheless, to explore the evolution of the incentive system in the longer term and to anticipate changes that may be required to keep it abreast with future developments in economic conditions and policies.

3.62 The thrust of future changes should be to increase the transparency, automaticity, and simplicity of incentives. The number of incentives offered could be reduced, for example, by shifting the administration of the duty drawback system to the Customs Department. It is encouraging that the new Code has eliminated both the loss carryover and the credit on the withholding tax on interest to foreign lenders, thereby reducing the unequal and erratic distribution of incentives across firms and activities.

3.63 New Objectives. A move towards functional objectives is a desirable redefinition of BOI's role. General support of technology and fiscal incentives for research and development falls under this heading. So would moves to include "restructuring" projects in the IPP. As noted above, it is desirable to avoid any bias favoring new projects, enterprises and investment over rehabilitation involving technological modernization in ongoing, and in several cases even contracting, activities.

3.64 The incentive system should be periodically reviewed. Trade liberalization, in particular, will reduce the bias against exports and permit gradual reduction of export incentives. Economic studies of the anti-export bias of trade policy should be used to provide explicit guidance as to the level of incentives needed to offset the trade policy. Similarly, as the VAT

system is introduced, there will be less need to give "incentives" related to taxes that are to be removed, such as those on exports and on capital equipment. Any revisions to the investment code should carefully consider the interface between BOI incentives and forthcoming VAT legislation, and be conscious of the fiscal impact of tax concessions.

3.65 The IPP should be used to list examples of profitable projects that are likely to benefit the Philippines, and which the BOI stands ready to support because of certain externalities. This makes the IPP an indicative list of potentially profitable business opportunities. Actually, the IPP already operates somewhat like an indicative list since it is very broad and since new products can be readily added. Indeed, the IPP's profile should be raised by widely publicizing the individual feasibility studies on which it is based. Effective development of feasibility studies is an example of the developmental and informational activities which should occupy an increasing share of BOI's efforts.

3.66 The redirection of the objectives of DTI toward developmental activities, and the integration of the BOI into the Department of Trade and Industry represent valuable changes in the administration of industrial policy in the Philippines. DTI already performs functions that affect industry in the areas of international marketing and the supervision of technological agreements. Within the Department, some agencies should assume a more active role in coordinating the delivery of technical and marketing support, and in identifying problems that require actions in other ministries. For this to be effective, there is a critical need to acquire staff with appropriate skills and undertake additional training. The Department will need more people with sophisticated analytical leadership and policy-making skills. Such staff would require improved data support systems. Greater emphasis should be placed on the statistical monitoring of industrial performance and on making such information machine readable.

Financial Sector Policies Affecting Industry

3.67 A major program of financial sector reform was initiated in 1980. These reforms were comprehensive. Most importantly, interest rate ceilings were progressively lifted and variable rate instruments were introduced. A new Manila Reference Rate (MRR) was established as a readily observable index to serve as the base for variable interest rate loans. Important regulatory reforms were also carried out. Institutional functions were enlarged and licenses issued for universal banking. This increased competition amongst different types of financial institutions and allowed the same institution to extend long-term credits, underwrite securities, and invest in equity as well as carrying out normal credit operations.

3.68 As a result of these reforms, savings mobilized by the financial sector increased sharply and there was a concomitant shift to more market oriented lending and interest rates. However, even as the positive effects of these reforms were beginning to be felt, severe problems in the domestic economy became evident which, among other things, caused large exchange rate adjustments and sharply fluctuating nominal and real interest rates. Since 1985, real interest rates have been so high that they have had a severe impact on industrial enterprises. High real rates reflect high intermediation costs,

the high level of government borrowing and falling inflation due to restrictive monetary policies. As inflation started to fall, nominal rates did not adjust fast enough, leading to high real interest rates. Only in the last quarter of 1986 have nominal and real interest rates finally begun to ease, although recent trends have taken their toll in the form of the weakened financial conditions of many enterprises and the fragility of the financial system as a whole. Recently, government has reduced reserve requirements and declared its intention to remove the gross receipts tax, which should help in a further reduction of lending rates.

3.69 Another major reform in the financial sector consists of the restructuring of the GFIs. Government banks, particularly DBP and PNB, had been major providers of term finance to industry in general and to specific subsectors such as SMEs, exporters and rural-based industries. These institutions benefited from a variety of preferential and targeted credit programs for which they were major implementing agencies. Such programs have been virtually eliminated in practice.

Further Financial Sector Reforms

3.70 As noted, financial constraints have contributed to the weakness of recent industrial performance. There are three key issues to be addressed in the future. First, the rise in debt/equity ratios of many firms has made them ineligible for further loans for working capital or rehabilitation investments. These firms need to restructure their financial make-up and, in many cases, recapitalize themselves. Second, high effective taxation of financial intermediation remains, reducing the sector's efficiency. Third, as a result of the restructuring of the GFIs and the proposed pace of privatization, there is the danger of a major squeeze on industrial credit, particularly term financing, in the future.

3.71 A two-pronged strategy is recommended to facilitate case-by-case restructuring of viable firms. The first component of the strategy would be to tighten and achieve closer compliance with the regulations of the Central Bank dealing with the supervision and control of financial institutions. This would be aimed, among other things, at achieving a more realistic assessment by financial institutions of their existing and potential loan losses through specific and general provisions for bad loans; it would also involve some strengthening of the Central Bank's general supervisory role with respect to banks. The second component of the strategy would be to create and strengthen institutional mechanisms to assist firms facing difficulties and needing financial restructuring; specifically, firm-level restructuring would be facilitated through provision of financial and other advisory services, complementary term financing and/or equity funds, and use of new financial instruments appropriate for work-out plans. Provision of such financial engineering services is likely to put a significant technical and financial burden on the banking system. A review of the options is needed, that should include the use of non-bank intermediaries.

3.72 Industrial finance would be improved by a modification of current regulatory policies with regard to the taxation of interest rates, the compulsory credit guidelines and the fixed and high reserve requirements policy. This would reduce the spreads on financial intermediation and lead to more

efficient resource mobilization. As discussed in the Bank's recent economic report,^{15/} a reduction in the overall level of legal reserve requirements and an elimination (or reduction) in the "agri/agra" selective credit requirements would be desirable. This would, of course, have to be implemented within the established overall monetary policy objectives. For similar reasons, it would also be beneficial to eliminate the gross receipts tax (GRT). This tax was originally structured to increase as the remaining term of the loan, presumably to provide for some incentive for term lending; but in practice, banks treat GRT as an "add-on" cost element to be passed on fully to the borrowers and the incentive had virtually no effect on encouraging longer loan terms. An additional area of policy action which could encourage mobilization of term deposit resources and hence the availability of term financing, as well as help in further reducing interest rate spreads in the system as a whole, is to have a differentiated reserve requirements policy, based on maturity of deposits.

3.73 A third issue is the adequacy of instruments and funding sources for industrial finance. Lending by the Philippine banks has always been short-term oriented since the 1960s. The short-term preference of investors and banks became intensified as a result of the large interest rate and exchange rate volatility experienced over the last several years. Moreover, in recent years, most of the medium- and long-term loans have been those funded through the rediscounting funds or other special schemes, with the first-tier banks simply acting as a channel for term funds provided to them rather than using resources raised from the market for term lending. At present, the demand for investment finance is still very low, so that "scarcity of finance" cannot be considered to be a constraining factor for industrial investment. The more relevant question is whether the financial system is likely to generate adequate amounts of finance as macroeconomic conditions become more favorable.

3.74 The prognosis for the evolution of industrial finance in the Philippines is dominated by two recent events. First, the restructuring of the GFIs has sharply reduced a major source of lending to industry. Second, the proposed schedule of public asset privatization is likely to increase substantially the demand for industrial finance. Table 3.10 gives indicative figures on the outstanding loans of the financial system to industry. It should be pointed out that loans are not the only financial resources provided--banks also have considerable equity in industry. However, breakdown of the sectoral distribution of equity is not available. Furthermore, a major portion of current equity holdings reflects the conversion of non-performing loan accounts to equity positions.

3.75 The data in Table 3.10 have two critical features. First, they show that the total size of loans outstanding to industry at the end of 1985 was only P 58 billion. By comparison, the book value of manufacturing assets to be privatized over the next five years is P 75 billion.^{16/} While only a

^{15/} Report No. 635^~PH "The Philippines: A Framework for Economic Recovery" (November 5, 1986).

^{16/} Comprised of P 44 billion in the NPAs and P 31 billion in government non-financial industrial corporations.

Table 3:10: LOANS OUTSTANDING - END OF PERIOD
(Billion pesos)

	Commercial banks		Specialized gov't banks /a		Private development banks /b		Total	Of which: Industry
	Total	Industry	Total	Industry	Total	Industry		
1980	77.2	34.3	20.3	9.4e	9.0	4.2e	106.5	47.9e
1981	86.5	33.4	24.3	11.3e	7.8	3.6e	118.6	48.3e
1982	98.2	39.7	30.4	14.1e	8.7	4.0e	137.3	57.8e
1983	111.4	48.6	32.1	14.9e	13.1	6.1e	156.6	69.6e
1984	116.4	48.6e	40.5	18.8e	13.2	6.1e	170.1	73.5e
1985	87.6	36.6e	33.2	15.4e	13.2	6.1e	134.0	58.1e

e = Estimates.

/a DBP, LBP and PAB.

/b Includes private investment houses and companies.

Sources: 1985 Fact Book, Philippine Financial System.
1984 Annual Report, Statistical Bulletin.

portion of this book value will be actually realized in the sale price, and some infusion of new equity will be necessary, it appears nevertheless that the credit requirements of a successful privatization program will be major relative to total current credit levels.

3.76 The second key feature of Table 3.10 is the large share of government banks in total credit. If PNB (about one-third of the commercial bank total) is added to the specialized government banks, public institutions comprise about 45% of credit. Given the limits placed on future operations of the GFIs, and their weakened financial condition, it is apparent that little expansion from these sources will be forthcoming in the near term. The burden of meeting new credit needs will, therefore, fall overwhelmingly onto private commercial and development banks.

3.77 In summary, lack of credit may constrain successful privatization, while rapid privatization is likely to crowd-out the remainder of the private industrial sector from new credit. A comprehensive assessment of the capacity of the financial sector to meet industrial credit needs should be conducted as a matter of some urgency. Attention should be given to developing instruments to mobilize new sources of funds, such as bond and note issues to tap insurance and pension funds.

