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Indonesia
Sustaining Development

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CURRENCY EQUIVALENTS

Before November 15, 1978, US$1.00 = Rp.415

Annual Average 1979-1992

1979	US$1.00 = Rp.623
1980	US$1.00 = Rp.627
1981	US$1.00 = Rp.632
1982	US$1.00 = Rp.661
1983	US$1.00 = Rp.909 [a]
1984	US$1.00 = Rp.1,026
1985	US$1.00 = Rp.1,111
1986	US$1.00 = Rp.1,283 [b]
1987	US$1.00 = Rp.1,644
1988	US$1.00 = Rp.1,686
1989	US$1.00 = Rp.1,770
1990	US$1.00 = Rp.1,843
1991	US$1.00 = Rp.1,950
1992	US$1.00 = Rp.2,030

May 24, 1993 US$1.00 = Rp.2,079

FISCAL YEAR

Government	-	April 1 to March 31
Bank Indonesia	-	April 1 to March 31
State Banks	-	January 1 to December 31

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[a] On March 30, 1983 the Rupiah was devalued from US$1.00 = Rp.703 to US$1.00 = Rp.970.

[b] On September 12, 1986 the Rupiah was devalued from US$1.00 = Rp.1,134 to US$1.00 = Rp.1,644.

INDONESIA: SUSTAINING DEVELOPMENT

CONTENTS

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EXECUTIVE SUMMARY

i. This report discusses the challenges Indonesia faces in ***sustaining development***. Indonesia's economic achievements over the past twenty-five years are significant: continued strong growth; resilience to major external shocks; implementation of substantial structural reforms that diversified the economy, expanding the role of the private sector and reducing reliance on oil; considerable reduction of poverty; and a notable start on improving environmental management. These achievements have brought Indonesia to a new threshold of development. Although Indonesia remains a low-income country with a per capita income of $650 and 27 million people still living in absolute poverty, it is well placed to make substantial progress that would place it firmly in the ranks of middle-income countries by the turn of the century. A strong economic foundation has been laid that the Government can now build on as it looks ahead and formulates the Sixth Five-Year Development Plan (REPELITA) and the Second Long-Term (25-year) Development Program, both of which start next year.

ii. This progress can be realized, however, only if there is a clear recognition of and response to the formidable challenges of sustaining development. While past achievements have opened up new opportunities for development, they have also given rise to new challenges. The transition to a higher level of development will be associated with important structural shifts and changes in the nature of the policy agenda. The momentum of growth will need to be maintained amid a changing economic landscape, while improving equity and dealing with emerging issues of environmental management. Export growth will have to contend with increasingly competitive international markets and the need to diversify into new products. Indonesia's past success in managing structural change and rising to new challenges gives confidence that the important transitions likely in the years ahead can be managed smoothly. The key will be a continued commitment to sound economic management and action on an evolving agenda for development.

iii. Many of the key challenges of sustaining development are reflected in the issues that currently occupy Indonesian policymakers. Concerns about Indonesia's high external debt explain the increased attention to domestic resource mobilization and careful management of external financing. The current high real interest rates, their effect on private investment, and strains in the financial system have raised concerns about the risks they pose to the sustainability of growth and to financial stability. Questions as to what policies would best support the next phase of industrial development in Indonesia motivate the current debate on industrial and technology policy. Concerns about the relative dominance of conglomerates in industry stem from the implications for both the efficiency and equity of private sector development. Recognition of the evolving challenges of development is also reflected in the increased emphasis on raising the quality of human resources. Moreover, growing awareness, in Indonesia and around the world, of how environmental degradation can jeopardize the sustainability of development underlies the increased interest of policymakers in improved environmental management. The report analyzes these and other issues within the broad framework of its central theme of sustaining development.

Sustaining Development: The Challenges

iv. The report discusses the task of sustaining development in its three major, complementary dimensions:

- maintaining robust economic ***growth***, by capturing the enhanced opportunities for development and diversification that now present themselves;

- promoting ***equity***, by further reducing poverty and broadening participation in development; and

- protecting the ***environment***, by conserving resources and limiting pollution.

Growth, equity and environmental protection are all necessary ingredients of sustained development. Strong synergies exist among them. Growth generates the employment and increase in resources necessary to reduce poverty and improve environmental management. Equitable development broadens the base of growth and reduces poverty—a major source of pressures on the environment. Protection of the environment fosters efficient, long-term growth and benefits the poor who tend to suffer most from environmental degradation. Trade-offs also exist, for example, between industrial growth and pollution control. But the answer is not to produce less, but differently. Effectively integrating the objectives of growth, equity and environmental protection is the crux of sustained development. It calls for a long-term vision of development, and policies and programs, such as those supporting efficient functioning of markets and human resource development, that take maximum advantage of the complementarities that exist among these objectives. It also calls for actions that deal effectively and efficiently with trade-offs among the objectives.

v. Within this broad framework for sustained development, the future policy agenda will be shaped by some fundamental structural transformations and transitions. As outlined below, in all the three areas of growth, equity and environmental protection, a new generation of issues is emerging that will test the responsiveness of the policy and institutional framework.

vi. **Growth with Stability**. Indonesia needs to sustain growth of 6-7% p.a. in non-oil GDP to employ the growing labor force (annual increase of about 2.3 million) at rising levels of productivity and continue to improve the general living standards. A fundamental condition for sustained, robust growth is the maintenance of a ***stable macroeconomic environment***, a condition reinforced by Indonesia's high external debt and debt service (58% of GNP and 30% of exports, respectively, for MLT debt). But policies will also need to adapt to some fundamental ***qualitative shifts*** in the growth process as well as to continuing major ***structural transformations*** in the economy. The qualitative shifts include:

- an increasingly important role for improvements in ***efficiency and productivity*** as a source of growth; and

- a ***transition from quantity to quality*** in the production of goods and services.

With increasing competition in international markets, raising efficiency and productivity will be the key to sustaining the dynamism of non-oil exports, which will remain a major driving force of Indonesia's growth and diversification. The sources of Indonesia's competitive edge will shift gradually from the basic cost advantages of cheap domestic labor and abundant raw materials to gains in productivity. Besides exports, efficiently supplying the large domestic market offers substantial scope for productivity improvements and growth, with large gains for Indonesian consumers. The critical need is to foster increased competition, not only by opening the economy further to competition from abroad, but also by intensifying efforts to remove barriers to competition within the domestic economy. The need to give greater attention to quality will manifest itself in several ways: shifts in the focus of public service provision increasingly toward quality improvements as quantity targets are met (e.g., in basic education); increasing private use of quality improvements and new product development to capture markets; and a shift toward environmentally benign methods of production.

vii. Key structural transformations that will shape the pattern of future growth include:

- a continuing ***shift in public-private roles***;
- a ***declining role of oil*** in the economy; and
- major ***inter-sectoral and intra-sectoral shifts*** within the non-oil economy.

With the private sector leading in expanding productive capacity, the Government's role will need to continue to shift to ensuring efficient functioning of markets and providing public services effectively and equitably. The share of oil could fall to as low as 5% of GDP over the next two decades, from about 28% in 1980 and 18% in 1990. This underscores the importance of continuing to promote non-oil sources of growth and exports. Maintaining the dynamism of non-oil manufacturing constitutes the core of this effort; the sector will need to post growth of around 10% p.a. for Indonesia to achieve its overall growth and export targets, which would double the sector's share in GDP over the next two decades (to over 33%). Within the sector, the structure of production will be expected to shift gradually in response to market forces toward more downstream processing and higher value-added activities. But, with labor supply remaining relatively abundant, labor-intensive industries will remain Indonesia's main area of comparative advantage. Agriculture will continue to lose share in GDP, but will still play a vital role as the main source of employment and producer of wage goods and raw materials. Growth in the sector will rely increasingly on non-rice activities. Sustaining the overall growth momentum while adapting to the foregoing qualitative and structural shifts in the economy, and maintaining macroeconomic stability, will be a major challenge.

viii. **Equity through Wider Participation**. Ensuring equitable development will call for continued progress on three related fronts:

- continuing to ***reduce and, in the long run, largely eliminate poverty***;
- ensuring ***widespread regional participation in development***; and
- promoting ***broad-based private sector growth***.

Indonesia's progress in reducing poverty, sustained during the adjustment to major external shocks in the 1980s, has been impressive. In 1970, 60% of the people were absolutely poor, compared with 15% in 1990. As poverty declines, further reductions may become increasingly difficult. A progressively larger proportion of the remaining poor are likely to be those who are harder to reach through a general growth of incomes and services, such as people living in resource poor and remote areas. A reflection of this is the uneven geographical pattern of poverty in Indonesia; the incidence of poverty remains high in the Eastern Islands and parts of Java. The centerpiece of the strategy to reduce poverty will remain the promotion of a broad-based pattern of growth that expands opportunities for the productive use of labor, the poor's most abundant asset, and the widespread provision of education and health services that enhance the poor's capacity to grasp those opportunities. However, the role of interventions specifically targeted at the disadvantaged groups and backward areas will increase in importance as the poor become a smaller part of the general population. Also, non-agricultural (and within agriculture, non-rice) activities will need to make a greater contribution to poverty reduction than in the past. Given continuation of appropriate policies, Indonesia can realistically set itself the objective of reducing poverty (as currently defined) to below 10% by 2000 and largely eliminating poverty, except for a small hard core of particularly disadvantaged people, by the end of the Second Long-Term Development Program.

ix. The promotion of a broad-based pattern of growth, which uses the diverse regional potentials for development, would also help reduce regional income disparities. A source of increasing concern in recent years has been the relatively high concentration of ownership, and market power, in the modern business sector in the hands of large business groups, or conglomerates. The dominance of conglomerates raises issues of both equity (equal access to market opportunities) and efficiency (removal of barriers to competition). Effectively and efficiently dealing with this issue will be an important test of policies to foster broad participation in private sector development.

x. **Protecting the Environment.** Sustainable growth will depend on efficient use and conservation of Indonesia's natural resources, including preventing pollution from destroying those resources. Essential to sustained growth, environmental protection is closely linked to the qualitative and structural shifts in the economy outlined above. Through such shifts, the structure and sources of growth need to change, to use resources, especially non-renewable resources, less intensively and to generate less pollution. An increasingly flexible, resilient and efficient private sector is essential for such shifts to occur with minimum dampening of growth. Policies that reduce the pressure of population growth make an important contribution to environmentally sustainable growth by generating demographic shifts that permit a given standard of living to be achieved with less use of resources and less pollution.

xi. Sustainable use of natural resources is particularly important to Indonesia's development prospects given the major role these resources play in the economy: direct extraction and primary processing account for about 40% of GDP; and the primary sectors still generate about 60% of export earnings and 50% of employment. Sustained growth requires carefully managing the ***environment as a source*** of these resources. Key issues concern:

- increasing scarcity and deteriorating quality of water supply, especially in Java (in dense urban areas, groundwater extraction rates have already exceeded natural replenishment, leading to salt water intrusion; in Jakarta, water pumped from the ground each year is estimated to be almost three times the sustainable level); and

- deforestation, land degradation and loss of biodiversity, mainly in the outer islands (harvests from tropical forests are running about 50% higher than the estimated sustainable cut).

xii. In addition to utilizing the resource base, growth will lead to increased urbanization and industrialization. As noted earlier, the share of manufacturing in GDP could double over the next two decades. The urban population has been growing at 5% p.a.; from only 15% of total population in 1970, it has already reached 30%. By the end of the Second Long-Term Development Program, half of the population may reside in urban areas. Cities in Java will need to cope with 1.5 million new residents each year. Some of this growth will come from reclassifying densely populated rural areas as urban, but it will still lead to increasingly complicated problems of urban environmental management. Rising pollution and congestion intensify the need to ensure sustainable use of the capacity of the ***environment as a sink*** for urban and industrial wastes. Major issues include:

- in industry, control of air and water pollution and hazardous waste disposal (industrial pollution in urban areas could increase 10-fold over the next 25 years; it is already serious in many areas on the north coast of Java); and

- in cities, better sanitation and solid waste disposal, and lower air pollution—especially from vehicle emissions—and congestion (in a recent survey in Jakarta, 93% of shallow wells, the dominant form of residential water supply, were found to be contaminated with human

waste, while tap and hydrant water samples revealed rates of contamination of 21% and 58%, respectively; also in Jakarta, particulates, lead and other airborne pollutants have already reached levels that harm health).

The Agenda

xiii. Capturing Indonesia's enhanced prospects for growth in an equitable and sustainable manner will require action across a wide-ranging policy agenda. It will call for maintenance of a stable macroeconomic foundation; improvements in the incentives regime for enterprise; substantial investment in human and physical capital; and institutional reform and development. This suggests an agenda for sustained development, integrating the objectives of growth, equity and environmental protection, that is linked by four broad themes: macroeconomic management; incentives; investment; and institutions.

xiv. **Macroeconomic Management.** Macroeconomic stability is a fundamental condition for sustained growth. By providing a stable setting conducive to a continuous increase in incomes and to efficient decision-making (through a clearer transmission of market signals), it also underpins efforts to reduce poverty and protect the environment. Prudent macroeconomic management has been an important hallmark of Government policies. The measures taken by the Government since 1990 to cool down an overheated economy are bearing fruit, while maintaining robust non-oil GDP growth (7.5% in 1992). The current account deficit is estimated to have declined from 3.8% of GNP in 1991/92 to 2.4% in 1992/93, helped by an exceptionally strong growth in non-oil exports (30% in dollar terms). Inflation fell from about 10% in 1991 to 5% (end-year basis) in 1992. Restrained macroeconomic policies contributed to this outcome. The resurgence of inflation in the first quarter of 1993, however, demonstrates the never-ending need for cautious macroeconomic management.

xv. The main challenge in maintaining macroeconomic stability is navigating the narrow path between sufficiently rapid growth and excessive demand pressures and external shocks that would raise the current account deficit and inflation. Indonesia's room for maneuver is tightly constrained by its relatively heavy external debt, which necessitates that the current account deficit be reduced to, and then maintained at, sustainable levels. This calls for keeping the current account deficit on a downward course, to reduce it to about 2% of GNP, and ***carefully managing the external debt***. Sustaining robust non-oil export growth will be central to achieving the current account targets. To sustain non-oil GDP growth of 6-7% p.a., the overall investment rate will need to rise, from about 23% in 1992 to about 25.5% toward the end of the decade. Reconciling the higher investment rate with a lower current account deficit will require an increase in the national savings rate, from about 20% in 1992 to 23.5% toward the end of the decade. This underscores the need to intensify ***domestic resource mobilization***.

xvi. Keeping the economy on a sustainable growth path will call for a ***balanced, coordinated use of fiscal, monetary and exchange rate policies***. The burden of reducing excess domestic demand since 1990 has been borne primarily by monetary policy. A ***firmer fiscal stance*** would produce a better policy balance, helping to lower the current high real interest rates and allowing higher private investment without rekindling demand pressures. A fiscal stance consistent with both a sustainable external balance and continued robust growth in private investment, while adequately providing for complementary public investments, will be a key element in macroeconomic management for growth with stability.

xvii. Reconciling the roles of fiscal policy in supporting stabilization and promoting growth calls for increasing ***public savings*** and allocating them to priority investments, while generating a fiscal balance consistent with the overall macroeconomic policy framework. This, in turn, calls for: mobilizing more public revenues, emphasizing efficiency-enhancing improvements in cost recovery and better tax

administration; restraining growth in government administrative spending; guiding public investment allocations by a sound set of priorities and raising the efficiency with which investments are implemented; and improving public enterprise financial performance. Incorporating all government expenditures in the budget would subject them to the discipline of the budgetary process and enhance transparency and efficiency in the use of public resources. It would also lead to more effective implementation of fiscal policy since non-budget operations were a major cause of the increase in the overall fiscal deficit in 1992/93. ***Private savings*** need to rise too. Sustaining growth, maintaining financial stability, fostering financial deepening, and promoting profitable, widespread investment opportunities through continued improvements in the incentives regime, as outlined below, should contribute to higher private savings, by households and firms. Demographic shifts resulting in a lower dependency ratio may also help boost savings rates.

xviii. **Incentives.** Both the toughening international business climate and Indonesia's outward-oriented development strategy place a premium on policies that provide incentives to raise efficiency and productivity. Through its structural reform program, Indonesia has taken major strides in improving the incentives regime; but much still has to be done to lower the high costs that remain in many sectors of the economy. There is concern among investors, both domestic and foreign, that regulatory reforms have slowed. Restoring strong momentum to these reforms is a high priority. Reforms need to focus on making ***markets*** work better, by strengthening both external and domestic sources of ***competition***. The reform agenda comprises three broad elements:

- Competition in the ***product markets*** needs to be boosted by a reinvigorated drive to remove remaining regulatory barriers. Despite substantial ***trade policy reform***, many activities, in both industry and agriculture, remain protected from external competition, contributing to a high-cost economy. Indonesia's production coverage of non-tariff barriers (about 30% in both manufacturing and agriculture) and effective rates of protection (over 50% in manufacturing) are high relative to those in most of its East Asian neighbors. Priorities in trade reform include: eliminating virtually all non-tariff barriers; reducing tariffs so that few lie above 20% (currently nearly 4,000 tariff items, or about 45% of the total, have tariffs and surcharges above 20%; of these, about 1,450 items, 16% of the total, have tariffs and surcharges of 40% or more); and reducing export restrictions, especially on forestry products (in conjunction with raising forestry fees and royalties). Deregulation should be applied with equal vigor to ***domestic trade***, by dismantling trading monopolies (e.g., for many agricultural products) and removing barriers to inter-regional trade. Ensuring correct price signals also calls for reforming ***domestic pricing policies***, including appropriate pricing of public goods (utilities) and freeing the prices of private goods (e.g., sugar, fertilizer and cement); the recent major reform of fuel pricing provides an excellent example to follow. ***Investment regulations***, for both domestic and foreign investment, have been substantially eased, but there remain areas for further reform to increase the number of competitors in markets and attract larger inflows of foreign direct investment, including: shortening the negative investment list; relaxing minimum local content and export requirements; further easing the requirements for dilution of foreign ownership; streamlining a continuing array of regulations at the local level; increasing the scope for competitive private entry in the provision of public services; and improving the actual implementation of reform measures (e.g., in customs).

- ***Factor markets*** need to become more flexible and efficient, to help translate incentive reforms into a robust supply response. For the ***financial system***, which has grown rapidly in response to extensive deregulation, the priority tasks are to consolidate past growth,

continue to strengthen prudential regulation and supervision, and safeguard the stability of the system, which is currently under strain. Increased confidence in the system and improved efficiency of banks will contribute to lowering the high real interest rates. Related issues are developing viable ways to reduce the concentration of credit and improve credit availability to smaller businesses, and developing the market for equity (to reduce relatively high debt-equity ratios). The ***land market*** remains underdeveloped, with the cost and complexity of transactions acting as a deterrent to business, especially foreign investment. A market-based system of land allocation needs to be introduced by: sharply reducing and simplifying land regulations; improving and expediting land titling and registration; and instituting competitive auctioning for the allocation of State land. An efficient market for ***technology*** will be increasingly important for maintaining the competitive edge of Indonesian industries and developing new products. International experience shows that the acquisition and assimilation of technology are best achieved by maintaining an open regime for trade, investment and technology licensing and a strong emphasis on education and training, supplemented by a technological support infrastructure—R&D facilities, standard setting and quality control—that is well-focused and responsive to private needs. In contrast, policies centered on a "technological leapfrogging" strategy, involving the development of targeted high-technology industries supported by direct public investment or subsidies and high levels of protection, have proven costly and ineffective in most countries. Also, such policies are inconsistent with Indonesia's strategy of broad-based growth and generation of enough jobs to employ the growing labor force. The ***labor market*** is relatively free of distortions in Indonesia; the main tasks are to increase the supply of better educated and more skilled workers, and to avoid actions that undermine the flexibility of the market, such as barriers to the use of expatriate skilled workers.

- The policy and regulatory infrastructure for markets needs to be improved to support ***better market outcomes***. First is the need to develop up-to-date, clear and enforceable ***commercial, credit and contract laws***, ***standards for accounting, auditing and financial disclosure***, and transparent procedures for ***Government interactions with the private sector***. Such "rules of the game" support efficient and equitable functioning of markets. Policies that "level the playing field"—dismantling of trade and investment barriers and other sources of monopoly advantage, prudential regulation of bank lending to interlocking business interests, and commercial legal reform—are the best way to prevent excessive concentration of market power and ensure that *conglomerates* face effective competitive pressures. It is particularly important that relations between the Government and the private sector be disciplined by transparent, competitive procedures to avoid real or apparent conflict of interest and discourage rent seeking. Regulatory reforms and supportive market infrastructure that promote competition and equalize access to market opportunities will also be a more effective means of promoting the development of ***small and medium-sized enterprises*** than direct government interventions. Second is the need to improve the framework of ***incentives to protect the environment***. Allowing markets to work efficiently helps exploit the synergies between good economics and good ecology; examples are eliminating subsidies on natural resources—maintaining economic pricing of fuel, raising water and power charges, and correcting policies that result in underpricing of forest resources—and clarifying land rights. Even where markets fail because of externalities, market-based measures (e.g., pollution taxes and tradeable permits) are likely to be more effective and cost-efficient. However, regulatory measures are also needed, such as emission or ambient standards and land-use planning; their design needs to reflect institutional capacities for implementation and enforcement.

xix. **Investment.** A sustained, vigorous investment effort will be required to meet Indonesia's development objectives. There are four broad priorities in the investment agenda:

- While the investment rate, both private and public, will need to rise, equally important will be raising the ***efficiency and quality of investment.*** Without efficiency improvements, resources will be insufficient to meet requirements. Higher productivity of private investment will depend critically on the provision of a more outward-oriented and competitive incentives regime, as outlined above. Higher efficiency of public investment will depend on continued progress in several areas: market-based public pricing policies; effective operation and maintenance of existing investments; exposure to private competition, where feasible; systematic evaluation of project proposals; and enhancement of project planning, implementation and management capacities of investment agencies.

- The composition of investment should emphasize complementarity in private and public investment, with the latter focused on ***infrastructure and human resource development.*** Private enterprise should focus on investment in directly productive activities, but can also be tapped to contribute more to improving the availability and quality of public services, in both infrastructure and social sectors. The framework for private participation in public service provision needs to be carefully structured to generate competitive pressures and protect the public interest. Around 85% of total public investment over the REPELITA VI period could be allocated to infrastructure and human resource development, slightly higher than in REPELITA V, but much higher than the 70% allocation during REPELITA IV. In infrastructure, in view of the pressure of rapidly rising demand on existing capacity, the expansion of power supply is a high priority. In human resource development, basic education and health will remain the major focus of public spending, with a growing emphasis on quality enhancement. The emphasis at higher levels of education and in vocational training will also need to be on raising quality and improving relevance.

- The effectiveness and efficiency of expenditures on ***poverty alleviation*** can be enhanced through better targeting of public subsidies for social services. The poor's access to education and health has improved substantially, but much could be done to make the poor benefit more effectively from public expenditures on these services. Targeting these expenditures better for the poor calls for: identifying more accurately the location of the poor; shifting expenditures more toward programs of largest benefit to the poor, such as primary education and public health centers; increasing the use of public programs by the poor where it is low, such as in junior secondary education; and reducing service charges for the poor, and financing these reductions from improved cost recovery from the better-off.

- Expenditures on ***environmental protection*** will need to be raised. For public investment, the priorities will be water supply, sanitation and solid waste disposal services; improved quality of urban transport; and forest protection. Expenditures on human resource development (education, health, family planning) and poverty alleviation programs will indirectly, but importantly, benefit the environment. The private sector will need to spend more on urban and industrial pollution abatement. The incremental costs of public and private environment-related investments are sizable, but modest in comparison with their economic and social returns. There are two important points to remember. First, improved pricing and cost recovery will be essential to pay for much of the needed public investment. Second, prevention is cheaper than cure; improved environmental evaluation of projects and

adoption of cleaner technologies for new investments can save expenditures later on fighting environmental degradation.

xx. **Institutions**. Institutional capacities will have a major bearing on the effectiveness of the incentive reforms and investments outlined above. Over the longer haul, the responsiveness of the institutional framework to strategic and structural shifts in the economy will be a major determinant of the sustainability of development. The transitions that the Indonesian economy is undergoing—the dismantling of regulatory controls, the increasing role and capacities of the private sector, and the shift toward more decentralized decision making—and the new challenges of development that are emerging, most notably that of environmental protection, have profound implications for institutional roles and capacities. The agenda encompasses both market and public institutions. It comprises three main thrusts: strengthening the institutional underpinnings of markets to support efficient and broad-based private sector development; adapting and developing public institutions, focusing their capacities on efficient and equitable provision of public services; and developing the institutional framework for environmental management.

xxi. Two critically important, and related, ***institutional underpinnings of markets*** are a well-functioning legal system, to provide a predictable and fair environment for business, and a sound accounting and auditing system, to instill financial discipline. The need for clear, modern commercial laws and accounting and auditing standards was noted above, but these laws and standards would be of relatively little practical value without adequate means for their implementation and enforcement. The main needs are: strengthening the court system and arbitration mechanisms; upgrading the training of lawyers, accountants and auditors and developing their professional associations and standards; and widely disseminating legal information.

xxii. The evolving role of government implies the need for major adaptations and improvements in ***public sector management***:

- ***Public enterprise reform*** needs to be accelerated, proceeding on two tracks: further commercialization of enterprises providing public goods and services that need to remain in the public domain; and a gradual divestiture of enterprises providing private goods and services. Improving the performance of enterprises remaining public needs to emphasize greater exposure to competition, autonomy in a framework of enhanced accountability, and financial discipline. Divestiture should employ transparent, competitive mechanisms that protect the public interest and allow broad private participation.

- Reassessing and realigning ***government administrative structures*** and the size, deployment, skill-mix and incentives of the ***civil service*** to perform the changing functions of government are an essential complement to economic reforms. These reforms imply the elimination of many routine government administrative, control and licensing functions, and an increasing focus on policy analysis, promotion, monitoring and coordinating functions. One important implication is to move toward a leaner but more professional and technically skilled civil service, with better compensation linked to higher productivity.

- A key dimension of public sector reform to provide public services more efficiently is the ***decentralization*** of responsibilities for local services to local governments. Mobilizing more local revenues, to reduce the present heavy dependence of local governments on central transfers, and building local institutional capacities will be essential for successful decentralization.

xxiii. Closing the existing large gap between environmental policy and implementation calls for strengthening the ***institutional capacities for environmental management***. Progress will be needed on three main fronts: improving the systems for environmental information and analysis to inform priority-setting and policy design; strengthening the institutions responsible for environmental management, including clarifying their roles and improving coordination; and enhancing local participation in policymaking, monitoring and enforcement.

xxiv. **Priorities in the Agenda**. The foregoing discussion suggests the following priorities in the agenda for sustained development:

- ***Macroeconomic Management***: continue prudent macroeconomic policies to maintain financial stability, mobilize domestic resources and ease the burden of external debt. Raising both public and private savings will be central to macroeconomic management for growth with stability.

- ***Incentives***: strengthen both external and domestic sources of competition to support efficient and broad-based private sector development, building environmental concerns into the framework of incentives. Greater integration with the regional and global economy, through removing barriers to international flows of trade, investment and technology, should form a principal thrust of policies to raise efficiency and productivity.

- ***Investment***: focus public investment on infrastructure and human resource development, emphasizing efficiency and quality of services and better targeting for the poor. In the other sectors, the primary role of Government should be in providing a competitive environment for private investment.

- ***Institutions***: adapt and develop public institutions in line with the evolving role of government, focusing public capacities on providing the institutional underpinnings for efficient functioning of markets and on effectively and equitably delivering public services, including environmental protection.

External Financing Implications

xxv. The projected pace of growth, poverty reduction and reform will call for substantial external resources, even with the expected rise in domestic savings. Given Indonesia's still low per capita income, substantial poverty and heavy debt-service burden, much of the external financing needs to be on concessional terms and in forms that effectively meet the financing requirements of the economy. In 1993/94, total gross external financing is projected to be about $10.5 billion, substantially lower than in the past three years. This reflects the major progress achieved since 1990 in reducing unsustainably high current account deficits and associated large increases in foreign borrowing, especially private borrowing. The projected financing plan for 1993/94 is based on the following important assumptions. First, the current account deficit will be contained to $2.9 billion, about the same as in 1992/93, despite an expected decline in the world oil price; this implies an improvement in the non-oil current account balance of $0.5 billion and a decline in the total current account deficit from 2.4% of GNP in 1992/93 to 2.2% in 1993/94. Second, amortization payments will rise sharply from $7.4 billion in 1992/93 to $8.4 billion. Third, part of the large financial inflows attracted by high domestic interest rates in 1992/93 will flow out as interest rates gradually decline toward international levels. Fourth, official reserves will be maintained at levels equivalent to 4-4.5 months of imports, levels that are prudent given Indonesia's open capital account and vulnerability to external shocks.

xxvi. Private borrowing is expected to decline to more sustainable levels in 1993/94, but would rise again thereafter. Private capital, including foreign direct investment, would provide about half of Indonesia's total external financing needs in the 1990s, compared to negligible amounts in the 1980s. The increasing role of private capital in external financing calls for continued careful attention to debt management and policies that ensure efficient use of resources, especially given Indonesia's already large stock of debt. First, the incentives framework needs to ensure that these external resources flow into efficient uses and generate rapid, high returns, especially in export-oriented activities. In this regard, large, capital-intensive projects, and projects with high follow-up costs, need particularly careful scrutiny as such projects can add rapidly to Indonesia's debt, while crowding out potentially more profitable investments by small and medium-sized enterprises. Second, the availability of private financing at the projected levels cannot be taken for granted and will depend heavily on perceptions of Indonesia's creditworthiness. Third, the shift in the composition of Indonesia's debt toward private capital implies that Indonesia will have to cope with a rising average borrowing cost and a shortening maturity profile of debt.

xxvii. Given the size of Indonesia's existing debt and the hardening of average terms, direct investment needs to be a larger share of capital inflows. Such inflows reduce the need for borrowing, and the risks associated with higher levels of debt, and also provide new technologies and export market access. Foreign direct investment has risen significantly in response to the regulatory reforms of recent years, but larger flows can be promoted by policies that enhance Indonesia's attractiveness as a home for foreign investment.

xxviii. Within the overall financing plan, ***concessional assistance*** will play a strategically important role, even though such assistance will decline significantly in net terms and in relation to the size of the economy throughout the decade. An adequate flow of concessional assistance is an essential part of Indonesia's transition to a more diversified financing pattern. First, such assistance will continue to provide financial support to projects and programs in such key areas as infrastructure and human resource development. Second, it will enable Indonesia to continue to pursue with confidence its program of structural reforms to enhance productivity and competitiveness, while it seeks to improve further its macroeconomic balances. Third, as amortization payments rise, it will be important to ensure that the net flow of concessional external resources does not fall too rapidly. Fourth, an adequate degree of concessionality will support prudent external debt management by keeping the rising average borrowing costs noted above within limits that are manageable, given Indonesia's high indebtedness. Working together, these factors will help improve Indonesia's access to international financial markets, and attractiveness to foreign direct investment, and thus increase the probability that the projected private and commercial flows will be available as needed.

xxix. This financing scenario projects that current levels of concessional financing are maintained. With an appropriate mix of project and sector assistance, and further efforts to improve project implementation, CGI commitments at about the same level as last year ($4.9 billion) would generate the projected concessional flows. As discussed at last year's CGI meeting, infrastructure and human resource development remain priority areas for this assistance.

1
SUSTAINING DEVELOPMENT

A. Overview

1.01 "The achievement of sustained and equitable development remains the greatest challenge facing the human race." So begins the last World Development Report.[1] This also provides an apt opening for this Report which focuses on the challenges Indonesia faces in sustaining development in the years ahead. Indonesia's recent development record is impressive: continued rapid growth; resilience to major external shocks; management of substantial structural change; considerable reduction of poverty; and a notable start on improving environmental management. Past achievements have laid a good foundation for further progress, to move the country up the income ladder. Indonesia is still a low income country, though fast closing the gap with the middle income group; large numbers remain poor; and there are major issues emerging in environmental preservation. ***Sustaining development***, the central theme of this Report, has three major, complementary dimensions: maintaining robust ***growth***, capturing the enhanced opportunities for economic expansion and diversification that now present themselves; promoting ***equity*** in development, in further reducing poverty and broadening participation in the process of economic growth; and protecting the ***environment***. Effectively integrating these objectives is the essence of sustained development.

1.02 In sustaining development, Indonesia will face continuing major structural shifts in the economy and an evolving array of challenges associated with the transition to a higher level of development and an increasingly competitive world. These range from the shifting roles of government and economic sectors to the rising imperatives of improving efficiency and productivity (and hence fostering greater competition) in the production of goods and services. The focus of investment will need to shift increasingly from quantity to quality. The issues of environmental management will in general require greater attention. Institutional development and reform, encompassing both market and public institutions, will have an increasingly important role in the policy agenda. Indonesia's effective management of structural change in the past inspires confidence that the transitions that lie ahead can be managed successfully. But the challenges of sustaining success are formidable, and should not be underestimated. The key will be a continued firm commitment to sound economic management and responsiveness to an evolving agenda of reforms.

1.03 This chapter sets out the thematic and structural framework of the Report, and provides an overview of its main conclusions. Starting with a review of Indonesia's progress on development in Section B, it discusses, in Section C, the main challenges of sustaining development. The discussion highlights the evolving nature of the challenges. It also brings out the links between the three dimensions of sustained development: growth, equity and environmental preservation. Meeting these challenges will require action across a broad policy agenda. This agenda is discussed in Section D, organized under four themes: ***macroeconomic management***; ***incentives***; ***investment***; and ***institutions***. Each of these themes in turn forms the subject of a subsequent chapter, where the various elements of the agenda are analyzed and developed more fully.

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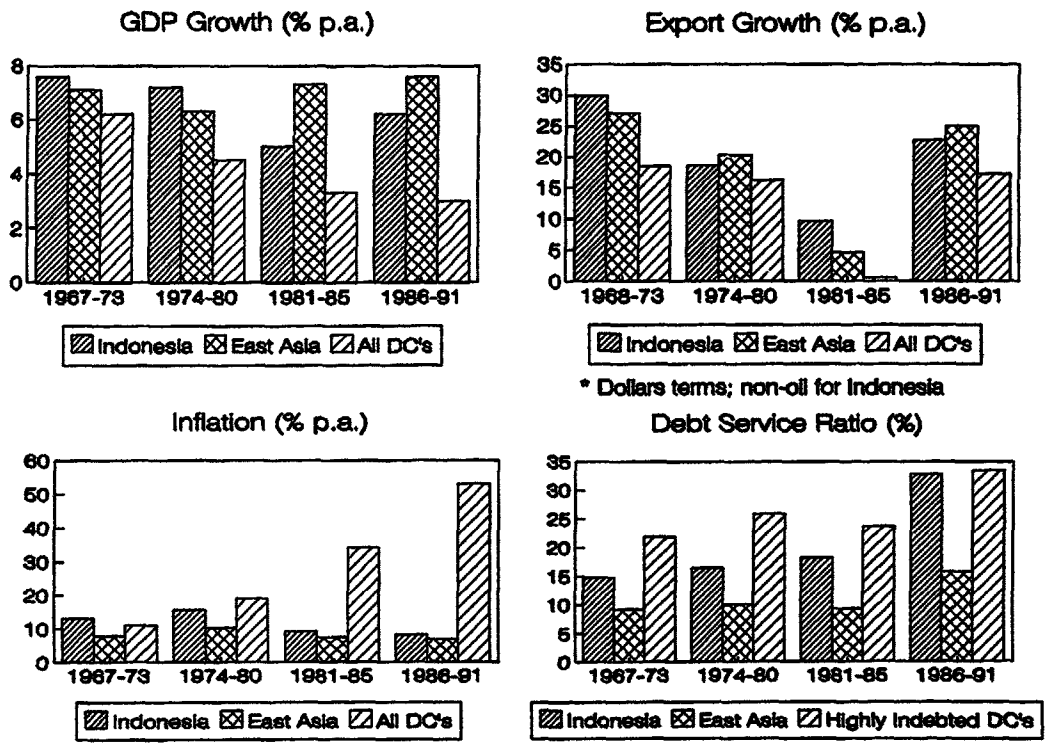
1 *World Development Report 1992: Development and the Environment*, World Bank, Oxford University Press, May 1992, p. 1.

1.04 The themes of macroeconomic management, incentives, investment and institutions provide a useful, cross-cutting framework for integrating the agenda for growth, equity and the environment. Thus, for example, the chapter on incentives (Chapter 3) addresses reforms needed in the incentives regime not only to promote productivity and efficiency—and hence economic growth—but also to foster equity through wider access to opportunities and to improve environmental outcomes; the complex of issues discussed ranges across sectors, public/private as well as economic sectors. A similar, integrated approach is taken in the chapters on investment (Chapter 4), which includes social spending, and on institutions (Chapter 5). Also, the chapter on macroeconomic management (Chapter 2) goes beyond the usual macroeconomic issues to analyze the implications of the medium- to long-term economic outlook for poverty and the environment. This way, the three dimensions of the challenge of sustained development are discussed in each chapter, bringing out their complementarities as well as noting the trade-offs.

B. Progress on Development

1.05 Indonesia can be justifiably proud of its development record. Twenty five years ago, it was one of the poorest countries in the world, with a per capita income of only $50. Since then, it has made great strides, achieving an average GDP growth of almost 7% p.a., a growth performance that ranks among the ten fastest in the world and on par with that of the dynamic East Asian economies (Figure 1.1). Rising at a rate of about 4.5% p.a. over this period, Indonesia's per capita income reached $650 in 1992, implying a substantial improvement in living standards. Indonesia is still classified as a low income country, but, provided the momentum of development is sustained, it is now within striking distance of joining the ranks of middle income countries.

Figure 1.1: Selected Indicators of Economic Performance



1.06 **Growth, Financial Stability and Structural Reform.** Consistent emphasis on maintaining economic stability, marked by the willingness to take hard decisions in times of both boom and bust, provided a solid foundation for sustained, robust growth. Prudence was exercised during the years of the oil boom in the 1970s, spreading the use of the oil windfalls over time and across sectors in a manner that avoided the erosion of the non-oil sectors that plagued most other oil-exporting countries. The development strategy emphasized channeling oil revenues into raising agricultural output and developing physical and social infrastructure. The emphasis on agriculture supported broad-based growth of rural incomes. The development of infrastructure strengthened the foundations for future growth. The economy grew at nearly 8% p.a. during the 1970s. A quick, tough response in the mid-1970s avoided a potentially serious debt problem. Subsequent cautious macroeconomic policies, including a conservative external borrowing strategy, maintained financial balances, although inflation rose moderately in response to the increased spending based on oil revenues. At the turn of the decade, the external current account was in surplus and the debt-service ratio was below 13%, about one-quarter of Mexico's level.

1.07 Indonesia faced a series of severe external shocks in the mid-1980s, including the collapse of oil prices, the rise in international interest rates and the depreciation of the US dollar. These developments sharply reduced exports and fiscal revenues, opening up sizable external and domestic financial imbalances, and raised external debt service (these shocks together are estimated to have entailed an average loss of income for Indonesia of 7-8% of GDP p.a. during 1983-88). The Government responded promptly and effectively by embarking on a two-pronged adjustment program: restoring macroeconomic stability through fiscal and monetary restraint, supported by improvement of external competitiveness through a responsive exchange rate policy; and establishing a more diversified and efficient productive base through structural reforms that reduced the dependence on oil. The strategy to develop the non-oil economy had two main thrusts: promotion of the private sector; and encouragement of a more outward-oriented economic structure. The structural reforms were developed within a comprehensive, medium-term framework that fostered credibility through consistent implementation. While wide-ranging in scope, the reforms were particularly far-reaching in the areas of trade, investment, taxation and finance.

1.08 This strategy was successful in stabilizing the economy, maintaining growth and transforming the structure of production (Table 1.1). Sound macroeconomic management substantially reduced the current account and fiscal deficits, and contained inflation to below 10% p.a. Prudence in external borrowing allowed Indonesia to service its debt without requiring any rescheduling, at a time when many other oil-exporting countries encountered serious debt difficulties. Despite its large debt, Indonesia retained access to voluntary market finance throughout the adjustment period, in contrast to the general experience of the heavily-indebted developing countries.

1.09 Supported by prompt macroeconomic stabilization measures and structural reforms that spurred competition and enlarged opportunities for growth, especially of non-oil exports, the economy rebounded quickly from the effects of the shocks. Economic growth averaged close to 7% during 1988-91, having dipped to around 4% in the mid-1980s in the wake of the severe external shocks. The major force driving economic recovery was the private sector, as private investment responded vigorously to the policies of deregulation. The private sector contributed over 70% of the total GDP growth during 1983-91. Besides the increasing role of the private sector, evidence of successful structural diversification abounds. Non-oil exports and non-oil budget revenues increased from about one-quarter of total exports and budget revenues in the early 1980s to about two-thirds by the end of the decade, while the share of non-oil manufacturing in total GDP almost doubled (Table 1.1). Non-oil export growth averaged about 18% over the past five years, with a still faster growth of 26% p.a. in exports of manufactures, an achievement that compares favorably with the region's best performers.

Table 1.1: Key Economic Indicators [a]

	1975-83	*1983-87*	*1988-89*	*1990*	*1991*	*1992 (est.)*
Average real growth rates (% p.a.)						
GDP	6.5	5.0	6.6	7.1	6.6	5.8
Non-oil	7.0	5.7	7.8	6.9	6.3	7.5
Non-oil exports	10.5	12.2	17.8	2.8	24.3	26.6
Fixed investment	10.7	-3.7	11.9	14.6	6.0	5.0
Private	9.1	0.9	10.7	16.2	3.0	3.7
Macroeconomic balances (%) [b]						
Current account/GNP	-7.8	-2.5	-1.9	-3.4	-3.8	-2.4
Overall public sector balance/GDP	-4.8	-2.7	-2.1	0.3	-1.1	-1.4
MLT debt service/exports	16.8	34.8	35.8	29.7	31.6	30.0
Structure of the economy (%) [b]						
Non-oil exports/total exports	23.0	51.9	61.1	55.0	64.0	70.5
Non-oil revenues/total revenues	35.6	56.5	58.9	57.0	62.3	66.0
Non-oil manufacturing/GDP	9.9	12.8	13.9	14.9	15.4	16.0
Private fixed investment/ total fixed investment	52.1	60.6	58.7	59.1	57.7	57.0

[a] Balance of payments data are for fiscal years (starting April 1).
[b] For last year of multi-year periods.

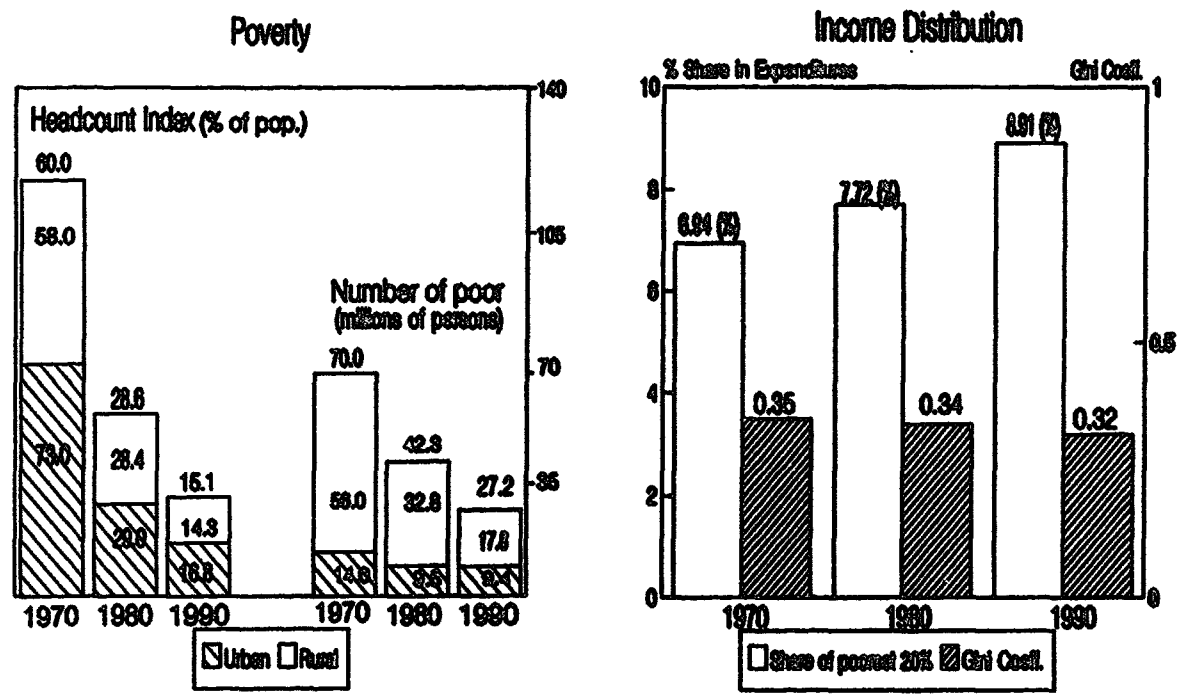
Source: Central Bureau of Statistics and World Bank staff estimates.

1.10 Following the successful adjustment to the external shocks of the 1980s, the Government has faced the challenge of managing dynamic, private-sector led growth in an increasingly deregulated economy. In 1990/91, a strong surge in private investment, responding to the incentive and regulatory reform, combined with an easing of monetary policy, led to the emergence of excess demand pressures. These were reflected in a widening of the current account deficit, an associated sharp increase in external borrowing, and higher inflation. The Government responded by tightening monetary and fiscal policies and restraining public and publicly-related external borrowing, which helped dampen the demand pressures. It moved to strengthen the framework for prudential regulation of the financial sector, which showed signs of stress following rapid growth spurred by extensive sector deregulation. At the same time, the Government continued to build on earlier reforms in trade policy and investment and industrial regulations. These more recent macroeconomic developments and structural reforms are reviewed in greater detail in Chapters 2 and 3, respectively.

1.11 **Poverty and Income Distribution.** Perhaps the most powerful indicator of the success of Indonesia's development strategy and adjustment to the shocks of the 1980s is the degree of poverty reduction. Indonesia started the 1970s with around 70 million people, or 60% of the population, in absolute poverty. By 1990, the number of the poor had dropped to about 27 million, or 15% of the population (Figure 1.2). Even during the difficult adjustment period in the 1980s, poverty reduction was sustained. The 1990 World Development Report found that, over the last two decades, Indonesia achieved the highest annual average reduction in the incidence of poverty among all the countries studied.

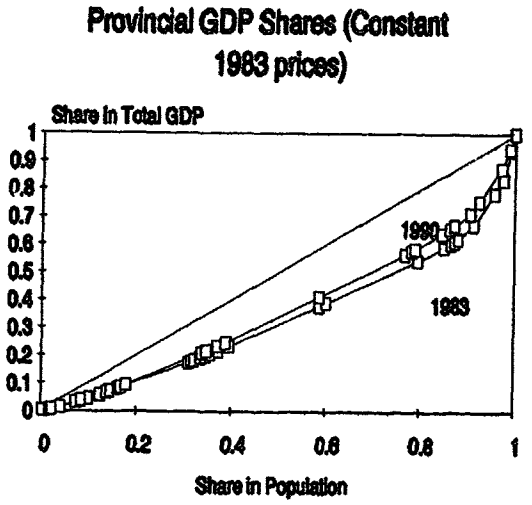
Indonesia's success in reducing poverty is attributable to several elements of its development strategy: substantial investment in economic and social infrastructure that supported sustained, broad-based growth; strong emphasis on improving productivity in agriculture, the source of livelihood to a majority of the population and the overwhelming bulk of the rural poor; structural reforms that induced a shift from inward-oriented, capital-intensive activities toward export-oriented, labor-intensive activities; and cushioning of the impact of adjustment in the 1980s on expenditure programs beneficial to the poor, notably social services.

Figure 1.2: Incidence of Poverty and Income Distribution, 1970-1990



1.12 Evidence on the distribution of income, personal and regional, is more limited than on poverty, but the available indicators point to a gradual reduction of disparities. The share of personal expenditures by the poorest 20% of the population improved from 6.9% in 1970 to 8.9% in 1990; the latter compares with 5.5% in the Philippines, and 4.5% in Malaysia and Sri Lanka. Indonesia's relatively low and declining level of inequality is also indicated by the trend in the Gini Coefficient (estimated from the distribution of personal expenditures), which fell from 0.35 in 1970 (0.38 in 1978) to 0.32 in 1990 (Figure 1.2). There is evidence also of a gradual narrowing of regional income disparities, though the disparities remain large (Figure 1.3). Against these favorable trends, a source of concern has been the emergence of a relatively high concentration of ownership, and market power, in the modern business sector in the hands of large business groups, or conglomerates, and its implications for both the efficiency and equity of private sector growth. The operations of the top 200 such groups were estimated in 1990 at the equivalent of around one-third of GDP (excluding the smallholder and the oil extraction sectors), of which about a third was accounted for by the top 5 groups.

Figure 1.3: Trends in Regional Income Distribution



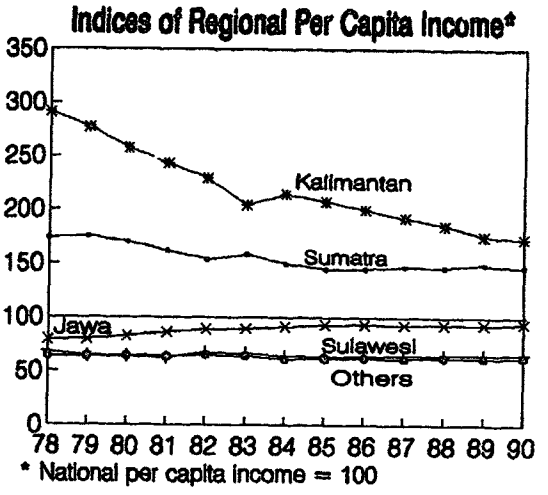
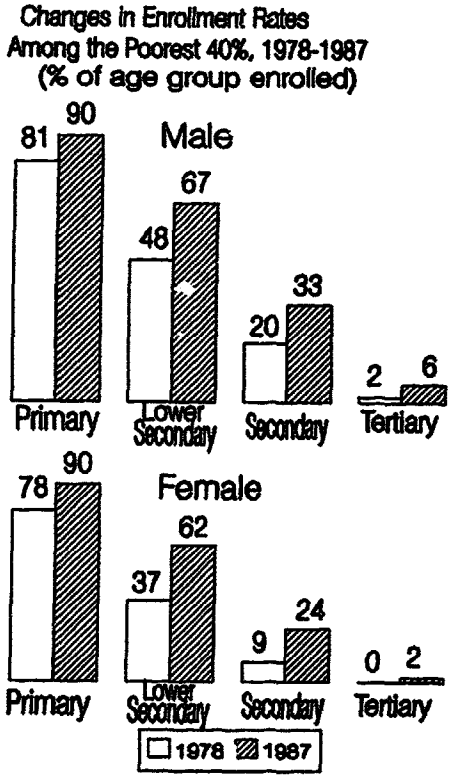
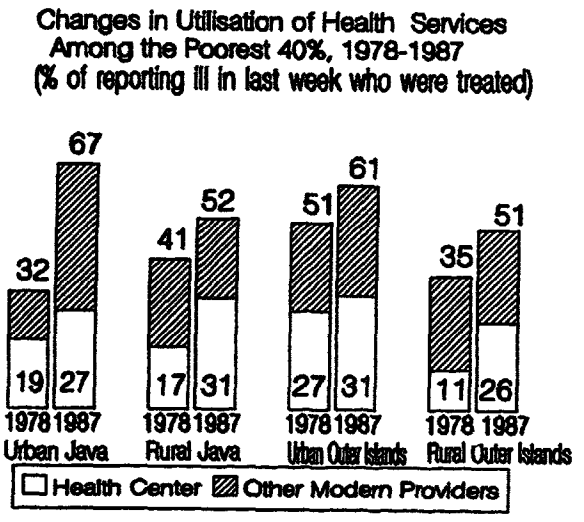


Figure 1.4: Access of the Poor to Social Services





1.13 **Human Resource Development, Infrastructure and Environment.** Human resource development has received strong emphasis in the Government's development strategy, both as a means of raising living standards and increasing the capacities for growth. The successes are evident from the social indicators shown in Table 1.2. Infant survival, life expectancy, literacy, school enrollments and access to health services have all improved substantially. Cross-country comparisons of social services show Indonesia catching up fast with its East Asian neighbors, despite having a much lower income level and starting from a much lower base. Attention to women's role in development and poverty reduction is reflected in female school enrollments rising faster than average, so that 48% of all primary school students and 45% of secondary school students are female. The development of social services has been accompanied by an improvement in the access of the poor to these services (Figure 1.4). Improved access of the poor to basic education and health services has been an important factor in the reduction of poverty.

Table 1.2: Human Resource Development - Selected Countries, 1960-1990

	Life expectancy at birth (years)		*Infant mortality rate* [a]		*Adult illiteracy rate* [b]		*Primary enrollment ratio* [c]		*Secondary enrollment ratio* [d]		*Population per physician*	
	1960	*1990*	*1960*	*1990*	*1960*	*1990*	*1960*	*1989*	*1960*	*1989*	*1960*	*1984*
Indonesia	b41	62	159	61	61	23	71	118	6	47	46,780	9,410
East Asia & Pacific												
Philippines	53	64	134	41	28	10	95	111	26	73	n.a.	6,570
Malaysia	54	70	105	16	42	22	96	96	19	59	7,020	1,930
Thailand	52	66	149	27	32	7	83	86	13	28	7,950	6,290
South Korea	54	71	120	17	29	4	94	108	27	86	3,540	1,160
South Asia												
India	43	59	165	92	72	52	61	98	20	43	4,850	2,520
Sri Lanka	62	71	71	19	25	12	95	107	27	74	4,490	5,520
All Developing Countries	46	63	233	69	n.a.	40	n.a.	105	n.a.	43	n.a.	4,980

[a] Number of infants per thousand live births, in a given year, who die before reaching one year of age.

[b] Proportion of the population over the age of fifteen who cannot, with understanding, read and write a short, simple statement on their everyday life. Base period illiteracy rate is for 1960 except for: Indonesia and India (1961); Malaysia (1970); and Sri Lanka (1963).

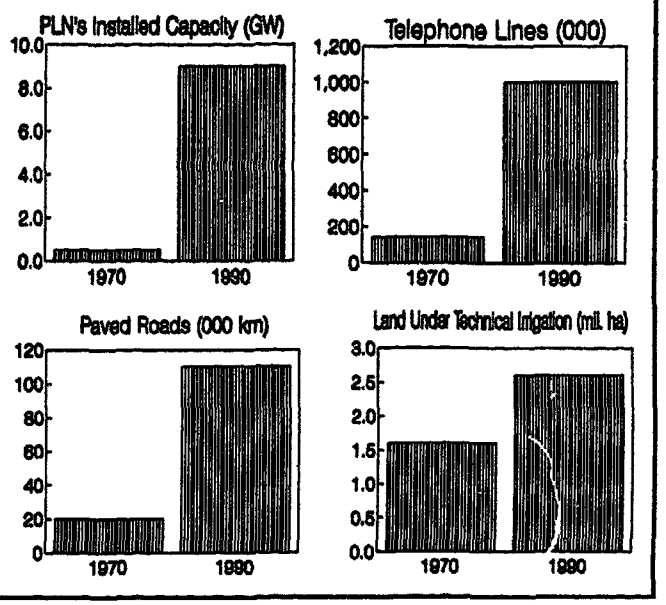
[c] Gross enrollment of all ages at the primary level as a percentage of primary-school-age children.

[d] Computed in the same manner as the primary enrollment ratio.