3.78 Restructuring of the GFIs has also reopened the issue of the adequacy of long-term finance for investment. Investment projects for the establishment of new productive enterprises or major expansion of existing production capacity typically involve long gestation periods and require medium- to long-term financing to provide a financial package whose cash flow characteristics match those of the investment. However, having experienced a period of high and varying inflation and interest rates, Philippine savers show a strong preference towards investing in deposit instruments towards the short end of the maturities spectrum (usually with maturities of three months or less), making it very difficult for banks to mobilize or lend term funds. To help resolve this dilemma, and to facilitate such term transformation, the Central Bank established a last-resort liquidity facility to protect banks against liquidity risks inherent in term transformation and took steps to encourage the use of floating interest rates in the Philippine banking system in order to help banks minimize the "income risk" associated with term transformation. In particular, the Central Bank helped establish the representative deposit rate index of the average effective cost of new deposits raised by major banks, called the Manila Reference Rate (MRR), whose availability and weekly publication since the early 1980s was instrumental in popularizing the use of floating interest rates, especially during 1982-84.

3.79 Over the last 1-2 years, the MRR index has fallen into relative disuse, reflecting fears that it may have been manipulated by some major banks as well as a lack of familiarity among banks and borrowers about the precise current definition of the MRR index. At present, most banks prefer to use floating rates based on an internal cost index of the individual bank rather than the MRR index. Moreover, the term "floating rates" tends to refer to interest rates on short-term "rollover" loans rather than medium- or longer-term loans.

3.80 Three main courses of action should be taken to facilitate wider use of floating interest rates. First, steps should be taken to develop a reference rate which is well understood and accepted by a wide spectrum of lenders and borrowers. Second, emphasis should be given to the design of new lending instruments which could help overcome the current problem of differential expectations and risk perceptions of borrowers and lenders with regard to interest rates. Third, a practical way to encourage the use of floating interest rates would be to offer them as an option in one or more of the Central Bank rediscounting mechanisms for industrial financing (e.g., the IGLF) which, if successful, could have a demonstration effect on the remaining parts of the financial system.

3.81 Ideally, most of the term financing needs of industry should be met from market-mobilized resources rather than through directed credit or special financing schemes supported by the Government. However, for reasons discussed earlier, term lending based on resources generated from the market by the financial intermediaries has been very limited in recent years. Many of the Central Bank rediscounting schemes for term lending were established to fill this perceived gap, and are currently the main source for medium- and long-term loans to industrial enterprises, with the possible exception of only the largest enterprises. Given the likely time required to overcome the marked short-term preference of savers and develop a sizable market for deposit and lending instruments of longer-term maturities, the rediscounting schemes are likely to continue to be the main sources of term finance for most of industry in the near future. In addition, there is a third natural source of medium- and long-term finance that should not be neglected--namely, the insurance companies and pension funds.

3.82 Philippine commercial banks have traditionally concentrated their lending to established large firms, especially in the Metropolitan Manila area. The strategy reflects to a considerable extent the centralized management structure of the banks. Commercial banks have traditionally been reluctant to lend to small- and medium-scale industrial (SMI) firms on the premise that they pose higher credit risk than their traditional larger clients, a perception often proven inaccurate in the past. For example, the experience under the IGLF scheme for SMI financing, with average arrearage rates of 3-8% over the last five years, suggests that the repayment record of many of the smaller firms has been as good or better than large companies. On the other hand, there is evidence to suggest that the risk premiums charged by banks for some of the smaller and less established firms may be excessively large in comparison with the actual differentials in credit risk based on prior experience.

3.83 One instrument that would help improve the access of SMI and other less-privileged firms to credit would be a well-designed credit guarantee scheme (IGLF, GSFME and Philguarantee). While the coverage of the guarantee schemes appears adequate, very few clients or banks are requesting credit guarantees under these schemes. As a means to provide broader access to the guarantee facility, the credit guarantee facilities should be delinked from actual financing. The credit evaluation system also needs to be strengthened. There is currently a relatively well-established credit-risk evaluation function under a semiautonomous institution called "Credit Investigation

Bureau" of which the Central Bank is a cosponsor. The Bureau is engaged in rating the credit risk of individual firms upon the request of a potential creditor, and has been selling its services to banks and other financial institutions. It should be possible for the guarantee organization to join forces or coordinate its activities with that of the Bureau in order to ensure that all guarantee authorizations are well supported.

3.84 As the portfolio problems of banks are identified more clearly and corrective actions taken to clean up the portfolios, some of the financial intermediaries themselves may face a need for restructuring, consolidation, or, in some cases, liquidation. The degree of problems varies considerably among different categories of financial institutions, as well as among individual institutions within the same category. The financial characteristics, portfolio quality and capability to absorb potential (hitherto unrecognized) losses vary greatly among individual banks within the same category, and are a function of many individual factors such as size, tradition and controlling shareholder philosophy which need to be assessed in detail. Follow-up work in this area should receive a high priority. Specifically, financial sector work is needed to identify the financial condition of private-sector intermediaries, their capacity to handle the impact of restructuring which is taking place or will take place in the real sector, and alternative ways or orchestrating any necessary transition in the structure of the financial system.

Macroeconomic Policies

3.85 Macroeconomic policy has been extensively treated in other recent World Bank and IMF reports, but its influence on the industrial sector is too pervasive to ignore completely in this report. There are four principal channels through which macroeconomic factors have affected industry: inflation, real interest rates, external balance and the real exchange rate, and real wages, employment and aggregate demand. The industrial sector has suffered from imbalances in each of these areas.

3.86 Past inflation and high real interest rates have contributed to a substantial deterioration in company balance sheets. They are the legacy of high fiscal deficits and exhaustion of foreign borrowing opportunities. Although inflation is now under control and real interest rates have declined relative to their peak levels in mid-1986, it will take some time before investors regain confidence in the willingness and ability of government to maintain conservative macroeconomic policies. In the medium-term, there is a need for fiscal deficits to remain at a moderate level consistent with the availability of noninflationary financing. Given the growing expenditure requirements of domestic and foreign interest payments, there is a need to improve revenue collection, along the lines indicated in the current tax reform program.

3.87 In the near term, there is scope for a fiscal stimulus to the economy, along the lines currently being implemented by the government, focussed on maintenance and investment activities. This should significantly aid selected depressed sectors such as cement, bricks, iron and steel and wood products. Early signs of a recovery in these sectors are already apparent.

In addition, other sectors would be helped by a recovery of demand that permitted greater capacity utilization. However, because of the "supply" constraints affecting much of the industrial sector, reflecting deep-rooted financial and technological problems, the response of output to a generalized demand stimulus is likely to be limited.

3.88 Industry has suffered considerably as a result of the appreciating trend and high variability of the real exchange rate since the early 1970s. In particular, the costs associated with the rationing of imported goods that followed the recent financial crisis have been substantial. Experience with previous liberalization episodes in the Philippines and other developing countries suggests that it is balance of payments pressures stemming from inappropriate macroeconomic policies that has been the most common factor causing an abandonment of trade liberalization.^{17/} The study also suggests that the negative consequences of liberalization on employment are fairly small, even for previously protected sectors, and inconsequential for the entire economy. The corollary of this is that high current unemployment cannot be attributed to the ongoing trade reforms. Good macroeconomic policies should be used to address the unemployment issue, not selective interventions in specific sectors, which would again lead to a distorted trade regime.

3.89 Exchange Rate Management. While a large number of structural reforms were initiated in 1980, a major shortcoming of policy during this period and through the economic and financial crisis was the lack of appropriate exchange rate management. Exchange rate policy was not sufficiently flexible in the face of expansionary fiscal and monetary policies and the changing external and domestic environment, resulting in several adverse effects: (a) it contributed to the buildup of macroeconomic imbalances and balance of payments pressures; (b) when macroeconomic adjustments were undertaken, they necessitated excessive reliance on expenditure reduction with higher adjustment costs; (c) the lack of exchange rate adjustment made trade liberalization more difficult when it could have played a facilitating role; and (d) there was a steady erosion in competitiveness vis-a-vis other East Asian countries which contributed to the weak export performance.

3.90 Figure 3.2 shows trends in the real exchange rate over the 1970-86 period. The main trends of note are: the real exchange rate depreciated moderately between 1970 and 1978; then appreciated significantly between 1978 and 1982 which covered the period of large trade liberalization; this was followed by a large correction in 1983, and in turn by appreciation in 1985 and a very large depreciation in 1986.