Source: *World Development Report*, various issues; *The State of The World's Children, 1989.*

1.14 The development of physical infrastructure has been a second major plank, alongside human resource development, of the Government's strategy to promote strong, broad-based growth. Infrastructure development has consistently received high priority in successive five-year development plans (REPELITAs), averaging over 40% of all development expenditure. This is reflected in a substantial expansion of services in all major infrastructure sectors over the past two decades. For example, the installed capacity of the state electricity company (PLN) increased 18-fold; the number of telephone lines rose seven-fold; and the length of paved roads increased nearly six-fold (Figure 1.5). The expansion and improvement of infrastructure facilitated the strong private supply response to the investment opportunities opened up by Government deregulation policies.

Figure 1.5 : Indicators of Infrastructure Development, 1970-1990



Box 1.1: Indonesia's PROKASIH (Clean Rivers) Program

The PROKASIH Program in Indonesia was initiated in 1989 in response to growing pollution loads, especially from rapidly expanding industries, in critical watersheds. It was designed to overcome the fragmentation of previous efforts to control pollution. At its inception, the Program included the eight most industrialized provinces: East Java, Central Java, West Java, DKI Jakarta, North Sumatra, South Sumatra, Lampung and East Kalimantan. In 1990, Riau, Aceh and West Kalimantan also joined. The initial focus was on the worst industrial polluters in the 24 most affected rivers, with a stated goal of reducing their pollution loads by 50% within two years.

Technical and administrative coordination of the Program is provided by central agencies, but the implementation is carried out by provincial authorities, with central support as needed. The mass media is encouraged to report on the environmental damage caused by pollution and on significant clean-up efforts. NGOs are encouraged to help community groups participate in environmental activities. The Program involves five key steps: (a) establishing the local PROKASIH Teams; (b) identifying specific firms in highly polluting industries; (c) getting these firms to sign voluntary "Letters of Commitment" to cut pollution loads in half within an agreed time frame; (d) monitoring subsequent results; and (e) applying increasing pressure on those not making a good-faith effort to comply with their commitment.

While it is still a relatively new program, there have been some notable successes. PROKASIH Teams are now in place in the 11 provinces, and voluntary agreements have been signed by some 2,000 firms. Pollution loads have been reduced in several provinces, particularly in those with the strongest technical capacity to pursue the objectives of the Program. There are still major shortcomings in the Government's capacity to monitor actual industrial effluents, and in the private sector's capacity to design and operate pollution abatement systems. The political commitment to enforce environmental standards, however, has been greatly enhanced by the favorable publicity surrounding the PROKASIH Program, which in turn has increased the credibility of the national and provincial authorities in their enforcement efforts with individual firms.

1.15 Indonesia has taken important steps to improve environmental management. This reflects growing awareness, in Indonesia and around the world, of the serious risks environmental degradation poses to sustainable development. Among developing countries, Indonesia has played a leading role in articulating a sustainable development strategy and putting in place essential elements of a regulatory and institutional framework to support that strategy. These initiatives include: establishment of an environmental protection agency (BAPEDAL); environmental impact analysis (EIA) requirements for development projects; and new legislation on spatial planning. Specific sectoral or cross-sectoral environmental initiatives include: the preparation of a Tropical Forestry Action Plan, setting out the agenda for sustainable management of forest resources; the preparation of a National Biodiversity Action Plan, aimed at preserving Indonesia's rich array of plant, animal and marine life; the start of a Clean Rivers Program, PROKASIH, which targets reducing industrial pollution in 24 most polluted rivers across Indonesia (Box 1.1); and a review of the institutional arrangements for water resource management. In the years ahead, Indonesia faces major challenges of environmental sustainability. The implementation of the above initiatives is constrained by institutional weaknesses and limited financial resources, but a good foundation has been laid for future efforts in responding to these challenges.

C. Sustaining Development

1.16 Indonesia's development achievements over the past twenty-five years, including the demonstrated resilience to major external shocks, are impressive. The past successes enable the Government to build on a strong economic foundation as it looks ahead and formulates the next (Sixth) Five-Year Development Plan (REPELITA) and the Second Long-Term (25-year) Development Program (both of which start next year). At the same time, there needs to be a clear recognition of the formidable challenges of sustaining development that lie ahead. While past achievements have opened up new opportunities for development, they have also given rise to new challenges. Future challenges stem both from the fact that, despite past progress, Indonesia remains a low income country, with a sizable segment of its population still living in absolute poverty, and from significant changes in the nature of the policy agenda associated with the economy's transition to a higher level of development.

The task of sustaining development is three-fold:

- maintaining a robust pace of economic ***growth*** to improve living standards and provide gainful employment to the rapidly expanding labor force;
- promoting ***equity*** by reducing poverty and broadening participation in development; and
- protecting the ***environment*** by conserving resources and limiting pollution.

Sharing the common aim of improving human welfare, growth, equity and environmental protection are all essential to sustained development. Strong synergies exist among these objectives.[2] Growth supplies the increase in resources necessary to reduce poverty and improve environmental management. Equitable development broadens the base of growth and alleviates a major source of pressures on the environment—poverty. Protection of the environment fosters efficient, long-term growth and contributes to equity as the poor tend to be the most vulnerable to the consequences of environmental degradation. Trade-offs also exist. An example is industrial growth and the control of pollution. However,

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[2] "Promoting growth, alleviating poverty, and protecting the environment are mutually supportive objectives...", *Environment, Growth, and Development*, World Bank, Development Committee Pamphlet 14, 1987, p. 5.

appropriate, well-targeted policies can mitigate these trade-offs. Concerns about the costs of environmental protection, such as pollution control, in terms of foregone income growth are often short-sighted and based on an incomplete consideration of the benefits of better environmental management (or of the costs of environmental inaction). The 1992 World Development Report aptly termed the distinction between development and the environment a false dichotomy.[3] Similarly, there exists no inherent dichotomy between growth and equity, as borne out by increasing international evidence of a positive correlation between strong and equitable growth—the East Asian, and Indonesia's own, record of robust growth combined with impressive reductions in poverty is a case in point.[4] The central challenge in sustainable development is to take maximum advantage of the complementarities that exist between growth, equity and environmental protection and to minimize the costs of addressing the trade-offs.

1.17 In Indonesia, the harmonization of growth, equity and stability, often referred to as the "Trilogy of Development", has been a fundamental principle guiding development policy for the past 25 years. In a major statement on economic policy (1992 Independence Day Speech), President Soeharto underlined the Government's continuing emphasis on the consistency of these goals, but, looking ahead to the next Long-Term Development Program, also noted the increasingly important need to improve environmental management.[5] The fundamental objectives of Government development policy thus support the goal of sustainable development in its broadest sense, and provide a guiding framework for consistent policy formulation to meet the challenges of sustained economic progress.

1.18 Within this broad framework for sustaining development, the future policy agenda will be shaped by some fundamental structural transformations and transitions underway in the economy. These shifts associated with the evolution of the economy imply important changes in the nature of ongoing challenges as well as the emergence of new challenges. As elaborated below, in all the three areas of growth, equity, and environmental protection, a new generation of issues is emerging. Success in sustaining development will depend on both pressing ahead with the unfinished agenda in the existing areas of policy reform and adapting and developing policies and capacities to cope with the new issues.

Growth with Stability

1.19 Sustained robust growth is central to achieving Indonesia's development objectives. To employ the labor force, which is increasing by 2.3 million people annually, at rising levels of productivity, improve living standards and continue to reduce poverty, non-oil GDP will need to grow at 6-7% p.a. At this growth rate, Indonesia's per capita income would exceed $1,000 by the year 2000, placing it in the category of middle income countries, and rise to more than $2,000 by the end of the Second Long-Term Development Program. Sustaining this rate of growth, while maintaining macroeconomic stability and adapting to major structural transformations and transitions the economy will undergo, will be a major challenge.

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[3] *World Development Report 1992*, op. cit., p. 25.

[4] *More Evidence on Income Distribution and Growth*, George R. G. Clarke, Policy Research Working Paper No. 1064, World Bank, January 1993.

[5] "Another challenge that we have to take into account from now on is the scarcity and limitation of natural resources, (and) the impact of industrialization on the quality of our environment. We are determined that our industrialization is a sustainable one." State Address by President Soeharto on the 47th Independence Day, August 17, 1992.

1.20 A ***stable macroeconomic foundation*** is a necessary condition for sustained economic growth.[6] In maintaining a stable macroeconomic environment, the main challenge stems from Indonesia's large external debt; total MLT debt amounted to 58% of GNP and 176% of exports at end-1992. The MLT debt-service ratio in 1992 was 30%. In absolute terms, Indonesia's external debt is now one of the largest in the developing world. Cautious external borrowing policies, backed by strong growth in non-oil exports, have allowed Indonesia to maintain an unblemished debt service record, unlike most countries in similar circumstances. Nonetheless, the debt burden is heavy, and it limits Indonesia's policy flexibility and raises its vulnerability to external shocks. A central goal of macroeconomic management will be to reduce this burden gradually to levels that are more sustainable in the medium to long term. This goal has two important implications: reducing the current account deficit; and maintaining a prudent approach to external financing. Sustaining robust non-oil export growth will be the key to reducing the external deficit. To achieve and sustain a non-oil GDP growth of 6-7% p.a., the investment rate will need to rise, from about 23% of GDP in 1992 to about 25.5% by the end of the decade. Reconciling the higher investment rate with the need to reduce the current account deficit will require an increase in the national savings rate, from about 20% of GDP in 1992 to about 23.5% toward the end of the decade. This underscores the need to intensify domestic resource mobilization. Even with a declining current account deficit, Indonesia will need substantial external financing in coming years. One challenge will be to manage a smooth transition to an increased role of private capital in external financing, and to diversify the sources and types of financing. A related challenge will be to promote greater foreign direct investment, with its twin advantages of reducing the need for debt-creating flows, and providing new technologies and market access.

1.21 Policies for growth will need to adapt to the evolving nature of the growth process as the economy moves toward higher levels of development. Success in sustaining the momentum of growth will depend greatly on how effectively Indonesia manages some important dimensions of this evolution. These will include both some fundamental ***qualitative shifts*** in the growth process and major ***structural transformations*** in the economy. The former comprise:

- an increasingly important role of improvements in efficiency and productivity as a source of growth; and
- a transition from quantity to quality in the production of goods and services.

1.22 In an increasingly tougher international business climate, marked by globalization and keener competition, raising ***efficiency and productivity*** would be the key to sustaining the dynamism of non-oil exports, which will remain the *primum mobile* of Indonesia's economic growth and diversification. The sources of Indonesia's competitive edge will need to shift gradually from the basic cost advantages arising from the availability of cheap unskilled and semi-skilled labor and relatively abundant raw materials to gains in productivity. Besides exports, efficiency and productivity improvements hold the key to the role the domestic market will play in future growth. Indonesia has a large domestic market. Supplying this market more efficiently offers substantial scope for productivity gains and future growth, with large benefits for Indonesian consumers. The critical need is to foster increased competition, not only by opening the economy further to competition from abroad, but also by promoting greater competition within the domestic economy, an area where less progress has been made so far. More broadly, raising efficiency and productivity will be essential to realizing Indonesia's growth objectives within the limits

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[6] Strong cross-country evidence showing macroeconomic stability is positively associated with long-run economic growth is provided in *Macroeconomic Factors in Growth*, Stanley Fischer, paper presented to World Bank Conference on "How Do National Policies Affect Long-Run Growth", Washington D.C., February 1993.

of available resources. International—including East Asian—experience provides strong evidence of a positive correlation between economic growth and productivity increases and between the latter and the reduction of market distortions (more openness and domestic competition).[7] President Soeharto underlined the Government's clear recognition of these fundamental challenges by making efficiency and productivity a central theme of his 1992 Independence Day Speech.[8]

1.23 A transition from ***quantity to quality*** in the production of goods and services is closely related to raising efficiency and productivity. It has several important dimensions. In the public sector, it implies a shift of focus from expanding services to improving their quality. In the key area of human resource development, for example, past efforts have been instrumental in putting a school and a health clinic in almost every village; the priority now, as recognized by the Government, is to improve the quality of the education and health services, a critical element in the effort to raise the productivity of labor and support technological progress. In physical infrastructure as well, the quality and reliability of services, increasingly important to the competitiveness of domestic production as it grows in sophistication, will need stronger emphasis. The reorientation of the focus of public investment from quantity to quality will need to be supported by improved operation and maintenance of investments. In the private sector, improving the quality of goods, and developing new products, will become increasingly important sources of market growth. Another dimension of quality requiring increased attention, and relevant to both the public and private sectors, is the shift toward environmentally cleaner methods of production.

1.24 Accompanying these fundamental qualitative shifts in the growth process will be the challenge of managing continuing major transformations in the structure of the economy, in the form of changing roles of sectors, and of activities within sectors. Key structural changes will include:

- a continuing shift in public-private sector roles;
- a declining role of oil in the economy; and
- major inter-sectoral and intra-sectoral shifts within the non-oil economy.

1.25 The ***Government's role*** will need to continue to shift from direct management and control of productive activities, including the production of many private goods and services, toward the facilitation of sound private sector development. This translates into an increasing Government focus on: maintaining a stable macroeconomy; facilitating efficient functioning of markets; and providing public goods, notably infrastructure and human resource development services, efficiently and equitably. In addition to being the dominant provider of private goods and services, the private sector will be expected to play an increased role in the provision of public services that can be provided within a competitive framework. This reorientation of the Government's role entails a major agenda of policy reform and institutional restructuring.

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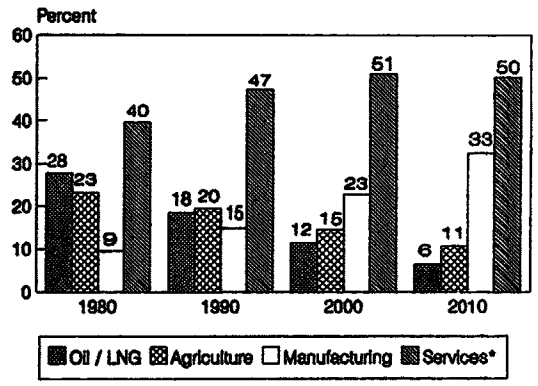
[7] *World Development Report 1991: The Challenge of Development*, World Bank, Oxford University Press, June 1991, pp. 45-46 and 98-100. On the lessons of East Asian experience with productivity growth, see *Government Policies and Productivity Growth: Is East Asia an Exception*, Vinod Thomas and Yan Wang, mimeo., World Bank, 1992.

[8] "We must [use] heightened national efficiency and productivity as the primary basis of our economic growth, for today and in the future. ...A resilient economy is one that consists of resilient industries, namely those which rely on high productivity and efficiency..." President Soeharto, op. cit.

1.26 The continuing ***decline in the role of oil*** is reflected in the prospect that Indonesia would likely become a net oil importer within this decade and the sector's share in GDP would drop to about 6% by the year 2010, compared to 18% in 1990 and 28% in 1980 (Figure 1.6). By the end of the Second Long-Term Development Program, oil may play only a minor role in the Indonesian economy. These prospects underscore the case for continuing to strengthen the non-oil sources of growth, exports and fiscal revenues. For example, non-oil exports would likely need to generate about 85% of total export earnings in 2000.

Figure 1.6: Changing Economic Structure
(GDP shares, at 1983 constant prices)



* Including construction and infrastructure services.

1.27 Growth in non-oil exports, as well as the momentum of overall growth in the economy, will depend heavily on the continued dynamism of ***non-oil manufacturing***. Maintaining a non-oil manufacturing growth rate of around 10% p.a. would be important, and appears feasible provided efforts to improve the environment for efficient private sector development are sustained. At this rate, the share of non-oil manufacturing in GDP could rise from around 16% currently to 23% by 2000. The sector's share would be expected to rise further to around 33% by 2010 (Figure 1.6). The critical role of the sector in export growth is indicated by the expected increase in the share of manufactures in total exports, to about 65% by 2000 from 45% recently. Given the fiercely competitive export markets for manufactures, this again underscores the importance of promoting efficiency and productivity in industrial growth. The likely increase in the share of non-oil manufacturing in total employment will be slower (from about 10% currently to 13% by 2000), but would still make an important contribution to absorbing new entrants into the labor force and raising the average labor productivity in the economy.

1.28 In contrast, the share of ***agriculture*** in GDP would be expected to continue to decline, from about 20% in 1990 to 15% by 2000 and further to 11% by 2010. Nonetheless, the sector will continue to play a vital role in the economy, as the main source of employment (still providing about 50% of the jobs in 2000 and 40% in 2010) as well as the producer of critical wage goods, industrial raw materials and commodity exports. Also, given supportive policies, agricultural growth, while slowing, could still average 3% p.a. during 1990-2010, exceeding population growth and thereby continuing to contribute to raising living standards and reducing poverty. In ***services***, a moderate increase in the sector's share in GDP and employment is likely (Figure 1.6). Spurred by deregulation, financial services have grown rapidly in recent years. In coming years, infrastructure-related services and tourism are the likely major sources of growth. Sustaining robust industrial growth and dismantling regulatory barriers would be key to the prospects for expansion and productivity gains in services, and would allow the sector as a whole to grow by around 7% p.a.

1.29 ***Intra-sectoral shifts*** will be an equally important dimension of the likely development transitions. In manufacturing, the share of basic processing activities is expected to decline gradually while that of more downstream processing and higher value-added activities is expected to increase. A relative decline in the contribution of resource-intensive industries would reflect both the normal evolution of industrialization and moves toward a more sustainable use of natural resources. Labor-intensive industries will remain Indonesia's main area of comparative advantage, as the domestic supply of labor will remain plentiful even though labor force growth is likely to decelerate somewhat later in the decade

as the effects of slower population growth are felt on working-age groups. An outward-oriented strategy is essential to ensure these industries are efficient and generate adequate employment. In agriculture, the share of rice is expected to decline, and those of such other activities as non-rice food crops, livestock and fisheries are expected to increase. Successfully achieving this diversification in agriculture, through policies that allow the sector to respond flexibility to evolving needs, will be important to sustained growth in the sector and to continued progress on poverty alleviation and regional development.

1.30 These inter- and intra-sectoral structural shifts are fundamentally similar to those experienced by both the developed countries and the rapidly industrializing economies of East Asia at corresponding stages of their economic evolution. International experience shows they are achievable, but it also shows they are not automatic; the difference between success and failure has been the sustained implementation of a strategy conducive to development, such as the one that has brought Indonesia to its present threshold of opportunity.

Equity through Wider Participation

1.31 The promotion of an equitable pattern of economic growth has been a major goal of the Government.[9] In pursuing this goal in the years ahead, the Government will face three main, related challenges:

- continuing to reduce and, in the long run, largely eliminate poverty;
- ensuring widespread regional participation in development; and
- promoting broad-based private sector growth.

1.32 Progress in reducing *poverty* over the past two decades has been impressive, but major challenges remain. About 27 million people, 15% of the population, remain below the poverty line, with many millions more of "near poor" with incomes just above that level. In addition to the large number of the remaining poor, the nature of the challenge to reduce poverty is likely to change. As poverty declines, further reductions in poverty tend to become increasingly difficult as a progressively larger proportion of the remaining poor are likely to be those who are harder to reach through a general growth of incomes and services, such as people in resource poor or remote areas. A reflection of this is the uneven geographical pattern of the incidence of poverty in Indonesia; it remains high in the Eastern Islands and parts of Java. The incidence of poverty ranged from 45.6% in East Nusa Tenggara to 1.3% in DKI Jakarta in 1990. Within Java, the incidence of poverty is lower than in most of the Eastern Islands, but there remain large pockets of poverty, with the result that, in absolute terms, the majority of the poor still live in Java. The centerpiece of the strategy to reduce poverty will remain the promotion of a pattern of growth that expands opportunities for the productive use of the poor's most abundant asset—labor—and the widespread provision of basic social services—education and health—that enhance the poor's capacity to grasp those opportunities. However, finding ways to target these interventions to reach the disadvantaged groups and backward areas will be increasingly important. Accordingly, accurate identification of where the poor are located, and proper design of the targeted interventions (such as subsidized basic education and health for the poor), will have an increasingly important bearing on the efficiency and effectiveness of poverty alleviation programs.

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[9] "From the very onset we realized that equitable distribution without growth will only mean sharing poverty. Growth without equitable distribution means sharing injustice." President Soeharto, 1991/92 Budget Speech.

1.33 Provided Indonesia can sustain the pace and pattern of growth of output and employment discussed in the previous section, and complement it with specific policies and programs effectively targeted at the needs and location of the poor, it can look forward to continued robust progress in reducing poverty. It can realistically set itself the targets of reducing poverty (as currently defined) below 10% by the year 2000 and largely eliminating poverty, except for a small hard core of the poor with particular disadvantages, by the end of the Second Long-Term Development Program.

1.34 Related to the reduction of regional disparities in the incidence of poverty is the broader objective of promoting more ***balanced regional development***. Regional income disparities have shown a tendency to narrow, but they remain large. The development potential and options vary considerably across the regions, reflecting wide regional differences in resource endowments and the level of past development. More research is needed to identify what specific development options hold the most promise in different lower income regions, in the Eastern Islands as well as in Java. However, in broad, strategic terms, three important elements of the challenge to bolster the development of these regions can be distinguished:

- In areas where the resource base provides good potential for agricultural development, the provision of agricultural services tailored to the specific regional needs would be important. The strategy of rice-led agricultural development, which has played a major role in reducing poverty and raising incomes in Java, is less relevant off-Java where the resource base for such development is lacking (and also in similar parts within Java, such as the uplands in Central and East Java and the coastal areas in North Java). However, good opportunities for non-rice agricultural development—in non-rice food crops, tree crops, fisheries, livestock and forestry—exist in some of these areas. The development of agricultural support services, e.g., extension, hitherto focused primarily on rice, needs to be oriented more toward such opportunities in these areas. In exploiting these opportunities, there is a need to devise approaches that do not deplete the fragile resource base and that promote linkages with the local economies rather than result in enclaves.

- In areas where the natural resource base precludes significant agricultural growth, the emphasis needs to be on exploring and developing viable non-agricultural activities, such as light manufacturing, marketing and other services. To the extent such activities could be developed in rural areas, it would help reduce the incentive to migrate and add to urban congestion. Where potential for viable non-agricultural rural activities exists, adequate provision of rural infrastructure, such as transport and power, and access to credit acquire particular importance. The development of both non-rice agricultural activities and rural non-agricultural activities should not be inhibited by regulatory restrictions on cropping patterns and land use.

- In areas of very limited productive potential, the primary emphasis needs to be on improving the population's access to quality human resource development services. In addition to raising the local people's present welfare, this would enhance their capacity to find alternative income-earning opportunities, including through migration to other areas of greater productive potential.

1.35 Both poverty reduction and the broader objective of narrowing regional income disparities would benefit from fuller participation of women in development, for which women's access to adequate education, health and family planning services is critically important. These objectives would also benefit from wider participation of local institutions and communities, including project beneficiaries, in the

planning and implementation of development. Building more constructive partnerships with local representatives would help tailor development programs and projects better to local needs, opportunities and constraints.

1.36 A third challenge is to promote ***wider participation in the growth of the modern private sector***. Besides equity, broad participation, by large and small firms, is conducive to the efficiency, diversity and robustness of private sector development. The key to addressing the concerns arising from the dominance of conglomerates in industry lies in pressing ahead with Government regulatory reforms to expose businesses to greater domestic and external competition, and dismantle the sources of monopoly protection and rent seeking that remain. To establish a level playing field so that businesses face the same kinds of competitive pressures and opportunities, underpinning market forces with a stronger and transparent commercial legal framework and prudential regulation of the financial sector are equally important.

Protecting the Environment

1.37 Sustainable growth will depend on efficient use and conservation of Indonesia's natural resources, including preventing pollution from destroying those resources. Essential to sustained growth, environmental protection is closely linked to the qualitative and structural shifts in the economy discussed above. Through such shifts, the structure and sources of growth need to change, to use resources, especially non-renewable resources, less intensively and to generate less pollution. An increasingly flexible, resilient and efficient private sector is essential for such shifts to occur with minimum loss to the pace of growth. Policies that reduce the pressure of population growth will also mean that a given standard of living can be achieved with the use of fewer resources and less pollution. The effects of population pressures on people's lives and on the environment will become increasingly stark on marginal lands, on the edges of forests and in urban slums.

1.38 Sustainable use of natural resources is particularly important to Indonesia's development prospects given the major role these resources play in the economy: direct extraction and primary processing account for about 40% of GDP; and the primary sectors generate about 60% of export earnings and 50% of employment. Sustained growth requires carefully managing the ***environment as a source*** of these resources. Key issues concern:

- increasing scarcity and deteriorating quality of water supply, especially in Java; and
- deforestation, land degradation and loss of biodiversity, mainly in the outer islands.

1.39 In addition to utilizing the resource base, future growth will lead to increased urbanization and industrialization. As noted earlier, the share of manufacturing in GDP could double over the next two decades, rising to 33% by 2010. Urban population has been growing at 5% p.a. From only 15% of total population in 1970, the urban population has already reached 30% and, by the end of the Second Long-Term Development Program, half of the population may reside in urban areas. Cities on Java will need to cope with 1.5 million new residents each year. Some of this growth will come from reclassifying densely populated rural areas as urban, but it will still lead to increasingly complicated problems of urban environmental management. Rising pollution and congestion intensify the need to ensure sustainable use of the capacity of the ***environment as a sink*** for urban and industrial wastes. Major issues include:

- in industry: control of air and water pollution and hazardous waste disposal, particularly on the north coast of Java; and
- in cities: better sanitation and solid waste disposal, and lower air pollution and congestion.

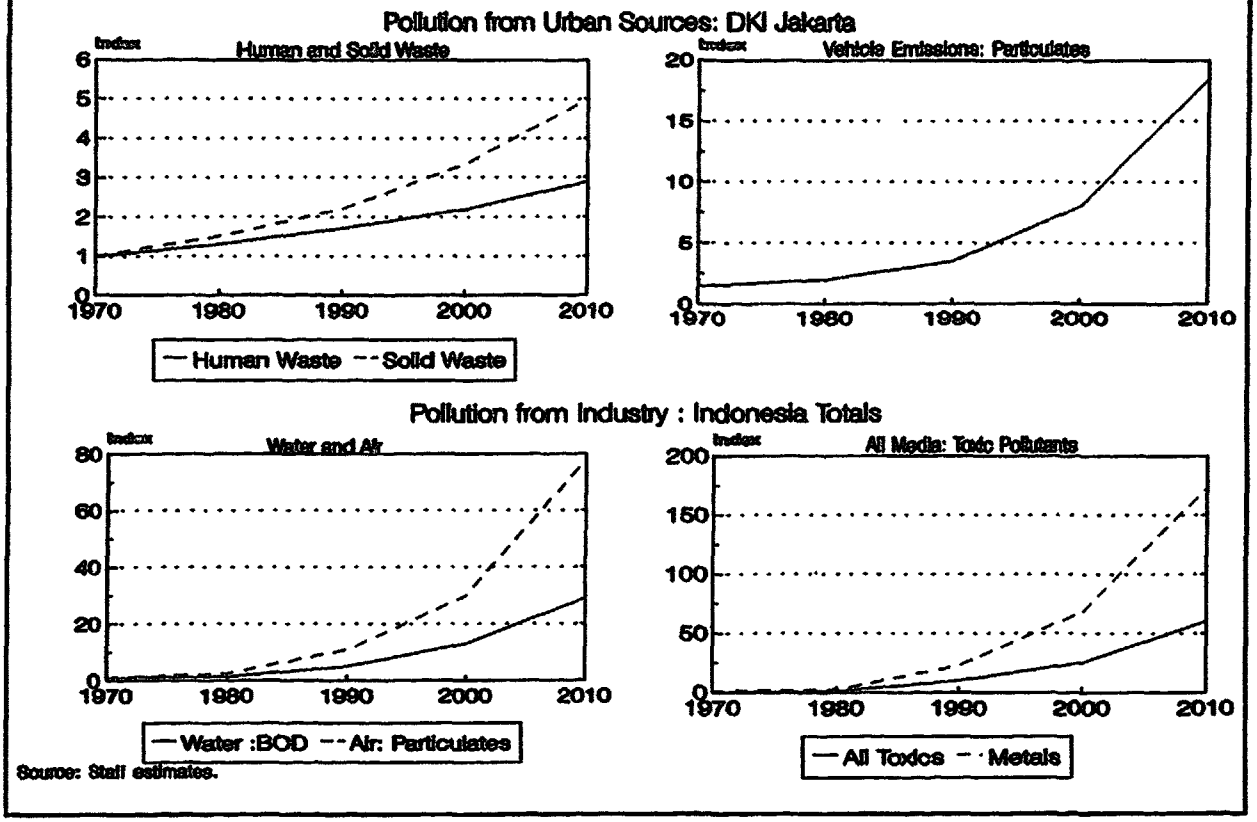
1.40 **Water, Forests, Land and Biodiversity.** Increasing and often conflicting demands on ***water*** resources on Java from agriculture, industry and sanitation have limited the availability of water and degraded its quality. The major demand is for irrigation, where supply and demand need to be brought into a more efficient balance by developing viable pricing schemes. In dense urban areas, high rates of ground water extraction have already exceeded natural replenishment, leading to salt water intrusion. In Jakarta, for example, water pumped from the ground each year is estimated to be almost three times the sustainable level. With this imbalance, salt water intrusion is advancing 0.5-1 kilometer per year. As with irrigation water, environmentally sound urban water use will require improved pricing.

1.41 Sustainable cuts from Indonesia's tropical ***forest*** are estimated at 22 mcm per year, but harvests are currently running at over 33 mcm per year. Logging, in combination with conversion for agricultural use and forest fires, claims 1.1 million ha. of forest each year, roughly 1% of Indonesia's forests. Forests are a major source of exports and livelihood and are important to the quality of the environment. While steps are being taken, developing and implementing an effective policy and institutional framework for sustainable management of forests will be a key challenge. Sustainable forest management is also central to the prevention of ***land*** degradation and loss of Indonesia's rich ***biodiversity***.

1.42 **Urban and Industrial Pollution.** In the urban environment, the Government is struggling with the burden of household and industrial wastes, both major sources of pollution, and both sources that will expand substantially as growth (especially industrial growth) continues apace (Figure 1.7). Lack of adequate sewerage treatment leads to contaminated rivers and ground water. In a recent survey in Jakarta, 93% of shallow wells, the dominant form of residential water supply, were found to be contaminated with human waste; tap water samples revealed a 21% rate of contamination, and hydrant samples 58%. About 75% of the biological oxygen demand (BOD) in Jakarta's rivers comes from household waste, with another 15% coming from industry. Industrial BOD loads have increased one and a half times since 1980, and are projected to do so again before 2000, and increase 10-fold by 2020. In 76addition, industrial growth is raising concentrations of toxic chemicals and heavy metals in water. Increased urban households and firms are also generating growing amounts of solid waste, 5-6% more each year. Collection and disposal are inadequate, with as much as 40% of solid waste dumped illegally, often into rivers and canals. The largest cities are also suffering from increasing problems of air pollution. Vehicle emissions are the largest single factor in urban air pollution, and are also likely to be the fastest growing source (Figure 1.7). Already in Jakarta, particulates, lead and other airborne pollutants have reached levels that harm health. Air pollution from industrial sources is becoming an increasingly serious problem in many areas of the country. Even with a decline in the pollution-intensity of industrial output, total industrial air pollution loads will increase considerably: an estimated 13-fold increase in sulphur dioxide by 2020, a 15-fold increase in suspended particulates and a 19-fold increase in the emissions of bio-accumulative metals.

1.43 Air and water pollution from household and industrial sources imposes significant costs on the economy and human welfare. Air pollution in Jakarta alone costs between $200-$500 million per year in reduced human health. The costs of fatal diarrhea contracted from polluted water are $100-300 million per year, leave alone the costs from less serious diarrhea or other diseases. Water pollution also imposes significant costs in terms of destruction of aquatic ecosystems. As urban pollution and congestion rise, they act as an increasingly important deterrent to economic activity, as the experience of several cities (e.g., Bangkok) demonstrates. Containment of such environmental degradation is thus important both on grounds of health and sustainability of economic growth in urban and industrial centers.

Figure 1.7: Environmental Challenges: Urban and Industrial Pollution



The Challenge of Integration

1.44 Effectively integrating the growth, equity and environmental objectives discussed above is the crux of the challenge of achieving sustained development. The main elements of the policy agenda to meet this challenge are discussed in the next section. Successful integration of growth, equity and environmental protection requires that three key principles guide this effort. These are:

- adopting and maintaining a ***long-term focus***;
- taking maximum advantage of the ***complementarities*** that exist between growth, equity and environmental protection; and
- dealing effectively and efficiently with the ***trade-offs***.

1.45 A long-term vision is central to the issues of sustainability of development. It facilitates a clearer recognition of the consequences—costs and benefits—of policies down the road. It helps bring out the complementarity of objectives that might appear to be in conflict in the short run (e.g., growth and equity), and shows the unsustainability of policies that might not be evident with a shorter horizon (e.g., distortions encouraging wasteful resource use). There is considerable scope for policies that simultaneously promote income growth, improve equity and protect the environment. Examples of such

policies are: appropriate pricing of resources; clarifying property rights and resource ownership, and strengthening the legal framework supporting the functioning of markets; and improving access to, and the quality of, human resource development services (Box 1.2). The discussion above emphasized efficiency and quality as major underpinnings of future growth; these are also necessary for sustainable improvements in equity and better environmental management. In general, policies that allow markets to work efficiently also make them more equitable and environmentally friendlier.

Box 1.2: Adjusting Fuel Prices: An Example of "Win-Win-Win" Policies

In a landmark decision announced by President Soeharto in his 1993/94 Budget Speech, the Government substantially raised domestic fuel prices with the aim of eliminating budgetary subsidies for all fuel products, except for a reduced and temporary kerosene subsidy. The President asserted the important principle that "we have to treat energy as an ordinary commodity with the going price at the international market". Retail prices for diesel, fuel oil and aviation fuels were raised to their world market levels, while the implicit tax on gasoline was raised to 66% to cross-subsidize the remaining 33% subsidy on kerosene. The overall price adjustment averaged 24%. The estimated fiscal impact of these price increases is large: revenues from domestic sales will increase by about Rp.3 trillion (1.1% of GDP) in 1993/94, switching an estimated budgetary fuel subsidy of about Rp.1 trillion (at the assumed world oil price of $18/bbl.) to a surplus of about Rp.2 trillion. This adjustment provides a powerful example of policies that simultaneously contribute to growth, equity and environmental protection.

Growth. Adjusting fuel prices by eliminating subsidies will improve the efficiency of use of fuel products and encourage substitution by economically cheaper fuels. It will ease macroeconomic constraints on higher economic growth. Higher prices will help to slow the rapid growth in domestic consumption, maintain Indonesia's exportable oil surplus longer, and reduce pressures on the current account balance. At the same time, eliminating fuel subsidies will improve the fiscal balance, mobilizing additional public savings needed to finance public investments in infrastructure and human resources to support sustained private sector growth.

Equity. Eliminating fuel subsidies will support better targeting of public expenditures to help the poor. Just eliminating the large automotive diesel subsidy, which did not benefit the poor directly, will save about Rp.1.3 trillion in 1993/94. Reallocating these resources to strongly pro-poor programs, such as primary education, health centers and health subcenters, could dramatically raise their quality and coverage. Recurrent public expenditure on these programs amounted to only Rp.1,800 billion, Rp.190 billion and Rp.55 billion, respectively, in 1990/91. Going one step further to eliminate the remaining kerosene subsidy, only 8% of which benefits the poorest 20% of the population, would release additional resources, about Rp.0.7 trillion, that could be reallocated to better targeted programs. Moreover, the adverse welfare impact on the poor of raising the price of kerosene could be largely offset by deregulating trade in sugar, which the poorest 20% of the population spend more on than on kerosene (3.3% compared to 2.5% of consumption expenditure). Import controls raise the domestic sugar price by about 40% above the world market price; eliminating import controls could reduce the price by about 30%.

Environment. The environment would benefit from more efficient use of petroleum products, a non-renewable resource, as well as substitution by less polluting alternatives, such as natural gas (in industry and transport), central station power generation (instead of diesel-based captive power generation) and LPG (in household and industrial uses).

1.46 While such "win-win-win" policies are extremely important, and must be exploited fully, they alone are not enough to harmonize growth with equity and the environment. Specific policies are also needed to deal with the trade-offs or negative links that exist between economic activity and the environment, such as industrial production and pollution, and to address aspects of equity that growth alone might not, such as attacking hard-to-reach pockets of poverty. Appropriate choice, design and targeting of policies, working as much as possible with the grain of the market rather than against it, are important both to dealing with these problems effectively and to keeping the costs of these interventions to a minimum.

D. Toward an Integrated Agenda for Sustained Development

1.47 As reviewed in the preceding sections, Indonesia's rapid economic progress over the past two decades has laid the foundations for substantial further advances in development, including the prospect of the country reaching middle income status within this decade. With the new opportunities opened up by past progress, however, have come new challenges, including continuing structural shifts in the economy and a new generation of issues in the efficiency, equity and sustainability of development. Maintaining the momentum of progress will depend on how effectively these challenges are met. Of fundamental importance is the need for the economy to be flexible and adaptable, able to respond to change.

1.48 The agenda for sustaining development is wide ranging. The 1991 World Development Report[10] highlighted four key elements of the development agenda: a stable macroeconomic foundation; a competitive climate for enterprise; investment in human and physical infrastructure; and institutional development. Drawing on these themes, the discussion of Indonesia's agenda for sustained development in this Report is organized under four broad headings: macroeconomic management; incentives; investment; and institutions. These themes provide a useful, overarching framework for integrating the agenda for growth, equity and environmental protection. The main elements of this agenda outlined below are developed more fully in the chapters that follow.

Macroeconomic Management

1.49 Macroeconomic stability is an essential foundation for sustained growth. Realizing Indonesia's growth objectives will require higher investment but, given the need to reduce the external debt burden, also higher savings to finance it. Macroeconomic stability fosters a climate conducive to both investment and savings. It promotes competitiveness, by providing a solid foundation for pressing ahead with structural reforms that raise productivity and by holding down inflation, thus helping to maintain the critically important non-oil export growth. At the same time, by providing a setting conducive to a sustained growth of incomes and to efficient decision-making (through a clearer transmission of market signals), it underpins efforts to reduce poverty and protect the environment.

The macroeconomic policy agenda has three broad, related elements:

- following ***balanced, coordinated fiscal, monetary and exchange rate policies*** to manage aggregate demand, mobilize domestic resources and support external competitiveness;

[10] *World Development Report 1991*, op. cit., pp. 6-11.

- maintaining a ***prudent approach to external financing*** and ***improving external risk and debt management***; and

- improving the ***capacity to monitor economic trends*** and ***developing the indirect policy instruments*** needed for macroeconomic management in an increasingly deregulated, private-sector-led economy.

1.50 The stabilization measures taken by the Government to cool down an overheated economy are bearing results, as reflected in a declining current account deficit and inflation in 1992/93. The principal task for macroeconomic management is to keep the current account deficit on a downward path to achieve a more sustainable level of around 2% of GNP in the medium term (from an estimated 2.4% in 1992/93), while supporting economic growth at a rate that continues to generate sufficient employment for the growing labor force at rising levels of productivity. Charting this narrow course between adequate growth and maintenance of financial stability will call for a balanced, coordinated use of fiscal, monetary and exchange rate policies. The burden of restraining domestic demand has been borne primarily by monetary policy. A firmer fiscal stance would produce a better policy balance, helping to lower the current high real interest rates and allowing higher private investment without risking a rekindling of domestic demand pressures. A fiscal stance consistent with both a sustainable external balance and continued robust growth in private investment, while adequately providing for complementary public investments, is the key to macroeconomic management for growth with stability.

1.51 Reconciling the roles of fiscal policy in supporting stabilization and promoting growth requires increasing public savings and allocating them to priority investments, while generating a fiscal balance consistent with the overall macroeconomic policy framework. This, in turn, calls for: mobilizing more public revenues, emphasizing efficiency-enhancing improvements in cost recovery and better tax administration; restraining growth in government current spending, by reducing subsidies, such as on fertilizer, and containing personnel spending; guiding public investment allocations by a sound set of priorities; and improving the financial performance of public enterprises. Private savings need to rise too. Sustaining strong economic growth, maintaining a stable financial environment, fostering financial deepening, and promoting profitable, widespread investment opportunities through continued improvements in the incentives regime, as outlined in the next section, should contribute to higher private savings, by household and firms. A lower dependency ratio resulting from demographic shifts should also help boost savings.

1.52 The high level of external indebtedness underscores the need for a cautious approach to external borrowing. Both to guide the overall level of borrowing, to ensure it stays within sustainable limits, and to help diversify the sources and types of borrowing to obtain the best possible terms as the role of private capital in Indonesia's external financing increases, call for further developing the institutional framework for managing external debt and formulating policies and advice on access to international financial markets. Greater attention will also need to be given to the use of financial instruments in managing external risks. The most important external risk insurance mechanism, however, remains the continued diversification of Indonesia's exports. Much potential exists for attracting larger flows of foreign direct investment; tapping it would depend on maintaining a stable macroeconomic environment and further improving the investment climate.

1.53 With the progressive dismantling of direct economic controls, such as interest and credit restrictions, and investment and import barriers, macroeconomic management needs to rely increasingly on indirect mechanisms. Also, deregulation has caused changes in relationships among economic variables, e.g., among monetary aggregates as a result of financial sector reforms, and the role of private

capital flows has increased. These developments have two important implications for the conduct of macroeconomic policy. First, continuous and improved economic monitoring will be necessary, to enable macroeconomic management to respond promptly to changing conditions. The recent overheating of the economy illustrates how quickly demand pressures can develop. The timeliness, reliability and analysis of economic data will need to improve to support vigilant, responsive macroeconomic management. Second, the indirect mechanisms for influencing economic behavior will need to be developed further. Examples include: deepening and broadening the market for monetary instruments for more effective open market operations; and using improved mechanisms for review of public enterprise investment programs, and prudential measures promoting financial discipline in banks and firms, to influence their external borrowing in place of directly administered borrowing ceilings.

Incentives

1.54 Bolstering incentives to raise efficiency and productivity will be fundamental to sustaining the dynamism of the economy and maintaining the momentum of the private sector. Indonesia's outward-oriented development strategy and the increasingly tougher international business climate place a premium on policies that enhance competition. Through its structural reform program, Indonesia has taken major strides in improving the incentives regime, but this effort needs to be sustained and extended to respond to emerging new challenges. The focus of this effort is ***markets***, and its central thrust is to increase ***competition***, both from abroad and within the domestic economy. The future agenda comprises three broad elements:

- removing regulatory barriers to ***stronger competition in the product markets***;
- developing ***more flexible, efficient factor markets***; and
- supporting ***better market outcomes***, by improving market infrastructure (transparent "rules of the game" contributing to a level playing field for large *and* small firms) and strengthening incentives for environmentally sound growth.

1.55 Further reductions in trade barriers will be a key source of increased competition and productivity. Despite substantial trade policy reform, many activities, in both industry and agriculture, remain shielded from external competition by non-tariff barriers (NTBs) and high tariff walls, contributing to a high-cost economy and biasing incentives against exports. While declining, Indonesia's production coverage of NTBs (about 30% in both manufacturing and agriculture) and effective rates of protection (an effective rate of protection of 52% in manufacturing) remain appreciably higher than those in its East Asian neighbors. Activities with particularly high protection include food crops, food processing, paper products and engineering industries. Priorities in trade reform include: accelerating the elimination of NTBs; reducing tariffs so that few lie above 20% and simplifying the tariff structure; and reducing export restrictions, especially on forestry products (coupled with an increase in forestry fees) to support more efficient and sustainable use of forest resources. Deregulation should be applied with equal vigor to domestic trade, by dismantling trading monopolies (such as the clove and citrus trading monopolies and several BULOG—State Logistics Agency—monopolies) and removing barriers to inter-regional trade. Ensuring correct price signals in the economy also calls for reforming domestic pricing policies, including appropriate pricing of public goods (utilities) and freeing the prices of private goods (e.g., sugar, fertilizer and cement) in conjunction with removal of barriers to trade and entry to ensure a competitive environment. While moving utility tariffs toward efficiency levels, their equity goals, where relevant, could be safeguarded through improved targeting.

1.56 Besides "getting prices right", increasing the number of competitors by removing barriers to entry is important to enabling markets to spur efficiency. Restrictions on both domestic and foreign investment have been substantially eased, but there remain areas for further reform, including: shortening the negative investment list; relaxing local content, export and divestment conditions; easing approval requirements for capacity expansion; streamlining a continuing array of regulations at the local level; and improving the actual implementation of reform measures (e.g., in customs). Continuing trade policy reform complemented by investment deregulation would allow Indonesia to benefit more fully from export-oriented foreign direct investment, as well as promote more efficient and broad-based domestic investment. There is scope also for exposing the provision of public goods and services, dominated by public monopolies, to greater competition.

1.57 Flexible factor markets help translate incentives reform into an efficient supply response. Spurred by extensive deregulation in recent years, the banking system has expanded rapidly and become more competitive. The major tasks ahead are to consolidate past growth, strengthen the framework for prudential regulation and supervision, and safeguard the stability of the system which has recently come under strain as the loan portfolio quality has weakened. Increased confidence in the banking system will contribute to lowering the high real interest rates. Related issues are developing viable ways of reducing the concentration of credit and improving credit availability to smaller businesses, and deepening and diversifying the financial and capital markets, including developing the market for equity (there is relatively high leveraging). In the market for land, the cost and complexity of transactions are a major deterrent to business activity, especially foreign direct investment; the underpricing of State land causes inefficient allocation and feeds rent-seeking; and the lack of clear property rights undermines equity and concern for the environment. A market-based system of land allocation needs to be introduced by: sharply reducing and simplifying land regulations; using auctions for allocating State land; and improving and expediting land titling and registration.

1.58 The labor market in Indonesia is relatively flexible and free of distortions, and has facilitated the expansion of labor-absorbing, export-oriented activities in which the country has comparative advantage. The main requirement, discussed in the next section, is to raise skill levels through improved education and training. Skill development is closely related to the development of the technology market. An efficient market for technology will be an increasingly important condition for sustaining the competitiveness of Indonesia's industries and for developing new sources of growth. International experience shows that the development, acquisition and assimilation of technology are best achieved by maintaining an open trade and investment regime, accompanied by emphasis on education and training. In addition to investing in education and training, the Government can contribute to technological advancement by undertaking sound research and development (R&D) activities, which are well-focused and responsive to private sector needs, and by strengthening and coordinating the technological support infrastructure (e.g., standard setting and quality control).

1.59 Clear, enforceable commercial, credit and contract laws, and standards for accounting, auditing and financial disclosure constitute important infrastructure for markets to function efficiently and equitably. The existing gaps in these laws and standards raise the risks and costs of doing business, reduce confidence of foreign and domestic investors, undermine financial discipline, and place smaller enterprises at a disadvantage. Equally important, transparent rules and procedures can limit rent seeking. Providing adequate legal underpinnings for markets is a key function of government. Over the past year or so, the Government has initiated some important efforts in that direction. Priorities include: adopting new company laws, including clear rules on mergers, acquisition and bankruptcy; establishing proper legal requirements for accounting and auditing of company financial records and disclosure of information; instituting modern credit and security laws, incorporating current practices and expanding

the range of permitted securities and thereby broadening the credit possibilities for smaller businesses; and improving credit and security registration and information systems. Together with the dismantling of trade and other sources of monopoly advantage and prudential regulation of bank lending to interlocking business interests, commercial legal reform is important to leveling the playing field for businesses and addressing concerns arising from the concentration of economic power in the hands of a relatively few business groups.

1.60 The framework of incentives to protect the environment also needs systematic improvements. The first priority is for policies that exploit the synergies between good economics and good ecology. Allowing markets to work efficiently is central to these policies. Important examples are eliminating subsidies on natural resources—maintaining economic pricing of fuel, raising water and power charges, correcting policies that result in underpricing of forest resources—and supporting market development, e.g., land titling. Poverty alleviation, education, and dissemination of information on the environment complement the working of the market. Where markets fail because of externalities, policy interventions to change private behavior are necessary. Even here, measures that work through the market—pollution taxes/charges and tradeable permits—are likely to be more effective and cost-efficient. However, regulatory measures, such as effluent/emission and ambient standards for water and air and land-use planning, are also needed. Their design needs to reflect institutional capacities for implementation. As in commerce, clear legal ground rules—laws and sanctions—are important for compliance and enforcement.

Investment

1.61 Achieving Indonesia's development objectives will require sustaining a robust investment effort, including increases in both private and public investment. Key elements of the investment agenda are:[11]

- raising the ***efficiency and quality of investment***, both private and public;
- fostering complementarity in private and public investment, focusing the latter on ***infrastructure and human resource development***;
- better targeting expenditures on ***poverty alleviation***; and
- adequately reflecting emerging ***environmental concerns*** in investment policies and programs.

1.62 While the investment rate will need to rise (para. 1.20), an equally important challenge will be to raise the efficiency and quality of investment. The latter is essential both to improve the competitiveness of the economy and to ensure that prospective investment requirements could be met within available resources. Enhancing the productivity of private investment will require further reforms of the incentives regime, to provide a more outward-oriented and competitive market environment, as discussed above. International experience shows that economic rates of return on investment projects are

[11] In addition to capital investment, the discussion here encompasses issues relating to recurrent expenditure that is developmental in nature, such as recurrent expenditure on human resource development and expenditure on operation and maintenance of existing investments.

higher in markets that are less distorted.[12] By promoting higher profitability and guiding resources to more viable activities, market reforms support not only more efficient but also higher and more sustainable private investment. Raising the efficiency of public investment will require continued progress on several fronts: basing public pricing policies on economic costs (important to both the efficiency of investment and cost recovery); providing adequately for effective operation and maintenance of existing investments; where feasible, exposing public investment to competition from the private sector; promoting systematic evaluation of project proposals; and implementing institutional reforms to enhance project planning and management capacities of investment agencies, bolster incentives for improved public enterprise performance, and decentralize responsibilities that are more efficiently performed at the local level.

1.63 The private sector will need to provide the bulk of investment in directly productive activities. Consistent with this, the public sector would be expected progressively to reduce its role in these activities, through limiting fresh investment and through divestiture. The private sector is expected to play an increased role also in the provision of public services. Its role in providing social services is already substantial, but there are possibilities for increased participation in both existing and new areas, e.g., vocational, including employer-based, training, and health insurance. The public sector will remain the dominant provider of physical infrastructure, but increased private participation could contribute to raising efficiency, by introducing competition, and to alleviating pressures on public institutional and financial capacities. Infrastructure services are often near natural monopolies and the policy and institutional framework for private participation will need to be carefully designed to generate competitive pressures and protect the public interest. The scope for private participation is largest for those services that can be provided in a competitive market setting, such as transport and power generation. Given a sound, supportive framework, the private sector's share in total investment in physical infrastructure could rise to about one-third in REPELITA VI, from around 15% in REPELITA IV.

1.64 While the share of the private sector in total investment is likely to continue to increase, public investment will remain important. Complementing private investment, the priorities for public investment are infrastructure and human resource development, areas well-suited for public investment because of their public good nature and important positive externalities. Increasing national and international evidence supports the complementarity of public infrastructure investment with private investment and overall growth.[13] Infrastructure provision is an important element of government role in providing an enabling environment for private enterprise; public infrastructure shortages force private firms to resort to higher cost alternatives, for example, captive power generation, and can deter growth, especially of small businesses. Supporting human resource development is an equally, if not an even more, important role of government. Recent years have seen a spate of studies bringing out the

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[12] *World Development Report 1991*, op. cit., pp. 82-84.

[13] Among recent studies, see, for example, *Infrastructure Sector Policy Review*, World Bank, Urban Development Division, December 1992 (Working Draft), and *Fiscal Policy and Economic Growth: An Empirical Investigation*, William Easterly and Sergio Rebelo, paper presented at World Bank Conference on "How Do National Policies Affect Long-Run Growth", Washington D.C., February 1993.

importance of human resource development to increasing productivity and growth and alleviating poverty, and providing evidence of very high rates of return on investing in people.[14]

1.65 Already accorded priority by the Government, the further shift in public resource allocation toward infrastructure and human resource development in recent years is in order, and needs to be maintained, raising the share of these sectors in total public investment from around 70% in REPELITA IV to around 85% in REPELITA VI. Physical infrastructure (power, transport, telecommunications, and water and sanitation) will likely claim more than one-half of total public investment during REPELITA VI. With existing facilities coming under strong pressure from rapid economic growth, expanding infrastructure capacity, and improving the quality and reliability of services, are important to maintaining the dynamism of the private sector. Power sector investment will command an especially high priority. In human resource development (education, health, nutrition and family planning), which will likely claim close to one-third of total public investment during REPELITA VI, expenditure priorities will be shaped by an increasing shift in emphasis from service expansion to improving service quality and by the changing needs associated with the demographic transition (e.g., change in age structure). Basic education and health will remain the major focus of public expenditure, but incremental resources will need to be directed primarily to quality enhancing measures, such as better teaching materials and teacher training, and adequate and better quality health staff and medical supplies. The emphasis at higher levels of education, and in vocational training, will also need to be on raising quality. Effectively responding to the country's evolving, and differentiated, human resource development needs will require improvements in service design and means of delivery, as well as varying the public-private mix for different services.

1.66 Improving the poor's access to quality education and health services will be central to further poverty reduction. These services address directly some of the worst consequences of being poor, but they also attack some of the most important causes of poverty. While the poor's access has increased, much remains to be done to make the poor benefit more effectively from public expenditures on these services. Public subsidy on education and health per capita accruing to the richest quintile of the population was recently estimated to be more than twice as large as that accruing to the poorest.[15] Better targeting public education and health expenditures on the poor calls for: more accurately identifying where the poor are located; shifting expenditures more toward pro-poor programs, such as primary education and public health centers/subcenters; increasing utilization by the poor of public programs where it is low, such as in junior secondary education, while inducing the better-off to shift to privately provided services, such as in hospital care; and reducing service charges for the poor, and financing these reductions from improved cost recovery from the better-off.

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[14] See, for example, *World Development Report 1991*, op. cit., Chapter 3, and *International Comparisons of Educational Attainment*, Robert Barro and Jong-wha Lee, paper presented at the World Bank February 1993 Conference, op. cit. The latter underscores the role of education of women, and a passage from it is worth quoting: "Our results about female human capital accord in some respects with the viewpoints of [L. H.] Summers [*Investing in All the People: Educating Women in Developing Countries*, presented at 1992 World Bank Annual Meetings]. He goes quite far, however, and even argues "...the education of girls may well be the highest return investment available in the developing world." It is unclear how to reconcile this conclusion with the findings of [J. B.] de Long and [L. H.] Summers [*How Robust is the Growth-Machinery Nexus*, paper presented at the World Bank February 1993 Conference, op.cit.] ...that investment in machinery is the key element in economic growth. Perhaps the true key is to have educated women working with machines."

[15] *Indonesia: Public Expenditures, Prices and the Poor*, Draft, World Bank, 1993.

1.67 Effective human resource development, including family planning, and poverty alleviation programs will contribute to better environmental outcomes. However, expenditures on more directly environment-related programs will also need to rise. For public investment, the priorities will be: improved urban water supply, sanitation and solid waste disposal services; improved quality of public urban transport (to reduce congestion and emissions from private vehicles); and protection of forests. Improved cost recovery from public services, e.g., from water and sanitation charges, and increasing public rent capture in forestry can pay for much of the incremental public investment that is needed. The costs of investments in urban and industrial pollution abatement will be borne primarily by the private sector, following the "polluter-pays" principle. The incremental costs of environment-related public and private investments are sizable, but amount to a relatively small proportion of total investment, and are modest in comparison with the benefits of these investments in terms of improved efficiency, growth and human welfare. Prevention is cheaper than cure; carefully evaluating the environmental implications of public projects, though the EIA process, and adopting cleaner technologies for new private investments will avoid larger expenditures later to tackle environmental degradation.