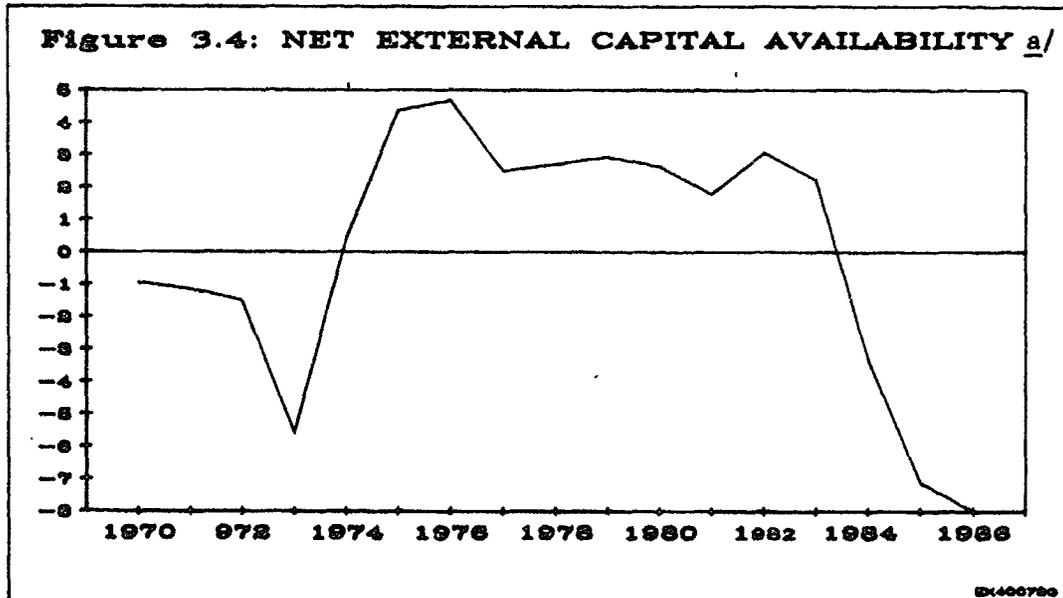
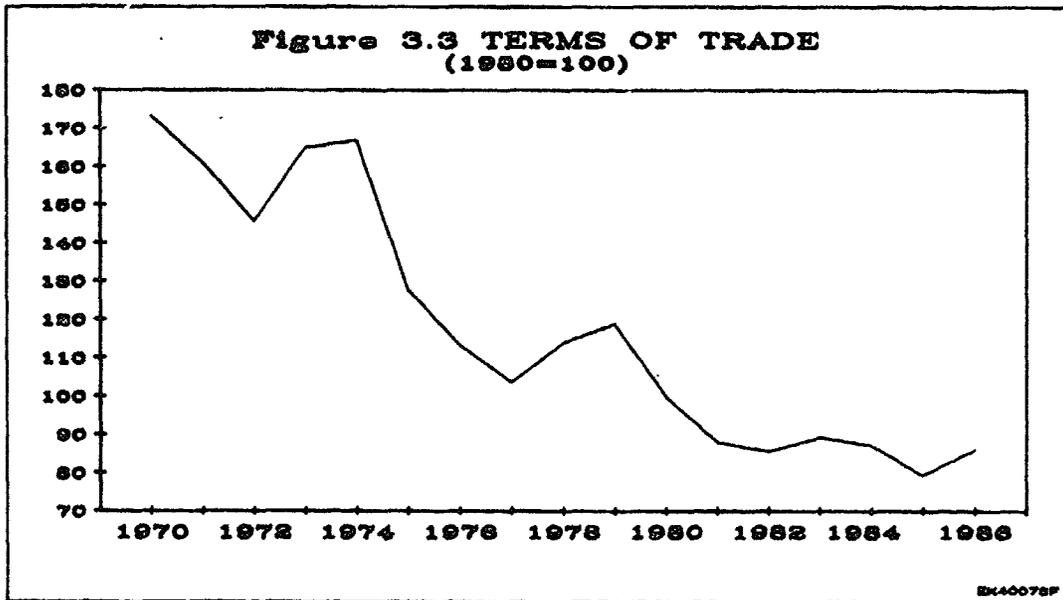
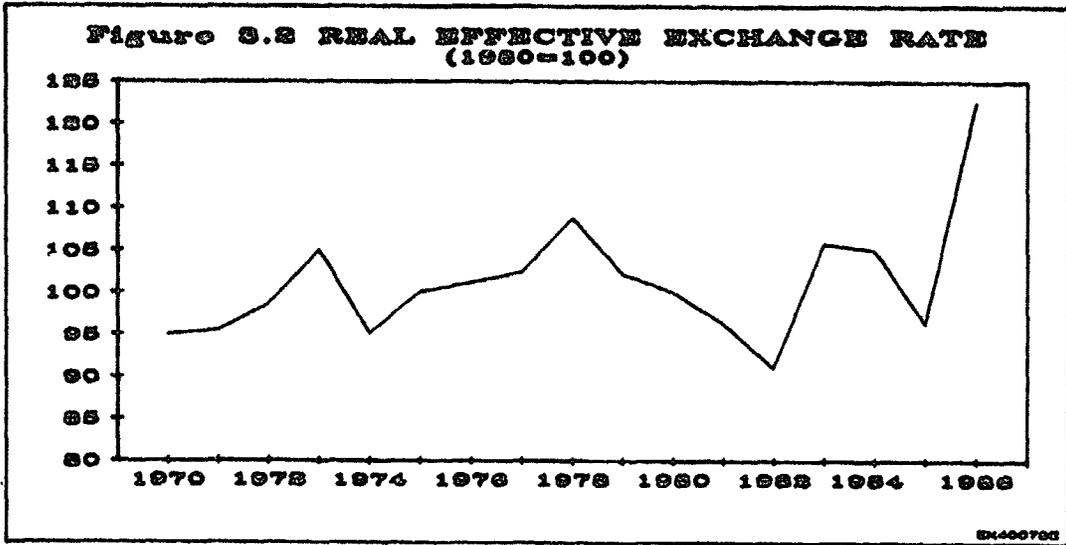
3.91 A way to view the appropriateness of the real exchange rate is to contrast trends in the real exchange rate with changes in structural factors or "fundamentals" that would necessitate adjustments in the real exchange rate. There have been important changes in underlying fundamentals, both during the 1970s and the most recent period. The most important has been the sharp decline in the terms of trade, as shown in Figure 3.3. Another

17/ Papageorgiou, D., M. Michaely and A. M. Choksi 1986. "The Phasing of a Trade Liberalization Policy: Preliminary Evidence." World Bank (mimeo).

structural change has been the trade liberalization process, which has been resumed in 1986. Under a protected regime, the real exchange rate will be overvalued to start with, and trade liberalization will require an equilibrating adjustment in the real exchange rate to maintain equilibrium in the balance of payments. A third important change has been in the availability of external capital. As a result of the large external borrowing of the past, there is now a large external debt overhang, implying substantial interest and principal payments in the future, and reduced net capital availability (see Figure 3.4). Finally, the need to expand exports to adjust to the new circumstances will itself require an improvement in relative competitiveness.

3.92 All of these structural changes suggest that substantial real exchange rate depreciation was warranted to maintain external equilibrium and encourage the shift of resources toward tradeables and export activities. Two issues that arise are: first, a large real depreciation has already occurred in 1986, and second, now that the exchange rate is floating, changes implied by structural factors should be automatically brought about.

3.93 It is certainly true that there has been a large depreciation of the real exchange rate in 1986, but this is entirely due to the link of the peso to the dollar and the depreciation of the dollar against other major currencies. Vis-a-vis the dollar, the peso has depreciated only 4% in real terms since the end of 1984. The depreciation of the peso vis-a-vis other currencies, will improve the competitiveness of Philippine exports in Japanese and European markets. But there are limits to this impact. About half of Philippine exports are primary commodities, which are dollar denominated. The bulk of exports for instance to Japan fall under this category. The US remains the dominant market for manufactures, accounting for 62% of Philippine exports. Moreover, the exchange rate trends need to be viewed in light of movements of currencies of competitor countries. As shown in Table 3.11, under some measures there has been substantial deterioration in the relative competitiveness of the Philippines during the 1980s, which has not been reversed during 1986, because most countries in East Asia have also maintained parity with the dollar during the recent currency realignment. Nevertheless, the move to a floating exchange rate system guarantees that the exchange rate will not be used for an extended period of time as an instrument to support the nontradables segment of the economy.



a/ Current Account excluding interest payments as percent of GNP.

Table 3.11: REAL EFFECTIVE EXCHANGE RATE VIS-A-VIS EAST ASIAN COMPETITORS

	WPI-based <u>/a</u>	Unit value of export based
1980	100.0	100.0
1981	96.6	108.3
1982	91.7	117.1
1983	97.8	108.1
1984	87.4	101.8
1985	78.1	103.8
1986	83.7	123.0

/a WPIs are unavailable for Hong Kong and Malaysia; therefore, these are excluded and weights below are adjusted proportionally.

Weights: According to share of nonoil exports of competitors in major Philippine markets: Hong Kong (15%), Indonesia (13%), Korea (20%), Malaysia (12%), Singapore (9%), Thailand (5%), Taiwan, Province of China (26%).

Source: Bank staff estimates. A rise in the index indicates a depreciation in the exchange rate relative to other countries.

Overall Assessment of Incentive System

3.94 Although the reform process that was initiated in 1980 was far from smooth, or as yet complete, much has been accomplished as a result of cumulative actions over the past seven years. Paradoxically, the economic and financial crisis which derailed the trade reforms of 1980-82, provided the momentum for drastically reducing some of the more intractable government interventions in the industrial sector. With the resumption of import liberalization in 1986, significant progress has been achieved in all of the key areas of needed reform:

- (a) a major tariff reform program was completed in 1985; with the progressive removal of import restrictions, the effects of this tariff reform are being unmasked;
- (b) the protective elements of the indirect tax system has been largely redressed;
- (c) the most important import restrictions are to be liberalized under the ongoing program; a significant proportion of the program was implemented in 1986, and a timetable has been set for liberalization of the remaining ones;
- (d) the system of exemptions from duties, except for exports, has been largely curtailed;

- (e) a major reform of BOI incentives was completed in 1983, which has made them more performance oriented and less discretionary; however, the Omnibus Investment Code of 1987 undercuts many of these reforms;
- (f) interest rates have been fully liberalized, and the role of preferential and targetted credit--particularly from public financial institutions-- has been virtually eliminated; and, finally
- (g) all restrictions on foreign exchange allocation for current account transactions have been removed and the exchange rate has been allowed to float.

3.95 All of these changes have added to a fundamental transformation in the policy environment away from a "rent seeking" inward-oriented regime. The most significant policy interventions remaining after these measures would be trade restrictions, but even these have been substantially reduced. In fact, as a result of cumulative policy adjustments since 1980, the Philippine economy is now more open and transparent in its regulatory and incentive structure than at any time since 1950. This has moderated the long-standing anti-export bias and will open the economy to a far greater degree of international competition. It is important that new policies, in particular the Omnibus Investment Code, be implemented in such a way as to retain industry's competitive edge without recourse to discretionary fiscal handouts.

3.96 Future reforms of the incentive system should be aimed at consolidating and reinforcing the on-going program. There remains a need to fine-tune the regulatory environment and improve the administration of existing laws. The most important such changes are:

- (a) review all remaining trade restrictions and replace them with tariff protection unless there are overriding security or health concerns;
- (b) modify the tariff schedule to promote lower levels of effective protection via a reduction of maximum tariffs from 50% to 30-40%;
- (c) focus BOI incentives on relative rather than absolute returns by reducing access to non-pioneer domestic producer registration;
- (d) strengthen regulation of financial intermediaries to induce their more active and timely participation in restructuring programs with their clients; and
- (e) reassess the credit needs of the privatization program and phase sales or institute other schemes so as to avoid excessive "crowding-out" of other industrial finance.

For these reforms to be credible and effective, it is essential that the macroeconomic environment be kept stable. In the short-run this implies some stimulus of domestic demand to restore internal balance. In the medium-term it implies restricting the overall public sector deficit to levels sustainable with non-inflationary financing. It also requires the maintenance of exchange-rate competitiveness relative to other East Asian manufactured good exporters.

IV. GROWTH PROMOTING PROGRAMS

4.1 Although government is committed to a reliance on private sector industrial development with a minimum of public interventions, it cannot afford to take a passive role and be content with minimizing the negative consequences of its own regulations. It is faced with the need to provide support to industry without creating the kinds of distortions that will only repeat the inefficient pattern of development of the recent past. The real challenge lies in the formulation of new instruments and new institutional structures that respond flexibly to changing market conditions. There are three priority areas where government can take the lead in actively promoting growth: industrial restructuring, both of public and private firms; export promotion, including more sophisticated trade negotiations; and technology promotion.

Industrial Restructuring

4.2 Public firms. The second oil shock gave renewed momentum to government's decision to intervene directly in selected subsectors of the economy. In 1979, government reorganized and expanded the National Development Corporation (NDC) and, in 1980, announced a program of direct public sector investment in so-called Major Industrial Projects (MIP). The original MIPs included proposed investments in steel, aluminum, pulp and paper, petrochemicals, diesel engines, phosphate fertilizers, heavy engineering products, coco-chemicals and cement.

4.3 Many of the MIPs were, in fact, never undertaken. Those that were completed include a phosphate fertilizer plant (PHILPHOS, total cost of \$555 million), a copper smelter (PASAR, \$402 million), and a cocochemical manufacturing plant (\$112 million). PHILPHOS has been operating since 1985, but at current exchange rates its costs are above average compared to world prices for phosphatic fertilizer, and its losses have been absorbed by the Government. PASAR has had a difficult time competing against processing plants in Japan, and has experienced technical problems as well. It is currently operating on a profitable basis. A heavy engineering plant with a total cost of \$21 million was started, but further work on this plant has halted. The cement industry project consisted of a conversion of private cement plants from oil to coal using financial incentives provided by government. The diesel engine plant was constructed from private funds, encouraged by import restrictions, investment incentives, and financing from the Development Bank of the Philippines.

4.4 In addition to the MIPs, NDC took over the operation of foreclosed properties from DBP, including several cement plants and sugar mills, and also made other industrial investments, in such subsectors as copper mining, rayon manufacturing, rattan processing and steel. While the plans for an integrated steel mill were eventually shelved, NDC also took over the country's major secondary steel processing plant (National Steel Corporation) and an associated tinplate producer (National Tinplate Corporation), when these private entities failed to meet heavy debts to DBP, despite government protection. NDC has also made investments in such nonindustrial areas as oil palm production and shipping.

4.5 Although public and private industrial investments undertaken during the 1970s were substantial, they were inappropriate. First, they were financed to a large extent by foreign borrowing and therefore subject to large exchange risk. Second, returns (at world prices) were exceptionally low reflecting the easy access to finance and the highly distorted incentive regime. Incremental capital output ratios and estimates of total factor productivity growth for this period underline the extremely weak performance of the Philippines compared to the other countries of the region. An additional indication of the structural weaknesses stemming from the trade and incentive regime is that growth rates in manufacturing had begun their downward descent in 1978, well before the economic and financial crisis that emerged after 1982.

4.6 The government has dropped all plans for further direct investment in industry. Public investment in industry will be limited to the provision of infrastructure in export processing zones. The reform of the GFIs operating procedures should ensure that government does not acquire further assets indirectly via its lending operations. A system has been set up to privatize existing industrial assets acquired through the GFIs. A large number of the subsidiaries of NDC, PNOC and HSDC are also slated for eventual privatization, in an effort to further reduce the government's direct role.

4.7 A two-tiered mechanism has been established for disposing of the NPAs. The interministerial Committee on Privatization will oversee and monitor the overall divestment program. The implementing arms of the program are the Asset Privatization Trust and the GFIs themselves. Overall, it is estimated that industrial assets with book value of P 114 billion will be restructured (Table 4.1). Of this, some P 81 billion is to be sold to the private sector, comprised of P 50 billion of NPAs and P 31 billion of public corporations. A central issue is the valuation of these assets. Some preliminary appraisal estimates are available for the NPAs, but these should not be construed as estimates of the market price. The latter will be a function of a number of variables, including the financing options associated with asset disposal.

Table 4.1: PUBLIC SECTOR INDUSTRIAL ASSETS
(billion pesos)

	Total claims <u>/a</u>	Booked <u>/b</u> exposure	Appraisal value
NPAs	86.9	49.7	47.3
Manufacturing	43.8	25.6/ <u>c</u>	24.3/ <u>c</u>
Mining	41.3	24.1/ <u>c</u>	23.0/ <u>c</u>
Non-financial corps. for privatization	64.4/ <u>d</u> 31.0/ <u>d</u>	64.4/ <u>d</u> 31.0/ <u>d</u>	n.a. n.a.

/a Comprised of booked exposure plus advances for rehabilitation plus unbooked interest, penalties and other charges.

/b Loans receivable, accrued interest receivable, equity investments and acquired assets.

/c Assumes that manufacturing and mining have average ratios of booked exposure/total claims and appraisal value/total claims.

/d Total assets of corporations.

Note: Appraisal value is based on balance sheet accounts. It does not represent market value. For the NPAs, market value is estimated at perhaps P 25 billion.

Source: Ministry of Finance; Bank staff estimates.

4.8 The magnitude and complexity of the task of the Asset Privatization Trust should not be underestimated. An undertaking of this scale by a developing country is unprecedented. One recent example of acquisition and sale by government of numerous companies is that of Spain, involving the RUMASA subsidiaries. Approximately 120 companies were taken over and sold for \$1 billion equivalent. The exercise took about three years, but the bulk of divestiture took place in the first year. There was substantial foreign technical assistance, through First Boston and other firms. The task was made simpler by the fact that many foreign investors were actively seeking a foothold in Spain as a means of penetrating into the European Economic Community.

4.9 Privatization of the assets from the nonperforming accounts through the APT and reform of the nonfinancial public corporations are a major component of government's industrial restructuring policy. There is a direct impact stemming from the expected gains in output as these assets are restructured. Given the sizeable share of these assets relative to total manufactured assets, this will be an important determinant of overall industrial performance. The initial stage of disposing of public assets has been initiated, although no assets have as yet actually been privatized and the mechanisms for privatization have not been tested in practice. The restructuring of public assets, however, does not stop at this stage. For the nonperforming accounts,

at least, physical rehabilitation must be undertaken within new financial structures. Partly as a result of the scale of operations, positive government action to smooth the overall restructuring requirements is desirable. Such action, however, must be consistent with government's central strategy thrust of reducing sector-specific inequalities and lowering budgetary support.

4.10 If the value of asset sales is sizeable, then the government should bear in mind two potential adverse macroeconomic impacts: on the availability of credit and on the interest rate on loans to the industrial sector; and on private fixed capital formation. The transfer of substantial publicly-owned fixed assets into private portfolios is likely to diminish the appetite of investors for new private equity offerings and for private fixed capital formation in industrial capacity. Table 4.2 provides data on the net increase in paid-up capital in industry. Clearly, if even a small portion of privatized companies are purchased with cash (for equity), the amounts are likely to be significant vis-a-vis the economy-wide annual increase in industrial equities--around P 4 billion. Note that this figure includes foreign portfolio investment. On the other hand, the financing of acquisitions from the APT could also tie up large credit lines. These developments could lead to a crowding-out of other industrial credits, upward pressure on interest rates for industrial loans and reduced economy-wide investment in the medium-term.^{18/} These effects should be minimized, either through the use of flexible financial packages, such as credits (preferably with commercial bank guarantees) and/or credit guarantees for APT sales, or through accommodating monetary and fiscal policy.

^{18/} In the short-run, privatization may lead to a rise in investment as rehabilitation occurs. In the medium-term, capacity expansion will depress the need for additional investment. It is also not expected that short-term ADT sales will be of sufficient magnitude to have any macroeconomic impact.

**Table 4.2: NET INCREASE IN INDUSTRIAL PAID-UP CAPITAL, /a
1983-86
(P billion)**

	1983	1984	1985	1986
New registrations	1.75 /a	1.20	2.13	1.69
Existing companies	3.04	2.04	2.11	2.43
(increase)	(3.78)	(2.43)	(4.46)	(3.02)
(decrease)	(0.16)	(0.03)	(0.61)	(0.13)
(Bankruptcies)	(0.58)	(0.36)	(1.74)	(0.47)

/a Includes both corporations and partnerships.

/b Excludes new investments by 29 new foreign stock corporations.

Source: Securities and Exchange Commission, Manila.

4.11 It is particularly important for government to recognize that asset sales should not be treated in the same fashion as fiscal revenue for budgetary purposes. Rather, it is only the annuity that represents newly available funds for spending. For example, if all APT proceeds were used to retire government debt, there would be annual savings on interest payments that could be directed to other expenditures. It is also important to emphasize that flexible financial packages offered in conjunction with APT sales should not expose the government to any further cash obligations or subsidies. Rather, they should be treated as devices for hedging against the uncertainties inherent in the process of valuing assets. For example, if an asset is sold at auction with a credit or a guarantee at a price below its "true" value, then the new firm is likely to succeed and government will earn additional income from fees associated with the guarantee. The reverse argument also holds. If the government must pay off on a guarantee, it reflects the fact that initial government receipts for the asset were higher than the "true" value. Through foreclosure and resale, the true value can be realized. The guarantee fee should then be set to cover the administrative costs and risk elements of the program. One problem remains: the cost of foreclosure in the Philippines is very high. These costs can be reduced by conditioned sales contracts that do not pass full title until debts are paid.

4.12 Overall, the guiding principle government should follow in privatization is to transfer management and ownership of the assets into private hands as quickly as possible. In general, this argues for cash sales. There are, however, some trade-offs to be considered. Cash sales would lower asset values and, on a large scale, would squeeze overall credit. If cash receipts are immediately spent, this would also distort fiscal expenditures. Use of other financial options would help minimize risks to new investors, would raise expected government revenue and would reduce any macroeconomic effects, but would imply longer-term government involvement.

Given the wide spectrum of issues and uncertainties over asset valuation, the overall solution must still be worked out.

4.13 There are three specific areas where government can act immediately. First, it should initiate studies at a firm level to determine the value of assets under alternative scenarios of: (a) scrapping the plant; (b) continued operation for a limited period of time with minimal new investment requirements (i.e., running-down existing equipment); and (c) rehabilitating plant and equipment through infusions of new capital to create a long-term viable concern. Priority should be given to firms which have a significant market share ("lumpy" investments). One such priority sector is mining. Government initiation of studies is recommended as foreign expertise will likely be required, given the dearth of financial, engineering and management consulting teams in the Philippines, and there will be substantial economies of scale in contracting with foreigners for studies of several enterprises.