Institutions

1.68 Stronger institutions will make the policy reforms and investments outlined above more effective. Similar policies have been found to produce different results across countries, and a major part of the explanation lies in the variation in respective institutional capabilities.[16] The foregoing discussion highlighted major strategic and structural shifts underway in the economy, such as the dismantling of regulatory controls, the increasing role and capacities of the private sector, and the shift toward more decentralized decision-making and greater local participation. Together with the evolving challenges in maintaining robust, equitable growth, new challenges are emerging, notably in environmental management. An important determinant of the sustainability of development would be the responsiveness of the country's institutional framework to these changes and challenges. Adapting to, and managing, this process of change entails profound implications for institutional roles and capacities.

1.69 The institutional development agenda encompasses both market and public institutions. It comprises three fundamental thrusts:

- strengthening the ***institutional underpinnings of markets*** to support efficient and broad-based private sector development;
- adapting and developing public institutions, focusing their capacities on ***efficient and equitable provision of public services***; and
- developing the ***institutional framework for improved environmental management.***

Specific issues of institutional reform and capacity building, supporting a strategy of a stronger orientation toward the market and a more focused, efficient public sector, are many and relatively complex. The main areas and directions of reform are outlined below.

1.70 A competitive incentives regime works best when reinforced by an institutional framework that provides the rules and information needed for efficient markets. Two critically important, and related, institutional underpinnings of markets are a well-functioning legal system, to provide a

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[16] *Restructuring Economies in Distress*, Vinod Thomas, Ajay Chhibber, Mansoor Dailami and Jaime de Melo, New York, Oxford University Press, 1991.

predictable and fair environment for business, and a sound accounting and auditing system, to support financial discipline. The need for clear, modern commercial laws and accounting and auditing standards was noted earlier (para. 1.59), but these laws and standards would be of relatively little practical value without adequate means for their implementation and enforcement. Key requirements are: strengthening the court system, including the establishment of specialized commercial courts and the development of arbitration mechanisms; upgrading the training of legal officials, accountants and auditors, and supporting the development of their professional bodies; and widely and systematically disseminating information on laws. Other important tasks in strengthening the institutional underpinnings for private enterprise include: developing the capacities of regulatory institutions in financial (including capital) and land markets; ensuring efficient customs operations; and making key support services for small enterprise development—in industry and agriculture—more efficient and responsive to changing needs.

1.71 Focusing public capacities on the provision of a policy and institutional framework for sound private enterprise, and on efficient and effective service delivery will require major adaptations and improvements in ***public sector management***:

- ***Public enterprise reform*** needs to be accelerated, proceeding on the twin tracks of: further commercialization of enterprises producing public goods and services that need to remain in the public domain; and gradual divestiture of enterprises engaged in the production of private goods and services. Policies to improve the performance of enterprises remaining public need to focus on exposing them to greater competition and increasing their operational and financial autonomy within a framework of improved accountability and financial discipline. Transparent mechanisms need to be employed to ensure that divestiture occurs efficiently, protects the public interest and allows broad private participation.

- Past and prospective deregulation implies the elimination of many routine government administrative, control and licensing functions, and an increasing focus on policy analysis, promotion, monitoring and coordinating functions. Reassessing and realigning ***government administrative structures*** and the size, deployment, skill-mix and incentives of the ***civil service*** to perform the changing functions of government are an essential complement to these economic reforms. One major implication is the need to move toward a leaner but more professional and technically skilled civil service, with better compensation linked to higher productivity.

- An important dimension of the reform of government administrative structure is ***decentralization***. Appropriately devolving responsibilities to lower-level governments can contribute to more efficient and equitable delivery of public services by tapping local initiative, better matching expenditures with local needs, allowing more effective targeting of poverty alleviation programs, and fostering accountability. It also helps reduce the burden on central capacities. These considerations are especially relevant in a large and diverse country such as Indonesia, and become increasingly important as the economy expands. Mobilizing more local revenues, thereby reducing the current heavy local dependence on central transfers, and building local institutional capacities will be essential for successful decentralization.

1.72 Developing the institutional framework and capacities is a crucial part of the agenda to improve ***environmental management***. While a policy and regulatory framework has been taking shape, there remains a large gap between policy and implementation because of institutional weaknesses. Enhancing institutional capacities for environmental management will require progress on three fronts.

First, the roles of the various agencies involved in environmental management need to be clearly defined and arrangements for inter-agency coordination improved. Important dimensions of this effort include the effective decentralization of relevant responsibilities to the regional level, and improved coordination among central agencies and with their regional counterparts on programs that cut across sectors and regional boundaries, e.g., water resource management. Second, the supply of staff skilled in environmental analysis and management, especially limited at the regional level, will need to be increased. Where appropriate, as in monitoring and inspection, contracting out of services to the private sector can relieve the skills constraint in government agencies. Third, efforts need to continue to involve local communities, project beneficiaries and NGOs more closely. Generally beneficial to the effectiveness of development activities, a more participatory approach is particularly valuable in environmental—and complementary poverty alleviation—programs, many of which require solutions closely tailored to local problems and conditions.

2
THE MACROECONOMIC FOUNDATION

A. Overview

2.1 Indonesia's development over the past 25 years has been based on achieving a trilogy of objectives: growth, stability and equity. This trilogy is very close to the themes of this report. In particular, this chapter discusses macroeconomic policies for sustainable growth. Sustainable growth in Indonesia should be rapid enough to absorb new entrants to the labor force at a rising average standard of living. Sustainable growth should also result in widespread sharing of the benefits of growth, including continued progress in reducing poverty. Sustainable growth should protect the environment so that future generations also benefit from Indonesia's rich endowment of natural resources. Finally, sustainable growth should be financeable; it must be consistent with the constraints Indonesia faces in using foreign savings to finance investment.

2.2 This report discusses policies to secure a sustainable growth path; this chapter focuses on the macroeconomic implications of this path, including measures to realize it. A key feature of the sustainable growth path is the need to raise domestic resources—public and private savings—in order to finance investment needed for growth, while containing the current account deficit. An important dimension of this is a macroeconomic policy mix that uses a larger fiscal adjustment to raise public savings. A firmer fiscal stance would help improve private confidence in macroeconomic policy, contributing to reducing domestic interest rates and keeping them closely aligned with off-shore rates, and free resources needed to finance higher private investment upon which continued rapid GDP growth will depend. This chapter identifies measures for raising public savings and prudent macroeconomic policies that will provide an environment conducive to raising private savings.

2.3 Indonesia has adjusted substantially since the 1989-90 period of overheated domestic demand. The policies that supported this adjustment and its main features are discussed in the next section. Having reduced macroeconomic imbalances, Indonesia is well placed to continue on a sustainable growth path with low inflation and manageable external borrowing requirements. Section C identifies the medium-term challenges for the sustainable growth path, and presents a growth scenario that meets these challenges. Section C concludes with an analysis of the macroeconomic policies needed to support the growth scenario. Indonesia remains vulnerable to external shocks, particularly in view of its high external debt, and needs to manage growth carefully to keep inflation and the current account deficit in check. The last section analyzes the sources of uncertainty—fluctuations in commodity prices, interest rates and exchange rates—as well as the uncertainties emerging trade blocs pose for Indonesia.

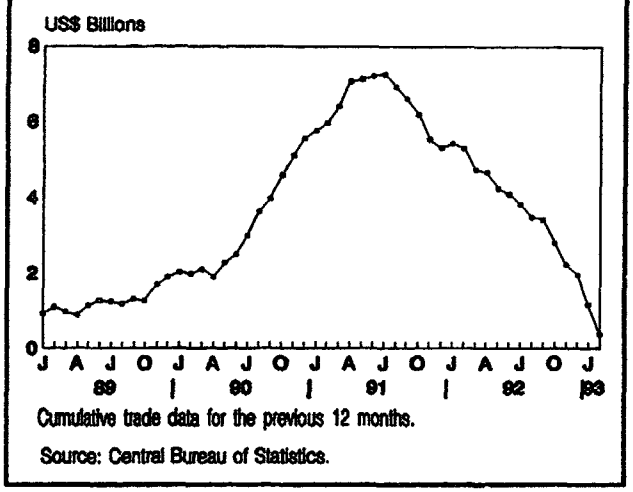
B. Response to Recent Macroeconomic Pressures

2.4 **Background.** In 1990, a surge in domestic demand combined with an accommodating monetary policy caused accelerating inflation, a widening current account deficit and a decline in international reserves. Efforts to restrain demand started in 1990 and intensified in February 1991 when deposits of state enterprises equivalent to 25% of base money were converted into claims on Bank Indonesia (BI), the central bank. Later that year, limits were imposed on external borrowing by state enterprises, supplemented by guidelines for private external borrowing. Bank Indonesia also raised interest rates on its certificates (SBIs), the primary instrument for influencing monetary and credit conditions, by four percentage points. Deposit and lending rates followed suit. Restrained growth in money supply and higher interest rates started to stem the reserve outflow after mid-1990, and in the last

three quarters of 1991/92 net foreign assets recovered by nearly $3 billion. The policies reduced domestic demand, especially fixed investment, thus restraining import growth and accommodating rapid growth of non-oil exports. Strong net export demand sustained robust 6.6% GDP growth. It was evident by March 1992 that the stabilization measures were working.

2.5 Considerable further adjustment was achieved in 1992/93. The most prominent gain was the fall in the non-oil trade balance (Figure 2.1). The ambitious target for non-oil export growth—24% growth in value—was exceeded despite slower than projected growth in the world economy. The dramatic reduction in the non-oil trade deficit was the main reason for the strong current account performance; the current account deficit fell from 3.8% of GNP in 1991/92 to 2.4%. The strength of the current account was matched in the capital account by large inflows of foreign capital, which permitted a further build-up of international reserves. Inflation slowed to 5% in 1992 (end-year basis) and deposit interest rates declined markedly. A significant step toward a more supportive fiscal stance was taken in January 1993 with the elimination of subsidies for most fuel products. However, the sizable adjustments in fuel and some other administered prices contributed to a jump in the consumer price index in the first quarter of 1993.

Figure 2.1: Non-oil Trade Deficit
(Jan. 1989 - Feb. 1993)



Cumulative trade data for the previous 12 months.
Source: Central Bureau of Statistics.

Macroeconomic Policy in 1992/93

2.6 The objective of ***monetary policy*** in 1992/93 was to support improvement in the external balance by keeping domestic demand pressures in check while achieving further progress in reducing inflation. Although the growth of domestic demand was slowing, the Government recognized that any relaxation of policies would be premature, particularly in view of the already large external debt. Slow domestic demand growth was expected to continue to improve the non-oil trade account, but a projected $2/bbl. decline in oil prices and higher interest payments on external debt were expected to prevent this from leading to a reduction in the current account deficit. A small increase in international reserves was anticipated.

2.7 The stronger than anticipated external adjustment made it difficult to keep the growth of monetary and credit aggregates on target. Oil prices and non-oil export growth turned out to be higher than expected, reducing the projected current account deficit by $1.4 billion. The stronger current account bolstered confidence in the stability of the rupiah, which made domestic interest rates attractive and led to short-term capital inflows. Net foreign assets increased by nearly Rp.10 trillion (Table 2.1) compared with the projected increase of less than Rp.0.5 trillion. However, much of the inflow was sterilized by commercial bank purchases of SBIs, contributing to SBI sales of over Rp.13 trillion. Because of the sterilization of most of the capital inflow, broad money growth of 22% was only a little higher than initially projected. However, private sector credit growth of 9% was well below initial projections. Subtracting estimated interest capitalization of impaired loans, private sector credit growth was only about 5.5%.

Table 2.1: Indonesia: Monetary Survey
(Rp. trillion)

					Annual Growth Rates (%)			
	1990 March	*1991 March*	*1992 March*	*1993 March*	*1990 March*	*1991 March*	*1992 March*	*1993 March*
Net Foreign Assets	17.9	20.2	23.6	33.3	-4.0	12.7	17.2	41.1
Net Domestic Credit	71.4	96.3	115.1	128.3	70.9	34.9	19.5	11.5
Public Sector	0.9	-5.4	-6.3	-6.3	-0.8	-61.3	-19.0	-0.1
Public Enterprises	8.8	7.3	8.8	8.6	14.4	-17.1	20.7	-2.6
Private sector	70.4	101.7	121.3	132.6	68.2	44.4	19.4	9.2
Other items, net	-24.9	-35.4	-37.9	-41.8	-53.4	-41.9	-7.0	-10.3
Broad Money	64.4	81.1	100.8	123.2	45.7	26.0	24.2	22.2
Memo item:								
Average velocity	2.7	2.5	2.3	2.1				

Source: Bank Indonesia.

2.8 Bank Indonesia faced a difficult job of lowering the interest rate on SBIs in an effort to encourage commercial banks to extend loans to the private sector rather than invest in SBIs while avoiding a premature relaxation that could rekindle domestic demand pressures. The rate on one-month SBIs was reduced from 18% in March 1992 to 16% in June 1992 and 12.5% in March 1993. However, for a variety of reasons, commercial banks continued to use the proceeds of sales of foreign exchange to BI to purchase SBIs. One reason was weak domestic demand, which reduced credit demand from enterprises dependent on domestic sales. Portfolio problems in the commercial banks also were a factor. Efforts of banks to meet tighter prudential norms established by BI (para. 2.11) made purchase of SBI's, a risk-free asset, an attractive option. Regulatory restrictions—the requirement that banks lend 20% of their portfolio to small borrowers and that joint venture banks lend 50% of their portfolio to exporters—may also have inhibited the supply of credit (Chapter 3). In addition to encouraging commercial banks to lend to the private sector, lower SBI rates were desireable to ease the strain on BI's cash flow. The sterilization of capital inflows by commercial bank purchases of SBIs cost BI an estimated $0.9 billion in 1992/93 from the interest differential between foreign assets and SBIs. Quasi-fiscal operations (para. 2.15) added to the strain. A more supportive fiscal stance could have made it easier for BI to lower SBI interest rates by reducing the danger that domestic demand would become overheated as rates fell.

2.9 The experience of 1992/93 highlights the limited scope for policy measures to affect directly domestic deposit interest rates. High nominal rupiah deposit interest rates reflect expectations of devaluation and a country risk premium. A measure of expected exchange rate depreciation is given by the nominal interest rate differential between financial assets that are identical in all respects except for the currency of denomination (Figure 2.2). A sharp increase in expectations of devaluation can be seen during 1990 leading to a peak in early 1991. Since then, adherence to sound macroeconomic policies has reduced expectations of depreciation. The scope for further reductions in expectations of depreciation and interest rates seems high, however, especially in view of the strength of the balance of payments and

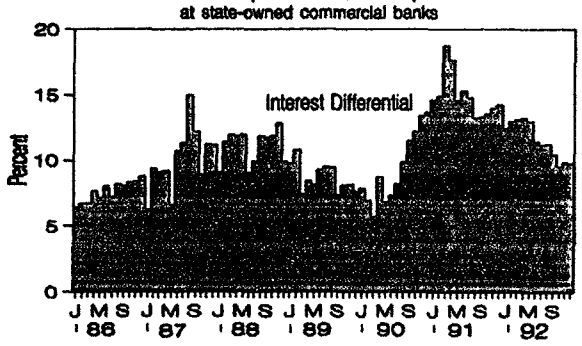
the fact that over the past five years the actual annual depreciation of the rupiah against the U.S. dollar has averaged less than 5%. A larger fiscal adjustment can reduce expectations of exchange rate depreciation by raising confidence in exchange rate and price stability. By following consistent macroeconomic policies that keep the domestic economy from overheating, market interest rates will decline further.

2.10 The country risk premium can be measured by the spread between interest rates on U.S. dollar deposits in Indonesian commercial banks and on U.S. dollar deposits in offshore banks (Figure 2.3). This measure of Indonesian country risk rose in 1987-88, was very low in 1989-90, and increased steadily from 1991 through 1992. The increase in 1992 coincides with the emergence of problems in the financial sector. It will take time for perceptions of riskiness to fall and the role of policy in bringing this about is to keep money and credit growth within prudent limits consistent with robust growth with low, stable inflation. An important role for the Government in reducing country risk is in creating a stable climate for investors, including an efficient, sound financial system. Chapter 3 discusses specific measures for improving the investment climate and ensuring the soundness of the financial system.

2.11 The decline in rupiah deposit rates was not matched by falling lending rates, leading to widening commercial bank nominal spreads (Figure 2.4). The downward stickiness of lending rates reflected several factors. The most obvious was the need for banks to strengthen their portfolios to meet new prudential guidelines. Also, changes to the regulatory system affecting the income statements and balance sheets of commercial banks made the extension of new loans more costly. In March 1991, BI tightened loan loss provisioning standards and mandated that commercial banks raise their capital-asset ratios to 5% by March 1992, 7% by March 1993 and 8% by December 1993. For banks where the capital adequacy requirement was binding, an increase in assets with a positive risk weighting, such as commercial loans, required additions to bank capital. Up to the point that the bank's

Figure 2.2: Devaluation Expectations

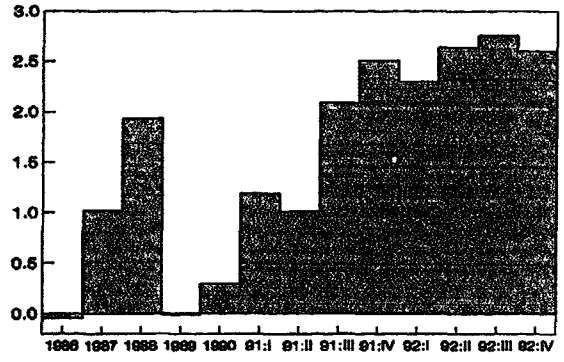
Interest rate differential between one-month rupiah and US$ time deposits at state-owned commercial banks



Source: Data provided by Bank Indonesia and World Bank staff calculations.

Figure 2.3: Indonesia Country Risk Premium

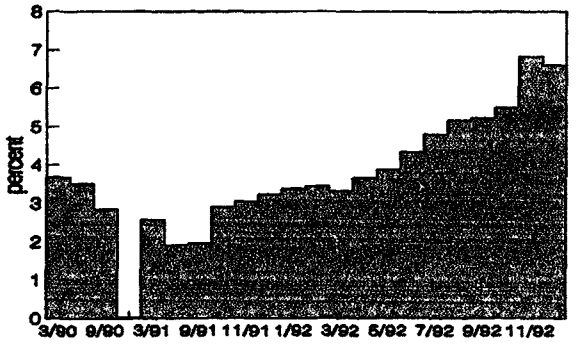
(On-shore/Off-shore US$ Deposit Interest Differential)



Source: Data provided by Bank Indonesia and World Bank staff calculations.

Figure 2.4: Commercial Bank Interest Rate Spread

Working Capital Credits - 3-month Time Deposit Interest Differential



Source: Data provided by Bank Indonesia and World Bank staff calculations.

blended cost of funds reached the SBI rate, the banks could defray the cost of increased time deposits by investing in SBIs, which have a zero risk weighting.[1]

2.12 The higher spreads will help banks improve their income and balance sheets. Over time this will lead to a closer alignment of deposit and lending rates. Further, competitive pressures will emerge to narrow the spread. Substitutes for commercial bank loans are becoming more attractive: 11 domestic bonds worth Rp.875 billion ($425 million) were issued on the Jakarta Stock Exchange in 1992, use of promissory notes is increasing and a commercial paper market is developing. Healthy banks—those that meet the capital-asset ratio requirement—will also begin to be more aggressive and take market share. In this way, commercial bank lending rates will gradually fall and margins narrow. Relaxing the 20% requirement (para. 2.8), as discussed in Chapter 3, would hasten this process. In addition, the 50% requirement (para. 2.8) could also be reviewed to assess its impact on domestic credit availability. Measures to deal with the strains in the financial system are discussed in Chapter 3. Steady growth in the economy will help ease the financial strains in the banking system. A well-balanced policy mix, including a stronger fiscal effort, would promote sustainable growth by helping to bring about a more rapid decline in interest rates.

2.13 An improved macroeconomic policy balance including the attainment of a fiscal surplus was an important objective of ***fiscal policy*** in 1992/93. By reducing the public sector's absorption of resources, more credit could be made available to the private sector without creating pressures on the external balance target. An increase equivalent to about 1% of GDP in the overall fiscal balance of the Central Government compared with the previous year outcome was targeted (Table 2.2). The authorities projected a 24% increase in non-oil tax revenues to be brought about mainly by higher revenues from the income and the value added taxes.

2.14 Lower than projected revenue from non-oil taxes, mainly a shortfall in indirect tax receipts, and higher current and development (both budget and off-budget) outlays more than offset higher oil/LNG revenues and lower interest payments on external debt and resulted in a slippage in the budget balance of Rp.3.4 trillion compared with the target (Table 2.2). About Rp.1 trillion of the recorded fiscal deficit in 1993/94 reflected outlays on oil subsidy arrears and state bank recapitalization, outlays that did not add directly to domestic demand. However, even allowing for these factors, the fiscal outcome was not consistent with a balanced stance of macroeconomic policies conducive to an easing of interest rates and a pick up in private investment while safeguarding the external position. The 1993/94 budget implies an improvement equivalent to about 1.5% of GDP over the 1992/93 fiscal balance. Continued strong growth in revenues from the income tax is the main reason for the 23% increase projected in non-oil tax revenues. Total expenditures are projected to increase by about 8%, with a somewhat faster increase in current expenditures because of an average 15% adjustment in civil service salaries announced in January. The fiscal adjustment targeted for 1993/94 would improve the macroeconomic policy mix and make a significant contribution toward a consistent, sustainable fiscal stance, which would help achieve sustainable growth targets, as discussed below (paras. 2.60-62). A major step toward achieving the targeted adjustment was taken in January with the elimination of the budgetary subsidy on fuel.

2.15 ***Quasi-fiscal operations*** of BI added to the strain on its cash flow. A 35% increase in liquidity credits to BULOG for procurement and storage of the bumper rice crop was offset by a reduction in other liquidity credits. However, during the year the Clove Marketing Board announced that it would be unable to repay maturing liquidity credits of about Rp.750 billion, which had been extended the

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[1] The blended cost of funds to banks was 11.5% as of January 1993 (based on a 24%/76% demand/time deposit mix at interest rates of 6%/13%), when the interest rate on SBIs was around 13%.

previous year. BI rolled over the overdue principal. Apart from highlighting the well-known problems with the operations of the Clove Marketing Board, the incident underscores the importance of phasing out credits at below market interest rates, including below market rediscounting of liquidity credits and export bills. Credit is seldom the most appropriate way of providing subsidies. In the exceptional case a credit subsidy is called for, the need for transparency argues for showing the subsidy explicitly in the government budget.

Table 2.2: Central Government Operations, 1988/89-1993/94
(Rp. trillion at current prices)

	Actual				*1992/93*		*1993/94*
	1988/89	*1989/90*	*1990/91*	*1991/92*	*Budget*	*Prov. Est.*	*Budget*
Revenue and grants	23.9	30.0	41.1	42.1	47.1	45.6	53.3
Oil and LNG taxes	9.9	11.8	17.6	15.5	13.9	15.3	15.1
Non-oil taxes	11.9	15.4	20.8	23.4	28.9	27.4	33.8
Non-tax revenues	1.6	2.2	2.4	2.7	3.7	2.3	3.8
Grants	0.5	0.6	0.4	0.4	0.6	0.6	0.5
Current expenditures	16.8	19.8	23.8	25.6	26.8	27.8	30.5
External interest	4.3	4.5	4.9	5.2	5.8	5.1	6.1
Subsidies	1.0	1.5	3.4	1.6	0.2	1.1	0.2
Other	11.5	13.8	15.5	18.8	20.8	21.6	24.2
Government savings	7.1	10.2	17.3	16.5	20.3	17.8	22.8
Capital expenditures	10.6	11.6	13.6	18.0	19.5	20.4	21.5
Budget balance	-3.5	-1.4	3.8	-1.5	0.8	-2.6	1.3
Financed by:							
External loans (net)	5.0	2.6	1.3	2.4	-0.8	0.8	-1.3
Asset drawdown	-1.5	-1.2	-5.1	-0.9	0.0	1.8	0.0
Memo items (% of GDP):							
Non-oil taxes (% of non-oil GDP)	10.0	11.2	12.4	12.3	13.3	12.7	14.0
Government savings	4.8	5.9	8.5	7.0	7.7	6.8	7.9
Budget balance	-2.4	-0.8	1.9	-0.6	0.3	-1.0	0.5
Total expenditure	18.6	18.3	18.2	18.6	17.7	18.4	18.1
Primary balance [a]	0.6	1.9	4.3	1.6	2.5	0.9	2.5

[a] Budget balance net of external interest payments.

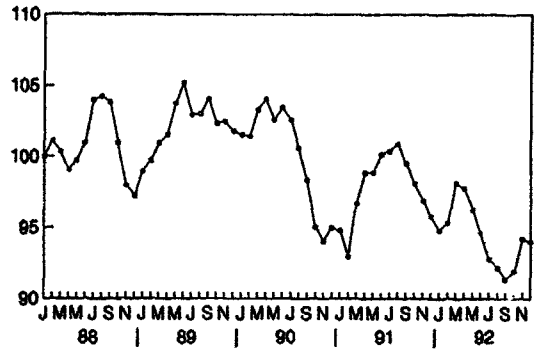
Source: Ministry of Finance and World Bank staff estimates.

2.16 The value of the ***exchange rate*** is determined by BI under a system of managed float. BI seeks to maintain the rupiah's competitiveness against a basket of currencies, mainly by depreciating the rupiah to compensate for the differential between Indonesian and U.S. inflation and adjusting for

fluctuations in the U.S. dollar cross-exchange rate with other currencies. The competitiveness of the rupiah as measured by the real effective exchange rate was maintained in 1992 (Figure 2.5). It showed signs of appreciating in early 1993 due to the large increases in the consumer price index resulting from the increase in domestic fuel and other administered prices, which widened the inflation differential between Indonesia and its trading partners. Since the first quarter jump in the consumer price index reflects one-time adjustments and not an acceleration of underlying inflation, it is not likely to lead to a loss of competitiveness. A policy of slowing the rate of depreciation of the exchange rate can be instrumental in slowing inflation, both by keeping tradable goods price inflation low and, by providing a more stable nominal anchor for domestic prices, dampening inflationary expectations. However, to maintain competitiveness, this policy needs to be accompanied by appropriate restraint in financial policies to lower the rate of inflation and by continuing structural reforms to raise productivity and eliminate the sources of high costs in the economy.

Figure 2.5: Real Effectice Exchange Rate*

(Jan. 1988 = 100)



* A decline is a depreciation.

Source : IMF

Macroeconomic Outcomes

2.17 Despite the considerable challenges to policymakers described above, the economy's performance in 1992/93 was impressive. Non-oil GDP growth accelerated, led again by a remarkable performance of non-oil exports. There was a significant reduction in the current account deficit and the underlying inflation rate was brought under control. In short, the process of correcting the macroeconomic imbalances that emerged in 1990 was consolidated.

2.18 Total GDP and non-oil GDP grew by 5.8% and 7.5%, respectively, somewhat higher than initially projected (Table 2.3). Favorable weather accounts for part of the faster than expected ***growth*** in non-oil GDP. Rice production rebounded from the drought-depressed 1991 production level of 44.7 million tons, reaching 47.3 million tons in 1992 and providing a major boost to overall growth in agriculture. Construction growth exceeded projections, in part reflecting the strength of public fixed investment. Growth in manufacturing remained strong in 1992 because of rapid growth of labor-intensive non-oil manufacturing exports, especially clothing and textiles, footwear, electronics and furniture. There was a 3.8% reduction in oil/LNG value added, reflecting lower OPEC quotas in 1992 following the Gulf-war-related increases.

2.19 As in 1991, ***non-oil exports*** were the fastest growing component of demand (Table 2.3). In view of the slowdown in major world economies and rising protectionism, the performance of non-oil exports is remarkable. Developing Asia has emerged as an important destination and now absorbs nearly 40% of Indonesia's non-oil exports, though some of this may be re-exported to other regions. Some 43% of the increase in non-oil exports over 1989-92 went to Developing Asia (Figure 2.6), followed by the European Community and North America. Japan absorbed 17% of Indonesia's non-oil exports in 1992, but only 4% of the 1989-92 growth in non-oil exports was to Japan. Textiles (including garments), Indonesia's, largest non-oil export, accounted for over 40% of the growth of non-oil exports during

1989-92 (Figure 2.7). Developing Asia is the most important destination of garment exports, followed by the European Community and North America. The second largest increase was in "other industry".

Table 2.3: Key Macroeconomic Indicators [a]

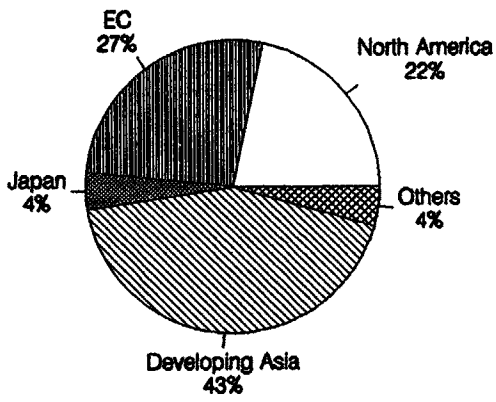
	Actual			Estimated
	1988-89	*1990*	*1991*	*1992*
Average real growth rates (% p.a.)				
GDP	6.6	7.1	6.6	5.8
Non-oil GDP	7.8	6.9	6.3	7.5
Agriculture	4.1	2.0	1.3	3.6
Manufacturing	12.2	13.0	10.6	9.7
Mining	4.8	14.6	18.1	24.0
Construction	10.6	13.5	10.9	11.9
Other Services	8.2	7.4	6.0	7.2
GNY	7.0	8.4	5.4	5.5
Non-oil exports	17.8	2.8	24.3	26.6
Non-oil imports	12.7	26.0	9.6	7.7
Fixed investment	11.9	14.6	6.0	5.0
Public	13.8	11.9	11.2	7.0
Private	10.7	16.2	3.0	3.7
Macroeconomic balances (%)				
Current account/GNP	-1.9	-3.4	-3.8	-2.4
Non-interest current account/GNP	2.3	0.4	0.3	1.4
Overall public sector balance/GDP	-2.1	0.3	-1.1	-1.4
MLT debt service/exports	35.8	29.7	31.6	30.0
MLT debt/exports	212.2	187.6	196.5	176.4
MLT debt/GNP	60.1	57.8	59.0	57.9
Structure of the economy (%)				
Non-oil manufacturing/GDP	13.9	14.9	15.4	16.0
Non-oil exports/non-oil imports	88.8	71.2	77.5	90.2
Public savings/GDP	6.4	9.5	8.5	8.3
National savings/GDP	20.9	20.9	20.3	20.1
Fixed investment/GDP	20.6	22.5	22.7	22.5
Private fixed investment/ total fixed investment	58.7	59.1	57.7	56.9
Consumption/GDP	74.2	74.2	75.0	75.0
Consumption/GNY	75.1	75.0	75.6	76.0
Prices				
Oil prices (US$/bbl)	17.9	22.6	18.3	17.4
Non-oil terms of trade (1983/84=100)	95.9	95.3	91.5	90.6
Domestic inflation (% p.a.) [b]	6.7	7.9	9.4	7.5

[a] Balance of payments data are for fiscal years (starting April 1). Other indicators are for calendar years.
[b] As measured by the average consumer price index, with an adjustment for rice prices during 1987-89.

Source: Bank Indonesia, Central Bureau of Statistics and World Bank staff estimates.

This is a large and diverse group of products including footwear, ceramics, plastics and furniture. Footwear exports have been particularly dynamic. They surpassed the $1 billion mark in 1992 to become Indonesia's third largest manufactured export following textiles (including garments) and plywood. Indonesia's share of world footwear exports is still negligible and footwear exports are not subject to quotas, so prospects for continued rapid growth appear bright as long as Indonesia's competitiveness is maintained.

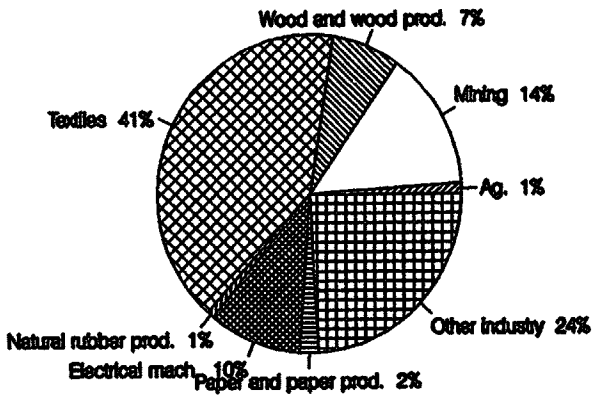
Figure 2.6: Growth of Non-oil Exports by Destination, 1989-1992

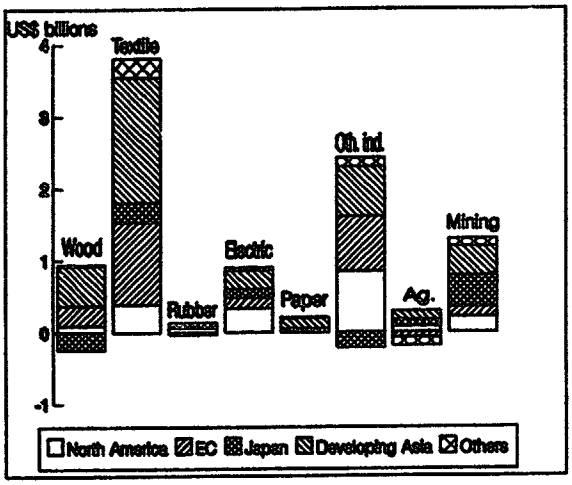


Source: Central Bureau of Statistics.

2.20 Following several years of rapid growth, ***fixed investment*** growth was moderate in 1992 for a second year in a row (Table 2.3). The slowdown in private fixed investment during the past two years reflects the cooling off of domestic demand in response to contractionary policies. Public fixed investment growth exceeded that of the private sector. Weaker than projected private demand is consistent with the observed slow growth of credit to the private sector. Overall ***consumption*** increased by 6.0% with real ***private consumption*** growing by 5.0%, due mainly to higher rural incomes from the bumper rice crop. Farm household consumption grew by 7% in 1992.

Figure 2.7: Growth of Non-Oil Exports by Product and Market, 1989-1992





Source: Central Bureau of Statistics.

2.21 The dampening of domestic demand was also reflected in a second consecutive year of slow growth of ***non-oil imports*** (Table 2.4). Capital goods imports, which account for roughly one-third of the total, fell by 2.3% due to the slowdown in investment demand. Imports realized for Indonesian Investment Coordinating Board (BKPM)[2] approved investments grew by an estimated 114% in 1990 but only 13% in 1991 and fell by 16% in 1992. The largest absolute increases were in parts and accessories and intermediate goods, reflecting in part the inputs needed for rapid export expansion. The fastest growth was recorded by consumer good imports, which are a small fraction of total non-oil imports. Food imports, which account for much of this increase, were unusually high as a consequence of the need to replenish rice stocks following the drawdown in 1991/92 when drought reduced the rice harvest. Passenger car imports declined for a second consecutive year. Reports throughout the year that a deregulation package for the automotive sector was to be introduced may have prompted consumers to delay their car purchase plans in the hopes that deregulation would result in lower imported automobile prices.

Table 2.4: Non-Oil Merchandise Imports, 1987/88-1991/92 [a]

	Value at current prices (US$ billion)					*Growth in current prices (percent p.a.)*		
	Actual							
	1987/88	*1989/90*	*1990/91*	*1991/92*	*1992/93*	*1989/90-1990/91*	*1990/91-1991/92*	*1991/92-1992/93*
Capital goods	2.5	4.0	6.6	7.8	7.6	64.5	14.3	-2.3
Parts & accessories	2.2	2.6	3.8	4.2	5.1	48.7	14.2	21.5
Intermediate goods	6.4	8.9	10.1	11.1	13.0	14.1	9.4	16.6
Passenger vehicles	0.2	0.2	0.4	0.2	0.2	53.7	-45.2	0.0
Consumer goods	0.4	0.5	0.6	0.7	1.2	24.1	44.7	58.1
Other [b]	0.1	0.1	0.1	0.1	0.1	-51.7	97.7	-26.5
TOTAL	11.8	16.3	21.6	24.2	27.2	32.5	12.0	12.5

[a] Disaggregation based on BPS import statistics, applied to BI estimated non-oil imports.
[b] Goods not elsewhere specified.

Source: Central Bureau of Statistics, Bank Indonesia and World Bank Staff estimates.

2.22 ***Inflation*** decelerated steadily during 1992. Annual average consumer price inflation was 7.5%, but only 5% measured on an end-year basis. One reason was the slower rate of depreciation of the rupiah, which kept tradable goods price inflation low. Another was the large rice harvest, which put downward pressure on the consumer price index by holding rice prices virtually unchanged. Delayed adjustments in administered prices also kept the increase in the index low. Tighter demand management policies that kept the growth of monetary aggregates broadly in line with the target rates also contributed by dampening inflation expectations as reflected in the narrowing dollar-rupiah interest rate differential (Figure 2.2). The consumer price index jumped sharply in January-March 1993 as a result of substantial fuel price adjustments in January 1993, adjustments in electricity and transport tariffs, and seasonal pressure arising from the Idul Fitri and Chinese New Year holidays in March. These one-time pressures abated sharply in April 1993. Despite the large jump in the CPI in the first quarter of 1993, adherence to the 17% broad money growth target with projected 6.3% real GDP growth and continued reductions in rupiah deposit rates would make 1993 end-year inflation of about 8% attainable.

[2] BKPM licenses investment projects that benefit from duty exemptions for capital goods and initial inputs.

2.23 ***Balance of payments*** developments were dominated by the rapid growth of non-oil exports, slow growth in non-oil imports, the higher than anticipated oil price and the strength of capital inflows. The first two of these produced a $2.5 billion fall in the non-oil current account deficit (Table 2.5). The higher oil price raised the oil/LNG current account surplus by $1.2 billion over the initial projection, though it declined by $1.1 billion from 1991/92. Higher interest payments on short-term debt offset part of the overall improvement. Nevertheless, the current account deficit of $2.9 billion, or 2.4% of GNP, was $1.4 billion lower than anticipated. The stronger current account performance was matched by a stronger capital account performance, leading to a $6.1 billion increase in net foreign assets. The increase in net foreign assets was split between official reserves, which increased to $11.8 billion, equivalent to a prudent four months of imports, and reserves of the banking system.

Table 2.5: Balance of Payments, 1988/89-1992/93
(US$ billion)

	Actual				*Estimated*
	1988/89	*1989/90*	*1990/91*	*1991/92*	*1992/93*
Merchandise exports (fob)	19.8	23.6	28.0	29.4	34.9
Oil & LNG	7.6	9.3	12.6	10.6	10.3
Non-oil	12.2	14.3	15.4	18.8	24.6
Merchandise imports (cif)	-16.2	-19.4	-25.7	-27.8	-31.0
Oil & LNG	-2.6	-3.1	-4.1	-3.6	-3.8
Non-oil	-13.6	-16.3	-21.6	-24.2	-27.2
Trade balance	3.6	4.2	2.3	1.5	3.9
Non-factor services (net)	-1.2	-1.2	-0.6	-0.6	-0.4
Interest payments (MLT)	-3.2	-3.4	-3.4	-3.8	-3.9
Other factor services and transfers (net)	-0.9	-1.2	-1.9	-1.5	-2.5
Current account balance	-1.8	-1.5	-3.6	-4.3	-2.9
Oil/LNG current account	3.1	4.0	6.1	4.7	3.6
Non-oil current account	-4.8	-5.5	-9.6	-9.0	-6.5
Public MLT loans (net)	3.1	1.4	0.5	1.8	2.1
Disbursements	7.4	6.1	5.1	6.6	6.8
Principal repayments [a]	-4.3	-4.9	-4.6	-4.7	-4.8
Other capital (net)	-1.6	0.2	6.3	3.9	6.9
Use of net foreign assets	0.3	0.1	-3.2	-1.4	-6.1
Use of official reserves	0.6	-0.4	-3.9	-0.9	-1.3
Use of comm. bank reserves	-0.3	0.5	0.7	-0.5	-4.8
Memo items:					
Net official reserves (US$ bln.) [b]	5.3	5.7	9.6	10.5	11.8
- Months of imports [c]	(3.3)	(2.6)	(4.1)	(4.1)	(4.1)
Current account/GNP (%)	-2.2	-1.7	-3.4	-3.8	-2.4
Non-interest CA/GNP (%)	2.2	2.4	0.4	0.3	1.4
MLT debt service/exports (%) [d]	36.8	34.7	29.7	31.6	30.0

[a] Includes prepayments of $341 million in 1988/89 and $300 million in 1989/90.
[b] Net official reserves are defined as gross official reserves minus outstanding liabilities to the IMF and other short-term liabilities.
[c] Net official reserves in months of next year's expected merchandise imports (oil/LNG and non-oil).
[d] Debt service on public and private debt, excluding prepayments; denominator is gross exports of goods and services.

Source: Bank Indonesia and World Bank staff estimates.

2.24 The composition of the capital account flows in 1992/93 reflected high domestic interest rates as well as confidence in Indonesia's economic prospects and management. Net foreign direct investment rose to $1.7 billion, three times the level of four years ago. The sustainable growth path discussed below projects continued growth of foreign direct investment. Short-term borrowing, estimated at $3.1 billion, reflected growth in trade finance and the scope for profiting from the wide differential between off-shore and on-shore interest rates. Medium- and long-term external borrowing by the private sector increased, though at a slower pace than in the previous two years. Gross disbursements of official assistance remained at the previous year level of $3.8 billion. Slower growth of debt and the increase in international reserves held the increase in ***net debt*** to $3.1 billion, a substantial slowdown from the increases of the previous two years ($9.8 billion and $8.4 billion in 1990/91 and 1991/92, respectively).

C. Sustained Growth and Macroeconomic Consistency

2.25 Significant adjustment in 1992/93 sets the stage for continued robust and sustainable growth. Sustainable growth over the medium term has four dimensions: it needs to be rapid enough to absorb new entrants to the labor force at a rising average standard of living; it should also allow a wider sharing of the benefits of growth, in particular continued progress in alleviating poverty; it should protect the environment; and it should be financeable, consistent with the constraints Indonesia faces in using foreign savings to finance investment. These challenges are quantified below and their implications for the economy analyzed. This is followed by a discussion of the macroeconomic policies needed to support this growth path, and meet the challenges it represents.

2.26 The economy should develop along a growth path rapid enough to meet the challenges without provoking demand pressures that lead to overheating. Such growth will require higher investment. The high level of external debt limits maneuverability by claiming a large share of Indonesia's cash flow from exports. It also raises Indonesia's vulnerability to external shocks. A reduction in the debt burden is in order to increase flexibility and reduce vulnerability. However, reducing external borrowing means reducing the current account deficit—foreign savings—in relation to GDP, while rapid GDP growth requires higher total savings to finance the higher investment needs. Therefore, the essential requirement for achieving sustainable growth is to generate higher national savings, both public and private.

The Challenges

2.27 **Labor Absorption.** Indonesia's growth path during the 1990s will continue to be marked by a substantial shift of labor from agricultural to non-agricultural employment. The share of employment in agriculture fell from 65% in the early 1970s to about 50% in the early 1990s. Although agriculture's employment share has fallen, the absolute number of farm workers has increased, with no decline in productivity. However, the shift of labor into non-oil manufacturing has been accomplished at higher levels of productivity. Growth of labor productivity in non-oil manufacturing of over 6% per year since the early 1980s has driven overall non-oil labor productivity growth to over 3% per year.

2.28 Indonesia's rapid GDP growth during the past decade has thus substantially raised the average productivity of Indonesian workers. This has been accomplished by drawing workers from agriculture into more productive jobs outside agriculture. Sustainable growth requires smooth continuation of this process, avoiding a rise in unemployment. Continued expansion of labor-intensive, non-agricultural employment is needed to absorb the stream of workers leaving agriculture as well as new entrants to the labor force. Continued expansion of productive employment in agriculture is needed too, so that the stream of workers to non-agricultural activities does not become a flood. Moreover, agricultural production and productivity must rise to provide food and raw materials for the rest of the economy.

2.29 Indonesia's past record suggests an elasticity of non-oil employment with respect to non-oil GDP of about 0.4. Although Indonesia's population growth rate is not high, the effects of more rapid population growth in the past will be felt through the 1990s. Indonesia needs to sustain non-oil GDP growth on the order of 6-7% p.a. to absorb new entrants into the labor force at rising levels of productivity. Agriculture is projected to maintain trend growth of 3% per year in the medium to long term. This implies that non-oil, non-agricultural GDP needs to grow by 7.5-8% annually. This compares with average annual growth of 8.6% during 1986-92.

2.30 With a labor force now at 81 million and projected to grow by 2.3 million each year for the rest of the 1990s, one percentage point slower non-oil GDP growth than noted above would mean 320,000 fewer jobs created annually. Since the mid-1980s, when deregulation and other structural reform measures started, employment growth has averaged 2.5% annually. Continuation of these reforms will help sustain rapid employment growth. The extension of deregulation to still heavily protected activities will encourage the balanced growth needed to generate adequate employment. The expansion of labor-intensive non-oil manufacturing activities calls for improved availability of the direct input—a well-educated labor force—and indirect inputs—physical and institutional infrastructure required for business. Chapter 4 discusses the roles of the Government and the private sector in increasing the quantity and improving the quality of human and physical infrastructure.

2.31 **Poverty Alleviation.** In view of the dramatic progress in poverty alleviation in the past two decades and the Government's commitment to extend this progress, a sustainable growth path for Indonesia would also seek to maintain the positive link between economic growth and poverty alleviation. Poverty declined from 40% of the population in 1976 to 15% in 1990, when real GDP rose nearly 2.5 times, implying a unitary elasticity of the reduction of poverty incidence with respect to GDP growth. Data for 1987-90 suggest an elasticity of the reduction of poverty incidence with respect to non-oil GDP of 0.6. Assuming non-oil GDP grows at around 7% each year, as discussed above, maintenance of the pace of poverty alleviation attained during 1987-90 would mean the share of the population living in poverty could decline from 15% in 1990 to around 10% by 2000. This would be a remarkable achievement by any standard.

2.32 The best means to alleviate poverty is job creation. So, the implications for Government policy are fundamentally the same as for employment generation: policies that support labor-intensive manufacturing growth, combined with continued robust growth of agriculture and human and physical infrastructure development. The majority of the poor remain in rural areas, and sustaining a high rate of growth of agriculture will be essential. Extending deregulation to agriculture, as discussed in Chapter 3, will raise productivity and reduce costs and thus improve the efficiency and employment-generating capacity of the sector. In addition, mechanisms to target Government anti-poverty programs more effectively would be needed. The priorities for poverty alleviation are discussed further in Chapter 4.

2.33 **Environmentally Responsible Growth.** With a per capita income of $650 and 27 million people still below the poverty line, raising the overall standard of living remains the highest priority. This will require rapid economic growth that is environmentally responsible. Synergies between economic growth, poverty alleviation and the environment will need to be exploited (see Chapter 1). However, there will also be tradeoffs. It will be impossible, for example, to preserve all the existing stock of natural resources. Nor will it be possible to push economic growth up irrespective of the effects on environmental resources. Recognizing this, Indonesia has adopted a policy of sustainable growth that allows for natural resources to be converted into other forms of capital as an essential part of development. There are two important dimensions of this approach. First, some natural resources must be protected to preserve critical ecosystems (e.g., upland forest cover for watershed protection, groundwater aquifers that provide safe drinking water). Second, where natural resources are converted

into other forms of capital—exploiting mineral resources, cutting down tropical forests—sound environmental (and economic) management requires that those resources be utilized efficiently.

2.34 Environmentally sustainable growth in Indonesia faces two basic challenges. First, natural resources play an important role in Indonesia's economic growth, and will continue to do so; sustainable exploitation of these resources, therefore, is intimately linked to the sustainability of long-term growth. The share of primary commodities (minerals, output in the agricultural, forestry, and fisheries sectors) in GDP has declined from about 60% in 1970 to 40% today, and could decline further to below 20% by 2010. However, in *absolute terms*, the value added of primary commodities has more than doubled over the past two decades, and is likely to increase by a further 50% by 2010, even though its growth rate will slow. Increased use of natural resources will also result from growth in the basic processing of primary commodities. Value added from these activities increased nearly eight-fold between 1970 and 1990, and is likely to continue to increase rapidly over the next two decades, rising another six-fold.

2.35 The second main challenge stems from the control of pollution from future industrial and urban growth. Indonesia's medium- to long-term growth path relies heavily on the growth of industry for the creation of higher-productivity jobs and non-oil exports. The nature and magnitude of future pollution loads from industry will depend on the scale of output and the intensity of various pollutants per unit of output. The damage/costs resulting from increasing pollution loads will depend on the location of specific industries and the size and concentration of the exposed population. Total industrial output has increased eight-fold since 1970, and is likely to expand another 13-fold by 2020. There has been a gradual shift in sectoral composition, with processing industries growing more slowly than assembly-type industries. Since the former are by far more pollution-intensive (especially for water pollutants, but also for many of the traditional air pollutants), there has been a noticeable deline in the pollution intensity of industrial output since 1970. Projections to the year 2020 indicate that this trend will continue. Nonetheless, with rapid growth of industrial output, pollution loads are still projected to increase 10-fold.

2.36 Growing congestion and pollution, especially in the main urban and industrial centers, will increase the difficulty of attracting foreign investment. The increasing social and economic costs of uncontrolled pollution will force a trade-off with economic growth. With urban population expected to more than double over the next 25 years, and with the increase in total industrial pollution, the pressure to slow the expansion of industry—in those areas most critical for future growth—will increase. Increasing community resistance is exemplified by the experience of other industrialized and industrializing countries in the region (Japan, Korea and Taiwan). Meeting the challenge posed by increasing industrial pollution will require an incentive framework that encourages industry to adopt clean technology and requires it to bear the economic costs of pollution. Incentives for dealing with pollution are discussed in Chapter 3. In addition, investments in pollution abatement will be required to achieve environmentally sustainable growth. Chapter 4 discusses the investment implications of controlling industrial pollution.

2.37 Efforts to reduce poverty further will contribute to environmentally responsible growth. The poor have few alternatives. Little access to capital, few skills and insecure tenure force the rural poor to farm marginal lands that quickly degrade. Efforts to lift people out of poverty will give them the option and incentive to use the environment responsibly, benefiting themselves and others. Continued implementation of effective voluntary programs to reduce the birth rate, combined with rising incomes and increased access to education and health services, will help reduce population growth and enable a given standard of living to be achieved with less growth, less use of non-renewable and other resources and less pollution. In the medium term, it will also reduce growth in the labor force, easing the challenge of generating adequate employment growth.

2.38 **The External Constraint.** Even with its admirable growth record, Indonesia remains a low-income country; but one with abundant resources. It possesses a large, hard-working labor force and a rich endowment of natural resources. These endowments make it natural that investment opportunities to develop Indonesia's potential exceed the current saving capacity of the national economy. As in the past, Indonesia can rely on effective use of foreign resources to bridge the gap between the saving capacity of the national economy and the investments needed to develop its potential.

2.39 However, Indonesia's reliance on foreign resources in 1990/91-1991/92 was unsustainably high and led to a large build-up of external debt. Total external debt reached $79.4 billion by end-1991; $27.7 billion was owed by the private sector and $14.5 billion of this was short-term. Servicing this debt absorbs over 30% of Indonesia's export earnings, which increases Indonesia's vulnerability to external shocks, such as an unexpected drop in oil prices or slowdown in major export markets. Experience indicates that developing countries that use foreign capital effectively to achieve satisfactory growth of incomes and exports can sustain current account deficits of about 2% of GDP over long periods without excessive build-up of foreign liabilities or erosion of creditworthiness. Reflecting this, the current account deficit is projected to decline steadily from 2.4% of GNP in 1992/93 to the 2% level in 1995/96 and remain at that level in the medium term. Current account deficits in this range will provide adequate external resources for growth and result in improved creditworthiness, provided there is a commensurate increase in national savings and improvement in investment efficiency. Increasing national savings is the only way to reconcile the greater need for resources required to develop Indonesia's potential and sustain rapid GDP growth with the goal of reducing the current account deficit (in relation to GNP) to a sustainable level. This requires both higher public and private savings.

Prospects for Growth and Structural Change

2.40 Medium-term projections consistent with Indonesia's main challenges, as outlined above, are summarized in Table 2.6. Growth of domestic demand is projected to accelerate slightly in 1993/94, with a compositional shift toward investment. Fixed investment growth could rise to 7%, consistent with declining interest rates, with consumption growth at 5.2%. The higher level of fixed investment demand would generate a higher level of imports. Non-oil export growth is projected to remain robust at around 10%. Overall GDP growth of 6.3% is projected, with non-oil GDP growing by 6.7%. On the supply side, non-oil manufacturing is projected to continue to grow rapidly in response to continued strong export demand and recovering domestic demand. Agricultural growth is projected at 3% p.a. Favorable rains provide grounds for optimism that the projection for agricultural growth in 1993 will be realized. Oil/LNG production is projected to grow by 1.1%; expansion of LNG production accounts for all the increase.

2.41 Over the medium term, non-oil GDP grows by about 7% each year (7.8% excluding agriculture), sufficient to provide needed jobs. Consistent with projected strong non-oil export demand, non-oil manufacturing remains the main engine of growth in the economy on the supply side. Projected annual agricultural growth of 3% is nearly one percentage point lower than during the 1970s and up to the mid-1980s, when large public investments in irrigation and supportive infrastructure and provision of subsidized inputs spurred rapid growth. However, the projected growth rate is in line with average growth since the mid-1980s. One measure of the structural change Indonesia will undergo during the 1990s is the decline in agriculture's share in GDP from 20% in the early 1990s to 15% in 2000. Overall GDP is projected to grow by an average of about 6% during the rest of the decade. Declining oil production is likely to be offset by rising LNG production so that combined oil/LNG sector value added remains almost unchanged in real terms over the medium term. However, the share of the oil/LNG sector would decline from nearly 20% of GDP in the late 1980s to 12% by 2000, another indicator of the continuing structural transformation of the economy.

Table 2.6: Projections of Key Macroeconomic Indicators [a]

	Estimated 1992	Projected 1993	Projected 1994-95	Projected 1995-2000
Average real growth rates (% p.a.)				
GDP	5.8	6.3	5.7	6.0
Non-oil GDP	7.5	6.7	6.9	7.0
Agriculture	3.6	3.0	3.0	3.0
Manufacturing	9.7	10.0	10.2	10.5
Mining	24.0	20.0	10.0	10.0
Construction	11.9	9.0	8.0	8.0
Other services	7.2	6.2	6.8	6.6
GNY	5.5	5.9	6.6	6.7
Non-oil exports	26.6	10.4	9.3	8.6
Non-oil imports	7.7	8.6	9.2	8.6
Fixed investment	5.0	7.0	7.2	7.6
Public	7.0	6.0	6.0	6.9
Private	3.7	7.6	7.9	8.0
Macroeconomic balances [b]				
Current account/GNP	-2.4	-2.2	-2.0	-2.0
Non-interest current account/GNP	1.4	1.5	1.5	0.9
Overall public sector balance/GDP	-1.4	-0.6	0.4	0.2
MLT debt service/exports	30.0	29.7	25.5	17.6
MLT debt/exports	176.4	163.5	137.3	92.4
MLT debt/GNP	57.9	54.6	47.2	35.1
Structure of the economy [b]				
Non-oil manufacturing/GDP	16.0	16.6	18.0	22.2
Non-oil exports/non-oil imports	90.2	92.6	94.6	97.0
Public savings/GDP	8.3	9.2	10.2	10.4
National savings/GDP	20.1	20.8	22.1	23.5
Fixed investment/GDP	22.5	22.8	23.2	24.4
Private fixed investment/ Total fixed investment	56.9	57.0	57.6	58.1
Consumption/GDP	75.0	74.6	73.9	73.4
Consumption/GNY	76.0	75.7	74.8	74.1
Prices				
Oil prices (US$/bbl) [b]	17.4	16.7	17.8	24.6
Non-oil terms of trade (1983/84=100) [b]	90.6	91.5	93.4	95.6

[a] Balance of payments data are for fiscal years (starting April 1). Other indicators are for calendar years.
[b] For last year of multi-year periods.

Source: Central Bureau of Statistics and World Bank staff estimates.

2.42 The developments in the oil sector highlight the crucial role of non-oil exports in reducing the current account deficit to a sustainable level, and maintaining it at that level. Oil prices are projected to decline by $0.7/bbl in 1993/94. With production projected to remain constant and domestic consumption increasing, a $0.5 billion narrowing of the oil current account surplus is projected (Table 2.7). Holding the overall current account deficit at the 1992/93 level thus requires a compensating

improvement in the non-oil current account. The oil surplus is projected to continue to decline, so that progress in narrowing the overall current account deficit toward 2% of GDP by 1995 will require additional improvement in the non-oil trade balance. The main uncertainties in the balance of payments, discussed in section D, arise from fluctuations in world oil prices and in import growth in Indonesia's main trading partners. In the event either of these is lower than projected, measures to raise the competitiveness of non-oil exports would be needed to sustain progress in reaching the desired current account deficit.

Table 2.7: Balance of Payments Projections, 1992/93-2000/01
(US$ billion)

	Estimated	*Projected*		
	1992/93	*1993/94*	*1995/96*	*2000/01*
Merchandise exports (fob)	34.9	38.4	45.9	79.0
Oil & LNG	10.3	10.0	9.6	12.0
Non-oil	24.6	28.4	36.3	67.0
Merchandise import (cif)	-31.0	-34.9	-42.4	-76.3
Oil & LNG	-3.8	-4.2	-4.1	-7.2
Non-oil	-27.2	-30.7	-38.4	-69.1
Trade balance	3.9	3.5	3.5	2.7
Non-factor services (net)	-0.4	-0.3	-0.2	0.2
Interest payments (MLT)	-3.9	-4.0	-4.2	-4.9
Other factor services and transfers (net)	-2.5	-2.1	-2.1	-2.9
Current account balance	-2.9	-2.9	-3.0	-4.9
Oil/LNG current account	3.6	3.1	2.7	1.0
Non-oil current account	-6.5	-6.0	-5.8	-5.8
Public MLT loans (net)	2.1	2.0	1.6	2.0
Disbursements	6.8	7.0	6.8	8.9
Principal repayments	-4.8	-5.0	-5.2	-6.8
Other capital (net)	6.9	0.1	3.3	5.8
Use of net foreign assets	-6.1	0.8	-1.9	-2.9
Memo items:				
Net official reserves [a]	11.8	12.6	16.3	29.2
- Months of imports [b]	4.1	4.0	4.1	4.1
Current account/GNP (%)	-2.4	-2.2	-2.0	-2.0
Non-interest CA/GNP (%)	1.4	1.5	1.5	0.9
MLT debt service/exports (%)	30.0	29.7	25.5	17.6

[a] Net official reserves are defined as gross official reserves minus outstanding liabilities to the IMF and other short-term liabilities.
[b] Net official reserves in months of next year's expected total merchandise imports.

Source: Bank Indonesia and World Bank staff estimates.

2.43 Indonesia should be able to realize the rapid non-oil export growth projected for sustainable growth. Much of Indonesia's recent success in expanding non-oil exports is attributable to growth of

textile (including clothing) exports. Textile exports surpassed plywood exports in value in 1990/91 to become Indonesia's largest manufactured export. Although Indonesia's textile exports have a significant 3% share of world exports in a sector where non-tariff barriers are important, there is reason for optimism about textile export prospects since Indonesia recently reached an agreement with the U.S. for a 35% larger textile quota. Textile investment projects requiring imports worth $10.6 billion have been approved by BKPM since 1986, and the realization rate for approved textile investments has been 45%, which is one of the highest rates of any sector. Greater capacity and the expansion of the U.S. quota should support the 12% annual growth of textile exports projected over the medium term.

2.44 In addition to continued growth of textiles, rapid growth of non-oil exports will increasingly depend on Indonesia's ability to expand exports of "other manufactures". Growth in this large, diverse group of products has been rapid since the late 1980s, yet Indonesia's share of world exports of these products remains small. The scope for further expansion is thus substantial. In footwear, the largest and one of the most rapidly growing other manufactures, Indonesia's share of world exports is less than 1%. Competitiveness rather than external market constraints will determine Indonesia's ability to expand this group of exports. The importance of competitiveness highlights the role of regulatory reform that exposes domestic sources of high costs to competitive pressures. With continued progress on that front and improving competitiveness, Indonesia should be able to sustain the 9-10% real growth of non-oil exports projected over the medium term.

External Financing and Debt Management Strategy

2.45 **External Financing.** Projections of Indonesia's external financing, based on the scenario outlined above, are presented in Table 2.8. Total gross external financing in 1993/94 is projected to be about $10.5 billion, substantially lower than in the past three years. This is due to the major progress achieved since 1990 in reducing unsustainable current account deficits and associated large increases in foreign borrowing, especially private non-guaranteed borrowing. The pattern of financing in 1992/93 included a large build-up of net foreign assets, including capital inflows attracted by high rupiah interest rates. As interest rates gradually decline toward international levels, it is probable that some of that capital will flow out, and this is reflected in the 1993/94 projection. At the same time, official reserves would be maintained equivalent to 4-4.5 months of imports, levels that are prudent given Indonesia's open capital account and vulnerability to external shocks, as discussed in Section D. The other major change in financing requirements is the growth in debt repayments from $7.4 billion in 1992/93 to $8.4 billion in 1993/94. Beyond 1993/94, Indonesia's external financing needs will continue to grow, reflecting growing debt repayment obligations, the need to maintain reserve levels in relation to growing imports, and a gradual, sustainable rise in the current account deficit (in absolute terms).

2.46 The financing plan implicit in the ***sources of financing*** projected in Table 2.8 recognizes the strategic role of continued official assistance, but also foresees a growing reliance on other sources of finance. Following reductions to more sustainable levels in 1993/94, private capital inflows (including foreign direct investment, private medium- and long-term borrowing and trade-related flows) will become an increasingly important part of overall financing. Within public borrowing, loans from commercial sources will become more important as gross flows of official assistance are projected to remain roughly constant as total external borrowing rises.

Table 2.8: Projected External Financing
(Period average for multi-year periods, US$ billion)

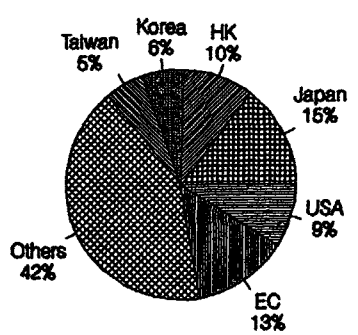
	Actual		*Estimated*	*Projected*		
	1986/87-1989/90	*1990/91-1991/92*	*1992/93*	*1993/94*	*1994/95 1995/96*	*1996/97 2000/2001*
External Financing	6.6	12.4	16.4	10.5	13.6	16.2
Current account deficit	2.4	3.9	2.9	2.9	2.9	4.1
(of which, MLT interest payments)	(2.9)	(3.6)	(3.9)	(4.0)	(4.3)	(4.6)
Principal repayments	4.7	6.3	7.4	8.4	8.9	10.0
Increase in net foreign assets	-0.5	2.2	6.1	-0.8	1.9	2.1
Sources	6.6	12.4	16.4	10.5	13.8	16.2
Direct foreign investment (net)	0.5	1.5	1.7	1.8	1.9	2.1
Private MLT loans	1.1	4.9	3.6	2.7	3.8	4.7
Other capital (net)	-1.1	0.5	4.3	-1.0	1.3	1.8
Public MLT loans	6.1	5.5	6.8	7.0	6.8	7.5
of which:						
Official assistance [a]	(3.5)	(3.8)	(3.8)	(3.8)	(4.0)	(4.0)
Other	(2.6)	(1.7)	(3.0)	(3.2)	(2.8)	(3.5)

[a] Excludes grants, which are included in transfers in the current account.

Source: Bank Indonesia and World Bank staff estimates.

2.47 Net inflows of foreign direct investment (FDI) rose from $0.2 billion in 1985/86, before the opening of the economy through deregulation, to $1.7 billion in 1992/93. In addition to increasing Indonesia's access to new ideas and technology, FDI provides resources for investment without creating debt. The sources of private investment have been quite diversified (see Figure 2.8). Gradual increases from the recently-achieved high foreign investment level are projected. Higher levels of FDI are possible, together with higher import levels and rates of growth, but even maintaining the current level will depend on progress in several areas: reform of investment and capital market regulations, easing of infrastructure bottlenecks, and institutional reforms, especially in the legal framework and accounting. Such policies, discussed in more detail in subsequent Chapters, will not only make Indonesia more attractive to foreign investors, but will also provide the kind of environment domestic investors need for efficient, sustained growth.

Figure 2.8: Sources of Foreign Direct Investment
(Based on 1992 Approved Investments of US$10.3 billion)



Source: Investment Coordinating Board.

2.48 Overall, private capital flows will provide about half of Indonesia's financing in the 1990s, compared with negligible amounts in the 1980s. This shift calls for careful attention to debt management and policies that ensure efficient use of resources, especially given Indonesia's already large stock of external debt. Three points need to be kept in mind in implementing this scenario. First, the incentive framework needs to ensure that these external resources flow into efficient uses, generating rapid, high returns, especially in export-oriented, labor-intensive activities. In this regard, large, capital-intensive projects need particularly careful scrutiny because such projects can add rapidly to Indonesia's debt, while

crowding out smaller, potentially more profitable investments. Second, the availability of private financing at the projected levels cannot be taken for granted. It will depend on perceptions of Indonesia's creditworthiness and attractiveness as a home for foreign investment. Third, the projected shift in the composition of Indonesia's debt will raise the average borrowing cost and shorten the maturity structure of debt.

2.49 Within this overall financing plan, ***concessional assistance*** will play a strategically important role, even though such assistance is projected to decline significantly in net terms and in relation to the size of the economy throughout the 1990s. An adequate flow of concessional assistance is an essential part of Indonesia's transition to the more diversified financing pattern projected above. First, such assistance will continue to support projects and sectors—such as human resource development and infrastructure—that will enhance Indonesia's productivity, competitiveness, and attractiveness to foreign investors. This in turn will improve perceptions of Indonesia's creditworthiness. Second, it will ensure the net flow of concessional external resources does not fall too rapidly as amortization payments rise. Finally, by maintaining an adequate degree of concessionality, it will make the rising borrowing costs noted above more manageable. All these factors will work together to keep total borrowing costs manageable and to maintain Indonesia's access to international capital markets. This will increase the probability that the projected commercial flows will be available as needed.

2.50 This financing plan implies that concessional financing flows remain at about current levels, with disbursements of official concessional assistance from Indonesia's Consultative Group (CGI), including grants, continuing at about their 1992/93 level of $3.8-3.9 billion. With an appropriate mix of project and sector assistance and further progress in improving project implementation, CGI commitments of about the same level as last year ($4.9 billion) would generate the projected concessional flows in 1993/94. As discussed at last year's CGI meeting, human resource development and infrastructure remain the priority areas for this assistance. This financing plan also assumes that other financing outside the normal donor framework remains at about last year's levels.

2.51 For the recommended level of commitments to generate the projected disbursements, the level and form of commitments need to be optimized, with continued improvements in project and program design and implementation and with disbursement mechanisms well-suited to the requirements of the activities being assisted. This will prevent an excessive, disruptive drop in disbursements. Sector operations are likely to provide a particularly appropriate lending instrument since such operations support efficiency-enhancing sectoral programs and policies while disbursing in line with the overall pace of activity in the sector. The projected level of concessional assistance will mean that a substantial, though declining, share of Indonesia's debt will remain on concessional terms, keeping the rising overall borrowing costs within manageable limits. Continued concessional assistance, in combination with prudent macroeconomic management, will work together to bring about sustained improvements in indicators of Indonesia's debt and creditworthiness.

2.52 **Debt Management.** The macroeconomic scenario, including the financing strategy, outlined above, leads to a significant improvement in creditworthiness, with the debt-service ratio falling below 20% by the end of the decade (Table 2.9). As noted, this will help ensure that the private capital inflows, which become increasingly important, materialize. Improvements in debt indicators alone, while necessary, are insufficient to ensure this. The economic and political environment for private investment must be attractive. The Government can help by maintaining macroeconomic stability, sustaining the momentum of trade, finance and institutional reforms, and reducing infrastructure bottlenecks that hamper private sector development. Investor confidence would be helped by institutional developments to make the business environment more transparent and predictable. The list of areas where work is needed includes the legal and accounting framework, foreign investment regulation, and land-use and ownership.

Table 2.9: Medium- and Long-Term Debt Indicators, 1987-2000
(percent)

	Actual				*Projected* [a]		
	1987-89	*1990*	*1991*	*1992*	*1993*	*1995*	*2000*
DOD/GNP	62.7	57.8	59.0	57.9	54.6	47.2	35.1
Public	55.8	47.5	47.0	45.9	44.2	39.9	29.2
Private	7.0	10.3	12.0	11.9	10.5	7.2	5.9
DOD/exports [b]	222.6	187.6	196.5	176.4	163.5	137.3	92.4
Public	197.9	154.2	156.6	140.0	132.2	116.3	76.8
Private	24.6	33.4	39.8	36.4	31.3	21.1	15.6
Debt service/exports [b, c]	36.1	29.7	31.6	30.0	29.7	25.5	17.6
Public	30.4	23.7	23.2	21.3	19.9	16.4	11.7
Private	5.7	6.0	8.4	8.7	9.7	9.1	5.9
Interest/exports [b]	14.0	11.0	11.5	10.0	9.2	8.1	5.4
Public	12.1	9.0	8.9	8.0	7.3	6.4	4.1
Private	1.9	2.0	2.5	2.0	2.0	1.7	1.2

[a] Based on exchange rates of December 31, 1992.
[b] Denominator is gross exports of goods and services.
[c] Debt service excludes prepayments.

Source: Bank Indonesia and World Bank staff estimates.

2.53 Indonesia could also consider implementing a strategy of market diversification. Such a strategy would include: (i) assessing Indonesia's financing requirements by volume, timing and use; (ii) considering potential sources and instruments, including the international bond market; and (iii) developing institutional capacity to carry out the strategy. In view of the dollar denominated burden of Indonesia's debt and the fact that exchange rate fluctuations have added significantly to the debt in the past, the use of specialized financial instruments and integrated asset-liability management techniques to reduce Indonesia's exposure to external financing and debt management risks deserves consideration. An array of financial instruments has emerged that allows governments, among others, to reduce exposure to currency, interest rate and commodity price risk.

2.54 Another debt management issue is how the Commercial Offshore Loan Team (COLT) should evolve. Rapid growth of private borrowing in 1989-90 and the reemergence of a number of large, capital-intensive public and publicly-related investment projects that were about to seek external loans led to the establishment of the COLT. The COLT was empowered to: (a) coordinate all public commercial borrowing, including state enterprise borrowing and private sector borrowing for projects involving the Government or its agencies; (b) set annual ceilings on external commercial borrowing by public and quasi-public entities and establish guidelines for loan terms; (c) determine the priority order and timing of approved loans; and (d) improve reporting and information from public and private entities on external commercial borrowing. The COLT later issued regulations for a prudent level of private borrowing that have tended to contain such borrowing. The regulations: (a) cap total public sector foreign exchange borrowing from international commercial banks in each fiscal year to FY95; (b) extend the restriction on commercial banks' net open position to include off-balance sheet transactions; and (c) limit commercial banks' short-term foreign liabilities to 30% of capital.

2.55 Further development of the institutional framework to manage external borrowing is called for to keep it within prudent, sustainable limits in the context of an open capital account. Continued vigilance is needed to ensure that the ceilings on external borrowing for public and publicly-related projects are maintained. Efforts to circumvent such ceilings indicate the need for careful monitoring, and for increasing reliance on indirect means of managing external debt—macroeconomic restraint, regular scrutiny of public enterprise investment programs, and financial sector and institutional reforms that encourage financial prudence by firms and banks. Subsequent chapters discuss public enterprise investments (Chapters 4 and 5) and measures to improve the financial discipline of banks and firms (Chapter 3). It would be useful to establish a debt policy body (possibly by extending the scope of the COLT) responsible for overall debt management. The body would need a secretariat with adequate full-time staff and resources to provide data and analysis needed for debt management. Improving the reliability and coverage of debt data, and systems for debt analysis would assist this effort.

Consistent Macroeconomic Policies for Sustained Growth

2.56 The sustainable growth path outlined above is an objective. Macroeconomic policy is an important instrument the Government can use to achieve this objective. Recent experience illustrates that macroeconomic policies—fiscal, monetary and exchange rate policies—need to be used in a coordinated fashion to keep the economy on an even keel. Rapid monetary growth in 1990 raised inflation and expectations of exchange rate depreciation that pushed up nominal domestic interest rates. A more supportive fiscal stance in 1991/92 would have reduced the burden of adjustment on private investment. A more supportive fiscal stance in 1992/93 could have helped achieve a quicker alignment of domestic and offshore interest rates by improving confidence in price and exchange rate stability, and would have created more scope for an increase in private investment. Close coordination of macroeconomic policies will be needed to keep aggregate demand along a path that is consistent with robust growth with low inflation and manageable levels of external borrowing.

2.57 ***Exchange rate policy***—the managed float—is projected to maintain the real effective exchange rate close to the present level. In view of the crucial role of non-oil export growth in the projected macroeconomic scenario, a competitive exchange rate would be essential. Under the managed float, the Government sets bilateral exchange rates for the rupiah *vis-a-vis* a basket of currencies. In practice the U.S. dollar has a heavy weight in the basket. Fluctuations in the U.S. dollar against major currencies therefore affect Indonesia's competitiveness because of the exchange rate policy. Recent large fluctuations in the U.S. dollar exchange rate may continue and the Government may wish to consider managing the rupiah against a basket in which the dollar has a lower weight. Recent experience also highlights the importance of expectations of exchange rate change. Changes in expectations of depreciation can quickly lead to capital inflows and outflows through Indonesia's open capital account. Policy inconsistency can raise such expectations. Therefore, adherence to the managed float exchange rate policy is easiest when there is a simultaneous commitment to a stable price level in conducting monetary policy. If the private sector perceives an inconsistency between the exchange rate policy and the goals of monetary policy, as occurred in 1990, confidence will erode and quickly lead to capital outflows.

2.58 ***Monetary policy*** in 1992/93 faced the formidable task of sterilizing large inflows of capital using only one instrument, the SBI. As noted above, sterilization operations are estimated to have cost BI nearly $1 billion in 1992/93. Developing alternatives to SBIs for BI to sterilize capital inflows could relieve the strain on BI's income. This would be advisable because a large drop in BI's profits could erode confidence and trigger capital outflows. Alternative ways of sterilizing capital inflows include prepayment of public debt, and increasing commercial bank required reserves or liquidity requirements. To encourage the development of a secondary market in SBIs and commercial bank debt instruments

(SBPUs), BI could coordinate balanced purchases and sales of these instruments. Over time the markets would become deeper and broader to permit BI to sterilize capital flows by intervening in the secondary market for these instruments.

2.59 An issue for near-term monetary management is the renewal of the special SBIs that were exchanged for deposits of public enterprises in February 1991 as part of the contractionary measures to withdraw liquidity (para 2.4). The Rp.7.1 trillion outstanding stock was renewed for another 6 months in February 1993. To avoid a destabilizing injection of liquidity, these special SBIs should be carefully phased to mature over time. This could be accomplished by renewing them upon maturity in August 1993 at staggered maturities of 1-2 months to several months, with some rolled over longer as needed. Another near-term issue is the orderly unwinding of the large stock of ordinary SBIs. BI should also review the need for its continued involvement in operations that can be better left to commercial banks, such as discounting of export bills. As the experience of 1992/93 demonstrates, such operations can make it difficult to keep the monetary aggregates on track. The effectiveness of monetary policy would also increase by accelerating the phasing out of subsidized liquidity credits. By insulating special classes of borrowers, these credits reduce the effectiveness of monetary policy and, within a given ceiling for credit growth, reduce credit to efficient private borrowers.

2.60 Because of the constraints Indonesia's exchange rate policy and open capital account put on monetary policy, ***fiscal policy*** is the most effective instrument for ensuring that excess demand pressures do not arise, causing inflation to accelerate or the current account deficit to become unsustainable. This means keeping the public sector's net absorption of resources to levels that prevent overheating. To do this, the fiscal stance must be consistent with the main macroeconomic targets. Inconsistency of policies would suggest that one or more macroeconomic targets may not be met, which might erode confidence. Maintenance of confidence in macroeconomic policy is essential to keep onshore interest rates aligned closely with offshore rates and to avoid destabilizing foreign capital inflows and outflows.

2.61 The consistency approach to determining the fiscal stance involves deriving public sector financial asset and liability movements, and the implied net financial position of the public sector, that are consistent with the main macroeconomic targets. One reason for adopting this approach to assessing fiscal policy rather than the usual one of counting expenditures and revenues is the nature of Indonesia's fiscal accounts. The public sector includes the central, provincial and local government levels. In addition, off-budget transactions are significant, public enterprises produce nearly one-fifth of GDP, and BI engages in quasi-fiscal operations (para. 2.15). All these activities should be included in a measure of the impact of the consolidated public sector on the macroeconomy. Data on the stocks of public sector assets and liabilities are often more reliable and up-to-date than revenue and expenditure data.

2.62 A given net financial position of the consolidated public sector can correspond to three kinds of asset and liability movements: issuance of external debt, internal debt, and revenue from monetization. In Indonesia, the balanced budget law prohibits internal borrowing, leaving only external borrowing and money creation. The medium-term scenario projects a sustainable path for the growth of net foreign liabilities of the public sector. Continued restraint on public borrowing along with the need to increase official reserves as the value of imports rises implies no real growth of public net foreign liabilities in the near to medium term. Revenue from monetization is determined by the demand for money, which depends on real GDP and the level of interest rates. Monetization is not a significant source of revenue; furthermore, it is projected to decline as inflation falls from 7.4% in 1992/93 (annual average) toward 5% by 1995/96. The analysis suggests that the sustainable medium-term fiscal stance is a small overall fiscal surplus. Measures are needed to improve the Central Government overall fiscal position, which was a deficit of about 1.0% of GDP in 1992/93, by the equivalent of about 2% of GDP in the near to medium term. The Central Government budget for 1993/94 implies an improvement in the fiscal balance

of about 1.5% of GDP during the year. Meeting this ambitious target would improve the balance of demand management policies, allowing private investment to revive as interest rates subside. For consistency with sustainable growth targets, the planned improvement in 1993/94 would need to be sustained in the medium term. As already emphasized, this would promote private confidence in the stability of the rupiah and in the price level, which would hasten the reduction in domestic interest rates.

2.63 Improving the fiscal stance while funding priority public investments underscores the need to strengthen ***public resource mobilization*** and increase public savings. While there has been a trend improvement in the public savings rate in recent years (Tables 2.2 and 2.10), there remains sizable scope for further improvement by raising tax and non-tax revenues and containing expenditures. The greatest potential lies in tapping more fully sources of government non-tax revenue, including strengthening cost recovery from public services, raising revenue from forestry fees and improving the financial performance of public enterprises. Stronger revenue mobilization will need to be supplemented by improved public expenditure management to ensure that the additional resources lead to higher savings. The main tasks on the expenditure side will be to reduce subsidies, contain general administrative spending, and rationalize investment priorities.

2.64 A major reform of the tax system in the 1980s created a modern tax system based on the value added tax (VAT), the personal income tax and the corporate income tax. Coupled with improved tax collection, the new system raised non-oil taxes in relation to non-oil GDP from 7.2% in 1981 to an estimated 12.7% in 1992/93, an important achievement. Indonesia's tax ratio, however, remains below that of most other countries in the region (17% in Korea and Thailand, for example). Moreover, with oil revenue projected to continue to decline in relation to total revenue, mobilizing more non-oil tax revenue will remain important. The primary focus of efforts to raise tax revenues should be improving tax administration. The proportion of potential revenue actually collected remains in the 50-60% range for several major taxes, including the income tax, the VAT and the property tax. In countries with more developed tax systems, this ratio tends to be as high as 80-85%. Also, recently, there appears to have been some loss of earlier gains in customs duty collection. Besides strengthening efforts to improve tax administration, possible tax reform measures include raising the effective property tax rate from its current low level of 0.1%, further broadening the coverage of the VAT, and taxing personal income from interest at the same rate as other personal income. Also, there is substantial scope for raising revenue from forestry fees; increasing government rent capture in the sector to 85% over the medium term could more than triple annual government forestry revenues from their present level of about Rp.1 trillion (while also supporting environmental objectives). Other sources of improvement in public resource mobilization are discussed in the following chapters. Thus, improved public pricing policies—for fertilizer prices, power tariffs and water charges—are discussed in Chapter 3. Policies for improving the efficiency of public expenditures are discussed in Chapter 4. Also, Chapter 5 discusses measures to improve public enterprise performance, rationalize government administrative spending, and mobilize more revenues at the local government level.

2.65 **Savings-Investment Balances and Sustainable Growth.** The foregoing analysis of the consistency of macroeconomic policies highlights the supportive role that fiscal policy would need to play in achieving sustainable growth. To minimize risks to the medium-term macroeconomic scenario, which shows robust growth with low inflation and keeps external borrowing manageable, the Government's overall fiscal balance should move to and sustain a small surplus over the medium term. Prudence argues for targeting a somewhat larger fiscal adjustment so that unexpected shocks or demands on the Government budget do not lead to domestic demand overheating.

2.66 Keeping the fiscal stance on a sustainable path does not guarantee the underlying macroeconomic targets for growth, inflation and external balance will be met; only that the fiscal stance

is consistent with them. Achieving the targets also depends on the private sector saving more to help finance growing investment demand. A key challenge throughout the decade will be to raise savings—both public, as already discussed, and private—to finance the higher investment that would sustain economic growth while reducing the economy's dependence on foreign savings. With an improvement in overall investment efficiency, GDP growth fast enough to absorb labor force growth at rising levels of productivity can be achieved with a moderate increase in the investment rate (Table 2.10). Within this, public investment is projected to rise to around 10% of GDP, from about 9.5% currently. This reflects the need for increased public investment in physical infrastructure and human resource development (Chapter 4 discusses the priorities for public investment). Private investment would need to rise by more, from about 13% of GDP currently to about 14% by 1995 and further to 15% by the late 1990s.

Table 2.10: Savings-Investment Balances, 1983-2000
(percent of GDP at current prices)

	Actual				*Estimate*	*Projection*	
	1983-88	*1989*	*1990*	*1991*	*1992*	*1995*	*2000*
Gross domestic investment	23.4	23.5	23.9	24.0	22.7	24.0	25.4
Fixed investment	20.4	21.2	22.5	22.7	22.5	23.2	24.4
Change in stocks	3.0	2.3	1.3	1.3	0.2	0.8	1.0
Gross national savings	20.1	21.8	20.9	20.3	20.1	22.1	23.5
Savings-investment gap [a]	-3.3	-1.8	-2.9	-3.7	-2.6	-1.9	-1.9
Public sector							
Gross domestic investment [b]	8.8	8.6	9.2	9.6	9.7	9.8	10.2
Public savings	7.1	7.0	9.5	8.5	8.3	10.2	10.4
Savings-investment gap	-1.7	-1.6	0.3	-1.1	-1.4	0.4	0.2
Private sector							
Gross domestic investment	14.6	14.9	14.7	14.4	13.0	14.2	15.2
Fixed investment	11.6	12.6	13.3	13.1	12.8	13.4	14.2
Change in stocks	3.0	2.3	1.3	1.3	0.2	0.8	1.0
Private savings	12.9	14.8	11.5	11.8	11.8	11.9	13.1
Savings-investment gap	-1.6	-0.2	-3.2	-2.6	-1.2	-2.3	-2.1

[a] The inverse of the current account deficit expressed in calendar years.
[b] Fixed investment only. Investment in stock changes is assumed to be financed wholly by the private sector.

Source: Central Bureau of Statistics and World Bank staff estimates.

2.67 Reduced reliance on foreign savings and the need to raise investment imply that national savings would need to increase by about 2% of GDP in the medium term and by 3.5% over the longer term (Table 2.10). Within this overall increase, adherence to a supportive fiscal stance would raise public saving by the equivalent of about 2% of GDP. Despite the increased savings effort from the public sector, private savings would also need to rise by close to 1.5% of GDP. The private savings rate declined sharply in 1990 and has recovered only marginally since. Saving involves postponing consumption today in order to consume more in the future, so raising in the expected return to foregoing consumption should increase saving. Improving access to, and the quality of, education and health services are ways the

Government can help. Over the medium term, a lower dependency ratio resulting from demographic shifts should help boost saving. Sustaining strong economic growth, maintaining a stable financial environment, and promoting profitable, widespread investment opportunities through continued improvements in the incentive regime, as discussed in Chapter 3, should also contribute to higher private savings, business and household.

D. Economic Management in an Uncertain External Environment

2.68 Indonesia faced a difficult and volatile environment during the 1980s. Both oil and primary commodities, which were Indonesia's principal exports, experienced large declines and considerable volatility in prices. The external environment in the 1990s is not projected to be significantly different from the second half of the 1980s. In the short term, the main uncertainties relate to oil prices and private capital flows. Indonesia also is vulnerable to currency and interest rate risks. Over the medium term, Indonesia will face two structural challenges: oil earnings in the 1990s are likely to decline because of a decline in the exportable surplus; and Indonesia needs to contain the current account deficit in relation to GDP while increasing its reliance on non-concessional sources of finance.

The Main External Sources of Uncertainty

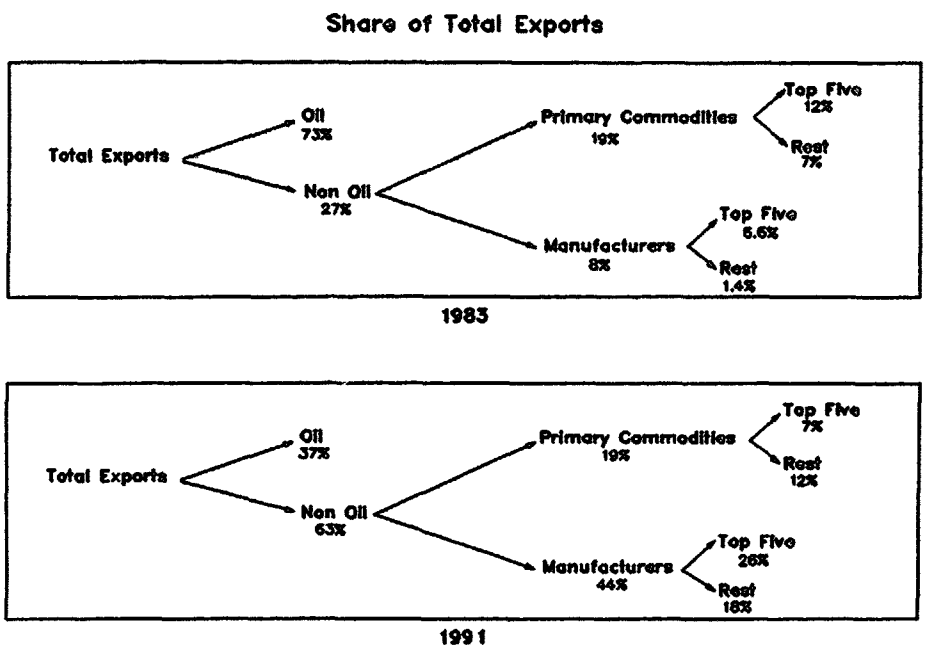
2.69 The main external risks to macroeconomic stability arise from fluctuations in:

- oil prices;
- non-oil commodity prices;
- demand for Indonesia's manufactured exports by major trading partners;
- world interest rates; and
- cross-currency exchange rates—particularly between the Japanese yen and the U.S. dollar.

2.70 **Oil Prices.** The outlook for oil prices depends greatly on demand conditions in the large oil-importing countries. With sluggish growth in the industrial countries expected for the next few years, oil prices are likely to remain constant, implying a fall in real terms. Some improvement in real oil prices is projected toward the end of the decade, but declines in Indonesia's exportable surplus will limit the extent to which Indonesia benefits from that improvement.

2.71 **Non-oil Commodity Prices.** In the early 1980s, the Indonesian economy depended heavily on oil. In 1981, the oil/LNG sector accounted for over 25% of total GDP, 70% of government revenues and over 70% of total exports. However, since the mid-1980s, the non-oil sector has expanded. Non-oil exports rose from under 30% of total exports in 1983 to 63% in 1991, a six-fold rise in real terms. Despite the diversification in export structure, both oil and non-oil primary commodities remain a significant proportion of total exports. Commodities account for over 56% of total earnings (of which 37% is oil/LNG, Figure 2.9). Unlike the 1980s, world prices of non-oil commodities are not expected to show any long-term decline in real terms during the 1990s. Although projected sluggish growth in the OECD countries over the next few years can be expected to exert downward pressure on commodity prices, developing countries are expected to continue to shift away from production of non-oil commodities, which will exert upward pressure on prices. The aggregate non-oil commodity price index is expected to stabilize in real terms for the rest of the decade. Commodity prices have also been highly volatile in the past and there is no reason to expect that volatility around the projected trend will decline.

Figure 2.9: The Changing Composition of Indonesia's Exports



2.72 **Manufactured Exports.** Unlike primary commodities, where the main source of uncertainty is the price outlook, the external factors affecting manufactured exports relate primarily to the growth of markets and possible market restrictions. In this respect, two aspects of the structure of manufactured exports are relevant: the composition or diversification of exports at the product level; and the regional or spatial diversification of exports.

2.73 The overall structure of manufactured exports in terms of both product and market concentration is summarized in Figure 2.10. Indonesia has two distinct groups of manufactured exports. About 63% of Indonesia's manufactured exports at the product level—consisting of plywood and textiles—is potentially subject to market restrictions. Moreover, this small group of products has a high regional concentration. Thirty-seven percent of exports are highly diversified. This group consists of a wide range of products, with low market shares and low spatial concentration. Although this group still constitutes the smaller proportion of total manufactured exports, it has grown rapidly over the past few years. Continued rapid growth of exports from this group depends mainly on Indonesia's competitiveness.

2.74 Recent changes in trading arrangements appear to have negligible implications for Indonesian exports and capital inflows. A World Bank study suggests that the overall impact of NAFTA on East Asian exports will be small—less than one percent of East Asia's non-oil exports to the U.S. However, North America is a growing market for Indonesian textile exports and if NAFTA results in a slowdown of U.S. support for the Uruguay Round negotiations on the future of the Multifiber Arrangement (MFA), the loss of Indonesian exports to North America could be substantial. More generally, if regional arrangements slow the progress of multilateral trade liberalization, the loss of trade opportunities for Indonesia will be considerable.

Figure 2.10: Manufactured Exports and the Nature of Potential Market Constraints
(% of Total Exports of Manufactures)

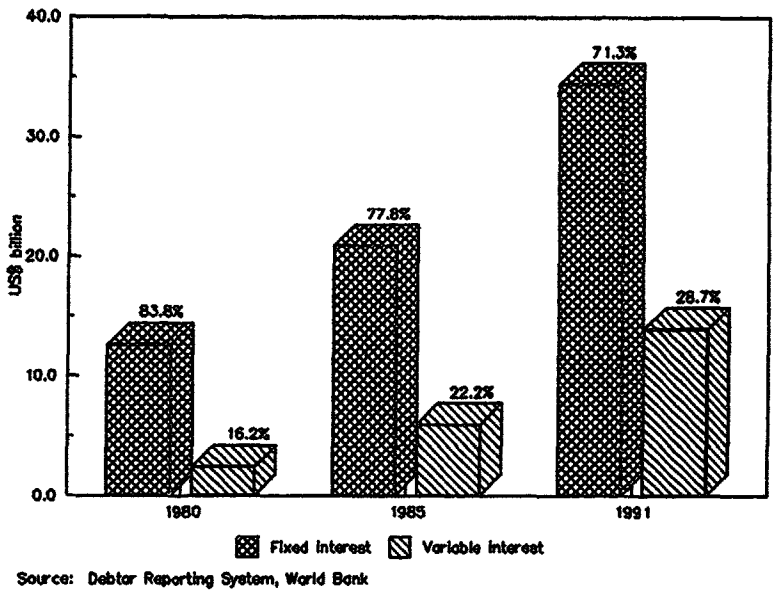
Product Market Constraint	Spatial Market Constraint: High Regional Concentration	Spatial Market Constraint: Low Regional Concentration	Total
High Potential Constraint	32.3	30.8	63.1
Low Potential Constraint	10.3	26.6	36.9
	42.6	57.4	100.0

2.75 Concerns about growing regionalism in the world has contributed to an acceleration of regional integration schemes in the ASEAN countries. In January 1992, the ASEAN member states signed two economic agreements during the Fourth ASEAN Summit; a Framework Agreement for Enhancing ASEAN economic cooperation; and an Agreement on the Common Effective Preferential Tariffs (CEPT) scheme for the ASEAN Free Trade Area (AFTA). The CEPT calls for the reduction of tariffs on all manufactured goods and processed agricultural products to a 0-5% range within a 15-year period, beginning January 1, 1993 when the CEPT came into effect. The AFTA is useful as an expression of the political will for trade cooperation among ASEAN countries. However, its impact on Indonesia's exports in the near term is likely to be small. Among the ASEAN countries, Singapore is Indonesia's largest trading partner (13% of exports); but Singapore is already largely a free trade area for Indonesia. Others in ASEAN account for a very small share of Indonesia's non-oil exports (about 4%) and the potential for growth is modest in the near term.

2.76 The analysis of patterns of trade suggests that growth opportunities for Indonesian exports in the 1990s may lie largely in East Asia going beyond ASEAN. Japan's share in Indonesian non-oil exports has been declining; the decline is particularly noticeable in growth areas such as industrial products (particularly textiles). Imports constitute a very small share of the Japanese market for manufactures and this market offers good opportunities for Indonesia's labor-intensive exports. The other East Asian markets such as Korea, Taiwan, Hongkong and China are beginning to emerge as major markets, particularly for resource-based products. In a recent review of East Asian regional developments, the Bank has suggested the need for concerted trade liberalization in East Asia. Such an initiative could help promote East Asia's exports and also preempt protectionist pressures and provide new impetus for trade reform. Indonesia could provide the initiative by lowering tariffs on a most-favored nation basis. Such a move would give Indonesia an initiating role, and serve domestic interests by lowering costs and export interests by strengthening competitiveness.

2.77 **Interest Rate Composition of External Debt and Interest Rate Risks.** Indonesia's external borrowing rose sharply during the 1980s. Initially, much of this debt was contracted from commercial sources at floating interest rates (Figure 2.11). As a result, the share of Indonesia's public debt at variable interest rates increased from 16% in 1980 to 22% in 1985. By 1990, the share of public debt at variable interest rates had risen to almost 29%, increasing vulnerability to interest rate fluctuations.

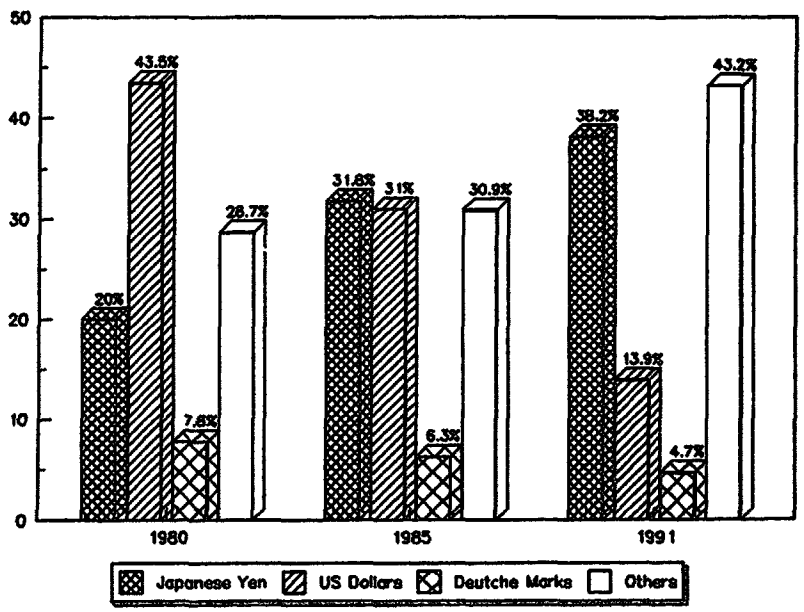
Figure 2.11: The Interest Rate Structure of Public Debt, 1980 to 1991



Source: Debtor Reporting System, World Bank

2.78 **Currency Composition of External Debt and Cross Currency Risks.** Unanticipated exchange rate movements can also lead to increases in the debt burden. The currency composition of Indonesia's external debt is heavily skewed toward non-dollar currencies, and in particular toward the Japanese yen (Figure 2.12). The large share of "other" currencies is dominated by multiple currency

Figure 2.12: Currency Composition of Public Debt Outstanding



loans of multinational organizations. At end-1992, 43% of these loans were yen-denominated, which implies that total public debt is 50% yen-denominated. At the same time, much of the inflow available to service this debt is in U.S. dollars (Table 2.11). The mismatch between the currency composition of net trade and external debt means that fluctuations in the exchange rate of the U.S. dollar against major currencies expose Indonesia to cross-currency risks.

Table 2.11: Currency Composition of Exports and Imports

	1988-89 (Period average, US$ billion)				1988-89 (Period average, percent)			
	Net-Oil Exports	*Non-Oil Exports*	*Non-Oil Imports*	*Net Exports*	*Net-Oil Exports*	*Non-Oil Exports*	*Non-Oil Imports*	*Net Exports*
Dollar	3.5	12.6	9.9	6.2	100.0	95.4	77.9	155.0
Yen	0.0	0.1	1.0	-0.9	0.0	0.7	8.1	-22.5
EC [a]	0.0	0.2	1.3	-1.1	0.0	1.5	10.3	-27.5
Other	0.0	0.3	0.5	-0.2	0.0	2.4	3.8	-5.0
TOTAL	3.5	13.2	12.7	4.0	100.0	100.0	100.0	100.0

[a] All European currencies.

Source: Ministry of Finance Data and World Bank Staff estimates.

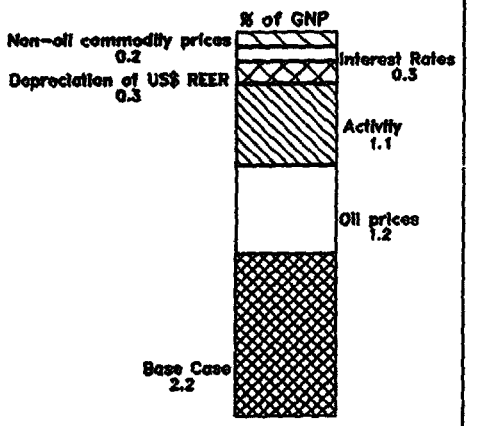
Quantifying External Uncertainty

2.79 Indonesia is vulnerable to external shocks, especially to falling oil prices and partner country import growth. Assuming shocks on the order of magnitude as observed in the past, Figure 2.13 summarizes the current account impact of the possible adverse external shocks (the assumed magnitude of each shock is shown parenthetically in Figure 2.13). Based on past experience, it is unlikely that all

Figure 2.13: Impact of Shocks on Current Account Deficit

	1995 US$ billion	% of GNP
Increment to Current Account with a:/		
Decline in non-oil commodity prices (12%)	0.27	0.2
Increase in interest rates (188)	0.34	0.3
Depreciation of US$ REER (17%)	0.35	0.3
Slowdown in partner country imports (22%)	1.48	1.1
Decrease in oil prices (28%)	1.55	1.2
Base Case Current Account Deficit	2.94	2.2

a/ Magnitude of shocks assumed are based on the variance exhibited by each of these variables over the past 15 years



of these shocks would occur simultaneously. Although, over the period from 1975 to 1991, oil price declines, U.S. dollar depreciations and interest rate increases all tended to move together, there has been a negative correlation between non-oil commodity prices and both LIBOR and the depreciation of the U.S. dollar. However, the cumulative impact of all the adverse external shocks would be large, on the order of 3% of GNP. Though sizable, Indonesia weathered larger external shocks in the 1980s from fluctuating oil prices. Since that time the economy has become more diversified and, consequently, less vulnerable.

Policy Implications

2.80 Indonesia can reduce its exposure to external risks. Specific risk management instruments can be used to reduce exposure to interest rate, currency and commodity price risks. Indonesia would need to focus on three key areas: foreign reserve management; external liability management; and commodity price risk management. Risk management involves a tradeoff between the assurance of a moderate but predictable current cost and assurance against future developments that could produce large windfalls or equally large losses. While other mechanisms for risk smoothing also exist (domestic or international price stabilization schemes), there are two advantages to using international financial instruments. First, the use of market-based instruments does not require large outlays (for example, for storage, price subsidies) and does not create price distortions. Second, the use of international financial instruments allows a country to transfer the risks to international markets. For example, exchange-traded instruments can be used for reducing exposure to risk from fluctuating oil prices. In late 1990 and during the first half of 1991, Mexico used financial risk management to protect its earnings from crude oil exports (which were averaging 1.3 million barrels a day). Mexico's strategy was to ensure that it received at least $17/bbl, the price used in preparation of the government budget. Purchasing over-the-counter put options for part of anticipated exports could be considered as one hedging strategy in some market environments. Care should be exercised in selecting scale, maturity, and strike price, and attention given to cost. The use of financial instruments and asset-liability management techniques could also be used to hedge interest and exchange rate risks to the external debt position (para. 2.53).

2.81 Financial instruments can help cushion the impact of a generalized slowdown in world demand. However, it would be difficult to insulate totally from such a shock. In the short term, Indonesia can reduce vulnerability by following responsive and prudent macroeconomic policies, including maintaining a competitive real exchange rate and an adequate level of international reserves. Indonesia also has undrawn lines of credit worth $2 billion that could be used to smooth the effects of a temporary shock. Over the longer term, the best way to reduce this source of risk is to continue to diversify the economy and increase competitiveness by reducing costs. The policies for achieving this are well-known: prudent, consistent macroeconomic policies, a competitive real exchange rate, and structural reforms to eliminate the sources of high costs in the Indonesian economy and encourage expansion of activities where Indonesia has a comparative advantage.

3
INCENTIVES

A. Overview: Making the Most of Markets

3.1 Incentives, the constellation of rewards and sanctions that guide economic activity, are a key determinant of growth and welfare. For most resources most of the time, the best set of incentives, those that allocate resources so as to lead to the greatest welfare, comes inherently from competitive markets. Improving the incentive regime, then, means making the most of markets. Increasing resource efficiency will most often entail increasing the breadth and competitiveness of markets, both for products and for factors of production, including land and natural resources. Strengthening markets and efficiency involves three areas, discussed in turn in this chapter:

- ***extending and strengthening competition*** by increasing the number of competitors; broadening the market through trade reform, domestic deregulation and removal of barriers to investment; and pricing for efficiency through freeing prices to reflect market conditions;

- ***developing factor markets*** by improving markets in finance, land, natural resources and technology that are crucial inputs into the economy; and

- ***improving market outcomes*** by easing market transactions through providing basic information to allow informed decisions; providing a transparent legal framework that protects the interests of those who abide by mutually agreed-upon rules and improves equity by broadening participation; limiting monopoly power either because of size or influence; and ensuring that the environment is protected.

3.2 Significant progress has been made already in these areas, but efforts need to be intensified as there is much yet to do. Trade deregulation has exposed the economy to international competition, but trade barriers in several key areas in both industry and agriculture still force high costs on the economy. While the efforts to broaden trade reform move forward, existing reforms in areas such as customs need to be safeguarded. Greater price decontrol and deregulation in the domestic market will buttress trade reform. This will require further moves to decontrol energy and fertilizer prices and to rethink BULOG's role in controlling trade in agricultural products. Local trade barriers need to be dismantled. A wider role for the market in the provision of public services calls for better enabling regulations. In financial markets, conditions call for efforts to promote soundness, particularly by defining guidelines for handling problem institutions and enhancing prudential oversight. Cutting the Gordian knot of regulations in land markets would allow better land pricing, reducing speculation and improving land use. An open trade and investment regime would provide a more conducive setting for technological development.

3.3 Making the most of markets also calls for interventions where outcomes are inconsistent with social objectives. To minimize these instances, improved market infrastructure—accounting and auditing, commercial law and financial disclosure—is a must. Transparent rules governing economic activity will benefit both growth and participation. Equalizing access to market opportunities will ensure large firms cannot exploit their positions at the expense of smaller firms (and the economy). Eliminating advantages gained from government policy, such as monopoly rights or uncompetitive contract awards, will be important in this context. In ensuring that market outcomes and sustainable development overlap, current policy distortions, such as subsidies for key natural resources, will need to be eliminated. A combination

of regulatory and market-based incentives can overcome the problems of such negative externalities as pollution.

B. Extending and Strengthening Competition

3.4 Getting the most out of markets means extending and strengthening competition. The pressure to survive against efficient competitors forces costs down and eliminates wasteful resource use. The drive to survive competition fosters new products and better performance, thus enhancing growth. Open competition gives opportunities for new firms to enter markets. With more producers in each industry, the level and concentration of profits drop, promoting a more equitable distribution of profit and improving consumers' welfare. Competition not only helps to reduce excess profits, it also forces down costs and limits firms' control of prices. Prices themselves are the fundamental information markets use to allocate resources. When prices reflect true costs and the comparative advantage of a nation, investor decisions will promote growth, employment, high value added and sensible environmental management. Hence, ensuring the prices adequately reflect private and social costs is a crucial element of making the most of markets.[1]

3.5 Many of the hindrances to competition are not inherent in markets, but rather, are the result of regulation, particularly restrictions on entry and on prices, including barriers to trade and investment. This section looks at the important areas for further deregulation, including international and domestic trade, that will promote a more competitive economy. It then turns to how efficiency can be enhanced by expanding the role of market-determined prices. Finally, removal of barriers to entry, either in investment or in providing public services, are discussed.

Extending Trade Policy Reform

3.6 In the mid-1980s, Indonesia's development strategy shifted from inward-looking to outward-looking. Reforms of the trade regime were central in implementing this shift. Prior to 1985, Indonesia's industrial sector was oriented mainly toward the protected domestic market, creating a high-cost economy with its attendant waste of resources and excessive profits for those favored by protection. Since then significant progress has been made in opening up the economy. Many of the sources of high costs have been exposed to competitive pressures of the world marketplace and, as prices have come in line with world levels, such high costs have dwindled.

3.7 But trade reform has not rooted out all the high costs in the economy. For example, restrictions on imports of three commodities—sugar, soybeans, and wheat flour—add appreciably to the costs of food processing and burden Indonesian consumers. Domestic production of steel and automobiles are highly protected activities. The policy prescriptions are also well-known: eliminate all non-tariff barriers and tariff surcharges, while lowering and simplifying tariffs. These measures would subject domestic producers to the discipline of international competition as they force prices into line with international levels, reducing costs to consumers, raising efficiency and eliminating inequitable rents.

3.8 **Trade Deregulation, 1987-92: Reducing Non-tariff Barriers.** Since the mid-1980s, most of the major changes in trade policy have been implemented through a series of almost annual ***packages***

[1] For most products matching social and private costs is best achieved by moving away from price controls or other barriers toward prices determined in a competitive market. Notable exceptions are goods for which production or use generate externalities such as pollution. Treating the problems of externalities and other market failures is discussed in the last section of this chapter.

whose main feature has been the reduction of the coverage of non-tariff barriers (NTBs)—import licensing[2]—on imports. The packages have reduced the share of production protected by NTBs from 41% in 1986 to 22% in 1992 (see Table 3.1). The opening up has been greatest in manufacturing where the share of protected production has fallen from 68% in 1986 to 31% in 1992. The reduction of NTBs in agriculture from 54% in 1986 to 30% in 1992 has been smaller.

Table 3.1: Coverage of Non-Tariff Barriers
(Percent)

	After reform packages of:						
	1986	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
Production Coverage[a]							
Gross production	41	38	29	28	25	22	22
Manufacturing	68	58	45	38	33	32	31
Food & beverages				63	61	60	59
Paper products				38	38	38	35
Engineering				49	36	34	34
Agriculture	54	53	41	40	39	30	30
Food crops				65	65	56	56
Estate & other crops				26	26	14	14
Import Coverage							
Import value	43	25	21	17	15	13	13

[a] Production coverage estimates for 1986 are based on 1985 production weights. Estimates for subsequent years are based on 1987 weights.

Source: World Bank staff estimates.

3.9 The July 1992 package (PAKJUL) reduced the number of NTBs from 703 to 464. Although PAKJUL did not affect the most important sectors still subject to NTBs, production coverage in the manufacturing sector declined from 32% to 31%. The PAKJUL reforms eliminated Krakatau Steel's remaining monopoly import rights. The 27 affected steel items now require an IP license which is being granted more liberally. Partly as a result, Krakatau Steel's prices for hot rolled coil and plate have fallen 16% since July.

3.10 A significant share of output is still protected by NTBs, and eliminating them remains a priority. At the sectoral level, agriculture and agro-industry, paper products and engineering, including

[2] There are basically four types of import licenses, ranging in restrictiveness from the least restrictive Import Producer or IP licenses, available to domestic producers who use IP items as inputs into their production process, to Producer Importer (PI) licenses, which restrict PI items to domestic producers of the same product or to a designated sole importer (see *Indonesia: Trade Policy Report*, Report No. 8317-IND, the World Bank (March 22, 1991) for a description of the import licensing system). All forms of import licensing are considered NTBs.

steel and automobiles, are highly protected by NTBs (Table 3.1). The policies responsible for the high protection in agriculture and agro-industry sectors are discussed below. Other subsectors/commodities also bear scrutiny. Where a good case for protection can be made, replacing NTBs with a temporary surcharge is preferable. The Uruguay round of GATT negotiations also recommends converting NTBs to tariffs.

3.11 **Reform of Tariffs and Surcharges.** As NTBs are removed, tariffs will become more important for determining the structure of protection. Although progress has been made in improving and rationalizing tariffs, especially in eliminating split tariffs, the system remains overly complex. There are over 9,200 tariff categories, giving the impression of a made-to-measure code. Both the highest rate—200% on motor vehicles and motorcycles, which also receive high protection from NTBs—and the median tariff, 35%, are high. Dispersion is also high; the standard deviation is 17 percentage points from the average tariff of 20% (see Table 3.2). Despite the high and variable nominal protection, the average effective tariff—import duties in relation to non-oil imports—has only been 4-6% since 1978. Moreover, since 1990 it has fallen in relation to the trade-weighted tariff (see Box 3.0). This discrepancy reflects mainly legal exemptions.

Table 3.2: Changes in the Tariff Schedule [a]
(Percent)

	Pre-1985	*1985*	*1988*	*1989*	*1990*	*1991*	*1992*
Average Tariff Rate							
Unweighted	37	27	24	27	22	20	20
Weighted							
By import value	22	13	15	12	11	10	9
By domestic production	29	19	18	19	17	15	13
Index of dispersion [b]	62	108	90	93	89	83	83
Average effective tariff [c]	n.a.	4.9	5.1	5.4	6.2	4.5	4.8

[a] Including surcharges.
[b] Coefficient of variation (standard deviation over the mean) of unweighted average tariff plus surcharge.
[c] Revenue from import duties in relation to non-oil imports (fiscal year).

Source: World Bank staff estimates.

3.12 The average tariff has come down from 37% before 1985 to 20% after PAKJUN, the package of June 1991 (Table 3.2). The most significant change in the PAKJUL package was the elimination of 40% of tariff surcharges, which accounts for the 2 percentage point drop in the production-weighted average tariff plus surcharge. The main recommendations for tariff reform remain: eliminate long-lived (more than one year) tariff surcharges; rapidly bring down the maximum rate to 20%; and simplify the tariff code by reducing the number of tariff categories. In addition, the duty drawback facility for exporters, BAPEKSTA, needs to be streamlined. The facility in the past provided an efficient way for exporters to obtain inputs at world market prices. Recent reports, however, suggest that long and costly procedural delays have emerged, reducing the incentive to use the facility and hence reducing the incentive to export.