4.14 Second, government should interpret existing legislation governing BOI incentives and the foreign debt/equity swap mechanism to include the restructuring of privatized firms as "pioneer" or priority activities. If privatization is to be successful, it is important that fiscal incentives not discriminate in favor of new investments and against rehabilitation of "old" assets. In this context, it is encouraging that the Central Bank has agreed to commit itself to approving a debt/equity swap for any winning bid and to permit the use of funds from debt swaps for the purpose of retiring domestic bridging loans.

4.15 Third, government should permit firms to restructure their finances via the purchase of their external debt obligations outstanding on international secondary markets at a discount, subject to the rescheduling agreement reached with commercial banks. This would greatly facilitate the creation of fresh viable financial structures for these firms. The authorities should take advantage of current favorable balance of payments and foreign exchange reserve positions to encourage such trades under broader guidelines than those currently in force in the debt/equity swap scheme. Such broader schemes have been adopted in other countries, notably Chile. Experience there indicates that the retiring of debt to restructure financial balance sheets at the firm level has been the most popular source of final demand for Chilean debt traded on international secondary markets.

4.16 Private firms. Government must also assist private firm restructuring. In the future, the actions listed above to facilitate public firm restructuring will carry over to help the restructuring needs of private firms. The latter will benefit from the creation of a restructuring "infrastructure" developed to support public restructuring under action (1) above. They would also benefit from the financing and legislative provisions recommended in items (2) - (5) above. There are, however, special needs for restructuring private firms stemming from the facts that they tend to be smaller and more numerous, are not being sold to new owners (and consequently have book equity values that may differ significantly from market value), and operate under different legal provisions.

4.17 To deal with the first concern, it will be necessary to create and strengthen institutional mechanisms to assist firms. One instrument that can be used is the set of subsectoral studies initially undertaken under the auspices of BOI. Although the experience to date of restructuring based on these studies has not been favorable,^{19/} the studies have proved their value in highlighting the special characteristics of different industries and the varying nature of key concerns in each sector, such as high energy costs or local content requirements. To a certain extent, restructuring efforts were hampered by exogenous factors: the sharp decline in domestic demand and turmoil in financial markets. In addition, however, the objectives of restructuring studies--identifying comparative advantage and assessing the impact and need for specific fiscal incentives--were incompatible with the aims of promoting a more neutral incentive system embodied in the rest of the reform strategy. The inconsistency between on the one hand "picking winners," which could be supported by directed government assistance through low-interest or guaranteed loans, protection from imports or other fiscal incentives, and on the other hand, reducing overall government intervention was reflected in institutional and administrative conflicts which adversely affected the studies.

4.18 The experience with the metalworking sector study is illustrative of the problems that have beset government restructuring efforts. This study has been based on a complex model designed to estimate costs of production of various products. Because of economies of scale and the wide variety of available production technologies, such costs are very sensitive to projections of internal and external demand and to best-practice technology being chosen and efficiently operated. The results must, therefore, be interpreted with great care. Focus on such details, however, has detracted attention from broader strategic issues that confront the engineering sector. For example, the study does not document the reliance of important subsectors, such as automobiles and auto parts, on export sales to operate at full capacity nor the substantial retooling of subassembly plants that would be required to meet global standards. Similarly, the strategic issues and marketing information required to penetrate the auto parts after market are not discussed.

4.19 Despite initial disappointments, the present planning exercises represent a useful early step in developing the BOI's new role. However, these exercises are proceeding on such an accelerated schedule that they may well require compromises in quality. It is important nevertheless to develop and refine the consultative planning process. Each subsector council should

^{19/} Several sectoral studies, including cement, textiles and garments, electronics, wood and wood products, leather and footwear, toys and sporting goods, metalworking and food processing were initiated in 1981. Of these, however, only two (cement and textiles) reached a stage where attempts were made to implement the recommendations. In the case of cement, the restructuring has proven to be too expensive, while in the case of textiles the effort has been largely aborted. Overall, the sectoral restructuring programs have been the weakest component of the trade and industrial policy reforms initiated in 1980.

be representative, and have the required consultant and secretariat support. Eventually, the process should generate high-quality "rolling" plans and action programs which can be subsequently used to monitor the performance of both the Government and the private sector.

4.20 Rather than using the studies as detailed blueprints for sectoral restructuring, government should use them to provide aggregate sectoral information on capacity, technologies, costs and market prospects which will be a common component of firm-level restructuring plans. This will involve a reorientation of the studies. Whereas in the past, Government efforts have been directed towards helping firms choose which products to produce, in the future they should be oriented towards functional support in easing technology transfer, providing technical support and training, and establishing norms and standards. Thus, the studies would provide a forum within which government could precommit its intentions regarding key policy items that would affect private restructuring decisions, such as the level of tariffs that would replace items still to be liberalized. They would also provide an opportunity to review and coordinate policies at a subsectoral level. Overall, they would document the economic and policy environment within which private restructuring decisions could be made.

4.21 The second concern over private firm restructuring is that several private firms appear to be in a state of ambiguous ownership, with creditors unwilling to foreclose on a firm's assets and write-off part of its bad loans, yet also unwilling to extend additional credit for working capital or rehabilitation investments. To remedy the situation, the authorities should tighten regulations dealing with the requirements for financial institutions to make specific and general provisions against bad loans. This would increase the incentives for lenders to become more actively involved in restructuring in a timely fashion. The Central Bank should monitor financial institution portfolios more closely with the aim of achieving a more realistic assessment of existing and potential loan losses and the adequacy of reserves.

4.22 Finally, government must ensure that an adequate legal framework exists to facilitate "work-outs" of companies. There is a clear need to review and reform the law in line with recent international trends emphasizing rehabilitation and restructuring (including use of receiverships). Provisions like Chapter 11 of the US Bankruptcy Code have the flexibility to allow a broad range of options to firms or the receiver. Under current Philippine law, comprised mainly of the Insolvency Act, 1956, and provisions in the Corporation Code as well as PD 902, receivers may not continue with company business. These laws are oriented towards the distribution of existing assets and protection of creditors' rights, rather than towards the most efficient use of resources.

Export Promotion

4.23 In the absence of full trade liberalization, and given the nascent stage of export development, a well functioning system of export incentives and administrative arrangements can provide an important boost to industrial exports. The experience of other East Asian countries suggest that export promotion policies can be successful in achieving "export neutrality" as well as in providing support to export development, but that this requires a

deliberate, sustained and comprehensive approach. The main ingredients of a successful export promotion policy are providing direct and indirect exporters with ready access to inputs at world market prices and to working capital for export production. It is particularly important that small and infant exporters, on the one hand, and indirect exporters, on the other, are drawn into the export promotion system. For small and infant exporters, in addition to access to inputs at world market prices, a critical need is speedy access to working capital, and this can be best achieved through a well functioning pre-shipment export finance agency. The most effective way of ensuring that indirect exporters are drawn effectively into the system is the introduction of the domestic letter of credit (DL/C) system. Government support in marketing and trading company development can also be helpful in identifying and entering new markets and developing specialized marketing capabilities. Finally, in the present world environment of increasing recourse to managed trade, the Government needs to develop a strong capacity to deal with bilateral and multilateral trade negotiations so as to maintain and improve market access, as well as develop appropriate domestic mechanisms to ensure that the available opportunities are utilized most effectively, for instance in the allocation system for textile and garment quotas.

4.24 The Philippines has a relatively long history of export promotion efforts. Many institutional arrangements for export promotion have been in place for some time and an Export Incentives Act, aimed at offsetting disincentives to export, was introduced in 1970. These efforts were quite successful in providing unrestricted and duty-free inputs for two important sectors--garments and electronics--which resulted in extremely rapid growth of exports of these items during the 1970s. However, export promotion efforts have been less successful in achieving a broad based export orientation. This is partly because the extremely inward-looking nature of the trade regime in the past made "export neutrality" more difficult to achieve. However, the inefficacy of past export promotion efforts also reflect deficiencies in the duty exemption/drawback systems, and in export financing and marketing support, as well as the general fragmentation of export policy and institutional efforts.

4.25 At the present juncture in the Philippines, when substantial trade liberalization has been undertaken but import tariffs are still significant, and when the manufacturing export base is still narrow, decisive policy and institutional efforts at export promotion can provide an important underpinning for accelerated growth of non-traditional exports. The specific deficiencies that will need to be addressed as well as the new initiatives that need to be taken are:

- (a) improve access to inputs at world prices by streamlining and simplifying the duty exemption system as well as the fixed and individual drawback systems;
- (b) ensure access to working capital finance by developing a strong preshipment export finance guarantee (PEFG) agency that would service small, infant and indirect exporters;
- (c) streamline and develop institutional support for export product development and marketing;

(d) institute a high level coordinating agency for export development with strong government commitment, in order to ensure timely and well coordinated decisions; and, finally

(e) back up industrial exports with sophisticated government trade negotiations and effective mechanisms for quota allocation.

4.26 Access to Inputs at World Prices. The most important element of a medium-term strategy to exploit fully the export potential of small, infant, or indirect exporters is to guarantee speedy and equal access to inputs at world market prices for all firms that generate export value added. To achieve this minimum requirement for manufactured export development without violating the GATT rules, efficient and automatic administrative mechanisms for exempting or rebating taxes and tariffs on inputs need to be developed. A comprehensive approach must be employed in setting the direction of reform.

4.27 The general problem with the existing systems is the excessive emphasis on procedures and the discretionary nature of existing administrative mechanisms. Unlike countries with more successful export promotion systems, the duty exemption scheme is relatively ill-developed. Access to the duty exemption system (CAO No. 3-78) is severely constrained due to the various requirements and limitations and was only used by 1.5% of exporters. The Philippine Bonded Manufacturing Warehouse (BMW) system is akin to a duty exemption system in that it has similar requirements such as formula of manufacture and re-export bonds. However, the purpose of a BMW system should be to bypass these requirements by installing special warehouses and customs inspection procedures. Philippine exporters also have access to duty drawback schemes although these are not as advantageous as the exemption system as they require higher working capital and raise interest costs. In addition, there are risks of export subsidy allegations unless the drawback system is properly administered. Consequently, it is recommended that the government make an expanded and revised duty exemption system that eliminates the present constraints and limitations imposed under CAO No. 3-78 (allowing access to all firms that generate export value added) and a simplified BMW system as the eventual goals of duty-free import administration.

4.28 Until the duty exemption system becomes efficient, however, improved individual and fixed drawback schemes should be used in parallel. The two important elements of reform for improved drawback schemes are a simplified and more transparent formula of manufacture and the replacement of tax certificates with cash refunds. BOI registration or any other requirement of eligibility for the fixed duty drawback system should be abolished. This is particularly important as the BOI is at present the implementing agency for the fixed duty drawback system.

4.29 The framework for drawback and exemption schemes should be designed to use procedures and documentation in common with those already established by the CB in relation to export and import L/Cs. Such common procedures would also make it feasible to design an efficient administrative system for indirect exporters' access to the basic export incentives (including duty-free imports), as discussed below.

4.30 Assuring Access to Export Financing. The underlying rationale for providing government-supported export financing in developing countries is that market imperfections or inefficiencies of the financial sector may deny actual and potential (including small or infant) producers access to working capital, so that even confirmed export orders cannot be filled. Just as in the case of duty-free import administration, a comprehensive approach must be employed in setting a direction for the reforms needed to design and implement institutions and administrative systems for export financing. Unlike many developing countries in early stages of export development, various elements of export financing have already been tried or planned in the Philippines, even though implementation has not been very effective. The issue of access to export financing for small, infant, or indirect exporters may not be resolved by creating yet another fund or guarantee scheme for small producers, because in some instances commercial banks may screen out viable clients due to lack of information. The fundamental problem of imperfect information on small producers must first be addressed. In other words, a comprehensive approach that considers fully the three central activities of information gathering, risk-pooling, and risk-reducing is called for. This should draw on the lessons from the successful preshipment export finance guarantee (PEFG) operations of other countries as well as past problems experienced by Philguarantee.

4.31 The first element of reform should be revision of the rules and regulations governing Central Bank (CB) export loans so as to include indirect exporters.^{20/} It is recommended that the CB design an instrument such as the DL/C system that provides an automatic modernized mechanism through which indirect exporters can have easy direct access to a CB preshipment, short-term working capital export loan. With such an instrument, commercial banks could manage indirect exporters' access without difficulty. Introduction of a DL/C system would not be very difficult in the Philippines as some preparatory work has already been done by a task force composed of CB and commercial banks in relation to the proposed 1984 Export Development Loan. One important additional advantage of the DL/C system is that it can be the most effective instrument to administer other incentives for indirect exporters, in particular access to duty-free imports.

4.32 Institutional Support for Export Product Development and Marketing. In the early stages of export development and exposure to world markets, some form of government assistance in export product development and marketing is justified by imperfect information at the firm level, by scale economies and externalities in information collection and dissemination, and by the high degree of uncertainty in exporting. In providing institutional support for export product development and marketing, the most critical issues are to fine-tune the sequential roles of the public and private sectors and to stress the collaborative efforts of the public and private sectors.

^{20/} Indirect exporters are firms that supply finished export commodities to trading companies as well as those supply intermediate inputs to next stage final exporters.

4.33 Overseas marketing and export product development are ultimately tasks of private firms, because private initiatives and creativity are key to export success. Furthermore, marketing information is useless unless it is absorbed and digested by producers. However, until firms become sufficiently large and well-established to internalize scale economies, government can play an important supportive role.

4.34 The Government can help develop better export marketing capability either through supporting trading company development or participating directly in export marketing and promotion. In the past, the government has attempted to promote local trading companies through BOI incentives. Although initial attempts have met with only partial success, the effort to promote trading companies and enhance the role of exporters' associations should continue. The government is also directly involved in export marketing and promotion through a host of different agencies--BETP, Foreign Trade Services Corps, CITEM and BSMI. Although many of the functions performed by these agencies are useful, the efforts appear to be often fragmented, duplicative and not very closely coordinated. A careful review of the functions of the various institutions is therefore required in the future to devise a medium-term strategy for an effective government role in this area.

4.35 An example where more active public support in export marketing could be useful is in the area of auto parts. The Philippines has a potentially sound base for exporting after market auto parts. Such parts are typically procured in small batches by distributors and merchandizers. Because of the low volume and large number of parts, production is relatively labor-intensive. Government could provide an analysis of market and technology factors to allow producers to determine what parts may be exportable and where their LDC competitors' comparative disadvantage may lie, and help local firms in marketing parts abroad.

4.36 Export Policy Coordination. In order to ensure timely and coordinated decisions it is recommended that the government form a task force to create a new Export Development Council (EDC) that incorporates all the key elements of the other successful countries as well as the positive aspects of the earlier Philippine Export Council and the Philippine Export Advisory Council. Ideally, the EDC would be empowered to make final decisions regarding export policy design and implementation, as well as to play a catalytic role in enhancing a synergistic export partnership between the public and private sectors. The council could be chaired by the President of the Philippines, and NEDA/MTI could serve as the joint Secretariat.

4.37 Trade Negotiations and Quota Allocation. A strong government capacity in trade negotiations, and effective mechanisms for quota allocation would allow the Philippines to fully exploit the opportunities in the present world trade environment. In order to promote exports, the Philippines should seek commitments from its principal trading partners on limits and rollbacks on nontariff trade barriers. To achieve this, the country must derive the maximum benefit from its current trade liberalization during the on-going Uruguay round of GATT negotiations as well as in its bilateral negotiations. Unlike previous rounds, there will be far greater pressures for trade concessions from developing countries, including the Philippines. For the country to secure trade concessions from partner countries and in the multilateral trade negotiations, four steps are necessary:

- (a) the authorities should have a well prepared position based on trade liberalization measures already taken since the Tokyo Round, both by way of tariff reform and removal of NTBs. For these to be recognized, the Government would have to make a commitment to bind the tariffs at the reduced rates;
- (b) the ongoing trade reform program would also have to be kept in mind as part of trade concessions already committed;
- (c) the authorities should also have a clear understanding of what further trade reform is in the country's own interests, and what timetable is appropriate, in case further trade concessions have to be offered; and
- (d) finally, identification of products and markets where the Philippines will benefit at present or potentially from the elimination of tariff and non-tariff barriers, so as to secure these concessions. The Tariff Commission and PIDS have already undertaken substantial analysis on the nature and magnitude of protection faced by Philippine exports.

4.38 Given that the Philippines will continue to face export quotas in key products, notably garments and textiles, the effective utilization of quotas must be an important policy objective. Although garments has been an area where the country's export performance has been most successful, and where demand constraints are most restrictive under the MFA, the Philippines has lost market share in the USA and Europe to countries such as Thailand, Indonesia and China. Furthermore, the quota utilization rate in the Philippines is the lowest among Asian producers. In the early 1980s, the Philippines only filled 65-70% of its quota allocation, while the average for other Asian countries was 75%. Korea, Taiwan and Hong Kong all exported 90-100% of their quota allocation. In both 1984 and 1985, the unutilized value of Philippine quotas was over \$375 million. The poor utilization of quotas reflects the lack of flexibility of the present system and disincentives to fully utilizing quotas. A large proportion of quotas are now allocated on a fixed basis to established firms. This has several negative effects. First, it promotes inefficiency by passing the quota rent to producers, thus allowing high cost producers to remain in business and reducing incentives to producers to upgrade products. Second, it stifles structural change by freezing the existing structure (past performance) and imposing obstacles to new entrants. Third, the system, encourages "rent-seeking" and illegal transactions.

4.39 The government has recently introduced a new system of allocating quotas. Under this system, the threat of entire loss of quota has been diminished, and a more graduated loss scheme, based on performance, has been instituted. Once existing holders have had their quota rights replenished, the remainder of quota (plus any new increase negotiated) will be placed in a "free market" allocated across firms on the basis of highest projected value-added per unit and regional location. In this system, firms expected to underperform may surrender their quota without full loss of future rights, depending on the time of year at which surrender takes place. Sales of quotas

will be disallowed. It still appears, however, that the new system favors existing producers excessively. Given the industry structure in the Philippines, comprised of a multitude of small and medium firms, government should attempt to make the system still more flexible. A full auctioning of quotas is not desirable as some long-term stability is needed to persuade firms to invest. A significant fraction of the quotas could be allocated to new exporters while the remainder could be allocated according to some past performance criteria. Quotas should be made transferable. Such systems have been employed with success in countries like Hong Kong and Australia.

Technology Development

4.40 Unlike many other developing countries, the Philippines has a relatively high standard of average educational achievement. Moreover, communications with the rest of the world are quite free and also aided by the widespread use of English as a working language. The evidence, though, on high ICORs and widespread negative rates of total factor productivity growth documented for the Philippines suggests that there have been major problems with the selection, assimilation, and efficient use of technology. This is partly explained by inappropriate macroeconomic, trade, and industrial policies which have distorted the choice of technology and provided little incentive to reduce costs and improve quality over time. Explicit technology development policies and institutional support have also been weak and often not directed towards meeting the demands of domestic industry.

4.41 Technology upgradation is imperative for successful export development as well as to meet the sharpening competition from imports. As macroeconomic, trade and industrial policies are made less distortionary and more outward oriented than in the past, policies and institutions should be in place such that firms are rapidly able to modernize technologically in both products and processes, and become competitive and able to respond to the challenge of rapidly shifting areas of comparative advantage. For the Philippines, the emphasis has to be on assimilation, absorption and adaptation of existing technology, rather than the creation of new technology. Greater outward orientation should provide the pressures necessary for firms to want to invest and upgrade continuously, but conditions should be such that they are able to do so.

4.42 The way in which firms introduce new technologies in the Philippines reflects the environment in which they operate. Some insights into the technological behavior of manufacturing firms can be obtained from a 1985 technology survey undertaken by NSTA (see the Appendix to Chapter VI, Vol. II). There appear to be three major constraints to an improvement in technological performance. First, few firms seem to have research and development units. Even amongst those that do, the orientation of their work is towards development of new products rather than new processes. The former is typically associated with segmented markets in which firms seek to extract super-normal profits through product differentiation. Process development, on the other hand, focuses more on cost reduction. This is likely to be the most important source of technical advance in export industries, for example. Thus, the orientation of firm R&D must be shifted in line with the new industrial strategy. It is noteworthy, however, that the current orientation parallels the BOI focus on classification by product rather than process.