Box 3.1: Customs and Tariff Reform

The decline in the average effective tariff is due to a decline in nominal tariff rates, and exemptions (see Table 3.2). Legal exemptions are important; 50% of potential duties and taxes are exempted. Tariff exemptions are given for three main categories of imports: investment equipment and raw materials for start-up operations of projects approved by the Indonesian Investment Coordinating Board (BKPM) and for oil and gas projects; eligible imports under the duty-drawback or exemption scheme for exports, BAPEKSTA; and imports specifically exempted by the Ministry of Finance (MOF). With the exception of the MOF exemptions, the schemes are reasonable means of ensuring access to imports at free trade prices for investment and exports.

Smuggling and underinvoicing are illegal means of avoiding tariffs that reduce the total revenue collected. There is evidence that these have become a greater problem. First, despite the decline in imports going through preshipment inspection (PSI) from 65-70% in 1986-88 to 47% in 1992, imports subject to PSI continue to account for 90% of tariff revenue. Second, over 20% of imports that have been subjected to PSI are not cleared through customs following procedures set out by the official surveillance company (PTSI/SGS). (Under the current two-tier system, shipments above $5,000 are subjected to PSI and those below $5,000 go through customs.) By-passing PSI procedures allows importers to bargain with customs to lower the assessed duties and taxes.

One way of reducing tariff evasion is tariff reform. Rapidly bringing down the maximum tariff to 20% would reduce the incentive to evade tariffs. Tariff reform presupposes the nominal system of protection—the tariff schedule—is effective. For this, importers should be indifferent between preshipment and customs inspections. The principle of neutrality of treatment has been eroded—avoiding PSI can be less expensive for the importer—and, as a consequence, the two-tier system is breaking down.

There are several ways of addressing the problem. One is to require that all imports be subjected to PSI. An alternative would be to reduce the threshold value for PSI from $5,000 to $500. Virtually all imports would then be subject to PSI. A third approach would be to have the surveillance company spot check a sample of shipments valued at under $5,000 and to impose stiff penalties for underinvoicing.

Loss of tariff revenue is not the only problem with some customs operations. Importers, despite having paid full duties, are sometimes subjected to lengthy and costly delays. Streamlining the customs clearance process and reducing importer uncertainties would cut these costs.

3.13 **Reform of Export Restrictions.** Just as tariffs and NTBs alter domestic prices, so do export restrictions. Controls on forestry products are by far the most important category of export restrictions. In 1989, very high export taxes ($250 - $1,000 per cubic meter) were applied to sawn timber in an effort to drive raw materials into the secondary processing sector (woodworking, moldings, furniture) where value added was expected to be higher. However, after an initial expansion, investment in secondary processing seems to have peaked, while the number of saw-mills has shrunk. The main beneficiary has been the plywood sector that has seen its supply of cheap logs increase.

3.14 In 1992, the ban on log exports was replaced with export taxes. While the removal of the log export ban is welcome, the impact on resource allocation is negligible because the taxes are high enough to replicate the protection provided by the ban. Consequently, it remains the case that only processed products can be exported. Because of the exorbitant taxes, domestic log prices are considerably below international levels: prices for Meranti logs exported from Sabah have averaged around $160 per cubic meter since 1986, with current prices over $300 per cubic meter; prices of equivalent logs in Indonesia currently average around $90 per cubic meter. Even this price may overestimate what most plywood mill operations pay, since the majority are affiliated with logging concessions and consequently

Box 3.2: Economic and Environmental Sustainability: The Forestry Example

Indonesia is the largest producer and exporter of forest products in the tropical world. Forestry currently employs some 700,000 people directly, but many more depend significantly on forests for their livelihood. Export earnings are around $4.2 billion per year, primarily from natural-forest-based products. Although plantations will take an increasing role in forestry in Indonesia, the natural forest will remain predominant for the foreseeable future.

Natural forests are limited. Recognizing this, and the important environmental and social benefits that emanate from forests, the Government is strongly committed to managing permanent production forests in a sustainable manner. This requires, first, a reduction in the annual area of forest harvested to well below that prevailing at present. Second, greater incentives need to be provided to communities living in and near the forests to become engaged in sustainable forest management. Otherwise, these groups, who have frequently been disadvantaged by commercial forest operations, will have little interest in protection.

It will be a major challenge for Indonesia to maintain a large and sustainable forest industries sector within these constraints. The main policy instrument by which it can be met is adjustments in pricing of the standing timber, coupled with higher investments in management and control to offset incentives for illegal removal that higher prices may encourage. By allowing the price of standing timber to rise to international parity, the Government would create opportunities for substantial economic, social and environmental benefits:

- increased logging efficiency as incentives to utilize all saleable wood rise;
- increased processing efficiency and competitiveness as the opportunity to profit from excess rents on logs disappears; and
- higher Government revenue to finance development activities, including some that will allow communities affected by commercial forestry developments to take a financial interest in sustainably managing the resource.

Apart from the general economic and environmental reasons for adjusting policies to promote sustainability, Indonesia now has an immediate, market-based incentive for doing so: increasing reluctance in some major forest product importing countries to purchase products based on non-sustainable forest use. Loss of biodiversity and the carbon sequestering capacity of tropical moist forests is of major international concern. Exporting countries that cannot demonstrate convincingly that natural forests are being managed sustainably, with adequate measures in place to preserve biodiversity and other conservation values, may lose market share, either through formal bans and trade restrictions, or voluntary actions on the part of major buyers.

obtain their logs at cost—approximately $67 per cubic meter inclusive of government royalties (currently $22 per cubic meter).

3.15 Artificially low log prices have resulted in environmental degradation, inefficiency in both logging and wood-processing industries and a lack of market diversification (see Box 3.2, and para. 3.103). Poor logging leaves an estimated 8 million cubic meters of timber rotting in the forest, while the lower technical efficiency of Indonesian plywood mills wastes another 3 million cubic meters. Together this wastage amounts to 33% of the annual harvest. Raising log prices would spur lower consumption of raw wood per unit of output. This could be done in two complementary ways: lowering

export taxes to open foreign markets and increasing government rent collection. Simply lowering export taxes, while raising domestic log prices, would generate huge rents for logging concession holders. For equity, then, royalties and fees on logs need to be increased. The Government has begun this process through a recent increase in logging fees and royalties of an average of $7 or 47%, with fees varying by species and location. This brings the royalties up to $22 on average, with a high of $112 on ebony and a low of $4 on wood chips. This recent increase, however, is still below the $30 level royalties would have reached by now had they been adjusted from 1985 levels by the wholesale price index for the forestry sector and, hence, is well within the capacity of the industry to pay, particularly considering the recent sharp increase in world log prices. The increase should generate about $160-170 million in additional government revenue, strengthening the fiscal stance and providing funding for critical infrastructure investments. However, there is clearly scope for further increases, as envisioned in the Government decision to adjust fees and royalties annually. Further royalty increases should be phased in so that log prices on the domestic market reach international parity levels over the medium term. Where resources are uncommitted to existing concession operations (new production forest areas, or existing concession areas due to expire under current licenses), timber rights should be auctioned.

3.16 **Trade Policies and Resource Allocation.** Trade policies alter resource allocation by changing the returns in various sectors of the economy, as exemplified by export restrictions in the forestry sector. A standard way of measuring the extent of the distortions is to calculate effective rates of protection (ERPs) for various industries (see Table 3.3). Despite past progress, trade policy continues to be biased against exports; it raises the price of imports relative to exports. In addition to shielding high-cost domestic industries from competition, this trade policy bias hinders non-oil export growth. It results in a loss of production efficiency by driving a wedge between the returns to import-competing sectors and the returns to export-competing sectors, so that more resources are drawn to less efficient import-competing activities than would be the case in free trade. There has been considerable progress in some industries in reducing effective protection since 1987. Tariff reductions and deregulation of cotton imports have improved the competitive position of the textile sector. Other industries, though showing improvement since 1987, continue to enjoy unwarranted levels of protection (see Table 3.3). The effective rate of protection in manufacturing in Indonesia remains high relative to those in most of its East Asian neighbors; most recent World Bank estimates of 28% for Korea, 23% for Malaysia and 33% for the Philippines compare with 52% for Indonesia.

3.17 One of the key sectors where protection is high in Indonesia is the ***food and beverage sector.*** Between 1985 and 1990, value added in this industry grew annually by only 3%, and employment by 0.3%, compared with 12% and 6% for non-oil manufacturing. Despite Indonesia's abundant labor force and supplies of primary agricultural products, processed food exports constituted only 1-2% of non-oil exports in 1985-92. Considerable improvement in performance is needed for agro-industry to fulfill its potential for employment creation and non-oil export growth.

3.18 Trade reform in the food processing sector is complicated by the fact that key primary agricultural products are subject to trade and investment barriers. The elimination of NTBs, and reductions in other barriers on agricultural products, particularly wheat, soybeans and sugar, would promote the food and beverage industry by allowing international competition to bid down prices of these inputs to international levels. With the industry no longer facing artificially expensive inputs, the Government could move aggressively to reduce the high protection it has received in compensation. Eliminating the NTBs that allow the three state-owned trading companies sole import rights for over 450 food and beverage products would be an important step. Reducing trade and investment barriers in agriculture would not only allow the food industry to prosper, but it would also lower food prices for Indonesian consumers.

Table 3.3: The Structure of Protection
(Percent)

Sector	1987 Output (Rp. trillion)	Nominal, Effective and Real Effective Rates of Protection: NRP 1987	NRP 1990	NRP 1992	ERP 1987	ERP 1990	ERP 1992	RERP[a] 1987	RERP[a] 1990	RERP[a] 1992
TOTAL	98.7	9	8	7	16	14	13	4	3	2
Agriculture	31.3	9	11	8	18	20	14	6	8	3
Mining (inc. oil refining)	28.0	0	0	0	-1	-1	-1	-11	-11	-11
Manufacturing	39.4	17	13	12	68	59	52	50	43	37
Food, Beverage & Tobacco	18.0	14	13	12	122	126	120	99	103	99
Textiles	4.3	32	12	12	102	35	34	81	21	21
Wood Products	2.8	2	-5	-5	25	33	33	12	20	20
Non-metal Products	3.1	17	14	13	57	49	44	40	34	30
Engineering	4.9	40	38	28	152	139	82	126	115	64
Other Manufacturing	0.3	40	26	26	124	79	80	101	61	62
Import-competing [b]	58.5	17	15	15	39	35	32	24	21	19
Export-competing [b]	40.2	-1	-1	-1	-2	-1	-1	-12	-11	-11
Anti-trade bias [c]					41	36	33			

[a] The RERP deflates the ERP by the increase in the consumer price index induced by the trade regime. Under certain simplifying assumptions, including that there is only one variable factor, sectors with positive (negative) RERPs will have domestic resource cost ratios greater than (less than) unity. The RERP predicts the direction of resource movements, in the sense that sectors with positive (negative) RERPs expand (contract).
[b] The dividing line between export and import-competing sectors is whether exports exceed or fall short of 20% of output.
[c] Defined as (1 + ERP import-competing)/(1 + ERP export-competing) - 1.

Source: World Bank staff estimates.

3.19 To avoid importing large amounts of ***wheat and wheat flour*** and capture domestic value added in flour processing, the Government controls wheat grain imports (1.9 million tons in 1991) and restricts imports of wheat flour. The National Logistics Agency, BULOG, is the sole agent authorized to import wheat. It allocates wheat to the monopoly-controlled flour mills, and distributes processed flour around the country. It sets the price that mills pay for grain, which is usually below the import parity price, and the ex-factory price of flour paid by distributors. The wheat grain subsidy was estimated at 33% in 1987 and 63% in 1990. The cost of the subsidy is passed on to consumers through a surcharge levied on approved BULOG flour distributors. The surcharge, which drives a wedge between the output-NRP—the extent to which the ex-factory price differs from the import parity price—and the input-NRP —the extent to which the price faced by users of wheat flour differs from the import parity price—was 50% of the international import price of wheat grain in 1987. In view of the size of the subsidy/surcharge, the welfare losses from protecting wheat flour producers could be large. Other waste arises because the local producer has no incentive to improve quality, which is poorer than imported flour. Further, wheat grain is not purchased by open tender, but by directly negotiated contracts. Deregulation would remove these inefficiencies in wheat trade.

3.20 The Government seeks self-sufficiency in ***sugar***. A number of programs and subsidies have been adopted to raise sugarcane production, including acreage controls, which require rice farmers to replace their rice crops with sugarcane to supply raw materials needed by domestic sugar mills. These efforts have not been very successful since farmers with access to labor and whose land supports three rice crops find growing rice more productive for their scarce land and water than growing sugarcane.

Indonesia imports approximately 300,000 tons of sugar each year. BULOG has the exclusive right to import sugar, and sets the farm-gate price to sugarcane growers, the mill buying price and the ex-factory price. The retail price of sugar is usually well above the world price, from 30% to 100% higher over the last twenty years. This taxes consumers and downstream food processors, though large food processors can sometimes lessen the burden by negotiating discounts with BULOG. In April 1990, the import price including transportation costs to the Jakarta wholesale market was $400 per ton, compared with the domestic wholesale price in Jakarta of $537 per ton (NRP of 34%). Eliminating sugar price controls would provide stimulus to the food processing industry, with large potential gains in exports. Lower sugar prices would also benefit consumers, especially the poor who spend a relatively large portion of their income on food. Javanese small farmers would benefit from being able to plant more remunerative crops, while lowering the prices would reduce the concentration of income in the hands of large farm owners. More farm jobs would become available with a switch out of sugarcane, as most other crops require more labor. Irrigation water usage would fall as farmers switch to other crops needing less water than sugar cane.

3.21 ***Soybeans*** are used in the production of soybean meal, *tahu* (molded soybean curd) and *tempe* (fermented soybean curd). It is an important source of protein for households and in livestock feeds. When processed, soybeans yield oil which is used in cooking and cosmetics. BULOG and its appointed trading companies have a monopoly on the importation and distribution of soybeans. Import restrictions allow the domestic price of soybeans to exceed the import parity price. In 1990, Indonesians paid 38% more than the import parity price for soybeans. This taxes thousands of small-scale *tahu* and *tempe* producers and significantly increases costs to poultry farmers. Eliminating the import restrictions would benefit these small producers, the food industry and consumers.

3.22 **Dismantling Restrictions on Domestic Trade.** Lowering restrictions on international trade has been coupled with a similar lowering of domestic trade restrictions, notably the 1989 introduction of new regulations on inter-island shipping. However, in contrast to this initial deregulation, and deregulation at the national level, local-level trade restrictions have become increasingly prominent. Local-level restrictions hinder intra-regional trade and efficient market growth. They often tax small producers in far-off regions, impeding regional equity and development. More broadly, they raise costs throughout the economy, eroding consumers' welfare and producers' competitiveness. While local revenue generation, cooperatives (KUD) development, quality improvements and other public objectives are often listed as justifications, in most cases the levies end up as burdensome taxes on local producers, restricting inter-island trade and generating trading monopolies and rent-seeking (see Box 3.3). They also run against the basic thrust of national policy.

Removing Price Controls

3.23 Domestic controls of varying degrees distort prices for many goods and services in Indonesia, with damaging effects on efficiency, the environment and, in some cases, also equity. Removing price distortions gives a chance to win on all three fronts. Price controls cover two categories of goods and services: public utilities, where price controls are justified because of natural monopolies; and key products for which a stable price is considered important for social stability. The price controls themselves fall into three categories: (i) regulations that administer prices charged by monopolies; (ii) indicator prices that trigger market interventions by Government agencies; and (iii) administered prices designed to control ex-factory and retail prices. The monopoly control category extends beyond natural monopolies, such as public utilities, to private goods such as transport and fuel. The indicator and administered price categories apply to private goods.

Box 3.3: Examples of Domestic Trade Restrictions

Efforts by provincial and local authorities to restrict or tax domestic trade are setting back regional growth, undermining efficiency and burdening the poor. Bringing local policies in line with the national push for deregulation will add new impetus to regional growth, efficiency and equity. Some of the more prominent local restrictions and their undesirable effects are given below:

The Indonesian domestic ***clove trade*** is monopolized by a sole marketing agency, BPPC, set up in 1990. Although itself extracting a high spread, the agency has been unable to maintain high prices promised to farmers or abide by the original terms of its subsidized loan agreements with state banks. Its earnings have come at the expense of clove farmers, cooperatives, the banking system and clove consumers.

In West Kalimantan, by a provincial decree, a private company was designated as the monopoly marketing agent for all ***citrus trade*** in 1991. Only KUD approved traders may buy citrus from farmers and the designated traders must sell to the private monopoly. In theory, the private monopoly is expected to set a floor price and quality standards, and to sell to inter-island traders. In practice, it enjoys monopsony and monopoly positions in the trade and ships directly to major markets, such as Jakarta. While squeezing both farmers, shippers and consumers, the private company is unable to handle large volumes of fruit so that production as well as farm-gate prices have fallen. Trade in what was a large market for lower quality citrus has been stopped, hurting poor farmers and less well-off customers. Unemployment and labor out-migration have increased, while exports to Malaysia have declined.

Also in West Kalimantan, by a 1992 provincial decree, a levy has been imposed on all ***processed rubber*** shipped by rubber factories, and also on rubber, sawn timber and rubber-fiber-density wood exported from Pontianak. Revenues are to be used for a rubber replanting fund. The levy will most likely be borne by farmers, lowering their income. There is also potential for mismanagement of the funds raised from the rubber levy, as has occurred in the past.

In South Sumatra, levies have been imposed on all ***latex*** received by a processing factory at the district level, earmarked for KUD development. Elsewhere, by a 1989 provincial decree, monopoly rights to import and market ***iodized salt*** had been given to a sole private company, allowing it to earn excess profits at the expense of consumers. In 1991, the decree was amended to permit 3 other companies to import and market the salt. Such a government-sponsored oligopoly still keeps prices unnecessarily high.

In North Sumatra, imports and marketing of ***iodized salt*** can only be done by the same company as in South Sumatra, and any other companies as may be approved by the provincial government. To date, only two other companies have been approved and the oligopoly continues.

In Bali, a provincial decree stipulates that only traders who are members of an Association of Indonesian Vanilla Exporters may be licensed to export ***vanilla***. This drives up the price of vanilla off Bali and depresses the price to farmers on Bali, all to the benefit of the traders. An inter-island shipping levy is imposed for dry and wet vanilla on any shipments from Bali to other islands. Inter-island shipping levies are also imposed on ***coconuts and coffee***, as revenue for the local government.

While such restrictions cover a limited range of commodities, they interfere with Indonesia's objective of establishing a more integrated national economy. Their removal would support this overriding objective while benefitting producers and consumers through more efficient production and distribution.

3.24 **Reforming Public Utility Pricing.** The most pressing need in the reform of price controls is to improve price signals for public utilities, including the electricity company (PLN) and local water companies (PDAMs). At most public utilities, regulated prices have been set below long-run marginal

costs, leading to excessively high demand and unnecessary environmental damage. Higher prices that reflect long-run marginal costs would increase efficiency in the use of public utilities by ensuring that available supplies are allocated to those who value them most. In addition, higher prices could be used: to generate more resources to support better operation and maintenance of existing infrastructure and contribute to investment in new capacity; and to provide an incentive for private investors to participate in supplying infrastructure services (see para. 3.43). However, because the activities of public utilities have aspects of public goods and monopoly, pricing policies cannot be left strictly to the market. An appropriate regulatory/competition framework is needed to ensure that inefficiency and market power do not force up prices faced by consumers.

3.25 Setting ***electricity*** prices has long been an important issue in Indonesia, with changes subject to Presidential approval. The Government has attempted to keep rates uniform to promote growth off Java, low to firms to promote industrialization, and lower still to most residential consumers in an attempt to make electricity affordable to the poor. These efforts have encouraged rapid demand growth and weakened incentives for efficient use. At the same time, they have hampered the expansion of electrical power and undermined the financial soundness and efficiency of PLN.[3] The Government moved in January 1992 to increase electricity tariffs by 13%, but only to offset the announced increases in fuel costs. More fundamental changes in the level and method of setting electricity tariffs are needed. At current rates, PLN's ability to finance investment remains limited. Abandoning the uniform pricing of electricity would spur efficient use across Indonesia. Without this, raising power rates on Java will unnecessarily burden industry. The higher costs of electricity off Java could be offset by explicit subsidies for projects setting up there. To ensure that future electricity prices continue to reflect long-run marginal cost, the Government needs to move ahead with plans to introduce more automatic, periodic price increases linked to costs beyond PLN's ability to control or adapt to. Such small, frequent price adjustments could be absorbed more easily by the public, thus depoliticizing the price changes and avoiding the instability they cause.

3.26 Besides adjusting the level and the method of setting tariffs, attention needs to be given to changing the rate structure to align social goals with economic ones. Currently, 99% of residential customers share a Rp.1.0 trillion subsidy on electricity consumption each year. Although this subsidy is intended for the poor, only 4% reaches them since they consume little or no electricity. The remaining Rp.960 billion subsidizes electricity consumption by the relatively better-off. Reducing the electricity subsidy and better targeting it on the poor would both enhance equity and spur more efficient use of resources. It would also allow a reduction in the tax on electricity use that large industrial users face, a tax of about Rp.350 billion, improving industry's competitive position and spurring growth.

3.27 As with electricity, ***water supply*** prices charged by public water companies to residential customers are too low, in some cases so low that operations and maintenance, leave aside capital costs, are not covered. Increasing water charges will spur needed water conservation. The inadequacy of charges (and problems of monitoring) on private wells that tap the deep aquifer is particularly alarming because of the slow rate at which that aquifer recharges. Excessive ground water use has already led to increased seawater intrusion into the water table in Jakarta and Surabaya and has prompted the Jakarta authorities to announce that existing deep well licenses in the central city will not be renewed. Higher piped water charges would provide the utilities with income to maintain and expand their systems, lowering the amount of water lost through poorly maintained pipes and increasing access to clean piped water. Such increases, though, would need to be coupled with efficiency improvements at the companies

[3] Uniform pricing across Indonesia indirectly taxes electricity use on Java, where the costs of supplying electricity are relatively low, to subsidize higher costs on other islands.

to avoid simply passing costs on to consumers. Currently, rates charged on piped water subsidize most residential users. Competition from the still more heavily underpriced ground water, however, limits the scope for increasing piped water charges. In Jakarta, for example, the local water company charges residential customers only Rp.350 per cubic meter while its costs are Rp.900 per cubic meter. Meanwhile industrial users must pay Rp.2,500 per cubic meter when ground water charges are only half that, when collected. This situation leads to environmentally costly overconsumption of piped water by households and overextraction of ground water. Better water management, then, requires raising charges for both piped and ground water and improving enforcement of the latter. While raising charges, a subsidy could be retained for lifeline consumption levels to protect the poor. Also, part of the improved cost recovery from the better-off could be used to support an expanded program of installing public standpipes to improve the poor's access to clean water.

3.28 Water used for irrigation is currently unpriced and, hence, overused. A current pilot program supported by a Bank loan seeks to use irrigation water more efficiently by requiring water charges that cover operations and maintenance. Improving the administrative framework for such pricing is critical to the success of the envisioned expansion of this scheme beyond the pilot stage.

3.29 **Pricing Private Goods.** Price controls extend beyond public utilities to cover goods and services that can be, or are, supplied by a competitive market. Among such goods some of the most prominent are fuels, cement, fertilizer and transport services. Agricultural products subject to price controls include rice, wheat, sugar and soybeans. Education and health care are also price controlled.[4] Eliminating or revamping price controls for these products offers the opportunity to spur more efficient production and consumption, with generally positive effects on the environment and equity.

3.30 Some of the most important tradable goods subject to price controls are ***fuels***. As with electricity, fertilizer and rice prices, adjustments require Presidential approval, a process that occurs relatively infrequently. Since international fuel prices are volatile, domestic fuel prices have often been subsidized using the argument that the cost of adjusting to volatile prices would outweigh the benefits of better resource allocation in the medium term. In practice, these subsidies caused excessive fuel use, squandering a precious natural resource and aggravating pollution. Not only were average fuel prices frequently below world levels, individual fuel prices favored dirty fuels like diesel and kerosene, worsening pollution problems. Indonesia moved boldly in January to eliminate the overall subsidy by increasing prices by an average of 24%. Equally importantly, the President stated that oil would be treated as a normal commodity and domestic fuel prices would now be linked to international ones. As with electricity, frequent small adjustments in domestic prices would be beneficial. In moves that will moderate air pollution, existing subsidies on diesel were eliminated and an implicit 66% tax was levied on gasoline (see Box 1.2 for more details).

3.31 Though sharply reduced, a kerosene subsidy of 33% was retained as a means of protecting the poor from higher prices. The President, however, stated the intention to remove this subsidy as well in the coming years. This will be important since, like the electricity tariff, the kerosene subsidy is very poorly targeted, with only 8% of the subsidy actually reaching the poor. Although kerosene is an important energy source to the urban poor, expenditures on kerosene by the poorest 20% of the population are only half of their expenditures on firewood for Indonesia as a whole, or about 2.5% of their overall expenditures. The rich, meanwhile, spend four times as much on kerosene. The poor would be better served by eliminating the subsidy and using the money for spending on health and education

[4] The particular issues surrounding health care and education are taken up in Chapter 4.

programs benefitting the poor. Alternatively, eliminating price controls on sugar would offset the impact of raising kerosene prices on the real consumption of the poor.

3.32 ***Cement*** production and pricing are tightly regulated in Indonesia. If prices rise above the indicator prices, official intervention is triggered to increase supplies, either through imports, export bans or redirection of supplies to certain regions. In addition to price controls, there is substantial state ownership, and there are regulations controlling exports and domestic marketing. These interventions have been justified as necessary to ensure as stable, low-priced supply of cement. As a result, cement prices in Indonesia have been well below neighboring countries since 1987, generating several inefficiencies. The requirements for firms to supply certain regions reduces competition. The occasional use of export quotas or bans to protect domestic users disrupts the development of overseas markets. In the run-up to a change in indicator prices, the domestic market is also disrupted as firms hold back cement in the hope of getting a higher price. Controls on cement pricing and regulatory controls over exports, imports and distribution should be reassessed with an eye toward their abolition.

3.33 The Government sets administered prices for ***fertilizer***, using data on costs in each factory to determine "break-even" prices, which fall above or below the c.i.f. import price depending on the particular product. Farm-gate fertilizer prices are subsidized. Designated cooperatives are the only legal distributors. These policies induce overuse by farmers, to the detriment of the environment. They reduce returns to domestic urea producers and provide wasteful protection to domestic producers of TSP and ammonium sulfate. A strategy to overcome these problems would include: (i) abolishing the cost-plus pricing of ex-factory fertilizer, with prices linked instead to export parity for urea and import parity for other fertilizers; (ii) raising prices to farmers; (iii) raising the price of natural gas (an important input) to its economic cost of supply; (iv) phasing out inefficient production of TSP and ammonium sulfate; and (v) abolishing marketing quotas for producers and deregulating distribution. These pricing and regulatory reforms would reduce budgetary subsidies, which the Government has pledged to eliminate, both to farmers and producers. The higher prices would lead to more efficient use of fertilizers with positive effects on the environment and little, if any, effect on rice yields. With higher factory prices for urea, a potentially large and efficient export market would be opened. Private investors could participate, taking advantage of the recent removal of urea from the negative investment list.

3.34 Rates for freight and passenger ***transport*** have traditionally been set by the Communications Ministry. The Ministry took an important step in rationalizing transport costs by deregulating freight rates. Nonetheless, further improvements are possible in passenger service pricing where basic fares are still subject to control. This is especially true for rail service where third-class fares are heavily cross-subsidized. In urban transport and air transport, pricing reforms would help improve service quality by strengthening competition from private companies (see para. 3.45).

3.35 The Government's ***rice*** pricing policy attempts to stabilize prices within a range set to provide food security for consumers and production incentives for farmers. When prices fall outside this range, the National Logistics Agency (BULOG) intervenes in the market by buying and selling. This pricing policy, which has kept domestic prices broadly in line with international prices, is often mentioned as a factor that helped Indonesia achieve rice self-sufficiency. Recently, however, the domestic price of rice has edged up relative to the international price, so that BULOG ran a financial loss when it exported surplus stocks in 1992. If continued, this trend can have several undesirable consequences: rice would become a relatively high-cost item, driving up the cost of living, especially for the poor, and putting upward pressure on wages that would reduce Indonesia's competitiveness; efficient crop diversification would be hindered, with high rice prices encouraging excess production of rice; and the cost of BULOG's operations would become large. At present, the net benefit to consumers and farmers from BULOG's intervention is unclear.

3.36 Now that Indonesia has demonstrated its capacity for rice self-sufficiency, it is important that its rice production become increasingly efficient, reducing costs to consumers and making the best use of scarce land and other resources. Moreover, modern agriculture will need to respond flexibly, diversifying as needed to take advantage of changing market conditions. Given the important role of rice in Indonesia, and the dramatic shift that has occurred in rice availability, it would make sense to rethink rice procurement and pricing policy to correspond better to Indonesia's new situation. A careful analysis of the incidence of the costs and benefits of the current policies would be a useful starting point. In the light of such analysis, a market-based approach could be developed to meet legitimate food security concerns while ensuring rice production remains efficient, by taking advantage of opportunities for more open domestic and international trade.

Dismantling Barriers to Entry

3.37 Trade and price reforms will spur better allocation of resources, but growth and efficiency will be hindered if restrictions on investment close off options. This holds equally for investment in private and public goods and services. Indonesia has made progress in dismantling barriers to entry, particularly in licensing investment, where the most recent improvements came in 1992 with PAKJUL. Barriers to private provision of public services have also declined. Still, further steps would weed out inefficiencies, foster competition and spur growth.

3.38 **Investment Licensing.** The principal improvement in investment licensing occurred in 1989 when the Government moved to a short negative list of industries closed to foreign and domestic investment, from the previous policy of a short list of industries open to investment. After the 1992 changes, the negative list of industries now comprises some 51 products and services for which investment is prohibited or restricted. The list includes some services (mainly reserved for domestic investment), transport, and some manufacturing (plywood, some chemicals, palm oil and heavy transportation or construction equipment). About half of the products remaining on the negative list are partially deregulated in the sense that projects are open to both domestic and foreign investors if either a certain proportion (65%-100%) of production is exported, or specified local content levels (mainly in engineering sectors) are reached. Products continue to be placed under a restricted list of investment open only to small investors (those with paid-up capital of less than Rp.200 million). Scrutiny of the existing negative list should permit the Government to eliminate restrictions in most areas where they serve no useful purpose.

3.39 Although the scope for investment has been broadened, all foreign investors and any domestic investors seeking incentives (import duty and tax exemptions) must have their projects licensed by BKPM, the Investment Coordinating Board. BKPM has streamlined its licensing procedures over the last 8 years so that approval is virtually automatic for investments not on the negative list. Whereas in 1984, 24 requirements had to be met, in 1992 BKPM required only 10. The life of its license has been extended from 5 years to the life of the project, with expansions of capacity of up to 30% allowable without relicensing. This has shrunk the average investment approval time from 18 months to under 9 (though this is still slower than in Thailand or Singapore). Further initiatives could be taken to improve the investment regime, by substantially relaxing the export and local content conditions for investment.

3.40 An important 1992 change in ***foreign investment*** regulations permits initial 100% foreign ownership for investments in Java and Sumatra with a paid-up equity capital of over $50 million, and for investments of any size in the Eastern Islands. A requirement that the firm be an exporter no longer applies, and the requirements for dilution of foreign ownership have been relaxed. As a result, the new regulations are more competitive with those in neighboring countries. However, the new regulations do

not provide relief for investors whose investments were made under earlier, more restrictive regulations. Also, the requirements for dilution of foreign ownership could be eased further.

3.41 Despite the improvements in BKPM licensing, obtaining other licenses remains a major hurdle to business. Licensing and approval requirements, often at the local level, are costly, particularly for small firms. Licensing requirements include obtaining: a Presidential Letter of Approval, a Company Registration, a Limited Importer Identification Card, a Tax Registration License, Manpower Permits, a Domestic Trade License, an Equipment and Master List (for import duty exemptions under BKPM incentives), a Location Permit, a Land Title/Utilization Permit, a Building Permit, a Pollution Control/Nuisance Permit, an Operating License, and an Import Permit. While most of these licensing requirements have sound underlying rationales[5], the ***procedures*** are costly and time-consuming. Improvements in procedures for land rights, manpower, building and nuisance permits were part of PAKJUL 1992. Efforts are needed to improve the efficiency of the process further by consolidating requirements and reducing the number of offices an investor must visit. Streamlined, well-publicized procedures would reduce costs and uncertainties. Because many of the licenses listed above are granted by the local administration, where understaffing and complex procedures lead to lengthy delays, devolving expertise from central agencies would speed up the licensing process.

3.42 **Competitive Provision of Public Services.** A potentially large area for extending the role of the market is the provision of public services. The challenge is to find ways to improve the supply of public services by promoting competitive market conditions and pricing while protecting the public interest. The Government is currently proceeding with and/or considering lowering barriers to private entry in the provision of a number of public services as a means of introducing competition, improving service quality and lessening the burden on public finances and institutional capacities. However, an appropriate policy framework for private sector entry has yet to emerge, resulting in risks for investors and for the public interest. Non-competitive and non-transparent concession and contract award processes are often being employed, entailing potentially high costs for users and precluding the realization of the benefits of private participation.

3.43 To be successful, private provision of public services needs to be arranged within a policy framework that maximizes competition. This framework needs to take into account a spectrum of services ranging between two poles: those provided in a potentially competitive setting and those where natural monopoly or public goods characteristics inhibit competition. Many areas of traditional public services contain both types. In transportation, for example, a bus terminal creates a local monopoly, but bus services using that terminal can easily be provided by a number of private firms. Similarly in the power sector, electricity distribution is a natural monopoly, but power generation can be done competitively by a number of firms. In developing a framework for private participation, key elements are:

- preparation of clear guidelines on the objectives and scope of private participation, along with a strategy for promoting such participation in key sectors;
- establishment of transparent rules for private entry and investment approval, including competitive bid tendering, evaluation, and selection (this is particularly important for large

[5] Licenses provide a key means for government to enforce social or environmental constraints that would not otherwise be taken into account in private investment decisions. Section D discusses some options for improving environmental licensing requirements, as does Chapter 5. An efficient role for land use permits that balances the needs of the public with those of private investors is outlined in paras. 3.73-74.

infrastructure projects, or those with public goods/monopoly aspects that need to frontload competition in the entry decision and couple it with an adequate regulatory framework);

- establishment of similarly transparent rules for divestiture where privatization of existing public enterprises may be involved, to ensure fairness in valuation and bidding;
- definition of the principles for pricing private infrastructure services to promote efficiency in supply and demand;
- specification of applicable laws and regulations, including environmental protection and consumer safeguards; and
- establishment of clear legal processes to enforce contracts, to increase investor confidence and protect the public interest.

3.44 Provided these guidelines are effectively implemented, the scope for improving services through private provision is significant. In ***power***, a strategy to secure more efficient private participation will comprise two complementary elements: using existing or new captive generation capacity for grid supply or for supply to limited areas such as industrial estates; and investing in large-scale power generation, through build-own-operate (BOO) or build-own-transfer (BOT) schemes. Such a strategy is embodied in the recent decrees on private power provision. However, key policy details, such as pricing, remain to be worked out. Ongoing negotiations with private providers for Paiton I demonstrate the strength of private sector interest in power generation. In ***telecommunications***, the private sector's role can be expanded by allowing private operators to provide the cellular telephone and the specialized services directly rather than only through revenue-sharing arrangements with TELKOM. Over the longer term, there will be more fundamental options to consider, such as promoting a second, private long-distance company to compete with the current public monopoly, and privatizing public enterprises which supply telephone equipment.

3.45 In ***transport***, two broad areas can be opened further to private participation: transport infrastructure, such as toll roads, ports, airports and bus terminals, and transport services such as bus service and road and facility maintenance. Some private consortia have already demonstrated their interest in participating in major infrastructure projects under BOT/BOO arrangements. Making the most of such arrangements requires greater competition in bidding to ensure fair pricing and well-designed projects. There is broad scope for more competition in bus services (especially in Jakarta where the service provided by the public company, PPD, is inefficient and of poor quality) and in the development of an urban transit system for Jabotabek. Improving the quality of bus services will be an integral part of efforts to reduce congestion and combat air pollution in Jabotabek.

3.46 ***Water supply*** services possess a number of natural monopoly/public good characteristics; consequently, the scope for private provision of these services in a deregulated and competitive environment is relatively limited. Nonetheless, schemes such as BOT or BOO arrangements, franchises and service contracts provide possible avenues for private participation in urban/industrial water supply. Some BOT/BOO joint-venture proposals for bulk water production to supply urban areas are being discussed. As with other infrastructure sectors, to maximize the benefits of BOT/BOO schemes, more competition needs to be injected into the process of selecting private providers. Service contracts can be an easier means of involving the private sector. Such contracts have been successful in reducing water losses, a problem that plagues most city systems in Indonesia.

C. Developing Factor Markets

3.47 When factor markets work smoothly, so do most other markets. Allocation of finance to high-return projects stimulates growth. A wider diversity of financial instruments encourages savings, and greater access opens opportunities to entrepreneurs otherwise excluded. Better functioning land markets allow land to be put to its best use and dampen speculation. Clearer definition of property rights promotes more equitable transactions and fosters more environmentally sound land management. As Indonesian development continues, technology markets will take on an increasingly important role. This section looks at the current status of these fundamental markets and offers suggestions on how to strengthen their role in support of growth, equity and environmental protection.[6]

Advancing Financial Reforms

3.48 Indonesia's financial reforms have been far-reaching. Serious reforms began in 1983 with the elimination of credit and interest rate ceilings, followed by lowered barriers to entry in 1988, stiffer prudential regulations in 1991 and a new Banking Law in 1992. These reforms have triggered a series of beneficial changes in the economy, but have also presented new challenges. This section looks at the effects of the reforms and the agenda for future progress.

3.49 **Impact of the Reforms.** Since deregulation commenced in 1983, the financial system has grown rapidly, mobilized greater amounts of savings and stimulated investment.[7] Real financial asset growth averaged 13% a year between 1988 and 1992, with banking assets growing at over 18%. The value of all financial assets is now equivalent to 108% of GDP, with M2 equivalent to 50% of GDP. Five years ago these figures were 81% and 30%, respectively. The growth in financial assets has been associated with a surge in the number of financial intermediaries, with more than 1,200 new companies, mostly small rural banks serving people formerly excluded from the financial system. New products that better serve the needs of savers and investors have been created: more attractive savings schemes, more flexible mortgage loans, and mutual funds are prime examples. Likewise, domestic syndicated loans have allowed local banks to finance projects that previously would have required external sources. The domestic stock market has emerged from lethargy, though after a torrid expansion in new listing and stock prices in 1990, new listings have slowed and share prices have bottomed out. Bond issues surged in 1992 with over a billion dollars in new issues, both on and off-shore. A fledgling commercial paper market gathered strength. Together the stock and bond markets supplied Rp.2.1 trillion in new financing in 1992, equal to 13% of the increase in bank credit.

3.50 ***Cost efficiency*** in the banking system has improved since deregulation as banks have lowered non-interest operating costs despite an expansion in the branch network of private banks and the increase in salaries for banking professionals. Since the freeing of domestic interest rates in 1983, competition has forced down bank margins across all banks, but particularly at state banks. The net operating margin at all banks in 1992 was only 1.9% of average assets, a level similar to that in the U.S. Improvements in ***allocative efficiency***, that is lending to projects with high returns, have been more elusive. Certainly the removal of interest rate and credit ceilings gave banks the opportunity to price and

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[6] Labor markets are not covered in this section because they are subject to few distortions and operate relatively smoothly. The main issues relate to education and skill development, which are taken up in Chapter 4.

[7] Details of the deregulation packages are outlined in the 1991 economic report, *Indonesia: Developing Private Enterprise*, Report No. 9498-IND, World Bank, May 4, 1991, pp. 75-91.

size loans in accordance with perceived riskiness, thus improving efficiency. However, loan portfolio quality has deteriorated sharply since 1990, with conservative estimates that classified loans represented about 15% of all bank loans in late 1992.[8] Though some of these problems may be due to the unwillingness, rather than inability, of borrowers to repay[9], the magnitude implies that credit may not have found its way to the most profitable projects. The surge in interest rates caused by tight monetary policy has aggravated the portfolio problem of banks by increasing borrowers' servicing costs. Further evidence of weaknesses in allocative efficiency comes from the market's assessment of the risk of holding assets in the Indonesian financial system, a risk that is heavily influenced by the state of bank portfolios. Measured by taking the difference between dollar interest rates on-shore and those off-shore, so as to eliminate the exchange rate risk, the market's risk premium increased from 0.3% in late 1990 to 2.8% in late 1992.

3.51 **Agenda for Future Reforms.** There is a tripartite agenda for further financial reforms: those directed at ***ensuring stability***; those aimed at ***improving credit access and allocation***; and those aimed at ***deepening financial markets.*** The three aims are interindependent. A sound financial system will naturally lead people to use it, thus promoting a deeper market. Better credit allocation is a prerequisite of soundness as no bank can survive long with a large portfolio of poor loans.

3.52 ***(a) Ensuring Stability.*** Maintaining stability in the banking system is now the chief objective of financial policy, particularly in the wake of the failure of a large private bank and runs on several others. The difficulty is to ensure that maintaining a sound financial system does not unduly restrict credit growth. The two objectives are not necessarily antithetical. One important factor that would both improve financial soundness and spur credit growth is lower interest rates. This requires moving to increase confidence in the financial system by handling problem banks, which will have the benefit of reducing the risk premium and thereby interest rates (see Chapter 2 and para. 3.50). In dealing with weak portfolios, efforts to improve portfolios at the state banks take on importance. With their dominance in the market and their ability to set prices, improving the portfolios of these banks will create room for lower lending rates on top of reductions in deposit rates made possible by a lower risk premium. The following paragraphs discuss other ways to bolster financial soundness.

3.53 ***Increase Loan Loss Provisions and Portfolio Examination.*** The increase in non-performing loans requires an increase in loan loss reserves to meet BI's prudential guidelines introduced in March 1991. Loan loss reserves have been bolstered in the last two years, but further increases are needed. Until loan reserves fully cover non-performing assets, the figures for bank profitability will be overstated. In some banks, interest and fee income has been unable to keep pace with the costs of provisioning. Classified assets that remain unprovisioned induce banks to make riskier loans to offset diminished income. Riskier loans impair the soundness of the banking system. Up-to-date portfolio classification and strict adherence to provisioning standards are needed to ensure that financial accounts reflect the true condition of banks and that excessive risk-taking is curtailed. Better portfolio performance would be stimulated by strengthening the role of commercial bank internal auditors and compliance officers so that the banks themselves would have better information.

3.54 ***Meet Capital Adequacy Requirements.*** In March 1991, Bank Indonesia mandated higher risk-adjusted capital requirements (in line with the Basle standards) to be phased in over 1992 and 1993.

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[8] Classified loans include three categories: substandard; doubtful; and loss. The classification is determined by the length of time loan payments are overdue and the financial condition of the borrower.

[9] See paragraphs 3.83 and 3.86, 88 for a discussion of the problems in enforcing debt contracts.

Banks, having met 7% in March 1993, must meet 8% by the end of 1993. This was done to reduce the risk that mismanagement by a bank of credit or other risks would lead to a loss by depositors, since higher amounts of capital can absorb more losses. Furthermore, higher amounts of capital at risk will dampen a bank's appetite for risky loans, thus reducing the chances of losses. The Government, as owner of the state commercial banks, has established a program with support from a World Bank loan to provide the needed equity infusion for the group. A solid core of private banks have already increased their capital to needed levels. Only 15 of 221 banks had not met the 8% guideline by January 1993, though they have until December 1993. While some banks experiencing difficulties may not expand their balance sheets, others are in a position to expand theirs. Posted spreads between borrowing and lending rates have increased to absorb the costs of raising the additional equity, roughly 1.5% at current rates. This additional spread ensures that banking is profitable and hence that sound banks will want to expand their loans. The additional cost borrowers will bear will be compensated by lower risk of financial distress.

3.55 ***Consider limited deposit insurance.*** The failure of a large private bank in December 1992 led to a flight to safer assets at the state banks and overseas. The perceived safety of the state banks comes from their backing by the MOF rather than the quality of their assets or management *per se*. This gives the state banks an advantage over private banks in attracting deposits. The creation of limited deposit insurance would lessen this advantage. If premiums were assessed on banks, it would also shift the burden of supplying insurance from taxpayers to the bank. However, such a system would need to be carefully crafted to avoid the moral hazard problems that have plagued deposit insurance schemes in other countries. A system in which small depositors would be fully covered, but large depositors remained partially exposed would formalize the existing system.[10]

3.56 ***Establish a Mechanism for Handling Problem Banks.*** Indonesia has made large strides in designing a prudential regulation framework to minimize bank failures. In the wake of the failure of Bank Summa, a legal basis for liquidation is now being built. Further efforts are needed, though, to design a mechanism for dealing with problem banks. Guidelines to keep in mind while designing such a mechanism include: preserve financial discipline while weighing the incentives and rights of all parties concerned; rely on rules rather than discretion so as to minimize perceptions of political manipulation or favoritism; minimize long-run costs and financial support from the Government; and concentrate decision making in a core team of independent, technical staff. If a deposit insurance fund is established, it is critical that specific rules for treating problem banks be written into its charter.

3.57 ***Review BI regulations to assess their effects on credit creation, efficiency and financial stability.*** The array of regulations governing banking creates a web of incentives that are sometimes conflicting and not always well-understood. A review of these regulations would provide a basis for tailoring them to the needs of a stable and growing system.

3.58 ***Enforce Portfolio Concentration Levels.*** Another emerging issue concerns the concentration of lending to a person, firm, or group. Experience in countries in Latin America and elsewhere has shown that concentration of lending greatly increases the chances of bank failure and endangers overall financial soundness. Ownership of banks by industrial groups creates an environment in which excessive concentration can easily occur. Many countries allow ownership ties between banks and their borrowers; however, to protect the soundness of the banking system, regulations must ensure that these ties are not abused. This problem has been recognized by BI, which moved in 1988 to establish legal lending limits

[10] In the two most recent bank failures, Bank Umum Majapahit Jaya and Bank Summa, small depositors were fully paid off, while large depositors shared the loss with equity holders and other creditors.

for persons and groups. The new Banking Law phases in a tighter limit of 30% of bank equity for lending to any group. Establishing a company registry would help BI and commercial banks in their efforts to enforce existing regulations on credit concentration by providing better information on the ownership structure of firms. Easing the way for banks to syndicate large loans or engage in other forms of risk-sharing provides an avenue for dealing with portfolio concentration without forcing a reduction in credit to borrowers.

3.59 ***(b) Improving Access to and Allocation of Credit.*** Portfolio concentration is not only a risk to bank soundness, it is also an equity and a competition problem. Concentrated credit enhances the industrial power of favored borrowers and limits competition. Moving to ensure that credit is not unduly concentrated will reduce the advantages of large borrowers, and the inequitable, uncompetitive outcomes that result.[11]

3.60 Two other areas of credit allocation deserve special attention. First is the requirement that banks lend 20% of their portfolio to small borrowers and, second, that foreign and joint venture banks lend 50% of their portfolio to exporters.[12] The ***20% requirement*** has been justified on equity grounds as a necessary tool to promote bank lending to small borrowers. Problems of access to credit were highlighted in a recent study of small exporting industries where rural firms systematically had greater difficulty in accessing credit.[13] Nonetheless, the existing requirement that every bank lend is excessively costly and threatens to burden some banks with additional problem credits. A system that allowed banks to trade the right to count small loans on their balance sheets for regulatory purposes, similar to the trading of textile quotas, would allow those banks that do not specialize in small loans to provide funding to those that do. Since banks which specialize in small loans make them more cheaply, the overall cost of supplying credit to small borrowers would fall. Bank Rakyat Indonesia (BRI) has shown, through its successful KUPEDES rural lending program, that specialized banks can make small loans profitably, with relatively low interest and default rates. Alternatively, a market for securitized small loans would accomplish the same goals, while also providing a new financial asset to the public at large. Two housing banks have already moved in this direction, announcing plans to securitize parts of their mortgage portfolio. A more flexible approach to meeting the credit needs of small borrowers would improve bank soundness and equity.

3.61 The requirement that foreign and joint venture banks lend 50% of their portfolio to exporting firms limits their ability to compete. Joint venture banks, however, are the best capitalized group of banks in Indonesia and have the soundest portfolios. As such, they are in the best position to expand lending. For the economy to benefit more fully from these banks, relaxing the ***50% requirement*** could be considered. Relaxation of branching restrictions would also improve the ability of these banks to raise domestic deposits and, hence, to provide more of the credit needs of the economy.

3.62 The continued use of subsidized, directed credits, termed ***liquidity credits*** in Indonesia, distorts the allocation of credit and complicates monetary policy. Although liquidity credits continue to fall as a share of total credit, to only 11% at the end of 1992, their decline is not as fast as targeted after the January 1990 reforms. Furthermore, the most recently announced interest rates of 14-16% for most

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11 See the fuller discussion of conglomerates in paras. 3.88-96.

12 Foreign and joint venture banks that meet the 50% requirement need not meet the 20% requirement.

13 See Albert Berry and Brian Levy, *Indonesia's Small and Medium Industrial Exporters and their Support Systems*, World Bank, mimeo, January 1993.

eligible activities, including farming, are well below market rates, undermining one of the pillars of the January reforms. While a case can be made that access to credit is important for farmers, the case for subsidizing such credit is weak. By issuing liquidity credits, BI takes away customers that commercial banks could otherwise service under their small credit programs. Further curtailing liquidity credits and moving rates to market levels would improve credit allocation.

3.63 *(c) **Deepening the Capital Markets**.* Progress in developing capital markets will reinforce financial soundness and increase the options for financing needed investment. Deepening the ***money market*** would provide needed liquidity to banks, ease BI open market operations and establish a reference interest rate for pricing other financial assets. To this end, BI has revamped the role of market makers in the money market. It recently changed the auction system for its paper, SBIs, moving to auctioning fixed quantities rather than setting a cut-off interest rate. BI is also assisting in the development of a commercial paper market by establishing, in consultation with banks, a much needed regulatory and legal framework and a credit rating agency. The latter, by providing more information to the market, should promote not only greater amounts of commercial paper, but also sounder bank lending decisions to large, rated firms. BI also plans to use commercial paper as an open market instrument.

3.64 In the ***stock market,*** further regulatory and institutional reforms should provide the basis for future expansion. Private management of the stock exchange has been successfully established during the last year, leaving BAPEPAM to focus on supervision. A new institution for settlement and clearing, PT. KDEI, has recently begun operation. Clearer guidelines on mergers are planned. It is important, though, that regulations are kept transparent and enforced uniformly. Recent increases in issues on the ***bond market*** have been led by public enterprises (PEs). The success of these issues has been due in part to a market perception that such issues have the backing of the Government. To further spur the bond market, consideration could be given to introducing explicit guarantees on PE bonds. A guarantee fee would be paid to MOF, set at a rate that would compensate it for expected pay-outs. Making the guarantee explicit would have the benefit of promoting the bond market while enforcing financial discipline on PEs. Changes in tax laws have made ***venture capital*** more attractive. Detailed regulations following up on the tax changes are due out shortly, as are the implementing regulations for the ***pension fund and insurance*** laws passed in early 1992.

Developing Well-Functioning Land Markets

3.65 Land issues are an important part of the social and economic agenda in Indonesia, as the country's robust economic growth leads to rapid changes in land use. Conflicts over land compensation and resettlement have increased, heightening concern over the equitable allocation of land. Because of inadequate delineation, parts of protected areas have become degraded. Rising urban land prices have not led to a proportional increase in land tax revenues. Creating a more responsive and transparent land market is a vital part of addressing these problems, supporting growth, equity and the environment. An efficient land market enables quicker adjustment of land-use patterns in response to market signals, thereby increasing economic efficiency. By offering the owner/operator greater security of tenure, it provides more incentives to invest in land, leading to greater productivity. An efficient land market and secure land titles enable land to be pledged as a collateral for loans, facilitating medium and longer-term credit and thereby improving resource mobilization. Social stability and equity are promoted by ensuring that land acquisition takes place fairly and transparently, and in a way that ensures the future income earning capacity of those being resettled. The sustainability of economic development is supported by appropriate safeguards to prevent the degradation of land and its related resources. Finally, public resource mobilization is helped by ensuring that public land resources are sold, leased and taxed at market prices. Where economic rents on private land sales are large, a portion can be taxed away to pay for much needed urban infrastructure development.

3.66 The Government has begun to take steps to address these land-related issues. In 1988, the Directorate of Agrarian Affairs within the Ministry of Home Affairs was transformed into the National Land Agency (BPN), which is directly responsible to the President and has greater powers to guide and coordinate land management, planning and administration. More recently, a national Commission for Spatial Development was set up, headed by the Chairman of BAPPENAS, to draw up broad policy outlines and guide the process of institutional reform. In early 1992, the Government announced a plan to title and register all non-forest parcels in Indonesia in the next 25 years. With the July 1992 deregulation package, restrictions on the right of exploitation (*hak guna usaha*, or HGU) and the right of building (*hak guna bangunan*, or HGB) for joint ventures were lifted, basically in the agricultural sector. These institutional and policy changes, however, are only beginning. Improving the land market requires further changes that mirror the main themes of this chapter: reducing barriers to competitive land sales; improving pricing by ensuring that prices reflect market values; and addressing environmental and social concerns.

3.67 **Reducing Barriers to Market Development.** A web of several thousand land regulations increases the cost, complexity and risk of land transactions. These regulations are poorly understood as they have not been comprehensively compiled, indexed and cross-referenced, though BPN has recently begun to do so. Uncertainty and costs rise further because of the incomplete titling and registration of land. To date only 24% of Indonesian non-forest land (7% of all land) has been registered, with the figure only slightly higher for Jakarta.

3.68 Like other markets, the efficiency of land markets and land-use planning depends on up-to-date, accessible information. The current fragmented land information system hinders efficient, equitable transactions. Each sector agency is responsible for managing its own resources; since concerns with different aspects of land cut across agencies, resource information tends to be fragmented and not freely available across agencies. This has led to duplication of effort and conflict. The fragmented nature of information also provides insiders with an opportunity to profit from information at the expense of the public at large.

3.69 The following changes to the legal and regulatory framework would lower the costs, time and risks of land transactions, while promoting more equitable outcomes:

- ***Simplification and improvement of land laws and regulations.*** Ongoing efforts by BPN to document, compile, simplify and improve existing land laws and regulations should be expanded.[14]

- ***Acceleration of land titling and registration.*** This should be a priority; the Government's announced 25-year program for land registration should be supported, as is planned under a proposed five-year Land Administration Project.

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[14] The proposed development plan for BPN, to be supported by a World Bank loan, involves three steps : (a) compilation of laws, regulations and court decisions to enable simple referencing; (b) further compilation through a computerized data base, including a complete subject index and cross-referencing; and (c) assistance in first reviewing, and then simplifying and revising these laws and regulations, as well as drawing up manuals containing integrated descriptions, clarifications and guidelines (indexed and cross-referenced) concerning each of BPN's tasks. The first phase was started in October 1992 and is expected to be completed in September 1993. It would provide a clear and comprehensive reference source not only for BPN staff but also for other GOI agencies, judges, notaries, lawyers and the public at large. It would then lead to greater consistency in the use of these laws and regulations. The second and third phases would be designed during project preparation, and financed under the proposed project.

- ***Improvement in access to information.*** Greater public access to BPN's land information, including actual sales prices, would promote land titling and fair sales prices. So, too, would the extension of the national geodetic network by the National Mapping Agency and the public sale of those maps. Organizing land information networks among ministries for collecting and sharing land resource information would improve mapping ard land-use planning.