4.43 A second constraint is the lack of experience of most firms with introducing major modifications in processes. Historically, most technical efforts have been geared toward work simplification and standardization with the goals of reducing costs and improving quality. Following a major change, however, such as that created by the trade reform, the priority lies in modifying products and processes and restructuring plants.

4.44 The third constraint is observable from firms' criteria for upgrading their technology. The main concerns are that the new product or process lie within the firms technical competence and that the technology be already demonstrably established in the market. Technical competence, however, is limited. The Philippines has one of the lowest ratios of scientists and engineers per million population (one-fifth of Korea's; one-half of Singapore's; four-fifths of Malaysia's). And because of its past inward orientation, it does not possess good institutional structures to provide information on foreign competitors' technologies used in export markets.

4.45 In addressing these constraints, government policy can play an important role in technological development in four main ways: (i) setting a proper general policy environment that encourages the right kind of technological effort; (ii) giving explicit attention to technology in industrial development strategy; (iii) providing an adequate technological infrastructure; and (iv) promoting particular technological activities. While the overall industrial policy environment has improved with reforms in trade policy and BOI incentives, explicit technological policies in the latter three areas have so far been haphazard. Yet firms attach considerable importance to government assistance. Table 4.3 shows firm responses to the NSTA survey on how government could best assist their technological development efforts.

Table 4.3: Ways Firms Would Want Government Help in Their Technological Development Efforts

Type of Govern- ment help	Total	Type of Firms		
		JT/VT	Foreign	Local
Economic climate	37	11	6	18
Government regulations	36	14	5	17
Financially	27	8	1	18
Technically	16	6	1	9
Information	10	5	1	5
Others	4	2 <u>/a</u>	1 <u>/b</u>	1 <u>/c</u>

/a Local manufacture of components, tax benefits.

/b Tax incentives.

/c Product standardization.

4.46 Setting a Proper General Policy Environment. The number one difficulty experienced by firms in the transfer of technology from abroad has been a shortage of foreign exchange. The move to a floating foreign exchange system should eliminate this bottleneck and permit free access to foreign technology. Other elements of the general environment are also important. The opening of domestic markets to import competition should encourage greater integration of markets and, hence, more emphasis on cost reduction rather than product differentiation. Similarly, greater competition in intermediate goods will provide firms with a more stable price and assured availability of raw materials -- another critical element in the decision to adopt a new technology. Thus, the policy changes already instituted in reform of the trade and incentive regimes will also foster greater technological change.

4.47 Integrating Technology into National Development Strategy. It is important to ensure that general economic policy supports technology upgradation objectives. The positive elements noted above are, to some extent, fortuitous. In the past, technology policy has been peripheral to strategic development decisions. One conclusion of this report is that a major constraint to the early development of a vital engineering sector in the Philippines has been the lack of substantial government programs to provide the needed technical support. Presently, there is very little interaction between those responsible for general economic policy and the diverse groups involved in technology policy. Although the five year plan includes some references to improving the technological performance of the country, this is interpreted mostly in terms of required budgetary allocations to fund public R&D. For example, little attention is given to the technological impact of BOI incentives. In fact, the new BOI reforms have eliminated the previous tax deductions for labor training costs. Similarly, capital cheapening incentives have encouraged firms to search for solutions to cost problems through purchase of more modern equipment. Often, this has proven ineffective because the real source of the problem lay in organization and coordination

activities. Failure to get full productivity out of technologies is well-documented in the case of textiles (see Pack, 1987). The lowest unit cost producer in spinning uses 1950 vintage technology. Incentives oriented towards new investment, therefore, are not always conducive to the most appropriate choice of technology.

4.48 Another example where technology concerns should be integrated into overall development strategy is education. Despite the high secondary school enrollment in the Philippines, there appears to be a deficiency in well-trained scientists and engineers. There is only one master program in engineering in the country and no Ph.D. programs. Matching the quality and type of higher education available in the Philippines with technological requirements should be reviewed.

4.49 The Development of Technological Infrastructure. With respect to technological infrastructure six areas that require attention are: technical education, technological information services, R&D centers, testing services, product standards, and patent protection. There needs to be greater emphasis on technical training. The Philippines has an impressive stock of potential scientists and engineers, but not that many actual scientists and engineers and even less allocated to R&D.

4.50 Technological information systems need to be strengthened. The existing scientific and technological information systems are weak and underutilized. There is no comprehensive technological information system to which a producer can turn to get information on technologies available inside or outside the country. The development of a good information system is important both for upgrading existing technologies as well as to help firms scan the potential offered by new technologies. There can be significant economies of scale to a good centralized technological information system which would argue for its establishment as a public institution. The Technology Transfer Board also has to be linked to the technological information system so that it can help local firms find alternative technologies and suppliers. Its role should be more of promotion and support in the search for alternatives than regulation of inflows.

4.51 Closer and better links between publicly funded research institutes and the productive sector should be promoted. There needs to be greater participation from private industry on the boards of the institutes. In addition, to provide a greater incentive for the institutes to build links to industry, they should be required to cover part of their operating costs from service and contract work with industry and to keep part of the income derived from these contracts. There also needs to be a greater emphasis on the transfer and delivery to the productive sector of the research results generated by the public institutes. As an incentive measure to individual researchers working in these institutes, some percentage of the royalties received on patents that are commercialized should be given to them as bonuses.

4.52 Product standards and testing services need to be further developed and diffused throughout the country. Lack of norms and standards are a key factor in the low diffusion rate in the Philippines of technological improvements. Many of the most basic services required by the productive sector to improve productivity and quality are not available. For example,

the local machinery producers seem to lack understanding of the standards and tolerances built into their products, the quality and criticality of the materials or components used, strength specifications and other design features that foreign competitors tailor to maximize performance and minimize costs for specific applications. In such instances, there is a need to develop basic standards to ensure that local firms produce output of adequate quality, especially for more demanding export markets. The laboratory and testing facilities of publicly funded research centers should be expanded, and greater number of private laboratories could also be certified, to perform these functions.

4.53 The Philippine Patent office needs to be strengthened. Its personnel need more training. The high approval ratios for patent applications suggests that patent searches are not being done thoroughly enough. The information base on existing patents has to be strengthened and automated for easier access and faster response time to inquiries. Timely information on alternative patents and on what technology lies in the public domain also needs to be available to potential inventors as well as to firms seeking to improve their technological level either through importing technology or own development.

4.54 Promotion of Technology Activities. With respect to promotion of technological activities, five areas that require policy attention are: getting greater participation of firms in R&D; disseminating existing technology, particularly to small- and medium-scale firms; strengthening and development of industrial engineering consulting firms; monitoring of technological trends; and identifying major areas of thrust for local technological effort.

4.55 Greater spending by firms on industrial technological effort must be stimulated by Government incentives. As noted above, Philippine industry does not spend much on R&D. In the new political and economic context, firms are going to see a greater need to devote more attention to technological effort. However, because some of the risk and the externalities involved in such effort, firms are not likely to devote as much resources to technological effort as may be optimal from the social point of view. There is a case to be made for providing fiscal and financial incentives for firms to undertake a greater amount of their own technological effort.

4.56 A greater emphasis needs to be put on dissemination of existing technology. Dissemination of existing technological information is very weak. With the exception of some of the work being done by the Technology Resource Center in there is very little diffusion of technological information to small and medium enterprises. The diffusion of information will have to be integrated into a more complete delivery system that includes person to person interaction, as well as provision of management, financial and marketing assistance.

4.57 The development of engineering consulting firms should be promoted. As noted in the sections on the choice and use of technology, firms often lack technological capability to select, assimilate, adapt and efficiently use technology. There is thus a need for specialized technological agents that can assist firms in these activities. One technological agent that specializes in many of these aspects of investment and production

capability is the industrial engineering consulting firm. Unfortunately, it appears that industrial engineering consulting firms are not very well developed in the Philippines. Many governments have found it useful to promote their development through various means such as special grants and finance for training and purchase of equipment and software necessary for their work, as well as participation in contracts involving foreign engineering firms so that they can learn many of the necessary skills.

4.58 An area where the Government can play a potentially important role in the monitoring of technological trends and identifying major areas of thrust for local technological effort is through publicly funded research or technology institutes. However this requires a very qualified staff, and a commitment to serve the needs of the industrial sector rather than academic interests. The existing R&D institutes in the Philippines are not up to this task because their underpaid staffs, obsolete equipment, and lack of incentives to respond to the needs of the private sector.

4.59 However, the experience of Japan, Korea, and Taiwan suggests that publicly funded research centers can be successful in carrying out these functions. Part of the reason for their success is that they have been able to attract and keep high quality staff, often by special arrangements that permits them to pay those staffs competitive salaries. Another part of the reason for their success is that their main objectives have clearly been assisting local industry in selecting, acquiring, and assimilating foreign technology; improving productivity and product design; and making effective utilization of local resources. These successful institutes monitor what is happening in technology world wide and help transfer technology to industry through technical seminars, personnel training and transfer, joint ventures with foreign companies that are later spun off to the local private sector, and joint development of technologies with single or multiple local clients. Given the human capital potential of the Philippines, there is scope for a more active role along these lines, but its success will depend on finding the right institutional arrangement.

V. THE STRATEGIC OUTLOOK

5.1 There have only been two periods of rapid industrial growth in post-war Philippine economic history. In the 1950s, growth was generated through import substitution of most consumer goods behind a curtain of stringent import controls. In the 1970s, growth was achieved with government coaxing, financing, licensing and direct participation. In neither instance did growth bring about sustained improvements in living standards. Industry, and in particular manufacturing, has contributed little to increases in employment or real wages.

5.2 Recognizing these problems, the current government has come a long way in a remarkably short time-frame in improving the environment within which industry operates. Most of these actions, however, have consisted of undoing or reversing past government interventions which, with the benefit of hindsight, have proven to be inappropriate. As government moves to consolidate these reforms and turns its attention to more active industrial promotion, several lessons of history should be borne in mind. First, industrial growth has occurred under the umbrella of government protection and incentives. There are few subsectors which have a track record of self-reliance, in the sense of achieving profitability and technological excellence without government or foreign assistance. A substantial shift in attitudes, management style, and entrepreneurial actions is required now that government support has been withdrawn.