3.70 **Appropriate Pricing of Land.** Regulations not only increase the complexity and transaction costs of registering or selling land, they also distort land prices. Procedures for land purchase by private developers also distort prices and create inequitable outcomes, particularly the *izin prinsip* and *izin lokasi* which grant developers monopsonistic rights over blocks of land (see Box 3.4). When state land, *tanah negara*, is involved, the formal sales price is often less than one-quarter the market price. By regulation, the base price, or *harga dasar*, is defined as a three-month average of market prices (updated quarterly) in each city and district, and is disaggregated by 42 different combinations of land-use and land characteristics. In practice, the *harga dasar* as set by local officials is generally below market price, so that the effective sales price is generally also far below the market price. This has several implications, including: loss of government revenue; encouraging extensive rather than intensive use of resources, leading to an accelerated demand for conversion of forest land to other uses; allocation of land to inefficient uses; and rent-seeking and corruption.

3.71 Low land compensation rates and forced evictions are also a source of growing conflict for development projects started either by the Government or by private developers. These conflicts are worsened by the lack of a national resettlement policy, the vagueness of existing regulations, and the failure of such regulations to require reestablishment of people's livelihood once resettled.

3.72 Moving to market-based land transactions will require steps to eliminate barriers to market prices. A pilot project of land auctions would be a useful first step in moving prices for state land to market levels. Care would need to be taken to ensure that people who have lived on state land for years (sometimes generations) have their livelihoods protected and that land to be auctioned has been inventoried. *Izin lokasi* and *izin prinsip* should be reformed to eliminate their distortionary effects on prices and equity. Requiring a realistic resettlement plan to be developed as a part of the feasibility analysis/project preparation work, within the context of a national resettlement policy, would lessen social tensions and promote equity.

3.73 **Land-Use and Environmental Planning.** Land prices and sales cannot be set solely on the basis of market prices and private demand and supply. While relying on the market for efficiently allocating the bulk of land in the context of an established and transparent regulatory framework, there is a need for ensuring environmental protection and sensible urban development through simple, focused land-use planning. In Indonesia, land-use planning activities are scattered among different agencies at different levels of government. The Law for Spatial Development, which was passed by the Parliament in September 1992, is intended to contribute to unifying land-use planning. Realizing the benefits of the Law requires implementing provisions for local participation, disclosure of information and assessing environmental risks.

3.74 Actions to improve land-use and protect the environment include:

- adoption of a strategic spatial planning approach that limits physical land-use planning to specific areas for specific purposes, such as protection of ecosystems, public health and safety;

- improved delineation of protected areas and continued development of buffer zone management by the Ministry of Forestry (MOFr), in cooperation with BPN and local governments (in this regard, the National Forestry Inventory work now being undertaken by MOFr could be accelerated);

- improvent of planning and implementation of watershed protection by MOFr in cooperation with the Ministries of Home Affairs, Agriculture and Public Works, and with local governments;

- enhancement of the newly created BAPEDAL's ability to monitor pollution effectively, as well as its capacity (and that of other sectoral agencies, particularly at the provincial and local level) to monitor the environmental impact of projects; and

- improvement of incentives for the protection of biodiversity and sensible use of forest resources at local level through schemes that share forestry revenue with local governments and people.

Box 3.4: Permits for Land Acquisition and Development

There are different models for acquiring land for development by the private sector. In the United States, developers use time-bound options to purchase individual properties to assemble large sites. In Thailand, land agents use a similar system to assemble small plots together, then offer the site on the market. The Indonesian method is quite unique; land acquisition is done through a complex permit system that enables specific land parcels to be purchased and developed only by the developer who is issued such permits (*izin lokasi*, and *izin prinsip*). Procedures for issuance of these permits vary greatly from region to region. Although they are mostly issued by the provincial governor, a range of different government agencies play important roles in granting the permits, at various administrative levels.

These permits are rapidly covering large areas of urban land. In West Java, about 25,000 hectares came under *izin lokasi* during 1990/91. It has been estimated that about 1% of total land in Jakarta comes under *izin prinsip* every year, with about 65% of the land slated for housing and the rest for commercial purposes. The permit system has several negative effects:

- ***equity*** is hindered because the permits allow buyers to acquire land from the current owners at below market prices;

- ***land speculation*** is encouraged because the reduction in the supply of land not subject to permits drives up prices;

- ***inefficiency*** is encouraged because the low prices on prime land under permits dampens the buyer's incentive to put land to its best use; and

- ***environmental management*** is complicated because environmental issues are inadequately considered in granting the lucrative permits.

By eliminating the monopsonistic aspect of the permits and creating a simple, transparent, competitive procedure for receiving them, the Government could simultaneously improve equity, boost efficiency and benefit the environment.

Spurring Technology Markets

3.75 **General Approaches and the East Asian Experience.** Although industrial development has been rapid since the mid-1980s, Indonesia is still a relative latecomer to modern industry. "Catching up" with other rapidly industrializing countries will require sustained progress in technology development. Policies to foster efficient technology markets that raise the efficiency with which Indonesian companies absorb, diffuse and develop new technology will be vital. Broadly, governments have used two options to accelerate the development of technology. The first is to promote private market mechanisms for technology development through ***functional interventions*** (e.g., maintaining competitive and open product markets; allowing unrestricted imports of machinery, technology and services; providing incentives for private investment in technology research and development; developing human resources; helping establish industrial standards and testing services; and providing extension and information services). The other is to invest in technological development through ***selective strategic interventions*** (e.g., selective targeting of technology-intensive industries through import protection, direct public investment or subsidies to induce private investment in such industries, and the targeted development of highly trained manpower for such industries).

3.76 While considerable debate has occurred in recent literature over the relative merits of selective or functional approaches, the main policy lessons of the East Asian experience are threefold. First, developing open technology markets and investing in quality basic education are fundamental to building broad-based technological capabilities. Second, only later, as local firms gradually acquire technological capabilities commensurate with a rise in the country's level of development, does it become feasible for governments to encourage industry to move up the technology ladder through limited, well-designed interventions. Korea, for example, did not build a steel industry until the late 1970s, and other heavy industries until the 1980s. Third, investments have been left largely to the private sector, which has been made to face international competition; in most countries, public sector, non-market investments directed at technology development have proven costly and ineffective.

3.77 **Indonesian Approaches and Experience.** Indonesia currently uses both functional and selective interventions in pursuing technology development, the first relatively successfully, the second much less so. A key functional intervention has been the deregulation of trade and investment beginning in the mid-1980s. This has considerably strengthened the private market for technology development, by allowing greater flows of foreign direct investment and foreign technical experts, with the accompanying inflows of technology and expertise. Exposure to competition from imports and pressure to export have also spurred the pace of technological deepening. In textiles, for example, Indonesian firms have entered into sophisticated spinning and weaving activities, the products of which are now exported worldwide. Indonesia's progress in agriculture is another example of the benefits of broad-based extension and the adaptation of foreign technology. Numerous other examples exist of a rapid improvement in the technological capabilities of the private sector. Realizing further gains from foreign technology and expertise will require extending the reform of the trade and investment regime, including reducing non-tariff barriers to imports in key industries and easing local content and divestment requirements. Emphasis on broad-based human resource development has been another major plank of Government policy to foster technological development.

3.78 In contrast to the success of the functional approach, selective strategic interventions have been less effective. Supported by heavy protection, and in some cases sizable public investment, domestic producers in the targeted high-technology industries, such as steel, engineering, shipbuilding, aerospace and telecommunications, supply small, protected domestic markets at high cost. Few linkages have developed between these industries and the rest of the Indonesian manufacturing sector. Instead, they absorb scarce technical and professional manpower (and public resources to train such manpower) that

could serve more productive purposes if redeployed in the private sector. Large public investments in a network of government industrial research establishments have primarily served the public strategic industries, rather than the broader needs of private industry. Studies show that although there are pockets of high technological competence, in most of these industries technological capabilities are weak, the public sector is often the main buyer, and exporting is undeveloped (except through special buy-back arrangements with suppliers).

3.79 The Indonesian electronics industry exemplifies some of the key technology issues facing the Indonesian industry. While growing, the industry lags those in other countries, as reflected in its relatively low share in output: only 0.5%, compared to 4.1% in Thailand, 15.4% in Malaysia and 13.9% in Korea. In comparison to these countries, Indonesia has few skilled electronics workers. Of the total employment of 40,000 in the sub-sector, only 1,600 have vocational training, while another 320 are university graduates (mainly engineers). For Indonesia to reach Korea's early 1980s level of development in electronics, for example, would require 36,000 skilled workers and 18,000 engineers. If Indonesia is to achieve broad-based technology development (rather than isolated pockets of advanced technology), it must address this binding ***human resource*** constraint. As in Korea and Taiwan, government investments in human capital, in both basic and vocational education, in partnership with the private sector will be crucial, as discussed in Chapter 4.

3.80 **An Agenda for Technological Development.** Sustainable, effective support for technology in Indonesia in the short and medium term will mean reorienting policy away from selective interventions toward the broad functional interventions that have proven successful elsewhere. The foregoing suggests the following main elements of the agenda:

- developing human resources, emphasizing higher-quality basic education and industrial skills training that is relevant to current and emerging development needs;
- further deregulating trade and investment, promoting larger inflows of direct investment, and improving access to technology licensing;
- establishing technology standards and better quality control and testing services;
- reorienting industrial research centers toward the needs of the private sector;
- adapting agricultural research, in partnership with the private sector, to the evolving pattern of agricultural growth in Indonesia and to differential regional needs; and
- promoting greater emphasis on building technological capability in private industry by bolstering incentives for private R&D and in-service training of staff, and improving access to technology information.

D. Improving Market Infrastructure

3.81 Strengthening competition, improving pricing and developing factor markets are not enough to make the most of markets. Sound market infrastructure—the accounting, legal and regulatory framework—is needed to ensure efficient and equitable performance of the market. It contributes to efficiency by ***setting transparent rules*** for market activities that limit uncertainty and increase information. It promotes equity and competition by ***broadening access*** to market opportunities. Accounting, for example, provides the basic information critical to investment and credit decisions that fuel the economy. Transparent laws and regulations protect the interests of those who abide by the rules

and improve equity by widening participation and limiting market power due either to size or political influence. Transparency of rules and access are particularly important for small firms, as is the elimination of advantages gained by large firms on the basis of government policy. Ensuring that sound market infrastructure is in place is a fundamental role of government. If the government does not adequately provide this infrastructure, which carries strong positive externalities, other parties would not take up the challenge since they would bear all the costs but share only a fraction of the benefits.

Establishing Transparent Market Rules

3.82 Gaps in credit and security laws, commercial law, accounting, and financial disclosure, as well as lack of enforcement, raise the costs and risks of market transactions in Indonesia. These gaps needlessly increase uncertainty and stifle business. Weak market infrastructure favors transactions between established groups where social or familial ties bind parties together. Small or new firms and outsiders, such as foreign investors, are placed at a disadvantage. This section discusses the nature of the problems and suggests improvements to the laws that govern the market. Institutional aspects, such as the court system and the accounting profession, are discussed in Chapter 5.

3.83 **Credit and Security.** Instruments such as the "fiduciary transfer of ownership" and "power of attorney" are frequently employed to secure contract and credit transactions, but have an uncertain basis in Indonesian law. Hypothecation is recognized only for immovables and ships, but not for a wide range of other assets, such as industrial machinery, receivables, stocks in trade and monetary assets. Pledges are possible, but require physical possession, which is impractical. There are formidable barriers to the transfer and mortgage of land, including major delays in receipt of title documents (see paras. 3.65-69). Leasing transactions are rendered difficult because of absence of a registration system for collateral, difficulty in mortgaging property and risks on leased property located on immovable property. In enforcing credit transactions, the debtor enjoys strong protection. A bank, for example, can be sued for publicly announcing the name of a delinquent debtor. Finally, there are no reliable information systems covering land registration, property and security (filed by individuals and businesses) or credit information.

3.84 **Company and Bankruptcy Laws.** The current company law is based on 21 rudimentary provisions of the 1847 Commercial Code. Starting a business requires approval of the Ministry of Justice, and although not a major deterrent, it is a time-consuming and often costly procedure. Companies can be formed only for specific purposes and defined time-periods, greatly limiting flexibility and mobility. Minority shareholders have little protection, and voting rights are archaic. The laws and procedures on exit and bankruptcy are unclear and untested because of the basic weakness of the court system. Most private businesses that fail in Indonesia simply cease to operate—exposing creditors and shareholders to high risks. High profile cases are handled *ad hoc*, providing little precedent for business at large.

3.85 **Accounting, Auditing and Financial Disclosure.** In addition to the difficulties with commercial law, no specified financial records are required to be maintained or filed by companies and there is no requirement for independent auditing. With limited demand for its services, the accounting profession in underdeveloped (see Chapter 5). Demand for audited accounts has increased with MOF decrees requiring statements from firms that intend to list themselves in the stock market, and BI now requires banks to publish quarterly accounts. Entry of major international accounting firms into Indonesia, however, is restricted. As a result, one major accounting firm apparently conducts 60-70% of all audits in the private sector. Misleading, and sometimes fraudulent, accounting practices have been a contributing factor to the wariness of stock market investors. Also, there are no requirements for public registration or disclosure of ownership and financial records, except in the case of listed companies. This

results in a lack of information on, and hence, unusually high risks to dealing with corporate entities in Indonesia, even the larger and better-known ones.

3.86 **Priorities for Reform.** The problems in credit, security, company law and accounting are being addressed in various ways. The chief effort is a recent commercial law reform project that seeks to modernize such laws. A draft company law has recently been issued by the Ministry of Justice. New laws in banking, insurance and pension funds, provide a more robust legal framework for many financial transactions. BI is establishing a credit information service for the banking system to improve the quantity and quality of information available on borrowers. In the stock market, new regulations give minority shareholders veto rights over mergers and acquisitions and force tougher disclosure standards. In accounting, BI and the Indonesian Institute of Accountants (IIA) have recently finished a new set of bank accounting standards. Priorities for reforms in these areas are:

- adopting a set of modern credit and security laws in the Indonesian language, recognizing existing practices and expanding the range of permitted securities (which would contribute to easing the credit constraint on small businesses);
- improving credit and security registration and information systems;
- adopting new company laws and fashioning a workable bankruptcy law; and
- requiring in the new company law full accounting and auditing of financial records and disclosure of information, thus increasing the access of investors and creditors to information.

Broadening Market Access

3.87 Economic efficiency depends critically on competition, or the threat of competition in contestable markets. It is hampered by barriers that cut off access to markets or restrict competition. Equity is also undermined when new or small investors are excluded or put at a disadvantage by market barriers. Some important constraints to competition arise from: the concessions granted to large business groups; direct government interventions in large private investment decisions, and in the award of public contracts; and the role of public enterprises in many key sectors. We take up the first two of these in this section, delaying the discussion of public enterprises until Chapter 5. We end with a discussion of the scope for widening participation of small firms in the market.

3.88 **The Role of the Conglomerates.** Indonesian business, as that of many other countries, is dominated by large business groups (or conglomerates), in many sectors of the economy.[15] The conglomerates are not defined as legal entities; they are a collection of companies with common shareholders. Data relating to the activities of conglomerates are scarce, but according to one source[16], there are some 200 conglomerates in Indonesia with an annual turnover exceeding $35 million and with an average turnover of $250 million in 1990 (Table 3.4). These 200 conglomerates control more than 4,000 individual companies. The same source estimated the total 1990 turnover of the top 200 conglomerates at Rp.93.3 trillion ($50.6 billion). With a ratio of turnover to GDP of 35%, this implies

[15] Throughout this section, the term conglomerate is used to cover horizontally or vertically integrated firms as well as firms from various unrelated activities grouped together by ownership and control.

[16] PT. Data Consult Inc., *Anatomy of Indonesian Conglomerates*, Jakarta, June 1991.

a relatively high level of concentration, on a par with Turkey, but less than half the level of concentration in Japan or Korea.

3.89 Conglomerates emerge for various reasons. Attempts to overcome market failures, such as uncertain supply, can lead to conglomeration. So too can attempts to capture economies of scale. Both of these economic rationales can be beneficial. On the other hand, forming a conglomerate may simply be a means of gaining or exploiting market power, to the detriment of social welfare. A key motivation in the formation of many conglomerates may not be to take advantage of competitive market opportunities, but rather to capture rents created by policy-created market distortions.

Table 3.4: Conglomerates in Indonesia, 1990

Turnover Size ($ million)	*Number of Groups*	*Average Annual Turnover ($ million)*
1. 35-75	65	60
2. 76-150	59	94
3. 151-250	27	216
4. 251-500	27	605
5. 501-1000	9	750
6. 1,001 and over	5[a]	3,240[a]
TOTAL	200[a]	250[a]

[a] Includes 8 large groups which are part of, or linked closely by ownership to, the top 5 conglomerates.

Source: PT. Data Consult, 1991.

3.90 The rise to prominence by conglomerates started in the late 1960s and 1970s, facilitated by monopoly rights and protection against local and foreign competition, and special access to financial resources (mainly from state banks). Analysis of investment and industrial concentration shows, for example, that sectors with high tariff protection are more concentrated. By the early 1980s, about 55 conglomerates had emerged, controlling about 70-75% of all private capital. The growth of conglomerates has been much faster in the 1980s, however, fueled chiefly by the creation of new conglomerates, although some of the older ones have prospered as well.

3.91 The growth of congiomerates during the 1980s appears to have been much faster than could be sustained from retained earnings. Since most groups have not opened up to the equity market in a big way, the implication is that debt-financing has been a major source of their growth. Indeed, recent work using the manufacturing census shows that large group firms have more than twice the debt of comparable non-group firms.[17] With very few exceptions, major private domestic banks are part of conglomerates.

[17] See J. Harris, F. Schiantarelli, and M. Siregar, *The Effect of Financial Liberalization on Firms' Capital Structure and Investment Decisions: Evidence from a Panel of Indonesian Manufacturing Establishments*, World Bank, 1992.

High leverage exposes groups to cash flow difficulties when interest rates rise and growth slows, as it has in the last year and a half. With conglomerates holding a disportionate share of credit, this, in turn, undermines financial soundness (see para. 3.58).

3.92 Export performance is an important indicator of the extent to which firms contribute to the enhancement of the competitiveness of a country. For Indonesian manufacturing as a whole, the export-output ratio has increased from 8% in 1985 to 16% in 1990. Yet conglomerates' export-output share, unlike their Korean counterparts, has lagged. They have not as yet used their relatively superior access to resources to strengthen international competitiveness. Recent investment figures, though, show that conglomerates are concentrating investment in export-oriented sectors, suggesting that their contribution to the export drive may pick up.

3.93 ***Implications for Efficiency and Equity***. The existence of conglomerates *per se* does not imply economic inefficiency or inequity. A group may be large precisely because of its superior business skills or because of a strategy to overcome market failures, as noted above. Nor does size necessarily mean that market concentration has increased. Indeed, available estimates show that four-firm concentration ratios in the manufacturing sector declined somewhat between 1985 and 1989. Meanwhile, the number of large business groups has more than tripled during the past decade, grounds to believe that competition between large business groups is now more active than in earlier decades. One advantage to the economy is that many conglomerates have now reached a size that enables them to participate in larger-scale developments that otherwise would have only minimal local participation or have to be undertaken by the state.

3.94 When large business groups are sheltered from strong competitive pressures, however, major efficiency losses and excessive concentration of economic power can result. There are several areas where non-market forces can shield groups from the discipline of competition and support a high-cost economy. These include: protection in the form of barriers to trade or entry; non-competitive bidding procedures on large contracts; preferential access to credit and the associated increase in financial fragility; pressures from vested interests to slowdown or reverse the process of deregulation; and uncertainty faced by investors not linked to influential business groups due to the weak legal and accounting framework that allows non-market forces a larger role.

3.95 ***Directions for Reform***. The special factors that encouraged the growth of conglomerates during the 1980s may undergo change in the 1990s. One source of change are foreign financiers who are demanding greater disclosure and compliance with internationally accepted accounting standards. The ability of some major groups to access special loans from the banking system should decline as Indonesia adjusts to the requirements of international banking standards. However, other reforms will still be needed: to dismantle systematically monopoly protection granted to certain groups and product markets; to improve the prudential regulation of banks by enforcing limits on lending to group companies by conglomerate-owned private banks, and by closer scrutiny of state-owned bank lending; and to enforce much greater transparency in disclosure of ownership links and financial accounts of the largest companies, through appropriate changes in company laws, corporate tax laws and capital market regulations. The purpose of the reforms would be to strengthen the long-run competitiveness of individual business units and in the process encourage conglomerates to evolve from tightly-held family firms to widely-held public companies. Vigorous pursuit of trade and investment policy reform, coupled with adherence to prudential regulations in banking and a strengthening of the commercial legal framework, will make markets work more effectively, creating incentives for conglomerates as well as firms in general to produce results that are both privately and socially desirable.

3.96 One oft-cited measure to deal with conglomerates is the establishment of an anti-trust law in Indonesia. While such a law may be beneficial in the medium term, making it a priority today could be counterproductive. First, establishing an adequate commercial law would stop more detrimental business practices than enacting an anti-trust law. Such a law would increase access and competition, thereby reining in the advantages conglomerates enjoy. Second, even in countries with anti-trust laws and strong enforcement, removing regulatory barriers to trade and investment, as Indonesia is emphasizing, has proven much more effective in limiting the concentration of market power.

3.97 **Government Interventions in Large Private Projects.** An important feature of Indonesia's current investment outlook is relatively large investments in certain sectors, such as tree crops, agricultural and natural resource processing industries (e.g., edible oils, wood-processing and pulp and paper, etc.), chemical and engineering industries (e.g., cement, fertilizer) and infrastructure. At end-1991, a cumulative total of 182 large projects with a combined investment commitment of $102.4 billion had received BKPM approval or were in various stages of planning. Some 51 of these projects are classified as mega-projects, each having an investment requirement in excess of $500 million. The degree of market competition is especially important in the case of such projects if Indonesia is to get the most from this substantial investment effort. Indeed, it was in part concern over the quality of a number of large projects seeking foreign financing that led to the establishment of the COLT and limits on public and publicly-related external borrowing (see Chapter 2).

3.98 While some improvements have been occurring, there remains substantial scope for Indonesia to increase the efficiency of large project selection, financing and implementation. There are three main directions for reform: creation of much more transparent and competitive conditions for private entry, including foreign investors, in large projects; in conjunction with the COLT (para. 2.54), announcement of and adherence to a deliberate policy of no bailouts for domestic or foreign borrowing in the event of project failure (where such announcements would not be credible, the use of explicit limited guarantees would be advisable); and reduction of the monopoly position of state enterprises, such as Pertamina, and favored business groups so that projects could be taken on by private business under competitive market conditions. These reforms would lead to a much greater market-based scrutiny and selection of projects, greater reliance on foreign or domestic equity over debt, and ultimately more efficient and internationally competitive projects.

3.99 **Supporting Small Enterprises.** Indonesia, like many countries, has used government policy to support small enterprises with the rationale that such support promoted equity and rural development. Policies have included: protection from imports for certain products; reservation of investment categories for small firms; credit schemes; moral suasion for large enterprises, both public and private, to support small firms (e.g., transfer of shares scheme, and *bapak angkat*, or foster father, programs); and government preferences in contracting. As in other countries, such schemes have had mixed results. Although the underlying objectives have been sound, many, if not most, of the schemes have been unable to achieve these objectives. The benefits of programs have sometimes been appropriated by unintended beneficiaries or inefficient enterprises, while credit programs have been plagued with very poor loan recovery, even with heavily subsidized rates. Nevertheless, small enterprises can play a potentially dynamic role in generating new entry and competition, adapting and developing technology, creating new market niches, and generating high growth in employment and output. Indeed, small enterprises have been playing an increasingly important role in Indonesia's non-oil export drive.

3.100 Widening the participation of small firms in the economy requires rethinking supporting Government policies. Experience suggests a two-pronged strategy towards the small enterprise sector: one prong focused on the micro-enterprises employing fewer than 5 workers (and accounting for about 55% of industrial employment); and the other on small- and medium-sized enterprises (SMEs) that employ

between 20 and 200 people (and account for about 11% of industrial employment). Addressing the problems of the thousands of micro-enterprises would support poverty alleviation and rural development, while addressing the problems of SMEs would dynamize and broaden industrial and technological development.

3.101 Effective support for ***micro-enterprises***, in rural or urban settings, hinges on increasing access to credit. The availability of credit opens opportunities for viable business to a large number of people with low incomes. A number of credit programs, by focusing on subsidies, have been of limited scope and have encouraged diversion of credit to unintended borrowers. Furthermore, the institutional mechanism for disbursing credit has been unsuited to the high-transaction-cost, low-denomination loans that micro-enterprises need. More effective outreach to micro-enterprises requires specialized credit delivery systems, such as the KUPEDES scheme of BRI, that charge market-based interest rates (to cover the risks and costs), provide intensive supervision and rely on group pressures to support credit recovery (see para. 3.60). Based on careful analysis of successful ***small- and medium-sized firms***, a strategy for further development of the sector could include: facilitating and supporting the further development of private networks of marketing and technology provision for SMEs, including collective efforts by strengthened, independently minded industry associations; and, as with micro-enterprises, increasing access to finance. Because of their relatively larger size, however, SMEs can rely on commercial banks that specialize in small business lending (see para. 3.60). Nevertheless, further efforts to improve credit and securities laws and stricter enforcement of regulations on concentration of credit would improve SME access (see paras. 3.58 and 3.83).

E. Managing the Environment

3.102 As earlier sections have suggested, making the most of markets can spur growth, efficiency and equity. But contrary to common perceptions, providing a wider role for the market can spur responsible environmental management too, when done with a knowledge of the nature of the environmental problem and the limits of the market. Environmental problems are chiefly caused by three factors: ***policy failures***, where explicit government decisions lead to poor environmental outcomes; ***market failures***—externalities, poor information—that drive a wedge between market outcomes and environmentally sustainable outcomes; and equity problems, i.e., ***poverty***, that lead people to damage the environment in a effort to survive. By overcoming these problems, often by making markets work for the environment, better environmental outcomes can be achieved.

Overcoming Policy Failures: Win-Win Policies

3.103 Many of the poor environmental outcomes in Indonesia result from policy failures, often attempts to circumvent competitive markets. A prime example is policy-induced subsidies on key natural resource prices: fuel and energy, fertilizer, water and timber. Until the January 1993 price increases in domestic fuel prices, the level and structure of these administered prices encouraged overconsumption of the dirtiest fuels, particularly diesel fuel. The poorly targeted subsidy for residential electricity use, amounting to about Rp.1.0 trillion per year, leads to substantial overconsumption (see para. 3.25). Low farm-gate prices for fertilizer have led to excessive fertilizer use and have burdened scarce water resources with pollution run-off. Given the low yields to additional fertilizer application, and the potentially high returns to alternative uses of the fertilizer subsidy funds, there is no compelling reason to suffer these costs by continuing to subsidize fertilizer use (see para. 3.33). The almost complete lack of pricing for irrigation water squanders this resource, while poor pricing of water in the cities only compounds the waste (see paras. 3.27-28). A combination of trade restrictions and low Government charges for logging rights keep log prices low, encouraging excessive logging and waste in plywood mills and discouraging investment in conservation on concessions (see para. 3.15 and Box 3.2).

3.104 By reducing or eliminating these subsidies, the Government can win on three fronts: environmental sustainability would be promoted, along with economic efficiency and the fiscal balance. Efforts along these lines have already begun for fuels and irrigation. The policy adopted in January to adjust fuel prices regularly in line with world prices will promote a more fuel-efficient Indonesian economy and combat air pollution. This will be particularly important in coming years as industrialization continues apace. One of the goals of a pilot project charging irrigation fees to cover operations and maintenance costs is to encourage water conservation.

3.105 Sometimes the effects of policies are more indirect than those caused by subsidizing natural resources. The destruction of mangrove forests for conversion to shrimp farms, *tambak*, has been accelerated by a subsidy on shrimp fry. Mangrove forests are a traditional source of shrimp fry, but the private short-run gains from conversion of that forest into *tambak*, already attractive without the subsidy, were further increased. It is important to screen policies for such indirect, unintended effects with a simple environmental impact assessment (EIA) process that would identify such outcomes and mitigate them.

3.106 Another set of poor environmental outcomes results from policies that cloud property rights, thereby limiting people's incentive to use resources sustainably in the long run. Consider the property rights given logging concessionaires in Indonesia. Their short tenure, 20 years, conflicts with the longer rotation cycles needed for sustainable logging. Since concessionaires are uncertain about their rights to the trees they leave standing on their land, their incentive to conform to sustainable logging practice is weakened. Clarifying property rights does not necessarily mean that rights should always be privately held. Communal property arrangements can be effective in managing resources by regulating use by members of the community and preventing overexploitation by outsiders. The legal morass that surrounds land titling, sale and use, discussed in section C, is another example of poorly defined property rights that leads to unwanted environmental outcomes. Government efforts to clarify and strengthen property rights would align owners' interests in maintaining the environmental quality of their assets with those of the society at large.

Overcoming Market Failures: Targeted Interventions

3.107 Aligning market outcomes and sustainable development is not simply a problem of getting out of the way of competitive markets. Sometimes it is a question of creating a market. Substantial environmental degradation springs from externalities, costs that one person imposes on another that he or she does not bear. A useful way of thinking of an externality is as a product or good for which the market is missing. Pollution, for example, imposes social costs in excess of the benefits derived from the product that generated the pollution because the victims have no market in which to express through a price their willingness to reduce pollution. Creating a market that prices pollution provides a means of bringing the level of pollution in line with the costs it imposes on the society. This is the rationale behind the Polluter Pays Principle (PPP) adopted by all OECD countries as a framework for designing policies.[18] How successful policies for pricing pollution, or other externalities, are depends on how the market is set up and operates.

3.108 Of course, creating an outright market price for an externality is only one option. In addition to pricing or economic instruments, externalities can be dealth with by:

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[18] The Polluter Pays Principle says simply that the producer of pollution should pay for the damage caused by his actions. It is an example of the general principle that the way to overcome externalities is to induce those who generate the externality to bear its costs (or benefits).

- regulating activities that create externalities, or
- using negotiation or legal methods.

All three main options, market-based instruments, regulations and legal mechanisms are explored in the following sections, with a special emphasis on pollution.

3.109 Moving to targeted interventions to deal with externalities imposes costs, often on industry. Some have argued that developing countries, like Indonesia, cannot afford to increase industrial costs because this will slow growth. But growth is only a means to improve people's welfare. Negative externalities harm people. Internalizing them, for example by forcing firms to bear the costs of pollution, may lower measured economic growth (though not necessarily, as the objective is to produce differently, not less), but will promote welfare. Holding off on dealing with negative externalities out of concern it will reduce growth is misguided, as it undermines the sustainability of growth over the longer haul.

3.110 **Regulatory Instruments for Environmental Management.** An option often used by governments to overcome problems of externalities and other market failures is to replace the market with regulatory controls. To deal with the external costs imposed by pollution, for example, governments establish an ***effluent standard*** that mandates the amount of pollution generated. Alternatively, the government can establish an ***ambient standard*** that sets limits, not on the emissions or effluents of a particular source, but rather on the allowed amounts of pollution in air or water. Choices that are otherwise made by producers are limited by the regulation: emit only so much effluent, use only this technology, operate only under these conditions, etc. Because of this, the effects on the environment are more predictable, provided the regulations are met. In practice, compliance varies widely, reflecting a host of socioeconomic and institutional factors. Also, the costs of meeting the regulatory standards are often unknown to the regulators.

3.111 Regulatory command and control policies are useful in situations in which the externality or market failure involves only a few entities that are the chief sources of a pollutant, for example, air pollution from power or cement plants. They are also more effective when technological options for dealing with problems are few and well-known. In these situations, the small number of firms and the simplicity of the control options means that actions are easy to identify and compliance easy to monitor. Unfortunately, in most industries, there are many firms and various technological options, limiting the scope for direct regulation.

3.112 Regulatory interventions have been the most common response in Indonesia, as in most other countries. Examples abound. National ambient and emissions standards for air have been in place since 1988 and are currently set to be tightened. BAPEDAL, the national environmental control agency, is finalizing a new regulation on air pollution control that will set national standards for automobiles and other mobile sources of air pollution. These would build on earlier road-worthiness standards put out by the Ministry of Communications that do not limit concentrations of lead and nitrogen oxides in vehicle exhaust. A national set of ambient water quality standards was introduced in 1990, with different standards for different categories of water use. The Environment Ministry (KLH) has also set effluent and emission standards for fourteen industries, including pulp and paper and textiles. New effluent standards are being designed for four other key industries: cement, thermal power, lead and iron and steel.

3.113 Environmental considerations play a part in existing licensing procedures for projects and activities, another typical regulatory measure. Because of the broad scope of many licenses, they offer regulators an opportunity to control various aspects of a firm's effect on the environment. An EIA systematically evaluates a project's effects on sustainable resource use, pollution loads, congestion, etc.

Costs and benefits can be laid out and alternatives explored. Since 1986, regulations require that all existing and new projects complete an EIA and propose ways of tackling detrimental effects before receiving their location permit (*izin lokasi*). Environmental criteria can also be used, though they are not required, in decisions to grant nuisance permits or activity permits.[19]

3.114 Increasing the effectiveness of licensing in protecting the environment, while at the same time streamlining the overall licensing process, is a major challenge facing the Government. At present, licensing is unnecessarily costly (see para. 3.41) and the environmental assessment quality poor. To make progress requires efforts to screen projects and waive the assessment requirement for those with little expected impact, thus concentrating resources on projects that will have serious environmental consequences. Furthermore, where impacts are easily identifiable, one should dispense with the assessment and focus on a mitigation plan. Greater focus will improve the quality of EIAs and mitigation plans. At the same time, the link between EIAs and licensing needs to be strengthened so that improved EIAs, and mitigation plans, remain a prerequisite for investment licenses.

3.115 **Market-Based Incentives for Environmental Management.** Unlike most regulatory responses, economic incentives explicitly alter the prices that producers and consumers face, thereby influencing their decisions along more benign environmental lines, while allowing greater flexibility. Producers can still choose their output level or inputs or output mix, but must pay a tax or fee (or receive a subsidy) for so doing. As with regulatory interventions, these can be either direct or indirect. In dealing with pollution, the oft-recommended direct economic instrument is an effluent or emission ***tax or charge***. Ideally, the tax is set at a level that induces the producer to generate pollution just at the level where the social benefits of lower levels of pollution balance the costs of further abatement.

3.116 Economic incentives are useful in dealing with situations in which there are many polluters and many alternatives for abatement. Since abatement decisions are left to individual firms, who best know their own options, the information requirements on the regulator are vastly reduced. Leaving abatement decisions to private firms also greatly increases cost efficiency. Those firms that can cheaply abate will do so, while those that cannot will opt to pay. If one uses pollution abatement costs in OECD countries as a guide, savings from using market-based incentives rather than regulatory standards are in the range of 0.5%-2% of GDP per year.

3.117 Use of charges for pollution abatement, though increasingly common in OECD countries, has not yet happened in Indonesia. Nonetheless, there are important examples of economic incentives being used in Indonesia, either explicitly or implicitly, to improve environmental outcomes. The ***reforestation fee*** charged on logs is a prime example of a tax designed with environmental goals in mind. This fee has been raised twice in the last five years and is likely to be increased again in the near future. While the reforestation fee itself has a positive environmental impact, the use of the funds gathered by the fee creates other problems. The tree plantation subsidy scheme, HTI, funded by the money collected from the reforestation fee, though potentially also environmentally friendly, creates incentives to clear-cut forests in order to start a tree plantation and receive the subsidy. Furthermore, the bulk of the subsidy is given to plantations that are commercially viable without the subsidy (fast-growth trees for pulp and paper mills), while slow growth plantations, those most important for easing pressures on the natural forest, get little funding. Although not explicitly designed to, the land tax (PBB) has a positive environmental effect by reinforcing incentives for more intensive, rather than extensive, land use.

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[19] Nuisance permits (Hinder Ordinandi) are granted by provincial governors and district or city mayors for businesses thought to create potential nuisances. Activity permits are granted by sectoral ministries.

3.118 Another important economic instrument that the Government is using, sometimes inadvertently, is ***subsidies***. Under one scheme, an interest subsidy is provided to firms that invest in additional pollution abatement equipment or new equipment which is less polluting. Pollution abatement equipment is already exempted from import duties by BKPM under some investment projects. Other subsidies are less explicit, or have indirect negative effects on the environment, such as the subsidy on piped water and on fertilizer mentioned above. While subsidies can be useful in inducing firms to invest in pollution abatement, they should be used with care. Interest rate subsidies, for example, risk promoting investment in polluting activities. Furthermore, the interest subsidy usually bears no relationship to the benefits gained from the investment in pollution abatement.

3.119 **Mixed Systems**. As environmental control policies have evolved, interest in systems that combine regulation and economic incentives has grown. The most well-known approach used in several countries, notably the US, is the ***tradable permit system***. Firms in a particular area are given (or purchase) the right to emit a given amount of pollution—the total amount for the area usually keyed to an ambient standard. Unlike a traditional permit system, however, firms are allowed to trade their permits with others, thereby creating a market for pollution rights. The number and size of allotments given with the permits determines the overall level of pollution. The trading of permits, at a price the permit holders determine, allows the ambient standard to be reached more cost effectively. Tradable permits for textile exports are already being used in Indonesia to allocate the country's quota under the Multi-Fiber Agreement, thus demonstrating the feasibility of such a market creation tool. Building on this experience, tradable permit systems for pollution could be an important part of an overall pollution control strategy to be carried out by BAPEDAL.

3.120 In some areas, a "***charges and standards***" approach, where polluters are induced to meet standards by a system of charges and subsidies, is appropriate (see Box 3.4). Such systems offer the incentive to reduce pollution beyond the standard for firms that can do so cheaply. At the same time, firms for which pollution abatement is extremely costly will opt to pay the fee. Depending on the level of the standard and the fees/subsidies, the system offers the advantage of capturing easily available pollution abatement, while foregoing extremely costly abatement. Furthermore, the system provides an incentive to firms to disclose information about their pollution abatement activities so as to receive the subsidy. Coupled with stiff fines for false reporting, the system eases the monitoring problems of the regulators. Because abating firms will report to receive a subsidy, the regulator can focus more efforts on monitoring non-reporting firms, which will be much more likely to violate emission standards.

3.121 **Information, Negotiation and Legal Measures**. Providing information or using negotiated or legal measures can improve the functioning of interactions between those who damage the environment and those who suffer from the damage. Greater ***information*** about the costs of their actions can lead those who damage the environment to reduce their activities. Alternatively, more information in the hands of victims can spur negotiated or legal settlements. Negotiation relies on the implicit government and social pressure to improve the environment. More aggressive legal actions, combined with better defined property rights as discussed above, create a mechanism for victims to force the costs of pollution onto the producers, thereby internalizing the externality and ultimately reducing it. Indonesia has already begun relying on ***negotiated agreements*** between polluters and the Government. While not based on a particular legal statute, the letters of agreement, "*surat pernyataan*", used as the basis for the Clean Rivers Program (PROKASIH, Box 1.1), are backed by the general power of the authorities to intervene in a firm's activities.

3.122 Taking ***legal action*** against polluters can be effective in reducing environmental damage. Because polluters know that they will be held financially liable, they will reduce their polluting activities. For this system to work, there needs to be a high probability of bringing successful cases against

Box 3.5: Pollution Control for the Brantas River Basin

The Brantas river runs 320 kilometers through East Java, entering the sea at Surabaya. Its 12,000 hectare catchment area stretches into the mountains around Malang and receives 12 billion cubic meters of rain a year. Fourteen million people rely on this water for their household, industrial and agricultural needs.

Perum Jasa Tirta (PJT), a public enterprise established in 1990, has the primary responsibility for managing water quality in the Brantas river basin. It faces a daunting task. Pollution of the river from human, agricultural and industrial wastes has worsened; in very dry seasons, businesses have been forced to close down. Monitoring by PJT has shown that the worst industrial polluters exceed national effluent standards by as much as 2,500%.

A system of effluent charges and subsidies coordinated and administered by PJT would greatly improve water quality. Bulk water fees would be charged to all water users in the basin, for use of both surface and ground water. The fees would vary by season to reflect the large differences between supply and demand over the year. The bulk water fees would then be supplemented with charges for water quality. If a water user returned water to the Brantas river that was dirtier than the water originally drawn, the user would pay a fee. If it was cleaner, the user would receive a subsidy. The fees and subsidies would be initially set to balance at the existing or slightly improved water quality. As users adapted to the fee system, the fees would be increased to meet higher quality standards.

polluters, and the financial penalties need to approximate the damage done. Indonesia has already seen a number of cases brought against polluters by various NGOs under Law No.4, 1980, but so far with little success. The Government, however, has brought cases as well, and with better results. In some cases, simply the threat of legal action was sufficient to effect improvements, as recently happened with a candy maker singled out by KLH for polluting a Jakarta river. The use of legal remedies and negotiations would be promoted by issuing clear implementing regulations for the 1980 law and disclosing more information on the environmental damage caused by firms or activities.

Combating Poverty to Improve the Environment

3.123 Alleviating poverty is both a moral imperative and a prerequisite for environmental sustainability. The poor are both agents and victims of environmental damage. Struggling daily to survive, the poor often lack the resources to avoid damaging the environment. In rural areas, for example, the poor often resort to cultivating unsuitable areas: erosion-prone hillsides; semiarid land that degrades quickly, and tropical forests where crop yields on cleared fields often drop sharply after just a few years. The high discount rates of the poor and their lack of access to finance limit the investments they can make in protecting their environment. Programs that help to alleviate poverty, then, also support sustainable development. This poverty-environment link is reflected in recent initiatives to protect Indonesia's national parks by providing the poor who live in or near the parks with viable and environmentally friendly employment. The poor also suffer inordinately from environmental damage done by others who use the environment as a sink for wastes. They live in areas without adequate access to clean water or air because these places are the least expensive. Hence, efforts to deal with pollution will provide large benefits for the poor, thereby improving equity, so long as the costs paid by the poor are not so large as to offset the benefits.

Choosing Environmental Management Tools

3.124 Indonesia has begun to use regulatory, market-based and other measures to attack its environmental management problems. In designing future measures, a few key selection criteria need to be kept in mind.

3.125 ***Environmental effectiveness***, i.e., does the instrument achieve the desired environmental goal? Here the focus needs to be on direct measures, ones that attack pollution or environmental degradation head on, whether market-based or regulatory. When dealing with pollution, effectiveness will be enhanced by focusing control efforts by area, by pollutant and by industry. It will also improve environmental effectiveness to deal with new sources of pollution differently from existing sources (by the year 2010, existing sources will contribute only 15% to pollution loads). Here, improved EIA and land-use planning will have an important role to play.

3.126 ***Economic efficiency,*** i.e., does the instrument meet its goal at the lowest cost? Here, market-based measures, such as effluent charges, have a clear advantage since they encourage those who can abate pollution at lower cost to take the most remedial action. The economic efficiency of environmental control instruments also depends on appropriately designing the instruments to ensure that the incentives created by the instruments are compatible with the desired environmental outcomes.

3.127 ***Equity,*** i.e., are the costs/benefits shared fairly? Answering this question first requires measuring costs and benefits, paying special attention to the poor. Second, accepting the PPP, appropriately designed charge-based systems have a distinct advantage over regulatory systems. With an emission charge, the polluter must compensate society for the damage caused by all his pollution. Standards only require that polluters internalize the cost of abatement up to the level of the standard. The costs of pollution consistent with the standard are borne by society. This differing allocation of costs is one reason polluters often favor a regulatory approach rather than a charge-based one.

3.128 ***Administrative efficiency,*** i.e., can the instrument be effectively administered, given the current or likely institutional framework? This issue is discussed at length in Chapter 5. For success, any program must be simple, so as to economize on scarce administrative capacity; it should be compatible with the goals of the policy makers and those involved in the program; and it should be similar to existing programs so that lessons learned from those programs can be incorporated. Making information on environmental matters more widely available to the public can also increase the effectiveness of any set of policies by increasing private participation.

4
INVESTMENT

A. Overview: More and Better Investment

4.1 A robust investment effort will be central to achieving Indonesia's objectives of growth, poverty alleviation and protection of the environment. For strong growth, a relatively ***high rate of investment*** will be needed, within a sustainable resource envelope. Equally important will be the challenge to raise the efficiency and quality of investment. Improved efficiency will mean that a higher rate of growth can be sustained out of a given rate of investment. Countries that have successfully sustained rapid growth have done so by ***increasing productivity*** of their investment effort. Development experience around the world suggests that this is best accomplished when private investment is encouraged in an outward-oriented and competitive market environment.

4.2 Nevertheless, the role of government will remain important, particularly in infrastructure and human resource sectors. Nearly one-half of total investment in Indonesia is likely to be undertaken by the public sector.[1] Public investment in areas complementary to private activity can raise the productivity of both the private and the overall investment effort.[2] Public investment is especially important in areas where the private sector may "fail" to invest adequately, because of externalities, high investment requirements and other factors. Among these are physical infrastructure, such as power, roads, telecommunications and irrigation; and human resource development, i.e., investing in people. Better education and health are desirable ends in themselves, because they improve the quality of life and welfare of the people. But they also bring substantial economic benefits, by improving the productivity of the work force. Public expenditures on human resource development targeted at the poor will also be important to achieving the Government's objective of reducing poverty further. Last but not least, the long-term sustainability of growth will depend on adequate investment and associated policies to prevent environmental degradation—to protect common resources such as land, forests, air and water. These resources are akin to natural capital stock and are not "free". When their use is taken into account, and unless they are being regenerated sufficiently, a nation's real growth may be much less than conventionally measured.

4.3 Public investment and expenditures, even when they are focused on the priority sectors noted above, do not necessarily result in greater efficiency of investment. Because public investments tend to be allocated by "non-market" mechanisms, significant potential exists for waste and misallocation of resources. Key elements of the agenda to raise the efficiency and quality of public investment are:

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[1] While the focus of this chapter is on investment, it is often difficult in practice to distinguish between capital expenditures and recurrent development expenditures. Indeed, significant recurrent expenditures (for operation and maintenance) are included in the development budget in Indonesia. The approach followed in this chapter is to include in the discussion of public investment all public expenditures which are developmental in nature. However, for macroeconomic consistency, only the investment components of such expenditures are included in the aggregate public investment resource envelope discussed in the chapter.

[2] See William Easterly and Sergio Rebelo, *Fiscal Policy and Economic Growth: An Empirical Investigation*, in Seminar Series on *How Do National Policies Affect Long-Run Growth*, World Bank, February 1993.

- a ***sound public investment and expenditure strategy***, to ensure that resources flow to areas with the highest social returns;

- improvements in ***public pricing and operation and maintenance*** activities, to ensure greater efficiency in the use of existing investments;

- wherever feasible, provision of public services in a ***competitive market environment*** open to private participation, to force service providers (whether public or private) to be responsive to the market, especially in terms of the quality and reliability of services; and

- ***institutional reform*** of traditional public service providers, to encourage greater efficiency in the delivery of services.

4.4 Raising the quantity, but more importantly the quality and productivity of investment, especially in areas where the public sector is expected to play a key role, is the subject of this chapter. Section B discusses issues related to the aggregate resource envelope for investment, and, within that envelope, the relative roles of private and public investment. Section C discusses the priorities for public investment and expenditure policies in key sectors. Section D discusses the role of public expenditures for poverty alleviation. Section E focuses on investments necessary to protect the environment.

B. Overall Investment and the Private-Public Balance

4.5 A strong investment effort is essential to sustaining rapid growth. Evidence points to the key role high rates of investment—backed by high rates of savings—have played in East Asian countries over the past 25 years.[3] Investment in these countries grew by about 11% a year between 1965-90—roughly 50% faster than GDP growth—and increased from about 22% to 40% of GDP. This was much faster than in any other region.

4.6 **Overall Investment Requirements and Constraints.** Indonesia's current gross domestic investment rate is estimated at about 23% of GDP. This is a somewhat lower rate than that which prevailed during the 1975-83 oil-boom period. However, the aggregate efficiency of investment has improved markedly (as evidenced by falling incremental capital-output ratios (ICORs) and improving factor productivity). Investment has also grown at an average rate of about 9% p.a. between 1986-92, faster than GDP growth. Provided that there is an adequate increase in the ***national savings*** rate, private investment should continue to grow rapidly and the overall investment rate in the economy should increase to about 25.5% of GDP by the end of the decade. The investment effort will need to be supported by increased ***efficiency of investment***. Investment projections in this report assume a significant (15-20%) improvement in efficiency; without it, the investment rate would need to be about 4-5 percentage points of GDP higher to maintain the same growth rate. Figure 4.1 shows the projected increase in the rates of (fixed) investment by private and public sectors necessary to achieve sustained non-oil GDP growth of about 7% p.a., while also making substantial headway to reduce poverty further and to protect the environment.

4.7 **Fostering Efficient Private Investment.** A large part of the answer to raising the overall investment rate, improving the efficiency of investment, and raising national savings lies in promoting private investment and savings. The Government has few direct policy instruments to affect private

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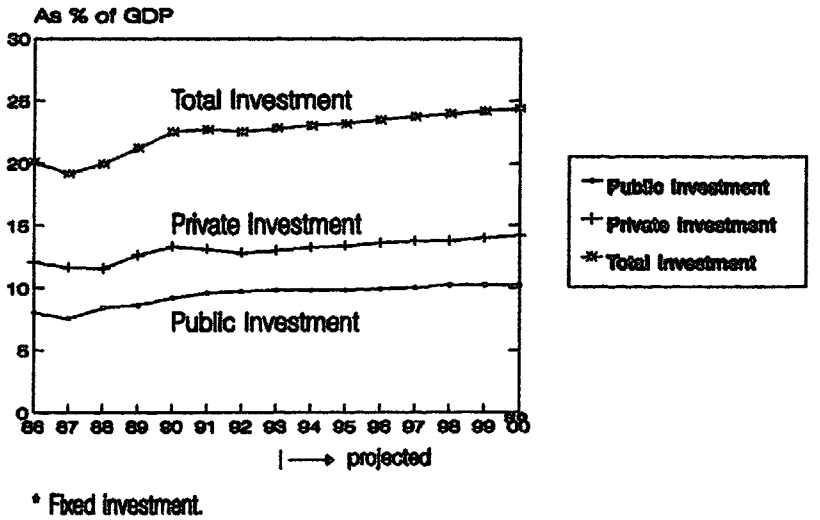
[3] *Sustaining Rapid Development*, East Asia and Pacific Region, World Bank, 1992.

sector decisions. But the principal lesson from East Asian and other countries is that policies that consistently improve the incentives and climate for private investment in ***internationally competitive activities*** provide a powerful stimulus to more and better investment. In turn, this leads to faster growth and increased savings. This is made possible by "market-friendly" policies that have been discussed in Chapters 2 and 3: sound macroeconomic policies that ensure low rates of inflation and sustainable current account balances, which are necessary to maintain private confidence; trade policies that improve the incentives to export and reduce the anti-export bias of domestic protection; policies to eliminate regulatory barriers to investment and competition; and policies that improve the functioning of key factor markets, for land, labor, capital and technology.

Figure 4.1: Private and Public Investment* Trends and Projections



* Fixed Investment.

4.8 Consequently, it will be important to ***maintain macroeconomic stability*** and to implement ***further trade and investment deregulation***. Policies to improve the climate for ***foreign direct investment*** will also promote technology flows and product market development. Given such a policy environment, gross private investment could rise to about 15% of GDP by the end of the decade (from about 13% currently), growing at a rate of about 8% p.a. Equally, the policy reforms would promote greater efficiency in private investment. These rates would imply a share of private investment in total investment of about 60%, lower than in the rest of East Asia, where the average share of private investment is 70-75%. The main reason is structural: there remain pressing investment needs in Indonesia in physical and human infrastructure, where the role of government will remain large.

4.9 Private investment is expected to play the dominant role in the ***directly productive sectors*** of the economy. Most private investment is expected to go into these sectors; however, an increasing and significant role is also expected in ***infrastructure and other public service sectors*** (such as power generation, tollroads, ports, and education and health). Currently, private investment in the provision of infrastructure services amounts to a little over 1.5% of GDP, and an increase to just under 3% of GDP is projected during the decade—which would imply an approximate doubling of its relative role. An even larger role will be difficult, since it might strain the financing of investment in the directly productive sectors of the economy.

4.10 A key policy challenge will be to ensure that efficient private investment is not "crowded out" by public investment. There are two dimensions of this. First, the Government should progressively withdraw from directly productive sectors, by limiting fresh investment and undertaking

a substantial program of divestiture.[4] Second, large public or quasi-public investments, especially on projects that rely on foreign commercial borrowing, should continue to be screened carefully. This would ensure that only those projects that have high economic returns are financed.

4.11 **The Role of Public Investment.** Increasing evidence from cross-country studies points to the importance of the complementary role of public investment, especially in areas where there are large externalities to such investment.[5] The key areas are: (a) physical infrastructure involving public or quasi-public goods, natural monopolies or very large capital investments (implying low contestability of markets)—such as road and telecommunications networks, power distribution, urban water supply and large irrigation systems; (b) human resource development, especially basic education, health and family planning; and (c) protection of the environment, such as through investments in urban water supply, sanitation and sewerage, and conservation of watersheds and forests.

4.12 Undersupplying these services can retard sustainable growth. If firms are unable to obtain efficient or reliable ***infrastructure*** services, they are forced to seek much higher cost alternatives (e.g., private power generation, which costs an estimated 30% more than bulk power supply). If services are unreliable (e.g., power outages, call interruptions, erratic water supply or urban traffic congestion), costs rise due to production delays, loss of perishable materials and output, and underutilization of capacity. Cross-country studies show that countries with large power outages and rationing lose about 1-2% of GDP annually (e.g., Colombia, Pakistan and India); incremental capital expenditures on account of inadequate road repair and maintenance can run as high as 1-4% of GDP (in Latin American countries); costs of private pumping and storage of urban water can be 40-80 times that of a public utility (e.g., in Peru and Honduras); and that infrastructure bottlenecks can act as especially important deterrents to small businesses and new firms (e.g., in Nigeria).[6] Inadequate infrastructure services can also cripple the ability of countries to compete successfully in world markets. In Indonesia, the deregulation of customs, maritime and shipping services has been important to the past success in increasing exports. As global competition intensifies, the ability of domestic firms to compete successfully in world markets will depend even more on efficient logistical services, such as adequate roads, ports, shipping, air freight services and telecommunications.[7]

4.13 ***Education*** investment plays a similar, if not an even more powerful role in the long term. A wide range of country studies shows that a one-year increase in schooling can augment returns to labor by more than 10% (after allowing for other factors). An additional year of schooling is shown to have

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[4] Cross-country evidence (see Easterly & Rebelo, op.cit.) indicates that public enterprise investment (in directly productive sectors) is consistently associated with lower aggregate growth and with lower rates of private investment.

[5] M. Blejer and M. Khan, *Government Policy and Private Investment in Developing Countries*, IMF Staff Papers, June 1984; L. Severn and A. Solimano, *Adjustment Policies and Investment Performance in Developing Countries: Theory, Country Experience, and Policy Implications*, World Bank, PRE Working Paper No. 606, March 1991; and A. Shah, *Public Infrastructure and Private Sector Profitability and Productivity in Mexico*, World Bank, PRE Working Paper No. 100, September 1988.

[6] *Infrastructure Sector Policy Review*, Working Draft, Urban Development Division, World Bank, December 1992.

[7] Easterly and Rebelo, op.cit., find a strong positive correlation between public investment in transport and communications sectors and long-term growth across countries.

increased farm output by 2% in Korea and 5% in Malaysia.[8] In Indonesia, real rates of return to improved basic education in rural areas are estimated to be about 27%, and in secondary education about 11-16%.[9] Cross-country studies of the broader effects of education on growth suggest that an extra year of education can raise long-term per capita economic growth by as much as 0.5%.[10] Education also has other important effects: reducing fertility and infant mortality[11], encouraging entrepreneurship and improving equity. Improving the access of the poor to education, health and family planning remains one of the most important instruments to alleviate ***poverty***. Improvements in ***health*** have a similar potential for large economic gains: surveys suggest that income losses from illnesses in eight developing countries accounted for 2-6% of yearly earnings (and hence GDP). Moreover, there are longer-term effects of health and nutrition on productivity and output, because they affect children's ability and motivation to learn, and ultimately their adult productivity. As in the case of infrastructure services, the key to improved human resource development lies not just in quantitative expansion of education and health, but more importantly in the quality of services. For example, the private rate of return to education is shown to drop by nearly one-half when educational attainments are adjusted for quality.[12]

4.14 ***Environmental protection*** is another area in which governments must play a central role. Private markets alone provide insufficient incentives for protecting the environment, whether it is reducing air pollution in urban areas, curbing the dumping of waste in public waters, or preventing excessive logging and overuse of land. Usually, the poor suffer most from environmental damage. The costs of unchecked environmental degradation are immense in terms of loss of resources and human welfare and the danger posed to the longer-term sustainability of growth. Investment in improved water supply and sanitation carries especially high returns in increasing the welfare of a large number of people.

4.15 **Challenges for Public Investment**. Consistent with the macroeconomic framework developed in Chapter 2, public investment in Indonesia could rise to about 10% of GDP over the 1990s (Figure 4.1). This would be about 1.5 percentage points of GDP higher than in REPELITA IV, and imply a growth in public investment of about 6.5% a year. Indicative desirable shifts in the allocation of public investment, within this overall resource envelope, are shown in Table 4.1.

4.16 There are six principal challenges in meeting the above targets for public investment over the mid- to late 1990s:

- efficiency improvements will be needed in all areas of public investment if the projected investments are to generate the desired pace of growth and meet the poverty and environmental objectives;

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[8] *The Challenge of Development*, World Development Report, 1991.

[9] W. W. McMahon and Boediono, *The Basis for Expansion of Education: Efficient Contributions To Growth and Equity*, in Conference on Second 25-year Development Plan and Sixth Five-Year Plan, Ministry of Education and Culture, Indonesia, January 1992.

[10] M. Weale, *Education, Externalities, Fertility, and Economic Growth*, PPR Working Paper No. 1039, November, 1992.

[11] Elizabeth King and M. Ann Hill, *Women's Education in Developing Countries*, Johns Hopkins University Press, 1992.

[12] J.R. Behrman and N. Birdsall, *The Quality of Schooling: Quantity Alone is Misleading*, American Economic Review, 1983.

Table 4.1: Sectoral Investment Priorities for Public Investment

	Actual 1984/85-1988/89 [a] *(REPELITA IV) (%)*	*Estimate 1989/90-1993/94* [a] *(REPELITA V) (%)*	*Indicative Projection 1994/95-1998/99* [a] *(%)*
Infrastructure	43.0	59.0	61.0
HRD/Poverty Alleviation	25.0	25.0	27.0
Others	32.0	16.0	12.0
Memo item:			
Public Investment as percentage of GDP	8.7	9.4	10.1

[a] Five-year totals in this table and following tables.

Note: Infrastructure includes power, transport, communications, irrigation, and municipal water supply and sanitation; HRD (human resource development) and poverty-related sectors include health, education, basic agriculture, population and family planning and other related programs financed through regional development and transmigration funds. Others include industry, mining, tourism, trade, cooperatives, manpower, religion, culture, defence, science and technology, business enterprises, law and information.

- investment in physical infrastructure (power, transport, telecommunications and urban services) will need to increase significantly, given the existing supply shortages, with spending on these sectors expected to account for over 60% of total public investment (compared to about 43% under REPELITA IV);

- spending on social sectors (education, health and family planning), poverty alleviation and the environment will also need to expand, accounting for about 27% of total investment (compared to 25% under REPELITA IV);

- increased investment in these priority sectors will mean that public investment in other sectors, especially in directly productive sectors, will need to fall to no more than about 12% of total investment (compared to about 32% under REPELITA IV);

- the envisaged sizable increase in public spending on the priority sectors will be infeasible unless improved resource mobilization and cost recovery are pursued vigorously, with a view tc raising aggregate public savings by about 2% of GDP; improvements in public pricing policies will also be important in increasing the efficiency of use of existing investments and improving their operation and maintenance (O&M); and

- institutional changes will be necessary to improve the implementation of public investments, raise the quality of public services, and promote greater private participation in the provision of some public services.

C. Priorities for Public Investment

Raising the Efficiency of Investment and the Quality of Services

4.17 A priority cutting across all sectors in Indonesia is the need to raise the efficiency of investment and improve the quality of public services. Too often, the main emphasis of public investment programs is on undertaking new investments, with inadequate attention given to improving the efficiency, reliability and quality of existing investments and services. Policies to improve the efficiency and effectiveness of existing investments can yield large pay-offs at relatively low cost. Such policies have three key elements: (a) ***appropriate pricing policies*** to improve efficiency in both the demand and supply of public services, with beneficial implications also for equity and the environment; (b) ***proper operation and maintenance*** (O&M) to make effective use of existing facilities; and (c) ***market-orientation of services***, including encouraging private participation (where practical) and increasing the accountability of public sector service providers.

4.18 Although considerable improvements have been made, there remain a number of public pricing policy distortions in Indonesia. As surveyed in Chapter 3, and as discussed further in this chapter, subsidies for fertilizer, power, irrigation water, municipal water supply and sanitation, secondary and higher education, hospital services, health insurance, etc., all contribute to inefficient use of scarce public resources, prevent adequate operation and maintenance, and constrain the financing of new investment. Most of these also tend to benefit the better-off more than the poor, and entail adverse implications for the environment. Reforming public pricing policies is a powerful means to improving the efficiency of investment. A careful design of pricing policies can ensure that the poor are adequately protected, and indeed helped by such policies (see Box 4.1).

Box 4.1: Public Pricing Policy for Junior Secondary Schools

An example of how important public pricing policy tools can be in improving the efficiency and equity of public expenditures is provided by policy choices with respect to junior secondary school fees. The Government is currently considering a proposal to abolish school fees at the junior secondary level to raise enrollment rates in Indonesia, as a step in making attendance up to grade nine obligatory by May 1994 (start of REPELITA VI). If fees are abolished for all income groups, the additional cost to the Government would be about Rp.340 billion (or $170 million) annually. The abolition of fees would do little to increase enrollments for the better-off, who can afford to pay. Gross enrollment rates at junior secondary levels were already greater than 90% for the richest quintile in 1989. Instead, a targeted fee-exemption policy for the poor would be more appropriate. Between 1987 and 1989, enrollments for the poorest 40% of the population declined (whereas they rose for the rich). Abolishing fees for the poor would raise their enrollments (and hence aggregate enrollments) significantly, but cost only about Rp.30-50 billion annually. Even a full subsidy scheme, which would not only waive fees, but also offer an augmented subsidy reflecting the opportunity cost of school attendance and out-of-pocket expenditures for the poor, would cost only about Rp.100-120 billion annually, and raise enrollments even more sharply. At the same time, the savings in budgetary resources (compared to a fee-subsidy scheme for all) would allow the Government to spend more on improving the quality of primary education in Indonesia—on textbooks, teacher training and incentives. In needs to be recognized, however, that pricing policies are only one part of an overall strategy to raise secondary school enrollments.

4.19 A second important area for attention in improving the productivity of investment is the planning, financing and implementation of O&M activities in all sectors. Poor operational practices are

reflected in underutilization or inefficient use of existing facilities and poor quality of services. Inadequate maintenance is reflected in rapid asset deterioration and the need for costly repair or rehabilitation work. While steps have been taken in the past few years to improve the institutional framework for O&M in Indonesia (important examples are urban infrastructure and roads), further improvements will be needed. First is the need to ensure adequate funding of O&M needs in the budget, especially for public works such as roads and irrigation. Second, fragmentation in the planning and budgeting of O&M needs to be sharply reduced. In irrigation, for example, at least six central ministries are involved in the authorization and allocation of financial and staff resources for O&M. Third, in staff-intensive sectors (e.g., agricultural research and extension, education and health services), priority needs to be given to improving the productivity and incentives of staff, rather than to new hirings and facilities. Adequate provision of tools and training are important: for example, textbooks and teacher training in education; medicines and staff training in health; and equipment and staff travel allowances in agricultural research and extension.

4.20 A third important need is to improve the market-orientation of public services. One means of improving services is to introduce competition and involve the private sector to a greater extent in the delivery of public services. Another is to increase the accountability of public sector providers of services—through further commercialization of public utilities, establishment of performance monitoring and incentive systems, decentralization of services and organizations, and incorporation of customer satisfaction indicators as a measure of performance (e.g., promptness in responding to customer complaints in utility services). Specific options and policies are discussed below, in the context of the discussion of public expenditure priorities in each of the major sectors and subsectors. To ensure that anticipated benefits from market-orientation of services are realized, institutional changes in the management of public services would be important, the directions of which are discussed in Chapter 5.

Directly Productive Activities

4.21 In the directly productive sectors, public investment is primarily carried out by public enterprises involved in a range of activities. These include enterprises in manufacturing (e.g., fertilizers, cement, steel, engineering, telecommunications equipment, shipbuilding, and aircraft manufacture); agriculture (e.g., tree crop plantations, forestry, seeds, and fisheries); and other services (e.g., state trading companies). These enterprises account for a significant share of output, about 6% of GDP. Many are inefficient, and there are no significant public goods characteristics in any of these activities. The private sector can produce the goods and services involved easily and more efficiently. While there may have been reasons for a large public presence in such sectors in the past, there are none now with the emergence of a dynamic and capable private sector. Over time, efficient and transparent divestiture of these enterprises would make sense. In the interim, these enterprises should be exposed to increased competition from imports and private firms. Moreover, fresh investments by these enterprises and support for these investments from the Government should be curtailed and capped. Since the mid-1980s, the Government has limited the financing of investments by these enterprises through the budget. More recently, borrowing for the financing of new investments has been subjected to limits and greater scrutiny.

4.22 There have been recent pressures, however, to increase the funding of new investments by some enterprises (e.g., fertilizer, cement, "strategic" industries, refineries), involving domestic and foreign borrowing and off-budget expenditures. While there may be modest room for some new investments (provided the enterprises and investments are sound and profitable at world market prices), a substantial net reduction in public investment in the directly productive sectors will be necessary to allow an expansion in investment in sectors such as infrastructure and human resource development. In the absence of such a shift in the composition of public investment, Indonesia will find it difficult to fund

priority investments adequately while keeping overall public investment consistent with the requirements of macroeconomic stability.

4.23 **Agriculture.** Public expenditures on agriculture (including irrigation works) in Indonesia have averaged about 8-9% of agricultural GDP. By developing country standards, this is high: public expenditures on agriculture average 2.9% in Philippines, 4.9% in India and 2.1% in Turkey. During REPELITA VI, there is substantial scope for reducing the share of agricultural spending, while raising the productivity of agriculture and maintaining food self-sufficiency, primarily by reducing low-return new irrigation schemes and by eliminating the fertilizer subsidy (Table 4.2). Even after reallocating these funds to higher spending in priority areas (e.g., doubling research and extension expenditures), there would be scope for a reduction in sectoral public investment.

Table 4.2: Indicative Public Expenditures in Agriculture

	Estimate 1989/90-1993/94 (REPELITA V) (%)	*Indicative Projection 1994/95-1998/99 (%)*
Total Expenditure (Rp. trillion, 1989/90 prices)	11.5	7.9 - 8.3
Of which (%):		
Fertilizer Subsidy	30.4	0.0
Research	3.5	12.5
Extension	0.9	5.0
Other [a]	24.4	31.0
Irrigation	27.8	29.5
Water Resource Management	13.0	22.0
Memo item:		
Agricultural expenditures as % of:		
Agricultural GDP	6.3	5.0
Total development expenditure	14.0	9.0

[a] The "other" category includes expenditures on estate crops, food crops, livestock, fisheries, and training.

Source: *Indonesia: Agricultural Transformation—Challenges and Opportunities*, World Bank, 1992, and Table 4.7.

4.24 Expenditures on ***fertilizer/pesticide subsidies*** and irrigation have made up over two-thirds of total agricultural expenditures over the past decade. With the elimination of the pesticide subsidy in 1988/89 (due to environmental concerns and excessive pesticide application), subsidies have fallen to about 30% of total expenditures on agriculture. Recognizing that the fertilizer subsidy has very low returns, the Government has committed itself to phasing it out. This alone could save about Rp.600 billion annually, about three times as much as is needed to fund incremental expenditures on research and extension. The proportion of agricultural expenditures devoted to ***research*** has averaged about 3.5%, and real expenditures have fallen by one fourth since 1986/87 and are only 0.2% of agricultural GDP—far below the average for South Asia (0.5%), Africa (1.0%), or North America and Oceania (2.0%). There is severe underfinancing of research on non-rice crops and livestock. Conducting effective research activities to support more diversified agriculture will require not only a broader range of skills (than that required for a single homogeneous farming system such as irrigated rice), but also a more regionally-oriented research infrastructure (rather than concentration on Java). Increased attention will also need to be paid to improved management and institutional reforms. Assuming these changes

can be effected, expenditures on research could be increased by about Rp.125 billion annually, or to about three times the current level. Expenditures on ***extension*** also should rise. Increased expenditures are needed not for hiring more extension agents (which already number over 30,000), but for better training and for increased allowances for travel, extension materials, etc. Rice has received most of the attention to date and extension skills are much less developed for other food crops, estate crops, fisheries and livestock. The ongoing Integrated Pest Management (IPM) Project has been extremely effective at teaching farmers a wide range of farming skills, and many IPM techniques could be adopted by the extension system as a whole. Improved management leading to a more professional extension service could justify an increase in yearly development expenditure of about Rp.35-40 billion, to about three times the current level.

4.25 Outside of research and extension—and irrigation and water resource management (para. 4.35)—there are few agricultural areas that require major public sector involvement, whether in production (e.g., tree crops), input supply (e.g., fertilizer, seeds) or marketing of output (e.g., BULOG operations). The Government is increasingly recognizing the role of competitive markets and the private sector in these areas, and is already implementing moves in that direction. A reduction of the role of government should permit lowering public investment, while increasing its efficiency. For example, in the ***tree crops*** subsector, the earlier nucleus-estate programs have been reduced and the Government is now experimenting with new approaches to smallholder planting of rubber, coconut, and other crops (one approach being increasingly supported by project studies is to let the private sector take the lead role). In the ***livestock and fisheries*** subsectors, programs have suffered major cost recovery problems and real expenditures on both subsectors have fallen from their peaks in 1987/88—by nearly one half in the case of livestock—which is probably justifiable given the larger role that can be played by the private sector. In the ***marketing of output***, the primary instrument of government intervention has been BULOG, the National Logistics Agency. Given the development occurring over the past decade, a rethinking of BULOG's role is called for, placing greater emphasis on private markets (see Chapter 3 for a fuller discussion). In the rice distribution system, an estimated 50% of civil servants currently sell the rice rations they receive from BULOG. This is an extremely inefficient way to provide an income supplement to civil servants, especially given well-functioning markets for rice. These and other factors have led BULOG to reassess its role in the rice and other commodity markets. In particular, there is little rationale for maintaining trade restrictions or monopolies over commodities such as sugar, soybean, and wheat. In the ***provision of inputs***, the public sector should remain involved only for valid public goods reasons, such as to ensure the quality of seeds and planting material through a certification scheme. Similarly, fertilizer production and distribution policies need to be deregulated to reduce costs, by introducing a much greater role for private supply and competition.

Infrastructure Development

4.26 Indonesia's rapid economic growth in recent years has placed heavy demands on infrastructure facilities. Currently, most of these facilities are either operating close to capacity or are overloaded. To sustain robust growth in the 1990s, substantial investment in new infrastructure capacity will be needed to meet the present unmet demand (quantity and coverage) and to provide adequately for the future growth in demand, while also improving the quality and reliability of infrastructure services.

4.27 Over the past two decades (1970-90), major progress has been made in developing and extending services in all major infrastructure sectors (para. 1.14). Nonetheless, meeting the infrastructure requirements in the 1990s will pose a major challenge. Comparative indicators show that large investments and improvements in services will be needed if Indonesia is to attain the levels of service typically found in middle-income countries. Currently, only about two-thirds of urban and one-fourth of rural households can be served by the public grid supply, provided by the state electricity company

(PLN). Moreover, PLN supplies only about half of the electricity used in industry, while the rest is provided mainly by diesel-based private captive generation facilities, which are less economical than grid-supplied electricity. In telecommunications, although the supply of services has expanded, demand has grown still faster; registered unmet demand for telephone services has increased to about 75% of capacity. In transport, the road network has come under increasing pressure in areas of rapid growth, especially in Java where much of economic activity is concentrated.

4.28 Policies to manage demand and improve efficiency in the use and provision of infrastructure will be important to moderate the need for investment in new capacity, and the associated claims on scarce national resources. Even so, given the sizable unmet demand already for some services, and the new demand that will arise as Indonesia maintains rapid growth in the 1990s, investment in infrastructure will need to increase substantially. This will require both a large program of public investment and increasing private participation (Table 4.3).

Table 4.3: Indicative Infrastructure Investment Program by Sector and Public/Private Participation
(percent shares in total infrastructure investment)

	Public Sector		*Private Sector*		*Total*	
	1989/90-93/94	*1994/95-98/99*	*1989/90-93/94*	*1994/95-98/99*	*1989/90-93/94*	*1994/95-98/99*
Power	35.4	36.4	9.8	34.5	29.6	35.7
(% of GDP)	(2.0)	(2.1)	(0.2)	(1.0)	(2.2)	(3.1)
Telecommunications	9.8	11.6	6.5	6.9	9.0	10.0
(% of GDP)	(0.5)	(0.7)	(0.1)	(0.2)	(0.6)	(0.9)
Transport [a]	42.7	39.0	77.2	51.7	50.5	43.3
(% of GDP)	(2.4)	(2.3)	(1.2)	(1.5)	(3.6)	(3.8)
Irrigation	6.1	3.2	..	..	4.8	2.1
(% of GDP)	(0.3)	(0.2)	..	..	(0.3)	(0.2)
Water resource mgmt.	2.9	2.4	..	..	2.2	1.6
(% of GDP)	(0.1)	(0.1)	..	..	(0.1)	(0.1)
Urban water & sanitation	3.1	7.4	6.5	6.9	3.9	7.3
(% of GDP)	(0.2)	(0.4)	(0.1)	(0.2)	(0.3)	(0.6)
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
(% of GDP)	(5.5)	(5.8)	(1.6)	(2.9)	(7.1)	(8.7)
Memo item: Total Investment in Rp. trillion (1989/90 prices)	52.2	73.0-77.0	15.3	37.0-38.0	67.5	110.0-115.0

[a] Includes investment in fixed as well as non-fixed public transport infrastructure facilities. The bulk of private investment is in non-fixed transport services (e.g., commercial trucks, buses, ships and aircraft), although a rising proportion will go towards fixed facilities in the future (e.g., toll-roads, ports, etc.).

Source: Government Five-Year Development Plan and World Bank staff estimates.

4.29 **Electric Power.** On current demand projections, total investment in the power sector will need to increase to around 3% of GDP p.a. in the mid- to late-1990s to ensure adequate growth in supply. This could support an expansion of total installed generation capacity of PLN and the private sector (excluding captive generation) from about 9,000 MW in 1991/92 to about 24,000 MW in 1998/99, together with commensurate expansion of transmission and distribution capacity. In implementing a program of this magnitude, PLN would face both financial and institutional constraints. An appropriate strategy would be to induce the private sector to contribute about one-third of the required investment, as assumed in the indicative power sector program summarized in Table 4.3. However, there has been a slow pace of development of private participation in the power sector (due to the complexity of the contractual process for BOO/BOT schemes), and the Government may wish to factor into its planning the possibility of a

smaller share of private investment in the power sector. Even if the target for private participation turns out to be achievable, implementing the implied investment program for PLN, which is set out in Table 4.4, would call for major improvements in PLN's financial performance (allowing higher self-financing of investment), organizational structure and institutional capacities. The envisaged increase in self-financing would be impossible without a substantial increase in power tariffs to eliminate subsidies.

Table 4.4: Indicative Public Investment Program for Electric Power

	Actual 1984/85-88/89 (REPELITA IV)	*Estimate* 1989/90-93/94 (REPELITA V)	*Indicative Projection* 1994/95-98/99
Physical Targets [a]			
Electrified urban households (%)	62.0	75.0	79.0
Electrified rural households (%)	16.0	25.0	33.0
Grid-supplied industrial consumption (%)	47.0	54.0	60.0
Generation based on natural gas (%)	3.0	19.0	26.0
Investment (Rp. trillion, current prices)	8.0	21.6	39.0 - 41.0
Of which (%):			
Generation	47.5	55.0	44.0
Transmission and distribution	52.5	45.0	56.0
Memo item:			
Self-financing of investment (%)	13.6	23.0	40.0

[a] At the end of the Five-year periods.

Source: PLN, and World Bank staff estimates.

4.30 Another important element is to ensure the use of least-cost options and appropriate sequencing of investment in expanding generation capacity. Cost comparisons show natural gas and coal as lower-cost fuel sources for generation than petroleum products and geothermal and nuclear sources. Rapid expansion of nuclear power, in particular, would be unwarranted given the country's sizable natural gas and coal resources and their lower costs. Given the possibility of slippage in private power generation and implementation and financing constraints on PLN's program, there is a need to set clear priorities in the investment program, protecting investments in Java where the demand-supply imbalance is more acute.

4.31 **Telecommunications.** Implementation capacity has in the past been a major constraint on TELKOM's ability to expand investment in response to the substantial and increasing excess demand for telephone service (actual investment fell well short of targets under REPELITA IV). A major challenge in raising investment in the sector, accordingly, will be to enhance TELKOM's institutional capacities. A positive development in this regard has been the recent conversion of the telecommunications utility into a limited liability company, which has resulted in greater operational autonomy. Efforts are also being intensified to improve internal organization and management. Progress in these areas is reflected in the recent increase in TELKOM's investment levels, and in the actual delivery of services. During 1992, TELKOM installed 635,000 new lines, surpassing its target of 525,000 lines; the number of lines installed in 1992 was about double the number of lines installed during the entire REPELITA IV. Given a continued build-up of institutional capacities, TELKOM's medium-term investment program, summarized in Table 4.5, provides for a catch-up with demand. The proposed investment levels would achieve a

significant increase in access to telephone service, and reduce the waiting list from about 75% at the end of REPELITA IV to about 10% by the end of REPELITA VI.

Table 4.5: Indicative Public Investment Program for Telecommunications

	Actual 1984/85-88/89 (REPELITA IV)	*Estimate 1989/90-93/94 (REPELITA V)*	*Indicative Projection 1994/95-98/99*
Physical Targets [a]			
Total telephone lines (millions)	0.9	3.0	6.5
Telephone density (lines/100 persons)	0.5	1.3	3.2
Successful call ratio (long-distance, %)	20.0	30.0	45.0
Investment (Rp. trillion, current prices)	1.4	6.0	12.5 - 13.0
Memo item:			
Self-financing of investment (%)	22.2	40.0	40.0

[a] At the end of the Five-year periods.

Source: PT. TELKOM, and World Bank staff estimates.

4.32 The investment program for TELKOM targets a significant reduction in the utility's relatively high unit costs as well as an improved quality of service. These objectives deserve increased attention, and their attainment would be helped by: utilizing more cost-effective technology; employing more competitive procurement and financing policies; improving human resources; adopting an integrated systems approach to project implementation; and adequately providing for operation and maintenance. More fundamentally, increased competition in service provision through greater private sector participation would spur efficiency. Private entry should be encouraged under open competition, not under institutional arrangements that risk converting a public monopoly into a private one. In telecommunications, instituting processes to ensure that investment decisions are made in the light of full information on fast-changing technologies is important. Improved financial performance resulting from more cost-effective operations should strengthen TELKOM's capacity to self-finance its investment program. However, the financing gap would still remain large, and would need to be financed from a mix of sources: foreign and domestic borrowing, subscriber bonds, and private investment.

4.33 **Transport.** The combination of large investment requirements in transport and public resource constraints underlines the importance of setting clear investment priorities, improving cost recovery and increasing private participation. The major area for public investment will remain the development of ***roads***. Annual investment in the roads sector has quadrupled in the past 5 years, a large part of it going towards reducing the backlog of maintenance and betterment of national and provincial roads. Together with many new tollroads on the most heavily trafficked corridors, this is producing visible results. However, the extremely rapid rise in expenditure on roads, and on the transport sector as a whole (where annual public investment rates rose from 1.5% of GDP in 1985 to 2.5% in 1991), calls for greater attention to the efficiency of the investment effort. For ***interurban roads***, the priorities would be increased investment in major betterments and new construction to provide additional capacity and better links in those corridors, in Java and other areas of rapid growth, where traffic volumes continue to rise rapidly and where heavy freight traffic will necessitate further pavement strengthening. Environmental consequences of land acquisition will require careful attention, especially in tollroad

construction. ***District roads*** are important in providing improved access to rural communities. The level of spending has increased rapidly, from 250 billion a year in 1985-88 to about Rp.700 billion in 1991, with much of it going into new road construction. Greater emphasis needs to be placed on maintenance, rehabilitation and upgrading of existing roads. The other major issue relates to developing the institutional capacity of responsible local government agencies. Expenditure on ***urban roads*** and related transport infrastructure will need to increase substantially. Such spending should be supported by effective traffic restraint measures to contain demand for private vehicle transport to manageable levels. Estimates for Jabotabek indicate a large investment requirement of around Rp.0.4 trillion annually for an extended period (total investment of about Rp.7-8 trillion at 1992 prices between 1995-2015) to provide a basic network of light-rail-based mass transit systems in existing major corridors. Additional investments will be needed in Jabotabek, and in major cities elsewhere, to provide more road capacity in congested inner city corridors and to open up new peripheral areas for development.

Table 4.6: Indicative Public Investment Program for Transport

	Actual 1984/85-88/89 (REPELITA IV)	*Estimate 1989/90-93/94 (REPELITA V)*	*Indicative Projection 1994/95-98/99*
Total Investment (Rp. trillion, current prices)	11.3	26.1	42.0 - 44.0
Of which (%):			
Road Network	44.2	65.9	60.5
Land Transport	18.6	13.0	14.0
Sea Transport	19.5	9.6	11.5
Air Transport	17.7	11.5	14.0
Memo item:			
Investment financed by cost recovery (%)	9.7	15.0	20.0

Source: Ministry of Finance, and World Bank staff estimates.

4.34 Substantial past investment in public ***bus services*** in urban areas has not been very effective, particularly in Jabotabek. Allowing greater competition by further opening up the market to private operators will both improve service standards and reduce public resource requirements. In the ***railways***, a major priority for PERUMKA will be to address the large backlog of deferred maintenance and asset replacement. In addition, some new investment in rolling stock is needed to serve high potential markets (instead of investment in non-core areas of signalling, telecommunications and other projects). Other major new investments in capacity expansion need to be very selective, pending improvement in the operational and financial performance of PERUMKA. In ***maritime transport***, the most pressing need is to expand capacity at the principal general cargo ports in Java and Sumatra, with an emphasis on providing room for growth in competitive private operations. Continuing investment, on a more limited scale, will be needed to develop and rehabilitate small ports in more remote areas, particularly in Eastern Indonesia. The expansion of shipping services and shipbuilding can be left largely to the private sector. A program for large-scale acquisition of ships in the public sector would be inappropriate. In cargo shipping, the private sector is already dominant, and the state-owned deep sea carrier (PT. Djakarta Lloyd) has been consistently making losses. In passenger services, the publicly-owned carrier (PT. Pelni) already has a large fleet and should finance further acquisitions out of its own resources, rather than from the Government. In ***air transport***, sizable investment has already been made in upgrading the major airports (Jakarta, Denpasar, Balikpapan). During REPELITA VI, further major investment is planned in upgrading other airports; however, several proposals appear to be questionable or premature (e.g., a greenfield airport to accommodate DC-10s in Padang). Plans for rapid expansion of fleet capacity of Garuda should

be restrained till the carrier has raised efficiency standards to be comparable to those of other regional carriers.

4.35 **Urban Services.** A major increase in urban infrastructure investments will be necessary in the coming years, as Indonesia's urban population continues to grow rapidly. One important area is urban transport—urban roads and public transport services—which has been discussed above. But urban infrastructure encompasses much more than transport; it includes improvements in urban water supply, sanitation and urban settlements, especially for the poor. Investment requirements in these subsectors are summarized in Table 4.3 above. Major issues are intimately related to investment issues in protecting the environment, and are therefore discussed together with the latter in Section E.

4.36 **Irrigation and Water Resource Management.** Economic returns to new irrigation schemes are low and signal scope to reduce the large expenditures on irrigation (Table 4.7). The Government has been reluctant to reduce investment for fear of affecting rice self-sufficiency. However, there is room for expanding irrigated area by about 35,000 ha per year by completing works within existing command ares—with higher returns as costs are one-half those of new irrigation schemes. Consequently, for REPELITA VI, analysis suggests that expenditures on irrigation development could be reduced by Rp.400 billion a year, or by about 75% of the 1991 level, without reducing growth in production. In addition to completing existing schemes, expenditures on O&M are a priority; they could be increased by about Rp.80 billion a year, or 75% above current levels. Over the medium-term, the Government should recover much of this O&M outlay through its irrigation service fee program. Outside of irrigation, there are also significant expenditure requirements on water resource management and conservation works. Basin-wide improvements in water conservation and integrated water resource planning and management will be important in achieving greater efficiency and an appropriate balance in water use between competing demands, particularly during the dry season and near urban areas when water scarcity is acute. There will be a continuing need for investment in river works, drainage improvements in low-lying agricultural and urban areas, and flood protection. A modest increase in such expenditures on water resource management is suggested in Table 4.7.

Table 4.7: Changing Priorities in Irrigation and Water Resource Expenditures

	Estimate 1989/90-93/94 (REPELITA V)	*Indicative Projection 1994/95-98/99*
Total Expenditure (Rp. trillion, 1989/90 prices)	4.7	4.0 - 4.4
Of which (%):		
New Irrigation	46.8	14.0
Irrigation Rehabilitation	12.8	24.0
Irrigation O&M	8.5	19.0
Sub-total (irrigation)	68.1	57.0
Water Resource Management, River Works and Flood Control	31.9	43.0

Source: Indonesia: Agricultural Transformation—Challenges and Opportunities, World Bank 1992, and staff estimates.

4.37 **Service Delivery Improvements.** Even with an expanded resource envelope, the challenge of infrastructure development in Indonesia cannot be adequately met without major efficiency improvements in the delivery of services. Low quality and poor reliability of services, a mismatch between demand and supply, and financing difficulties are all symptoms of underlying institutional issues in the sectors. The effort to raise the efficiency of services will need to have two major policy thrusts:

(a) attracting private entry and promoting effective competition for both private and public operators; and (b) increased decentralization, autonomy and accountability for public sector service providers.

4.38 There are many opportunities for increasing the role of the private sector in infrastructure services that can be provided in a competitive market setting, as discussed in Chapter 3. In all activities involving relatively low sunk costs (e.g., urban bus services, and road, shipping and airline transport services), increased private entry could be encouraged. Technological changes now permit competitive service provision in areas previously thought to be the domain of natural monopolies: e.g., operation of berths in ports, bulk power generation, and long-distance telecommunications accessing existing networks. Even for services where the role of government is justified by market failures or externalities, this role does not necessarily mean 100% public provision; indeed, private participation in the provision of such services under competitive bidding and public regulation can be a powerful tool to lower costs and improve services. The main challenge is to develop a framework of policies and procedures that protects the public interest and promotes competitive private participation, as described in Chapter 3.

4.39 For many infrastructure services, however, the public sector will remain the dominant provider. Improving the delivery of these services will require institutional development of responsible public agencies. Responsibility for many public services has traditionally been vested in government departments in many countries, as in Indonesia. Increasingly, these responsibilities are being transferred to autonomous public corporations, as in the case of power, telecommunications and tollroads. To ensure greater competition and efficiency, the next generation of reforms will include: (a) transforming the responsible public entities into more commercially-oriented organizations, with autonomy in management decisions (in employment and wage levels, procurement and allocation of resources) and financial autonomy based on economically efficient tariff-setting; (b) holding enterprise managers responsible and accountable for agreed performance targets (that include improvements in service quality), and rewarding or penalizing management according to transparent criteria; (c) decentralizating and rationalizating the functions of enterprises that might have become too large for efficient management (e.g., PLN could become specialized as a power generation utility, while its power distribution activities could be carried out by separate regional power distribution companies); (d) decentralizing responsibilities for local public services more to local governments, supported by strengthening their financial and institutional capacities; and (e) encouraging contracting out of services to the private sector under competitive conditions. Chapter 5 discusses these issues in more detail.

Human Resource Development

4.40 Indonesia has made impressive progress in human resource development in the past decades. Because of initially widespread lack of basic services, the Government focused on problems of access and adopted uniform nationwide policies and programs. This strategy worked well, as evident in a striking increase in access to services and, in turn, in improvements in the health and education of the population during the first 25-year plan. However, as this plan period comes to an end, new challenges are emerging. The agenda is no longer primarily that of launching major new initiatives to expand access, deploying new staff or establishing new facilities. Most of this infrastructure is already in place. The main challenge is to make the programs more effective, addressing issues related to the quality and effeciency of services, their responsiveness to increasingly diversified and changing local conditions, and the allocation and targeting of public resources.

4.41 Indonesia's progress in ***health and family planning*** is illustrated by the following: between 1960 and 1990, total fertility was nearly halved, from 5.6 to 3.1 births per woman; life expectancy at birth increased from 41 to 62 years; malnutrition declined; the incidence of blindness and other problems related to vitamin-A deficiency decreased significantly; and the infant mortality rate, a key indicator of

community health, declined from 160 deaths per thousand live births to 61. Health improved because of rising education, better family planning and nutrition, increased immunization coverage against childhood diseases, and improved access to other preventive and curative health services. These improvements were brought about by the implementation of uniformly packaged programs, including the establishment of a nationwide network of health facilities.

4.42 Indonesia's achievements in ***education***, based on a similar approach, are equally good. Near-universal primary school enrollments have been achieved, while secondary school enrollments have jumped from 15% in 1970 to 48% in 1988, and tertiary enrollments from 2.8% to 3.8%. Aside from the effects of income growth, these educational gains were attained through a number of government initiatives, including an ambitious public school construction program, teacher training and abolition of official fees for primary education. Progress can also be seen in adult literacy, which rose from about 40% in 1965 to about 80% in 1988, due largely to the expansion of primary education and the Government's innovative non-formal public education programs. A noteworthy feature of Indonesia's human resource development is that it benefitted not only the well-off but also the poor (see Section D).

4.43 Despite these achievements, there remain important challenges. One is the need for sustained improvement in ***health***. Maternal and child health remain key problems and the infant mortality rate appears to be stabilizing around a rate that is still appreciably higher than that of Indonesia's ASEAN neighbors. This points to a broader problem of health care quality and effectiveness—the ability of the health system to be responsive to the needs of the community and to provide care in accordance with acceptable standards of diagnosis, therapy, counselling and interpersonal interactions. Access to safe water and adequate sanitation and sewerage are also important concerns in public health, especially in urban areas (see Section E). As a consequence of the country's ongoing demographic transition, Indonesia will also have to provide for the health needs of a rapidly increasing adult and aging population. Unlike the earlier stages, dealing with these health needs will be more expensive and complex. A growing number of HIV cases will also need attention (see Box 4.2).

4.44 In ***education and skills development***, Indonesia needs to sustain its progress. One concern is that, while universal primary school enrollment has been achieved, a significant percentage of Indonesia's school children (10%) still fail to complete primary education, and an even higher percentage (60%) fail to complete junior high school. The transition rate for junior secondary education (calculated by comparing junior secondary intakes for each school year with primary education graduate totals for the previous year) has been falling—from 84.5% in 1980 to about 60% by 1990. Part of the reason for this trend appears to be rising enrollments in alternative schooling systems (e.g., the Madrasah religious schooling system). A more important reason, however, appears to be the substantial direct and indirect opportunity costs of secondary education for low-income households (see Section D), combined with labor market signals (average wages paid to workers with junior secondary education appear to be nearly the same as for those with primary education, which may, in turn, signal the need for substantial quality improvements) and a marked urban bias in the location of secondary schools. These issues will require responsive solutions if Indonesia is to achieve successfully the next stage of its educational transition—ensuring that basic education goes beyond primary education to junior secondary education, which is now part of Indonesia's universal basic education goal.

4.45 At this stage of Indonesia's development, sustained progress in education calls for an increased emphasis on quality and student learning achievement. Recent international studies of reading ability among primary and lower secondary school students show that Indonesia's fourth graders lag behind those in other countries in the region in reading competency tests. Moreover, Indonesia's lower secondary students are shown to be slightly behind their Philippine counterparts, but much further behind their counterparts in some other neighboring countries (Table 4.8).

Box 4.2: AIDS in Indonesia: Trends and Options

The number of positive human immune deficiency virus (HIV) cases in Indonesia appears to be growing. As of March 1993, 139 HIV cases had been reported cumulatively to the Ministry of Health, as compared to 83 at the end of December 1992, 70 at the end of September 1992 and 47 at the end of 1991. Included in the current total are at least 28 cases of acquired immune deficiency syndrome (AIDS), up from 21 at the end of 1991. The reported HIV figures suggest that the country has entered the epidemic's exponential growth phase, with doubling time for the case load reaching less than a year and threatening to fall further. What's more, the number of reported cases may greatly underestimate the extent of the epidemic—the actual number of cases may fall in the 15,000-20,000 range. Telltale indicators of underreporting in this respect include the high ratios of total AIDS to HIV cases and of male to female HIV cases, and the late stage of diagnosis for many of the AIDS cases. The reported presence of HIV cases in Jakarta, East and West Java, as well as several eastern provinces is a further indication of the epidemic's advance. Meanwhile, certain conditions favorable to a continuing rapid spread of HIV and AIDS are present, including the high prevalence of sexually transmitted diseases (STDs); the large number of visiting tourists, sailors and fishermen; and the scope of the country's commercial sex industry.

Indonesian policy makers have responded quickly to an epidemic which appears to be gaining speed and which poses not only huge health risks but adverse developmental implications. The Government's strategy includes such crucial components as surveillance for HIV, clinical management of HIV and AIDS cases, and prevention of transmission through blood and blood products. However, the resources allocated to such efforts remain limited and are likely to be inadequate to contain the potential for epidemic transmission. What seems to be lacking in this strategy is sufficient recognition that slowing the epidemic will require extensive behavioral change in the population, involving strong and visible leadership, intensive social marketing and training activities, and vigorous cooperation with the private sector, including NGOs. A successful strategy would need to prevent sexual transmission, by promoting safe sexual practices and controlling STDs. This would entail campaigns targeted on actual or potential high-risk groups as well as strengthening diagnosis and prevention of STDs, which if left untreated aid the spread of HIV. Indonesian information as well as experiences and findings from other countries will need to be used to identify high priority initiatives, while considerable operations research will be needed to lower the costs and improve the effectiveness of such interventions. Community organizations, private firms and NGOs need to be encouraged to participate in such research and in major efforts to change sexual behavior and control STDs.

4.46 Substantial investments in improving school quality will be needed to achieve a level of learning achievement now attained by students in other East Asian countries. These investments include training of teachers, developing a classroom environment suitable to active teaching and learning, and provision of higher-quality textbooks and other educational materials to students. Investments will also

Table 4.8: Reading Achievement Test Scores, 1992

Country	*Mean Score (%)*
Indonesia	51.7
Philippines	52.6
Thailand	65.1
Singapore	74.0
Hong Kong	75.5

Source: Vincent Greaney, *Literacy Standards in Indonesia* (processed), 1992.

need to be made to establish an effective professional support system for teachers and build stronger leadership and school management capacity among principals. In addition, resources will need to be provided for the development of teachers' incentives program. This will need to be supplemented by institutional reforms involving educational planning, budgeting, and administration (e.g., giving schools greater responsibility and accountability for student learning performance). The issue of improving quality applies not only to primary and secondary education, but also to higher education.

4.47 Increased competitiveness will also require cost-effective and market-oriented ***skills training systems*** in both private and public sectors. While an expansion of these systems is warranted, given the expected demand for skills training, the problem of quality looms large. Much of the technical and vocational training currently available in the country is of indifferent quality and requires upgrading. Public secondary technical schools are deficient in equipment and teaching materials. Moreover, the public training system, which is highly centralized, lacks strong links with industry and the institutional flexibility and incentives to be responsive to changing market conditions. While the private fee-based training centers appear to be more responsive and flexible, only a small proportion provide technical training, and where it is offered, it is also generally of relatively low quality. A key issue is the definition of the roles of the Government, employers, and private institutions in the financing and provision of vocational training. Another issue is the relative emphasis to be placed on improving the basic education system (e.g., at the primary and secondary levels) and on improving the skills training system. Cross-country experience suggests that where basic education quality (i.e., literacy, numeracy and ability to acquire information) is higher, skills training systems are more effective. Improving the quality and relevance of basic education also helps reduce drop-out rates. Strong emphasis should therefore continue to be placed on improving the quality of the basic education system, as a necessary foundation for improving skills.

4.48 The ability of the education and health systems to deliver better services will also depend on their responsiveness and flexibility to increasingly diverse and changing local conditions. The past practice of blanket, nationwide programs is unlikely to remain effective, and a major challenge for the Government will be to find new approaches. These approaches will need to emphasize: improved staff commitment and more effective performance of field activities; expanded local responsibilities; and a clearer definition of government and private roles. In the health sector, the Government has already started experimenting with a new approach that relies on a decentralized delivery system (under the World Bank financed Third Health Project), and intends to extend the approach over the next few years. Chapter 5 describes its features in fuller detail, but the main features are: granting much greater authority to the District Health Officer (DHO) to design, plan and administer the health programs; granting full responsibility together with accountability to the DHO for meeting program targets; consolidating separate heads of budgetary allocations for the program under a single budget; and piloting tariff-setting and revenue-raising measures to improve cost recovery and the quality of services. Similar pilot approaches and experiments are being tried and developed in primary education and other subsectors.

4.49 In the 1980s, per capita public spending on education and health peaked in 1985/86 at Rp.15,000 (in 1989 prices), with total public spending on these sectors amounting to about 4.9% of GDP. For two consecutive subsequent years, both of these figures declined substantially because of the need for fiscal adjustment. However, as the economy responded to the Government's adjustment policies, domestic revenues rose, enabling per capita spending on human resource programs to rise after 1988/89. Such spending has grown much more rapidly than total government spending, reflecting the priority the Government places on these sectors. It has also risen as a share of the rapidly growing GDP, with the Central Government budget for education and health for 1993/94 estimated at 3.5% and 0.5% of GDP, respectively. Table 4.9 projects what the level of spending on these sectors would need to be in coming years, assuming that these expenditure shares in GDP are maintained, real GDP growth is about 6% and

expenditures from provincial and local governments on education and health expand at the same rate (i.e., are maintained at about 0.5% and 0.2% of GDP, respectively).

Table 4.9: Government Budget for Education and Health

	Actual 1984/85-88/89 (REPELITA IV)	*Estimate 1989/90-93/94 (REPELITA V)*	*Indicative Projection 1994/95-98/99*
Total Expenditure (Rp. trillion, current prices)			
Social Services			
General [a]	23.0	45.0	83.8
Central [b]	17.8	38.2	71.2
Health			
General	3.0	6.9	12.6
Central	2.3	4.9	8.7
Education			
General	20.0	38.1	71.2
Central	15.5	33.3	62.5
Real per capita (thousand 1989/90 Rp.)			
Social Services			
General	14.8	18.5	25.3
Central	13.0	15.6	21.6
Education			
General	12.9	15.6	21.4
Central	11.5	13.6	18.9
Health			
General	1.9	2.9	3.9
Central	1.5	2.0	2.7
Share of GDP (%)			
Education			
General	3.5	3.4	4.0
Central	3.2	3.0	3.5
Health			
General	0.5	0.6	0.7
Central	0.4	0.4	0.5

[a] Includes all levels of governments.
[b] Central government, including SDO and INPRES.

Source: Ministry of Education and World Bank staff estimates.

4.50 Will such a resource envelope prove adequate to meet objectives? As universal primary education and access to basic health services are increasingly achieved, incremental resources can be devoted to ***quality*** improvements. Table 4.10 provides illustrative estimates of the resources required for a specific package of quality improvements, as well as to improve access and equity, in the education sector, derived from a Ministry of Education and Culture (MOEC) study. The table shows that maintaining public education expenditures at 4% of GDP comes close to meeting the indicated funding needs. With the private sector and increased school fees making a significant contribution, especially at the tertiary level (which generates nearly 25% of the funding needs), and with appropriate allocation, the resource levels implied in Table 4.10 should allow substantial spending to improve educational quality.

4.51 These projections, however, may underestimate the full cost of achieving all desirable quality improvements and increasing basic education enrollment and completion rates. For example, in the Bank's Primary Education Quality Improvement Project, expenditures to develop active teaching/ learning, in-service teacher training and professional support system amount to about $36 per student, excluding the provision of textbooks and other educational materials. In contrast, the estimated per

student budget for quality and equity improvements in the above projections for primary education is about $29. The projections should, therefore, be treated as tentative and rough estimates. Moreover, although research findings suggest that most of the proposed expenditures on quality improvement, such as those on teacher training, textbooks and educational materials, help raise school effectiveness, quantitative relationships between each of these inputs and results (e.g., learning achievements) in Indonesia are unknown. Second, the projections are not based on reality-tested estimates of how enrollments and grade completion will respond to the various measures contemplated by the plan. At present, it is difficult to say with confidence what the planned expenditures would actually buy in terms of educational outcomes. Similar problems exist in the health sector. However, the main conclusions are clear:

- substantial resources are likely to become available, within a reasonable aggregate resource envelope, for improvements in the quality of education and health, as quantity targets are reached; and

- there is need to proceed in phases, with incremental outlays determined through close monitoring, evaluation and, if necessary, recalibration of experimental initiatives (examples of these initiatives include the World Bank's Primary Education Quality Improvement Project (PEQIP), Third Community Health and Nutrition Project (CHN III), and the Water Supply and Sanitation Project for Low Income Communities (WSSPLIC).

Table 4.10: Education Development Goals and 1998 Expenditure Scenarios: MOEC Education Policy and Planning Project
(Indicative funding needs in 1998 in trillion Rp. at current prices)

	Primary	*Junior Sec.*	*Senior Sec.*	*Tertiary*
A. Access				
Total enrollment (million)	29.4	9.3	5.9	3.6
Net enrollment rate (%)				
1991	91.0	41.0	21.0	6.0
1998	100.0	65.0	40.0	11.0
Funding needs for access	3.71	2.04	1.38	2.27
B. Quality/Equity				
Textbooks	0.10	0.05	0.05	
Aid to underserved schools	0.62	0.68	0.27	
Teacher training/pay incentives	1.66	1.76	0.98	1.24
Strengthened univ. grants	-	-	-	0.55
Others	0.0	0.07	0.25	0.32
Funding needs for quality/equity	2.38	2.56	1.55	2.11
C. Total Funding Needs				
By level	6.09	4.60	2.93	4.38
All levels [a]		18.34 (4.2% of GDP)		
D. Available Funds [b]				
Central Government		15.12 (3.5% of GDP)		
General Government (inc. prov. & district budgets)		17.24 (4.0% of GDP)		
E. Funding Gap for Additional Private financing		1.10 (0.2% of GDP)		

[a] Includes non-formal education, not shown in the table.
[b] Available funds are derived from Bank staff estimates, Table 4.9.

Source: Boediono, McMahon, and Adams (eds.), *Education, Economic and Social Development*, MOEC, 1992.

4.52 **The Role of the Private Sector.** Private financing and provision of social services is already substantial in Indonesia (Table 4.11). As in the case of physical infrastructure, the private sector can play (and is playing) a dynamic and important role in improving the availability and quality of social services,

while reducing pressures on public supply. The fundamental role of private providers is to respond to market demand for social services that government institutions are unable to meet (because of insufficient resources or the inability of government to provide the level of quality, access and convenience wanted by different segments of the population).

Table 4.11: Role of Private Providers and Household Expenditures in Education

	Private as a percent of Total		
	Schools[a]	*Students*[a]	*Spending on Education*[b]
Kindergarten	99.8	99.6	- -
Primary Education	6.9	7.2	42.8 - 46.0
Junior Sec. Education	63.4	37.9	63.9 - 69.9
Senior Sec. Education	76.8	58.6	76.6 - 80.1
Higher Education	94.9	68.0	79.0 - 83.4
All Levels			61.5 - 63.0

[a] Ministry of Education and Culture data for 1990/91.
[b] SUSENAS data for 1989/90. Percent of educational spending accounted for by household expenditures. The range corresponds to alternative enrollment estimates.

Sources: Ministry of Education and Culture, BPS and Bank staff estimates.

4.53 Looking ahead, what would be the future role of the private sector? Important changes are likely to occur, depending on how public policies are implemented. For example, the 1989 National Education System Law requires children to complete nine years of basic education, defined to include primary education and three years of junior high school. As discussed earlier (Box 4.1), if the Government expands the intake capacity of its lower secondary schools to implement the above policy, and abolishes junior secondary school fees for all, this would sharply reduce the role of the private sector and impose a major additional burden on public expenditures. A far better policy approach would be to target public subsidies to the poor, and allow the private sector to cater to the better-off.

4.54 Similar arguments apply to tertiary education and skills training. The Government's decision to restrain expansion of its tertiary educational institutions' undergraduate program and rely on the private sector to meet rapidly growing demand for higher education has already raised the share of the private sector (in total enrollment) from roughly 50% in the early 1980s to 65% in 1989. In skills training, the decline in enrollments in publicly run training institutes was met by a rapid expansion of private training institutions—suggesting responsiveness and adaptability of the private sector. The pattern of private participation reveals strong social demand and individual willingness to pay for quantitative expansion. However, the private sector appears less responsive in investing in qualitative improvement, such as staff development through post-graduate education. Current Government efforts to improve the accreditation system of private institutions would be helpful. Public financing in higher education needs to focus on: upgrading graduate education, including developing quality research capacity; and achieving equity objectives by targeting low-income students.

4.55 Broadly similar issues are faced in the health sector. A key issue currently facing the Government is health insurance. On the one hand, the JPKM (Jaminan Pemeliharaan Kesehatan Masyarakat) national health insurance proposal could promote private involvement through its envisioned system of managed competition. On the other hand, private participation could suffer if, in implementing the health insurance component of the Social Security Law (JAMSOSTEK), the provision of health services is limited to government-owned health facilities.

4.56 Although the private sector can be expected to be relatively more efficient in providing services, the transfer of major human resource development responsibilities to private providers cannot be unconditional. The Government should continue to provide necessary guidance, in such matters as quality standards, accreditation of institutions, curriculum development, etc. It must retain critical obligations such as promoting equity, sponsoring activities with large spillover effects or of long gestation, and ensuring that service users have adequate information to make choices. Overall, the Government needs to provide an enabling environment for private provision of services, while safeguarding the public interest, and to develop a clear rationale for its own interventions.

D. Targeting Social Sector Expenditures to the Poor

4.57 In the 1990s, public expenditure programs in Indonesia will need also to target the poor more effectively, and reduce subsidies to the better-off. As reviewed in Chapter 1, Indonesia has made impressive strides in poverty reduction. Sound public expenditure policies have played a key role in achieving these gains. Two areas have been important: Indonesia's development strategy has consistently promoted rural and agricultural development, with uniform nationwide programs that have served the poor well; and it has also placed emphasis on human resource development, especially expenditures on nationwide programs for basic education, health and family planning. Nevertheless, new challenges in the 1990s are evident: (a) although absolute poverty has declined significantly, overall incomes are still relatively low and about 30-40% of the population could be classified as poor or "near-poor"; (b) while agriculture will remain important as a source of income, employment and consumption for the poor, it is unlikely to play as large a role as it did earlier in poverty reduction; (c) blanket, nationwide programs, especially in the human resource sectors, are increasingly unlikely to reach the poor effectively, as poverty becomes less widespread and more localized and because of leakages of benefits to the relatively better-off. In these circumstances, targeting social expenditures to the poor and "near-poor" is likely to be an increasingly important tool, if Indonesia is to achieve equally dramatic gains in poverty reduction and equity in the 1990s. Better targeting human resource development programs, in particular, will be important. Targeting means aiming public programs and expenditures at a particular section of the beneficiaries, in this case, the poor. Adequate provision of health and education services to the poor improves their capabilities to respond to economic opportunities.[13]

Access of the Poor to Social Services

4.58 Improving access to publicly provided basic education and health care is an important element of Government strategy for reducing poverty. Great progress has been made in expanding these services in Indonesia over the past two decades. To what extent have the poor benefitted from this expansion in coverage? As shown below, while major gains have been made, significant gaps remain in the access of the poor to education and health.

4.59 **School Enrollments.** Age-specific enrollment rates among the poorest 40% of all income groups rose significantly during the decade 1978-1987: from 81% to 90% for children aged 7-12 years; from 42% to 65% for the age group 13-15 years, and from 14% to 24% for the age group 16-18 years. However, the gap in enrollment rates remains wide between the poorest income groups and the relatively better-off, especially beyond the post-primary stage. In primary schools, the net enrollment rate for the bottom income decile is currently about 81% and only 13% lower than the rate for the top income decile. However, beyond the primary stage, the gap widens. At junior secondary level, only 9% of the children

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[13] See Amartya Sen, *The Political Economy of Targeting*, in conference papers on *Public Expenditures and the Poor: Incidence and Targeting*, World Bank, June 1992.

aged 13-15 from the bottom income decile are enrolled, whereas the rate is 76% for the top decile. At senior secondary level, the gap widens still further as fewer than 2% of the poorest 16-18 year olds are enrolled, compared to 69% for the top decile. The differentials are even wider at the university level, where fewer than 1% of youths aged 18-25 in the entire bottom half of the income distribution are enrolled, compared to 27% in the top decile.

4.60 **Health Services Utilization.** The 1990 SUSENAS shows a relatively low gap between the poor and the better-off in access to modern health providers. Around 57% of the sick in the bottom decile were treated by some kind of modern provider, compared to 68% of those reporting ill in the top decile. Much of the credit for helping to close the gap in access to basic health care for the poor goes to the expansion of the network of community health centers and subcenters. Taken together, the health centers and subcenters provided about two-thirds of all modern treatments obtained by the sick poor. Particularly striking is the important role of health subcenters in helping to equalize access, especially in rural areas. Nevertheless, there remains a huge gap in access to high-quality modern providers of medical care. Only about 5% of the sick poor were treated by hospitals or private doctors, compared to around 40% among the top decile.