5.3 A second lesson is that government efforts to protect all segments of industry are doomed to failure. In the 1970s, there was a proliferation of incentive programs, many of which were intended to offset the consequences of other programs. For example, the Export Incentive Act of 1970 tried to compensate exporters for the problems caused them by the protected trade regime. As another example, small and medium enterprises were targeted for special incentives to counteract the low employment absorption caused by credit and fiscal policy biases towards large-scale firms. Despite these efforts, both exporters and SMEs suffered considerably. The conclusion is that it is the relative not the absolute size of incentives that matters.

5.4 Third, history records that previous efforts at liberalizing the Philippine economy have often been reversed. These episodes weaken the credibility of government's present efforts, and substantiate the need to be sensitive to investor confidence by providing continued, consistent signals as to the scope and timing of future reforms and the new directions of government support.

5.5 The record of ad hoc and fluctuating government industrial policies, combined with political clouds and labor unrest, contributed to the low 'investor confidence' in the economy observed throughout 1986. While an economic recovery is clearly taking place in 1987, investment demand has been weakened by the existence of substantial underutilized capacity and high real interest rates. Only when these fundamentals change, is a sustained recovery in fixed investment likely to occur. Furthermore, any revival of private investment is likely to be oriented more heavily towards durable equipment for restructuring and rehabilitation than towards construction of new plant. As

equipment is relatively import-intensive, this will not have a sizeable spillover effect onto domestic capital goods producers. Some expansion in construction activity, however, is almost certain following the dramatic declines of the past three years and the revival of public investment activities. Sectors such as cement, brick, iron and steel will benefit. Nevertheless, these sectors are unlikely to reach full capacity operation over the medium-term, unless export markets can be developed.

5.6 The fiscal expansion, and the boost in external demand caused by real exchange rate depreciation, are important stimuli for industrial recovery. There are, however, several "supply-side" constraints which could prevent a sustained response: (a) a large number of enterprises in virtually every branch of industry is facing moderate to severe financial difficulties. This has weakened their ability to obtain working capital and new loans for restructuring. The mining sector is one example where financial restructuring is a key constraint; (b) institutions for promoting technological upgrading are weak at every level--public research activities, engineering consulting firms and internal firm R&D departments. Yet most enterprises must quickly adapt their physical plant and equipment and improve operating efficiency in response to the changed relative prices and more competitive environment they face.

5.7 In attempting to ease these constraints, government will be faced with areas where different policy thrusts are mutually inconsistent. For example, the report identifies a trade-off between reducing fiscal incentives, recommended for BOI, and avoiding bankruptcies. There is also a trade-off between privatization of public assets and improving the availability of industrial credit, especially term financing, to the remainder of private industry. Similarly, the competing interests of intermediate and capital goods producers versus downstream users need to be balanced.

5.8 Some recommendations in the report are for one option over another. For example, it is recommended that import restrictions be lifted from all items other than a select few with security, health and safety concerns. It is also recommended that additional tariff protection not be provided to intermediate good sectors in order to reduce the dispersion of effective rates of protection. Other recommendations suggest alternatives whereby trade-offs can be finessed. The provision of functional restructuring assistance could replace fiscal incentives and tax deferrals as the main tool of helping industries avoid bankruptcy. In order to be able to make the strategic choices in the face of these policy trade-offs, and to underscore the shift in the role of the Government from regulation to promotion activities, the report argues for a comprehensive approach towards industrial policy, covering macroeconomic, trade and fiscal incentive policies, financial reform, subsectoral and enterprise restructuring, and institutional support for exports and technological improvement.

5.9 Many elements of a comprehensive approach have been individually articulated and implemented. Once the policy package as a whole is completed, the Philippines should be well placed to reap the rewards of industrial development that have so far proved elusive. It can establish itself as a low cost producer on the basis of its productivity-adjusted unit labor costs. It can take advantage of existing pockets of well-developed technologies to bring

up rapidly the average level of efficiency, and by restructuring its capital assets, it can expand capacity cheaply. All these augur well for sustained growth despite the severe fiscal and external resource constraints faced by the country.

NOTES

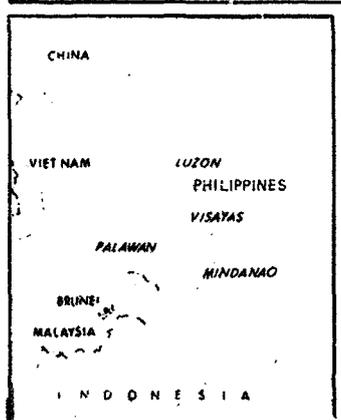
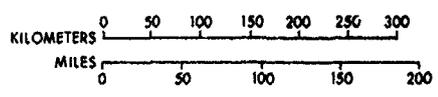
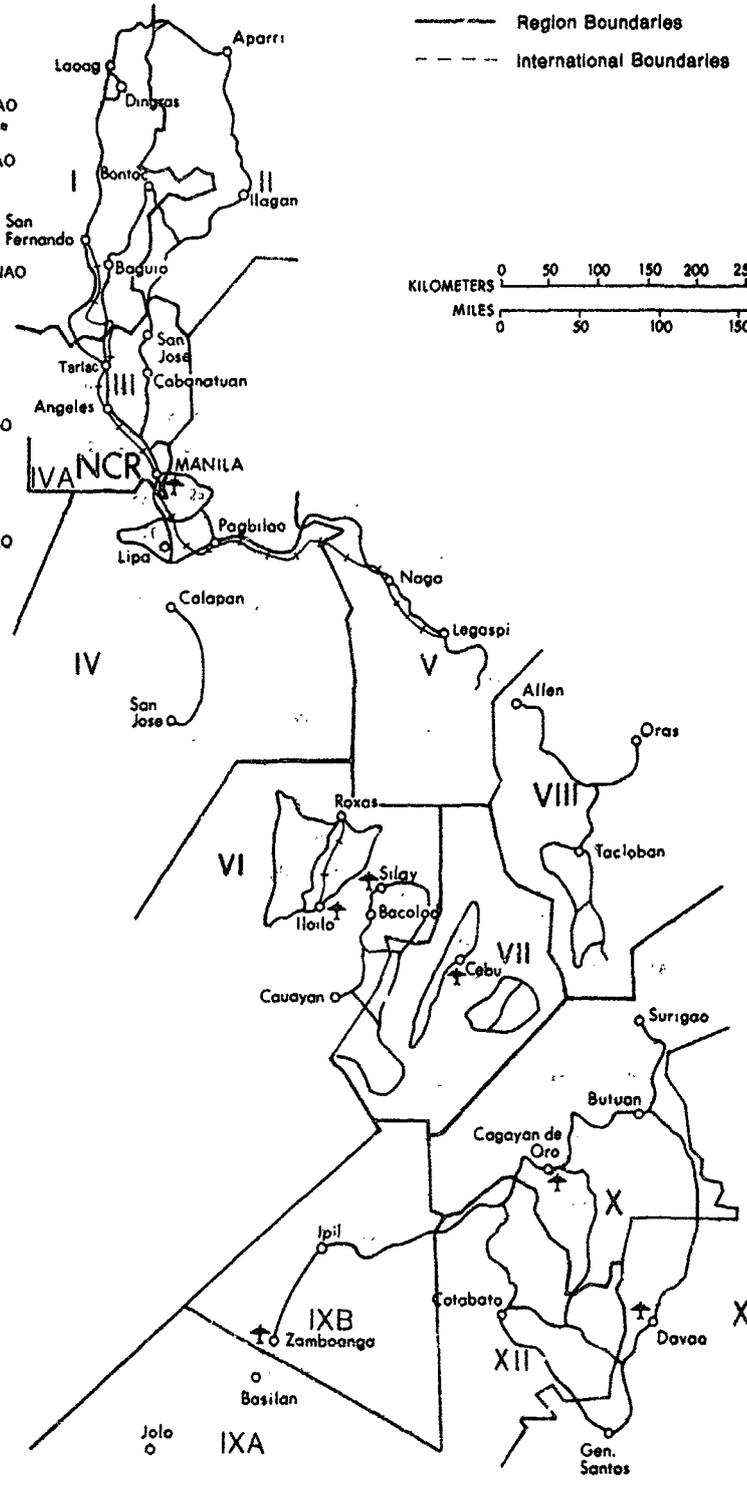
MAP SECTION

116° CLASSIFICATION OF PROVINCES BY GEOGRAPHICAL REGIONS 120° 124°

PHILIPPINES

- I ILOCOS**
 - Ilocos Norte
 - Abra
 - Ilocos Sur
 - Mountain
 - La Union
 - Benguet
 - Pangasinan
- II CAGAYAN VALLEY**
 - Batanes
 - Cagayan
 - Kalinga-Apayao
 - Isabel
 - Ifugao
 - Nuevo Vizcaya
 - Quirino
- III CENTRAL LUZON**
 - Nuevo Ecija
 - Tarlac
 - Zambales
 - Pampanga
 - Bulacan
 - Bataan
- IV NATIONAL CAPITAL REGION**
- IV SOUTHERN TAGALOG**
 - Aurora
 - Quezon
 - Rizal
 - Cavite
 - Laguna
 - Batangas
 - Marinduque
 - Mindoro Oriental
 - Mindoro Occidental
 - Romblon
 - Palawan
- V BICOL**
 - Camarines Norte
 - Camarines Sur
 - Catanduanes
 - Albay
 - Sorsogon
 - Masbate
- VI WESTERN VISAYAS**
 - Aklan
 - Cepiz
 - Antique
 - Iloilo
 - Negros Occidental
 - Negros del Norte
- VII CENTRAL VISAYAS**
 - Cebu
 - Negros Oriental
 - Bohol
 - Siquijor
- VIII EASTERN VISAYAS**
 - Northern Samar
 - Samar
 - Eastern Samar
 - Leyte
 - Southern Leyte
- IXB WESTERN MINDANAO**
 - Zamboanga del Norte
 - Zamboanga del Sur
- IXA WESTERN MINDANAO**
 - Basilan
 - Sulu
 - Tawitawi
- X NORTHERN MINDANAO**
 - Surigao del Norte
 - Comiguin
 - Agusan del Norte
 - Misamis Oriental
 - Misamis Occidental
 - Bukidnon
 - Agusan del Sur
- XI EASTERN MINDANAO**
 - Surigao del Sur
 - Davao Oriental
 - Davao
 - Davao del Sur
 - South Cotabato
- XII CENTRAL MINDANAO**
 - Lanao del Norte
 - Lanao del Sur
 - North Cotabato
 - Maguindanao
 - Sultan Kudarat

- Airports
- Roads
- Railroads
- Province Boundaries
- Region Boundaries
- International Boundaries



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