Who Benefits from Public Subsidies?[14]

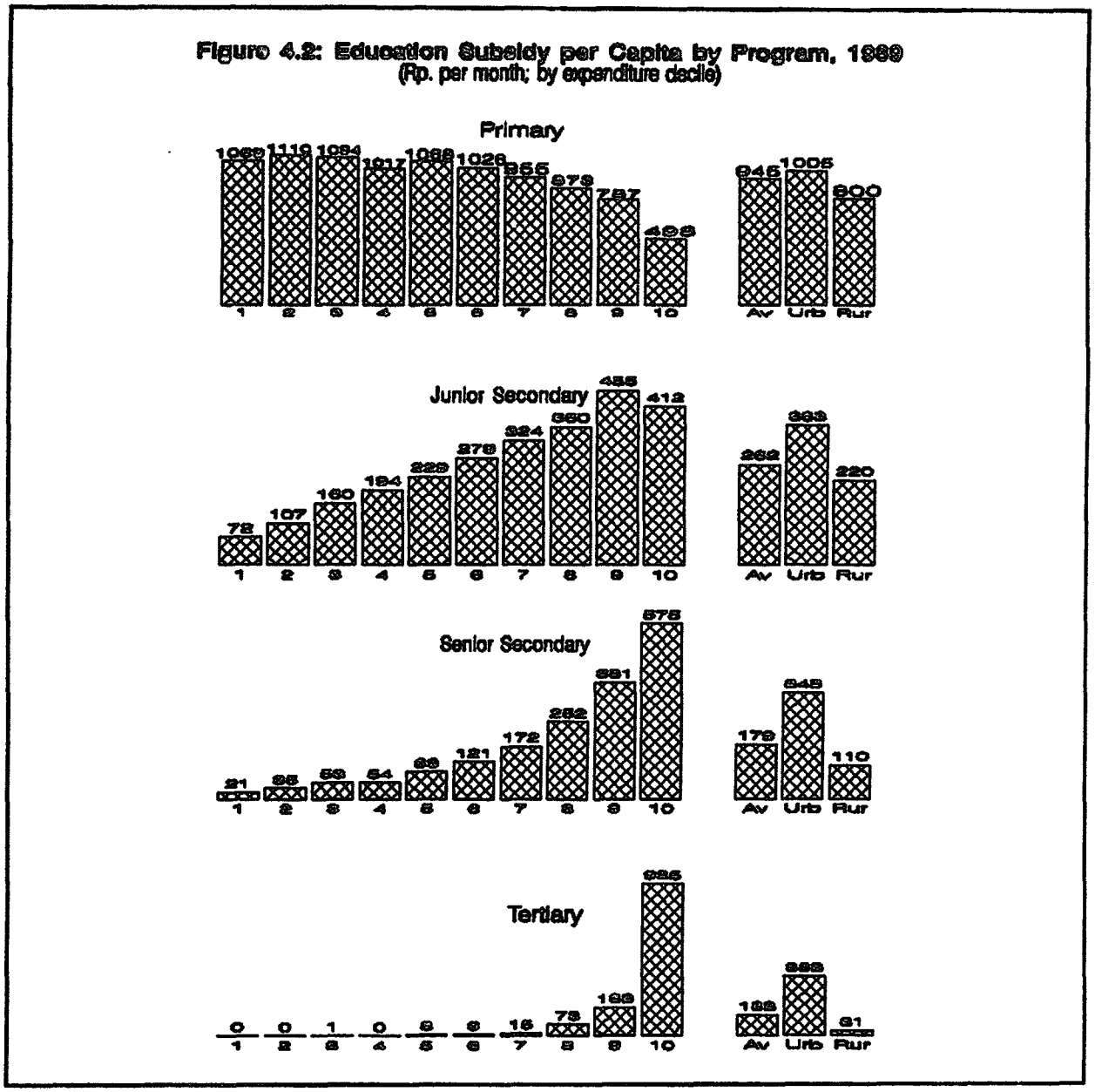
4.61 One important reason why the poor have not benefitted more is that a relatively large proportion of public expenditures goes to subsidize the better-off. Indonesia has done relatively well in putting an emphasis on programs that benefit the poor, but it could do more, as discussed below.

4.62 **Education Subsidies Per Capita.** In 1989, the monthly public subsidy per capita for all education programs in Indonesia averaged Rp.1,520. The subsidy per capita was, however, more than twice as large for the richest quintile than for the poorest. These differentials partly reflect differences between the better-off urban and poorer rural areas. Rural people receive a smaller subsidy than urban residents. But the main reason is that, because few poor children (are able to) attend post-primary education, most of the public expenditures on these subsectors go to benefit the relatively better-off.

4.63 Two very different subsidy patterns underlie the incidence of the total education subsidy: the pro-poor bias of per capita subsidies for primary education and the pro-rich bias of education at secondary and tertiary levels (see Figure 4.2). Almost all education subsidies benefiting the poor are delivered through primary schools. The primary education subsidy averages Rp.1,090 per capita per month among the poorest 20% of the population. On average, the richest 20% receive less than half as much as the poorest from the primary education subsidy. The pro-poor orientation of primary education is, however, offset by the pro-rich bias of public spending on post-primary education, which becomes more unequal the higher the level of education. Thus, the subsidy received by the poorest 20% amounts to only Rp.90 per capita per month from junior secondary education, falls off to Rp.28 per capita per month at the senior secondary level and becomes near zero at the tertiary level. In contrast, monthly per capita subsidies accruing to the richest 20% are five times larger for junior secondary education (Rp.434), 17 times larger at senior secondary level (Rp.479), and highest of all for tertiary education (Rp.590). The pro-rich bias of secondary and tertiary education is driven mainly by rapidly rising enrollment rates with income, reinforced by high public sector shares of enrollment and age effects working in the opposite direction than at primary school level. For example, at junior secondary level, gross enrollment rates rise dramatically from 15 to 100% across income groups; public sector shares

[14] Public subsidies are defined here as recurrent public expenditures on health and education services less costs of these services recovered from users.

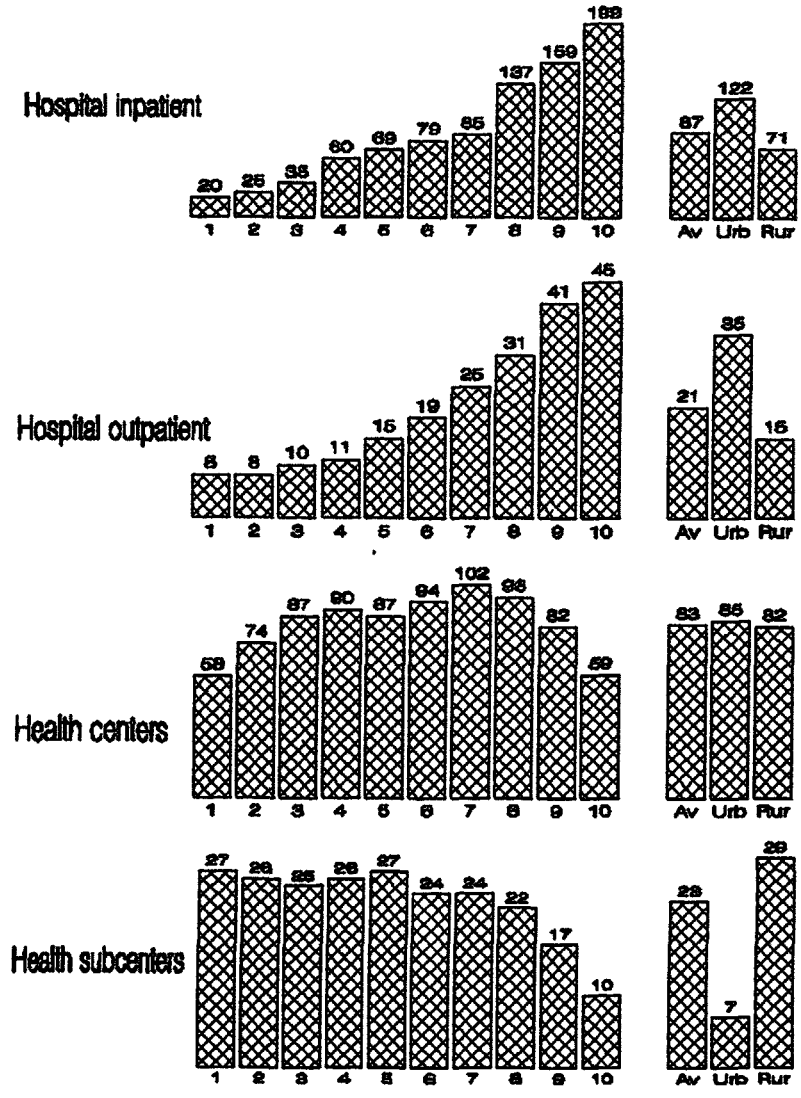
Figure 4.2: Education Subsidy per Capita by Program, 1989
(Rp. per month; by expenditure decile)



remain high and fairly constant across deciles (57%), so the public enrollment rate jumps from 9% to 57%. Similar effects are pronounced at the secondary and tertiary levels.

4.64 **Health Subsidies Per Capita.** In 1990, the health subsidy per capita averaged only Rp.213 per month, far smaller than the education subsidy. Overall, health subsidies are larger for the better-off (see Figure 4.3). Like education, the subsidy per capita was more than twice as high for the richest quintile than for the poorest. Again, these differentials reflect a bias towards better-off urban areas. The main reason for the above is the distribution of hospital spending, which strongly favors the better-off. Most of the health subsidy benefiting the poor is delivered through the network of health centers and subcenters. Very little of the hospital subsidy reaches the poor. For hospital outpatient visits, the bottom quintile receives only one-fifth of the amount captured by the richest 20%. The distribution of hospital inpatient subsidies is even more regressive. The inpatient subsidy per capita was eight times larger for

Figure 4.3: Health Subsidy per Capita by Program, 1990
(Rp. per month; by expenditure decile)



the richest quintile than the amount received by the poor. An important factor contributing to these utilization patterns is the provision of health insurance coverage to civil servants through the ASKES scheme. Civil servants generally belong to the upper part of the income distribution and use public hospitals at much higher rates than the uninsured population because the insurance increases their demand for medical care. Another factor explaining the pro-rich distribution of hospital subsidies is urban bias. Per capita subsidies for public hospitals are twice as high in urban compared to rural areas. This reflects the much greater availability of hospitals in the cities and hence lower access costs for the urban population. The much higher quality of hospital services induces the marked shift out of health centers that is observed in better-off urban areas.

Pricing Policies for Better Targeting

4.65 Redirecting public subsidies towards the poor means not only spending more on programs that are already well targeted but also improving the targeting efficiency of existing programs. Better targeting calls for a two-pronged strategy on the use of public services: increasing poor people's use of these services, and differentiating unit subsidies by the income class of users. Shifting the use of public facilities towards the poor requires measures that increase participation of the poor in programs where it is low (such as in junior secondary education), while inducing the better-off to shift out of public to privately provided services (for example, in hospital care). Differentiating unit subsidies in favor of the poor calls for spending more on, or charging less for, services the poor use more extensively (such as health centers/subcenters and lower level education); and subsidizing less the services used mainly by the better-off (such as hospitals and universities). Changing pricing policy, moving away from uniform prices towards a policy of greater price discrimination between different users and by type of service emerges as a potentially powerful instrument in implementing both elements of this strategy for shifting public expenditures towards the poor.

4.66 **Education.** An important factor explaining the unequal incidence of most education subsidies is that the poor face significant private costs of using public education facilities, even though these facilities are heavily subsidized. The costs include not only official fees but also unofficial fees in the form of parental contributions, and nonfee costs incurred for textbooks, uniforms and transportation. The opportunity costs of poor students' time are also likely to be important and rise steeply with the level of education. In public primary schools, families pay an average Rp.4,500 per month despite the abolition of official fees. Outlays triple to Rp.14,000 per month at junior secondary level, then nearly double again to Rp.23,000 at senior secondary level.

4.67 Private costs are high enough to deter enrollment in public education for many poor users, so they do not benefit from education subsidies. At all levels, the affordability ratio for fees alone (fee-to-income) is higher for the poor, ranging from 7% of income for the lowest decile at primary school level, to 47% at junior secondary and an enormous 84% of income at senior secondary level. By contrast, the relative cost burden is much lighter for wealthier students, ranging from 4% at primary, to 11% at lower secondary and 18% at senior secondary level for the richest decile. These affordability ratios show that, despite the subsidies for public education, the burden of education costs is still large and felt most severely by low-income households.

4.68 Statistical analysis provides strong evidence confirming that fees are a deterrent to continuing in school for the poor at all levels. Given the price of schooling, youths from poorer households are more likely to drop out of school. Distance also has a significant effect on enrollments: the farther away the nearest school is to the household, the more likely students are to drop out of primary and secondary school. Policy simulations suggest that a change in pricing policy to lower the private costs of education could significantly raise enrollment rates among the poor at all levels of education. At the primary school level, the gap in dropout rates between the poor and the better-off is not very wide, but abolishing all fees (including parental contributions) as well as nonfee expenditures for the poorest 20% could still help to reduce dropout rates further. The gap is much wider at the lower secondary level, and targeted pricing policy changes are likely to have a much greater impact on dropout rates. Abolition of fees plus a scholarship covering all nonfee expenditures for the poorest 20% might cut dropout rates in half. A similar targeted policy of subsidizing all schooling expenditures at senior secondary school could reduce dropout rates among the poorest 20% by about one-fifth. In contrast, the proposal to abolish fees for all, including the rich, would do very little to increase enrollments among the better-off.

4.69 The magnitude of these potential enrollment effects of lowering the costs of schooling to the poor highlights the possible role of fee reductions in helping the poor to participate in the drive towards universal basic education through the lower secondary level. How can these be implemented and financed? Perfect targeting through individual means-testing to identify who should be the poor beneficiaries of scholarships for free schooling is the ideal option, but it might prove difficult and costly to administer. Another approach might be for the local school authorities (e.g., school principals) to determine cases where fees may be waived following some transparent criteria. An alternative would be geographic targeting. For example, one could target the poorest 30% of subdistricts instead of households. Undercoverage of the poor living in richer districts would reduce the effectiveness of such fee reductions, but they could still have a sizable impact on enrollments among the poor. To help finance the targeted fee reductions, policy simulations suggest that full cost recovery could be instituted among the richest two deciles at secondary and tertiary levels of schooling with no adverse effects on enrollment. Indeed, the revenue generated from higher fees for the better-off would be large enough to offset the incremental costs of financing the full costs of education for the poor, including the induced expansion of enrollment. This suggests that a significant pro-poor reorientation of the incidence of public subsidies for education could be achieved by well-designed price differentiation.

4.70 **Health.** As with education, the poor get a disproportionately low share of overall public subsidies for health, except for the health subcenter program. Again, a possible reason for the unequal distribution of subsidies is that the costs of using public facilities are still too high for the poor to afford, even though they are heavily subsidized. These costs include not only official fees, but also the costs of prescription drugs and transportation, as well as the opportunity costs of travel time. Another factor is that the better-off, especially civil servants covered by the government health insurance scheme (ASKES), face public prices that are too low relative to the private alternative and do not have sufficient incentive to self-select out of the public system. As a result, they capture a significant share of the subsidies that otherwise could be spent on lowering prices for the poor.

4.71 Indonesia has maintained a policy of setting health center fees uniformly low but not zero, at Rp.300 per outpatient visit, to help ensure access to basic health care for the poor. However, even facing the same low prices, poorer consumers are still likely to use fewer health services than the non-poor because of income constraints. Experience from other countries suggests a rule of thumb that outpatient prices should be set below about 5% of nonfood consumption expenditure per capita to avoid adverse effects on utilization. Judged by this criterion, a significant proportion of households would be unable to pay the Rp.300 outpatient fee. The costs of inpatient care at public hospitals are, by contrast, relatively high. Average fees charged per inpatient day in the lowest class of service ranged from Rp.12,000 to Rp.21,000 in the two provinces studied. With lengths of stay averaging 7 days per inpatient admission, the total cost of hospitalization far exceeds monthly per capita income for the poor and undoubtedly constitutes a major barrier to access by the poor.

4.72 Increasing access of the poor to public subsidies calls for improved accessibility and quality of public health facilities. Efforts are already underway to raise prices in order to generate more public revenues to help finance these improvements, notably through the recent Lembaga Swadana initiative for public hospitals. The degree to which the poor will benefit from these changes depends critically on the extent to which they are protected from the impact of fee increases, and the success with which these increases are targeted to better-off users.

4.73 Four possible options for price discrimination within the public sector would help to shift public spending on health towards the poor. One is to strengthen the existing system of individual means-testing (the Surat Lurah) for fee exemptions, which appears to be little used. A second is to move away from uniform prices to a more differentiated pricing structure based on geographic price discrimination,

charging zero or low fees at facilities serving primarily poor households and larger fees at facilities serving primarily nonpoor households. This method is promising in rural areas, but has limited potential in cities where facilities are easily accessed by everybody. A third alternative applicable in urban areas is to encourage self-selection through charging differential prices at different levels of care. Finally, identifiable groups of the better-off can be charged higher prices. A notable target group are the civil servants with government health insurance (ASKES) who are better-off than average, use more public services, and reimburse the public system less than the normal tariffs charged to uninsured users of public services.

4.74 Expansion of ***health insurance*** for the better-off can also help to target more public resources towards the poor. In principle, provision of insurance coverage can switch the insured population towards the higher-quality private sector, reduce their drain on public facilities and increase the public budget available for the poor. In practice, the opposite could happen if insurance coverage is linked to service provision by the public sector at subsidized prices along the lines of ASKES. Estimates suggest that ASKES coverage roughly doubles the outpatient utilization rate in public facilities. This risk of encouraging switching into the public sector, instead of switching out to the private sector, is a key design issue associated with the new social security law (JAMSOSTEK).

E. Priorities for Environmental Investment

4.75 The Government of Indonesia has had a long-standing commitment to the objective of sustainable development. However, resources devoted to environmental protection have lagged behind this commitment, partly because of lack of wider information on the costs of unchecked environmental degradation, and partly because of inadequate integration of environmental investment into the public investment planning process. Effective protection of the environment is likely to involve substantially stepped-up investments in the coming years. Such investments are likely to have high social and economic returns in terms of: improved health and welfare of the people; increased efficiency and productivity in the use of human and natural resources; and greater equity in the development process. There is a strong demand for improved environmental outcomes, as suggested by the willingness of households to pay for such outcomes (e.g., access to safe water). How large are the gains from investment likely to be? And what are the most important sectoral priorities? Below, these issues are discussed first, before we turn to investment priorities in individual subsectors, their costs and financing, and the relative roles of public and private investment. Environmental issues affect many sectors, and some investment/expenditure issues discussed elsewhere—education, health, family planning, agriculture, and transport—also have important implications for the environment. The focus in this section, however, is on investments that directly protect the environment.

4.76 One priority area is ***urban water supply and sanitation***. Unsafe water is a major cause of widespread public diseases (e.g., diarrhea, typhoid, cholera) in Indonesia. The costs of mortality associated with diarrhea in Jakarta alone are estimated to be around $200 million a year. A 1989 survey showed that 93% of the shallow wells in Jakarta presented signs of fecal contamination, the main source of waterborne infectious and parasitic diseases. Cross-country studies suggest that a package of services including human waste disposal, hygiene training and safe drinking water could reduce diarrheal morbidity by about 25% and mortality by 55-60%. Aside from the health effects, investment in water supply (and sanitation) would have important effects on efficiency and growth, *inter alia* by bringing about a reduction in excessive groundwater withdrawal, and hence a reduction of the problems of subsidence of urban land, damage to urban infrastructure, flooding, salinity in coastal aquifers, contamination of groundwater, and damage to fisheries. The equity effects could also be significant. The poor suffer most from inadequate availability of safe water and sanitation; in 1992, less than 10% of

households with monthly expenditures below Rp.100,000 had piped water connections, compared to 91% for those with monthly expenditures above Rp.700,000. As a result, the main source of water for the urban poor was vendors, with unit costs 10 times greater than those for piped water.

4.77 A related priority area is the ***disposal of urban solid waste***. In Jakarta, an estimated 30% of solid waste goes uncollected. Also, densely populated poor neighborhoods (Kampungs) receive the least municipal waste collection services. Even when the waste is collected, it is often dumped in the open or in uncontrolled landfills, leading to the spread of diseases and contamination of groundwater.

4.78 A second priority is the containment of ***urban air pollution***, linked closely to pollution from urban traffic and from power stations. The inadequate and poor quality of public transport in urban areas is a major cause of urban pollution. Health-related costs from the use of leaded petroleum (e.g., loss in learning ability of children, premature mortality and other costs) in Jakarta alone are estimated at about $50 million annually, while the health costs of suspended particulates from a variety of sources are estimated to be over $75 million annually.

4.79 A third priority is the containment of ***industrial pollution***, especially in Java where much (75%) of the industry is located and where the density of population is one of the highest in the world. Surface waters and coastal areas around the main centers of industry (Jakarta, Surabaya) are already heavily polluted, with high concentrations of heavy metals. In a sample of fish and shellfish caught in Jakarta Bay, 44% exceeded WHO guidelines for lead, 38% for mercury and 76% for cadmium. As industrial growth continues, the levels of industrial pollution, if unchecked by adequate programs and investments, will grow to massive and unsustainable levels in the major industrial cities in Java, but also increasingly in other towns and cities outside Java. The costs in terms of premature morbidity are high. Such costs would threaten the long-term sustainability of industrial and overall economic growth, if unabated.

4.80 Other priorities are: ***sustainable development of land; management of forests; and conservation of biodiversity***. Improvements in the management of these resources, especially urban land and forestry, are important for efficiency and productivity in the economy. For example, by impeding efficient land transactions, the lack of adequate land titling contributes to a low density of urban spatial development and rising land prices, making it much costlier to supply urban services and promoting excessive urban sprawl and conflicts in land-use. Similarly, underpricing of forest resources is leading to rapid deforestation and loss of watershed and biodiversity. The costs are estimated at over $500 million a year in terms of foregone public revenues, and possibly a larger magnitude in terms of the loss in other resource uses associated with forests (e.g., fisheries and marine products, traditional local products, non-timber forest resources, tourism, and control of soil erosion and flooding). Most of the needed improvements in the management of these resources depend on sound public pricing policies and institutional improvements, and much less on major investments as compared to other areas noted above. Moreover, the revenues generated by improvements in pricing policies are likely to far exceed the investments needed.

4.81 A more detailed attempt at setting environmental investment priorities in Indonesia—based on a ranking of how important individual environmental issues are to achieving the overall objectives of growth, equity and environmental protection—leads to the same conclusions as above: urban water supply and sanitation, solid waste management, air pollution (especially from vehicle emissions in major urban areas), industrial pollution control on Java, and management of forests emerge as the most important tasks. As discussed below, incremental costs of investments to protect the environment are likely to be substantial—amounting to some 0.5% of GDP a year in public investments, and about 0.6% of GDP a year in private pollution abatement costs. However, they are modest in terms of the benefits they would bring

about (equivalent to at least 2% of GDP a year). The bulk of the investments should be paid for by the recipients of public services, and by private enterprises and activities responsible for causing the damage. Keys to ensuring this would be the enforcement of pollution abatement measures on private activities, proper pricing of resources and adequate cost recovery in the provision of public services.

4.82 **Water Supply.** The Government's concern for urban public services was reflected in an increased allocation for improvements in such services, from 3.4% of public investment under REPELITA IV to 6.1% in REPELITA V, with a rising proportion directed at urban water supply, sanitation and solid waste management. REPELITA V also emphasized improved O&M, local government responsibilities in carrying out the investments and mobilizing adequate resources to do so, and a greater role for the private sector. However, public investment in urban water supply has actually been declining in real terms, from about Rp.300 billion a year (in 1989 prices) in 1987/88 to about Rp.175 billion in 1990/91. Moreover, the envisaged private participation in the provision of piped water supply has not materialized. As a result, in 1990, only 15% of urban households were served with public piped water connections; most others relied on more expensive sources such as water from private wells and vendors. Among commercial users, only a fraction were connected to piped water, with most relying on expensive deep boreholes.

4.83 The main quality issue is the unsafe nature of most sources of urban water supply; the quantity issue is the excessive reliance on and withdrawal of groundwater, far in excess of recharge. If a significant improvement in the supply of urban water is to take place during REPELITA VI, spending on public water supply will need to be increased substantially, to about Rp.500 billion a year (in 1989 prices, see Table 4.12). Improvements in service quality will be essential. Key needs are: reducing unaccounted-for water losses (currently as high as 47%) by reliable metering and other measures; improving water pressure and quality; rationalizing the tariff structure; and improving the financial performance of water supply enterprises. If these improvements in services and investment levels are achieved, it should be possible to more than double the current percentage of households served by safe piped water supplies during REPELITA VI, reduce the excessive use of groundwater, and improve public health significantly.

Table 4.12: Indicative Public Investment Program for Water and Sanitation

	Actual *1984/85-88/89* *(REPELITA IV)*	*Estimate* *1989/90-93/94* *(REPELITA V)*	*Indicative Projection* *1994/95-98/99*
Total Investment (Rp. trillion, 1989/90 prices)	2.0	1.3	5.8 - 6.0
Of which (%):			
Kampung Improvement Program	15.0	30.8	15.0
Urban water supply	65.0	46.2	42.5
Sanitation	20.0	23.0	42.5

Source: Ministry of Finance and World Bank staff estimates.

4.84 **Sanitation and Solid Waste Disposal.** Improvement in sanitation has received inadequate attention in the development of urban services. The existing system relies primarily on private septic tanks (or the use of open spaces), resulting in widespread water contamination. Replacement of septic tank systems by piped sewerage systems, and the treatment of sewage, are important to public health.

Yet, few cities in Indonesia have even the beginnings of a public sewerage system. The poor have been affected the most, because of the higher density of population in urban areas where the poor live, and the inability of many to afford private septic tanks. In 1990/91, only slightly more than Rp.50 billion was spent on human and solid waste disposal and drainage. This contrasts with estimates of Rp.5 trillion (or about Rp.500 billion a year) needed to provide conventional sewerage systems in high density inner cities by the year 2000. Beyond the urban core, conventional sewerage systems are too expensive (unit costs of $300-$1000 per household) to contemplate. There is no single, simple, low-cost solution to the increasing problems of sanitation and solid waste disposal; the approach has to be differentiated, based on an assessment of location-specific conditions and experimentation with different, increasingly off-site technology options (i.e., where public services concentrate on providing the "trunk" infrastructure, and individual on-site systems are linked to the trunk services through different options) to reduce costs to manageable levels. Institutional, financial and other constraints also have to be taken into account when developing and implementing sanitation/sewerage programs.

4.85 The Government has initiated a planning exercise, covering up to 25 cities, to assess the sanitation needs. Preliminary assessments have been made for Jakarta, Surabaya and Denpasar. An important element of the exercise would be setting priorities for investment, identifying areas with the most severe problems, the greatest health hazards, and the widest potential impacts. Results show that about 60% of the population in the largest cities would need some form of on-site sewerage, and the balance off-site systems, to deal with human waste disposal. Assuming that least-cost technology options are selected, institutional issues are addressed, and adequate improvements in tariffs are made (by incorporating sanitation costs in water supply charges, and betterment levies in land taxes), it should be possible to increase public investments sizably, approaching Rp.500 billion a year in REPELITA VI. Together with the suggested expansion in water supply investments, this would imply doubling public investment in urban water supply and sanitation to about 0.4% of GDP and 4% of total public investment. Such an investment rate would, however, still represent a much lower level of spending than the average for all developing countries (0.6% of GDP and 10% of total public investment), indicating the large deficit in investment, and planning and implementation capacity, in Indonesia.

4.86 **Industrial Pollution.** World Bank estimates show that BOD (biological oxygen demand) levels from industrial pollution for Indonesia will increase by about 250% by 2000 and toxic waste and heavy metal by 280%. Many parts of the country will exceed tolerable standards for water pollution. In addition to the costs of BOD, industrial effluent carries hazardous wastes like toxic metals. These are forecast to increase even more rapidly than BOD, 19-fold by 2020. If the private sector fails to carry out investments to curb such pollution, the burden on the Government to clean up the wastes or compensate the public will be very high. A key policy issue is to ensure that private industry does not impose such huge costs on society—by inducing it to undertake necessary investments in pollution abatement. Fortunately, a few industries dominated by large plants (such as ferrous and non-ferrous metals, industrial chemicals, pulp and paper, cement and mining) are responsible for much of the industrial pollution; and the enforcement of strict environmental standards should be possible, following the "polluter-pays" principle. How large are the investments in preventing industrial pollution likely to be? In the 1970s, identifiable expenditures on controlling industrial emissions and wastes in industrial countries amounted to about 2.0-2.5% of total industrial investment, rising more recently to about 4-5% of investment. If spending on pollution control by manufacturers in Indonesia were to amount to about 2-3% of their investment, it would amount to about $500 million (Rp.1 trillion) a year at 1992 prices by the year 2000. Existing firms would face higher costs as they retrofit their plants, roughly estimated at $700 million for reducing pollution to 50% of its present level. The private costs are, therefore, significant, but in relation to the total value of output, they are likely to be small—about 0.4% of manufacturing sales, and about 1% of manufacturing value added in 2000. Moreover, the adoption of "best-practice" technologies common in industrial countries may mean no substantial extra costs to new or expanding firms. Social

returns to such investment would be many times greater, in terms of avoided costs of industrial pollution. The main public policy issues are: to establish and enforce unambiguous standards and pollution taxes right from the beginning; to concentrate on polluters and wastes that cause the most danger; and to use licensing and land-use planning to minimize pollution from new firms.

4.87 **Urban Air Pollution.** As with industrial pollution, estimation of the health costs of urban air pollution for all of Indonesia are difficult. Nonetheless, orders of magnitude are suggested by the costs of existing levels of air pollution in Jakarta. These have been recently estimated at $200-$500 million per year. Increasing these figures by 50% to cover costs in other urban areas gives a range of $300 million to $750 million per year. Unless action is taken, air pollutants may increase as much as 250% in the coming 7 years, with large increases in associated social costs. Clearly, unchecked urban air pollution would impose extremely high and unsustainable costs on the urban population. How much investment would be necessary to control urban air pollution to manageable levels? Estimates suggest that controlling power plant emissions of particulates would raise the total investment costs in the power sector by only about 1%, or about $50 million (Rp.100 billion) a year at 1992 prices. However, controlling the pollution from urban transport would require substantially greater investments. Shifting to unleaded gasoline, enforcing the use of catalytic converters in cars and similar devices for diesel transport (to control unburned hydrocarbons, nitrogen oxide and carbon monoxide) and other measures would require investments/expenditures amounting to about $400 million (or Rp.0.8 trillion) a year in 1992 prices by the year 2000. Substantial investments in mass transit may also be needed (para. 4.33). Nevertheless, these expenditures would only amount to about 0.3% of GDP, and would be a small fraction of the benefits from reduced air pollution. The vast bulk of the required investments would also be largely financed by the private sector, as car and transport owners pay for less polluting vehicles and fuels, shift to public transport, and customers pay for investments in emission control in power plants.

4.88 **Land, Forests and Biodiversity.** As discussed, successful environmental management of land, forests and biodiversity is chiefly a question of better pricing and institutional structures (see Chapters 3 and 5, respectively on these issues). But there is a role for expenditures, largely public ones, in supporting these efforts. Some of the needed expenditures, however, are not capital, but recurrent expenditures. In forestry, for example, any effort to increase domestic prices and rent capture needs to be coupled with increased government spending on monitoring and managing protected forests and concessions. Currently, the Ministry of Forestry spends about $45 million per year on such functions. Another important item of forestry expenditures is the HTI replanting subsidy scheme. Most of the large HTI subsidies benefit a few major pulp and paper companies, which should be paying for the replanting if their pulp and paper operations are economically viable. The scheme also allows these companies to gain concessions to large tracts of forest land and to cut natural forest in the initial years before the plantations are productive. Net benefits of the HTI scheme for forestry management are negative, both for public revenues and for forestry management and the scheme should be reexamined. Protection of biodiversity will require increased expenditures, both in designated conservation areas and in surrounding buffer zones. According to a joint UN Environment Program/KLH study, successful management of Indonesia's national parks would require between $2 and $8 per hectare per year. Spending on 3.5 million hectares in parks and 30 million hectares in protection forests would thus need to be around $100 million per year. Investments in buffer zones through integrated community development projects, such as that being designed for the Kerinci-Seblat Park in Sumatra, would require another $90 million a year in the coming 10 years.

5
INSTITUTIONS

A. Overview: Fostering Responsive Institutions

5.01 Stronger, responsive institutions are an essential complement to the incentives and investment agenda for robust, equitable and environmentally sustainable development discussed in the preceding two chapters. Institutional capacities have a major bearing on the effectiveness with which policy reforms are implemented, and on the efficiency and quality of investments that are undertaken. Over the longer haul, the responsiveness of the institutional framework to strategic and structural shifts in the economy and the evolving nature of future challenges is a key determinant of the sustainability of development. The transitions that the Indonesian economy is undergoing—the dismantling of regulatory controls, the increasing role and capacities of the private sector, and the shift toward decentralized decision making and greater local participation—and the new challenges of development that are emerging, most notably that of environmental sustainability, entail profound implications for institutional roles and capacity building needs.

5.02 A theme that permeates the discussion of the institutional development agenda in this chapter is ***the evolving role of the public sector***. The Government's strategy of private-sector-led development, and the policies of extensive deregulation that support it, imply an increasing focus of the public sector's role on two tasks: providing the policy and institutional framework underpinning the functioning of markets to support efficient private sector development; and effectively delivering public services. The increasing focus on these tasks calls for several important adaptations in the functions, structure and capacities of public institutions. First, it implies an increasing shift in government functions from direct management and control of economic activities, oriented toward the issuance of licenses and permits, to an indirect management mode that emphasizes policies and measures that indirectly support efficient working of markets. Direct interventions in production, trade or finance give way to actions that ensure markets are competitive and that strengthen the legal framework that provides the basis for market contracts. These shifts in the mode of economic management necessitate parallel shifts in the organizational structure, staffing and skill mix of government institutions, changing the emphasis from routine administration of controls to policy analysis, monitoring of policy implementation, facilitation of private activity, and coordination. Second, the focus on efficient provision of public services requires the public sector to reduce its role in the production of goods and services that the private sector can provide better, such as in agricultural or industrial production and trade, and concentrate its scarce capacities on those services that need to remain in the public domain, notably infrastructure services and human resource development. Even within this concentrated focus on public services, opportunities for efficient private participation to expose public providers to competition need to be explored. Such reorientation of public provision of goods and services implies the need to restructure government enterprises. Third, another important dimension of public sector restructuring conducive to more efficient public service provision, and consistent with the broader policy trend toward more decentralized responsibility, is the devolution of additional responsibilities to lower-level governments. This raises issues of reform of both intergovernmental administrative and fiscal relationships.

5.03 This chapter focuses on some important elements of institutional development and reform implied by the evolving role of the public sector in Indonesia, namely:

- strengthening the legal, judicial and accounting institutions underpinning markets to foster efficiency, transparency and wide participation in private sector development (Section B);

- reforming public enterprises by implementing an appropriately designed program of divestiture of enterprises engaged in the provision of private goods and by commercializing as much as possible the operations of those that need to remain public (Section C);

- reassessing and realigning government administrative structures and the skills and incentives of the civil service, to adapt them to the changing focus of government functions and to improve the quality of governance (Section D);

- improving the efficiency and equity of public service delivery through decentralizing responsibilities to local governments and reforming central-local fiscal relations, supported by an enhancement of local government institutional capacities (Section E); and

- building institutional capabilities for environmental management at the central and local levels, including promoting effective participation of local communities (Section F).

B. Strengthening the Institutional Underpinnings for Private Enterprise

5.04 Markets need appropriate institutional infrastructure to work efficiently and equitably. Two critically important, and related, market-supporting institutions are a well-functioning legal system, to provide a predictable and fair climate for enterprise, and a sound accounting and auditing system, to instill financial discipline. Existing gaps and weaknesses make the development of these systems a priority. The need for clear, modern commercial laws and accounting and auditing standards was noted in Chapter 3 in the context of the discussion of the incentives regime; the focus here is on institution-building measures that would support the implementation and enforcement of such laws and standards.

The Commercial Legal System

5.05 Investors, both domestic and foreign, need confidence that agreements are enforceable. Indonesia could enact the most modern company, credit and contract laws, but they will be of little practical value if there are inadequate means of enforcing them.

5.06 **The Court System.** In commercial law, the court system is widely perceived by investors and creditors to be inadequate: procedures are slow, with cases often taking long to resolve; the courts are overburdened and understaffed; there is little specialization, with all types of cases going to general courts and judges; enforcement of credit, security and copyright interests is difficult; and there is a lack of confidence in the fairness of the trial process. The courts are governed by the Basic Law on the Judiciary, No.14 of 1970, which emphasizes the principle of independence and seeks to prohibit all outside interference in judicial matters. In practice, however, the administration of the court system is under the jurisdiction of the Ministry of Justice, which controls the budget, posting, transfer and promotion of judges. As in most civil law systems, judges are career civil service employees, beginning as clerks and working their way up to judges.

5.07 There is a clear need to strengthen the court system for commercial law. A basic step is to increase the technical competence of judges to handle complex, modern commercial cases, through a combination of training and improved compensation. In the short term, salary increases could be linked to the objectives of a just and speedy settlement. There could be targets set for courts to reach decisions reasonably quickly. Publishing court decisions would promote consistency in judicial decisions. Civil procedures for credit cases could be amended to permit faster settlement. A specialized court to handle commercial matters could be set up on a pilot basis. Also, a panel group of judges could be regularly assigned to handle commercial cases so that they develop deeper knowledge in commercial law. The

Central District Court in Jakarta and a few other District Courts in areas with a high concentration of commercial activity (such as Surabaya or Medan) deal with a larger number of—and more complex—commercial cases than other courts. The Government could initially concentrate its efforts on selection of personnel, training, and performance in these selected courts.

5.08 **Arbitration.** Arbitration provides an alternative to the court system, with the advantage that a dispute can be settled quickly and accurately by specialists knowledgeable in the technical areas, as against judges who are trained only in broad, general aspects of law. A further advantage is that it avoids the confrontational aspects of a court trial and encourages settlement. Under Indonesian law, all disputes of a commercial nature can be submitted to arbitration, including disputes with Government agencies and enterprises. Arbitration proceedings follow procedures similar to those found in the Civil Procedure Code, but they are not required to. The format of the arbitral award is simple, and it must be rendered within six months of submission. The enforcement of a domestic award in principle is not cumbersome and appeals are limited to certain matters. An arbitration board (Badan Arbitrase National Indonesia, "BANI") was established in Jakarta in 1977 by the Indonesian National Chamber of Commerce and Industry as a private arbitration institution. However, its services are neither frequently utilized nor highly publicized. Recently, it has handled only 5-10 cases a year. The failure to utilize BANI more fully despite the shortcomings of the formalized court system suggests the need for improvement in the existing arbitration framework.

5.09 An important practical issue is whether to develop the existing framework of BANI or to help establish a new, more dynamic arbitration association. A revitalized BANI, or a new association, should serve as a focal point for supplying arbitrators and conciliators, for training and research, and for disseminating information about available arbitration mechanisms. It might also encourage trade or other groups to form their own arbitration boards. Several steps could be considered to strengthen the arbitration process. First, the list of arbitrators should include specialists in different areas, with diverse technical skills and business experiences. At present, BANI's arbitrators, although competent individuals, are drawn mainly from the ranks of former judges and professors, in contrast to the much wider use of businessmen and professionals in other countries. Second, a few highly qualified and respected resident foreigners should be included in the list of arbitrators. This would give confidence to foreign investors that the Government and the local business community are serious about settling disputes in a manner perceived to be fair by all parties. The use of non-nationals as arbitrators in commercial cases is quite common throughout the world. Third, concerns about the enforceability of foreign arbitral awards in Indonesia need to be addressed. Until recently, Indonesian courts refused to recognize foreign awards in spite of treaty commitments to the contrary. The Supreme Court has recently issued a circular that sets out a procedure for applying to the Court for recognition of a foreign arbitral award, but this procedure has not yet been used. The contents of the circular and the procedure it requires still need to be publicized and made known to the business community.

5.10 **The Legal Profession.** In Indonesia, as in most countries, a substantial responsibility for interpreting laws in commercial areas falls on the private legal profession. While the State has the major role in criminal cases, the private sector litigants, lawyers, notaries and other specialists ease the burden in the commercial area. Properly trained legal professionals can not only assist a court or arbitration panel in reaching a reasoned, proper decision, but in many instances can avoid the need for the issue to reach the court. To develop the legal profession, the Government should implement a program, in cooperation with the private sector and universities, to: give lawyers and law students better training, including in relevant subjects outside the law; expand opportunities for overseas training; improve the foreign language skills of the profession; and allow entry of more foreign legal professionals, by easing the strict work permit system.

5.11 **Legal Information.** The public's access to legal information in Indonesia is severely limited, posing a major barrier to the effective development and implementation of the commercial legal framework. There are two main problems. First, many laws, regulations, judicial decisions, procedures, and other legal information are unavailable. Second, although considerable effort goes into fashioning legal rules and procedures, the effort is undermined by the way they are presented to the public: a systematic official method of bringing regulations into existence within a reasonable time is lacking; and the body of laws and regulations in any given area consists of numerous decisions, regulations, and circulars that must be read separately, without a single method to reconstruct them into a rational whole. As a result, entrepreneurs, practitioners in the administrative and judicial system, and the public at large reach their own interpretations of the laws, and how they should be applied. Steps to disseminate legal information more effectively include: establishing a daily Gazette to notify new laws and regulations, and expanding the scope and size of the Berita Negara (State Reports); authorizing official translations of the Commercial Code; publishing court decisions; compiling and publishing rule-making and policy decisions systematically; and improving the sale and distribution of Government publications.

5.12 **The Law Reform Project.** The Government has recognized the need to develop the commercial legal framework. It initiated a major commercial law reform project in 1992, and the recently approved State Policy Guidelines (GBHN) for the next five years place strong emphasis on legal system development. The project is expected to assist in the design and implementation of many of the improvements needed in the company, contract and credit laws (as outlined in Chapter 3) and in the institutional framework of the legal system (as discussed above). Full implementation of the legal reform agenda will necessarily take time; however, the steps recently taken by the Government—the establishment of an Administrative Court, the promulgation of new laws in the financial sector and the preparation of a new draft company law—attest to the urgency and seriousness with which the Government is now taking up this agenda. A welcome feature of the law reform project is the involvement of the legal profession and the private business community.

Framework for Accounting and Auditing

5.13 **Legal Requirements.** To establish an effective system of accounting and auditing, the first step is to incorporate appropriate legal requirements in company law or regulations. Without a legal requirement, it is unlikely that a consistent and comprehensive framework for accounting and auditing will be developed and implemented. The present company law in Indonesia provides simply that adequate financial records be kept.[1] The corporate law provisions need to be made more explicit. They should: spell out the requirements for maintaining proper books of accounts and financial statements; define what constitutes financial statements; require independently audited financial statements and audit opinions for identified classes of companies; define special methods of accounting for important transactions, such as consolidation of subsidiaries and associated companies and joint ventures; designate a body whose members, through examinations and training, are qualified to provide the audit opinion; and require this body to set accounting principles and auditing standards.

5.14 **Institutional Responsibilities.** There is need for a strong body to set and enforce standards, and to enhance the quality and reputation of the accounting profession. The Indonesian Institute of Accountants (IIA) currently has the responsibility for setting standards and operates as an association of

[1] Other laws and regulations also impose accounting requirements. The 1984 tax law requires only that "adequate records" be kept. The capital market supervisory agency, BAPEPAM, requires companies that want to "go public" to provide audited financial statements and subsequently publish them periodically. Bank Indonesia has issued decrees requiring financial institutions to file audited financial statements. The Agency for Control of Finance and Development (BPKP) has the responsibility for ensuring that public enterprises submit audited financial statements to regulating Ministries.

professional accountants; but it has no statutory status and conducts its business on the basis of small subscriptions contributed by interested members who provide voluntary services. It adopted a framework of accounting principles and standards in 1985 and has since prepared several exposure drafts on accounting and auditing standards and a code of ethics, but none has been issued in an official and enforceable way. The Institute does not conduct the State Accountancy Examinations; and, although it does offer some CPA programs, it has not effectively encouraged continuing professional education. As a result of these shortcomings, enterprise financial statements are often not prepared consistently using a generally accepted set of accounting standards; and, even if audited by local accounting firms, such financial statements are often given limited credibility by investors, lenders and government agencies. At present, the IIA does not have the official support or human and financial resources of its own for the effective development of the accountancy framework. A clear strategy needs to be developed and implemented so that, in the medium- to long-run, the IIA can become an effective self-regulated body run by its members through annual subscriptions. With a clear legal requirement for auditing, and designation of only IIA members as qualified to provide the audit opinion, the IIA could be expected to grow and become self-sufficient. In the interim, the development of IIA should be supported through bilateral or multilateral assistance, to enable the IIA to recruit staff, develop accounting, principles and auditing standards, conduct uniform examinations for qualification as "accountant", and promote a program of continuing professional education. Until such time as the IIA becomes stronger, the authority for issuing accounting, auditing and professional standards could be placed with an Accountancy Board in the Ministry of Finance. The respective roles of government and the accounting profession (as represented by the IIA) in developing and issuing accounting standards—in the near term, with a relatively weak professional body, and in the longer term when that body might be stronger—are an important strategic issue for the Government to consider. Also, for the near term, consideration could be give to the adoption of international accounting and auditing standards already codified by the International Federation of Accountants.

5.15 **The Profession.** Current practices for qualifying and licensing of professional accountants are the main factor explaining the limited credibility of audited financial statements in Indonesia. Currently, to become a public accountant requires that one be a graduate in accounting from selected state universities and acquire three years of experience.[2] Local firms of such accountants are authorized by the Ministry of Finance to perform financial statement audits. Unlike other countries (see Box 5.1), Indonesia does not require its accounting graduates to pass an additional, rigorous examination in accounting theory and practice, auditing practice, and commercial law before they are licensed (as CAs or CPAs). Additionally, foreign accounting firms (e.g., any of the Big Six), who establish joint-ventures with local firms, cannot sign audit reports; only the local firm is authorized to do so. These weaknesses not only undermine the credibility of audited financial statements, but they also limit the strength of the IIA membership. The Government needs to review and strengthen its policies, systems and procedures for qualifying, testing and licensing professional accountants. The standards underlying these should be high, even at the outset. For Indonesia to start with lower standards, perhaps to have a larger number of local accountants qualify, would serve only to perpetuate the credibility problem, and probably make it even more difficult to overcome later. Also, high standards would exert a positive demand on the system of accounting education. In the short to medium term, shortfalls in qualified and experienced local accountants could be overcome by allowing international accounting firms to sign audit reports in the name of the international firm, as well as their local partner.

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[2] There is a provision that accounting graduates from other tertiary institutions can also become public accountants, by passing a Board administered examination and acquiring three years of experience, but this route is uncommon.

Box 5.1: Qualifying as a CPA in Thailand and Malaysia

Thailand and Malaysia, two of the more successful growing economies in Asia, have rigorous qualification criteria for Certified Public Accountants (CPAs). These criteria are similar to those in more highly developed countries. In Thailand, to become a CPA and be authorized to sign financial statement audit reports, a candidate must have a university degree in accounting; must pass a national qualifying examination; and have at least 2,000 hours of on-the-job training with a public accounting firm, over a period of two years. In Malaysia, audit reports are signed by full members of the Malaysian Association of CPAs. To become a full member, a candidate must pass examinations in eight foundation subjects, and nine specialized subjects; and have at least three years of experience with an appropriate public accounting firm. For those with a university degree in accounting, certain of the examinations may be waived.

In both countries, an expatriate professional accountant who has qualified in certain other countries (e.g., U.K. and Australia) may practice as a CPA if he or she passes appropriate examinations. For example, in Malaysia that person must pass two examinations, on local taxation and on company law, before becoming qualified to become a member of the Malaysian Association of CPAs, and thus becoming eligible to sign audit reports.

C. Public Enterprise Reform

5.16 The public enterprise (PE) sector in Indonesia consists of more than 180 enterprises[3] across all economic sectors. It represents an estimated 15% of GDP[4], with a book-value of total assets of about Rp.200 trillion and an employment of 1.15 million (1.7% of the labor force) in 1991. The share of PEs in the economy has declined gradually as a result of strong growth in the private sector.[5] With slight variations, the number of PEs remained stable at 184 firms between 1987-92. Most enterprises are in industry (42, or 23% of total), followed by agriculture (35, 19%), finance (30, 16 %), public works (19, 10%), transportation (17, 9%), and ten other sectors (40, 22%). In Indonesia, PEs operate mainly under two legal forms—"Persero" and "Perum". A Persero is a profit-oriented shareholding company with limited liability, in which the State holds all or part of the shares. In line with Government efforts to increase their profit-orientation, PEs increasingly have been converted into Perseros. They account for the vast majority of PEs (160 PEs or 87% of total in 1992, of which 17 are joint-ventures with majority Government ownership). Perums are enterprises with a public utility function, and are wholly owned by the State. There are 20 Perums (11% of total PEs). In addition, there are three special status PEs, including the oil and gas company, Pertamina.

Recent Reforms and Performance

5.17 **Recent Reforms.** Alongside other structural reforms, the second half of the 1980s saw stepped-up efforts to improve the operational and financial performance of PEs. Based on a Presidential

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[3] This number represents enterprises in which the State has a direct majority ownership, including joint-ventures. It *excludes* subsidiaries of PEs (even if the PE holds a majority), and enterprises owned by local governments.

[4] Including other joint-ventures with minority State ownership, subsidiaries, and local government PEs, the PE sector has been estimated to account for about 19% of GDP. PE activities in the oil and gas sector represent an estimated 7.5-8% of GDP.

[5] In the industrial sector, it is estimated that the share of PEs (including joint-ventures with the private sector) fell from about 24% in 1985 to about 18% in 1990.

Decree in 1988, an assessment was made of the financial soundness of each PE and a program developed for their restructuring. The proposed measures varied from a change of legal status (e.g., from Perum to Persero), mergers, management contracts, joint-ventures, public share issues, to liquidations. The Government also introduced a system to monitor enterprise financial performance annually, based on an evaluation of the firm's profitability, liquidity and solvency. A step toward greater managerial autonomy was the adoption in 1989 of a system of multi-year corporate plans and annual work programs/budgets as the main instruments for government supervision of PEs. Also, salaries of PE managers and directors were linked to enterprise financial performance. Last year, the system of PE performance monitoring was further refined with the incorporation of some non-financial performance indicators; financial performance indicators now account for 70% of enterprise evaluation, while technical indicators tailored to each subsector or enterprise make up the balance.

5.18 The PE restructuring program introduced in 1989 was ambitious; the aim was to implement the program largely within two years. Its implementation, however, has not met those expectations. Shortfalls are particularly noteworthy in divestiture. While the plan had been for 52 public share issues by PEs and 16 joint-ventures, only one has been realized in each case. Also, only one PE has been fully liquidated; several other liquidations took the form of mergers. Most progress was made in the conversion of PEs into Persero legal status, where achievements (23 PEs) have exceeded the plan (15). During 1989-91, six PEs were sold fully or in major part to the private sector or to PE employees. This was offset, however, by the formation of nine new PEs during the period. Similarly, the introduction of corporate plans has been slow, while their quality in many cases has lacked necessary analysis and strategic orientation and their links to annual programs have remained weak.

5.19 **Recent Financial Performance.** In terms of profitability, overall PE performance has been relatively stable over the last five years. Overall return on assets averaged 4-4.5% per year during 1987-92 (Table 5.1). Excluding State banks and Pertamina—which together account for 66% of PE assets,

Table 5.1: Overview of Public Enterprise Financial Performance, 1987-91

	1987	*1988*	*1989*	*1990*	*1991*
All Public Enterprises: [a]					
Pre-tax-profit/total assets (%)	4.1	4.2	4.5	4.6	3.9
Pre-tax profit/operating assets (%)	4.5	4.6	4.8	4.9	4.2
Pre-tax profit/equity (%)	13.7	14.6	16.1	18.0	14.0
Pre-tax-profit/sales (%)	12.1	12.9	13.8	13.6	12.5
Number of lossmakers	43	35	28	21	24
Total losses/total assets (%)	0.5	0.2	0.1	0.1	0.1
Budgetary impact (% of GDP) [b]	-2.0	-0.9	-0.7	0.5	-2.8
PE share of bank credit (%)	25	21	18	12	13
PE share of state bank credit (%)	34	30	28	21	23
Excl. Banks and Pertamina:					
Pre-tax profit/total assets (%)	2.0	3.8	5.2	5.7	5.8
Pre-tax profit/operating assets	2.6	4.8	6.1	6.7	7.0
Pre-tax profit/equity (%)	4.2	7.9	10.2	11.5	10.8
Pre-tax profit/sales (%)	5.3	9.6	12.4	13.7	13.5
Total debt/total assets (%)	50.8	51.5	49.4	50.4	47.1
Memo item:					
Number of enterprises	183	187	187	186	186

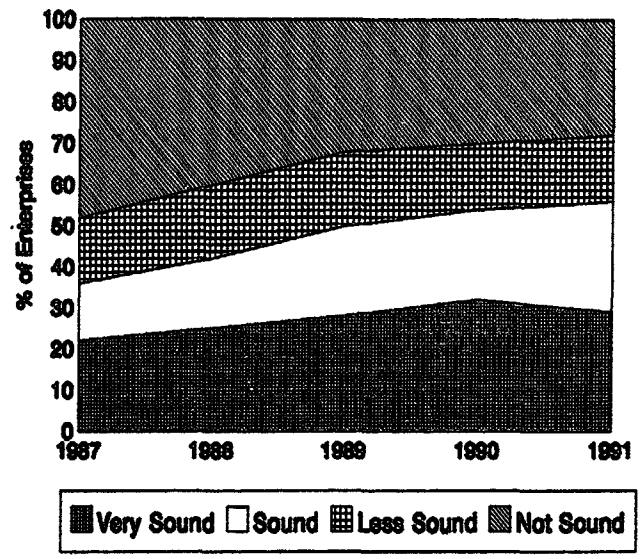
[a] PEs with majority State ownership, excl. subsidiaries and local government enterprises.
[b] See footnote 7.

Sources: Ministry of Finance and BI.

51% of turnover and 36% of profits—PE performance improved during the period, with the average return on assets increasing from 2.0% in 1987 to 5.8% in 1991. Although the return on non-financial, non-oil PE assets has improved, it remains considerably lower than the opportunity cost of capital in the economy (as reflected in real interest rates of over 10%) or the average return on assets in the private sector.

5.20 The Government classifies PEs by their level of financial soundness, based on an assessment of profitability (profits before tax/operating assets at book-value), liquidity (current assets/current liabilities), and solvency (total assets/total liabilities).[6] According to this assessment, the number of sound and very sound enterprises has been increasing steadily, rising from 66 PEs in 1987 to 105 PEs in 1991 (Figure 5.1). At the same time, the number of unsound PEs fell from 88 to 52 (the category "less sound" remained steady at 29 PEs). While this constitutes important progress, it also indicates that 28% of PEs were still considered unsound. In 1991, 24 PEs (13% of total) reported financial losses, down from 43 in 1987. The losses were concentrated in industry (65% of total), particularly in the "strategic" industries (ten capital-intensive industrial enterprises) which accounted for almost half of all PE losses.

Figure 5.1: Financial Soundness of Public Enterprises



5.21 The fiscal burden of PEs[7] also declined in the latter half of the 1980s, reflecting the Government's policy goal that PEs finance their operations and investments increasingly from internal sources or financial markets, rather than from the Budget. The PE fiscal impact improved from a deficit of about 6% in 1984 to a small surplus in 1990. Part of this improvement, however, was reversed in 1991. The share of PEs in total bank credit fell from about 30% in 1985 to 13% in 1991. The PE share of State bank credit fell from 41% to 23% during the same period. These reduced shares reflect the stronger growth of the private sector and its financing needs.

Current Issues

5.22 The Government's reform efforts to date have focused on improving PE efficiency and productivity, rather than on a change in ownership. The reforms—together with the deregulation policies

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[6] The classification scheme uses a scoring system with weights of 75% for profitability and 12.5% each for liquidity and solvency, and classifies PEs into four groups: very sound, sound, less sound, and unsound. To reflect technical differences among subsectors, additional, non-financial performance indicators were introduced from 1993, with a weight of 30% of the total score. The compensation of PE managers is linked to the above performance assessment.

[7] The fiscal impact of PEs is calculated as the sum of profit transfers and debt service to government, less government capital participation, subsidies, and "two-step loan" disbursements. Tax receipts from PEs are excluded, assuming that, if private, the enterprises would make similar tax payments.

to increase competition in the economy more generally—have contributed to a gradual improvement in PE performance. However, as noted, PE performance remains below potential and weak when compared to that of the private sector. With the development of private sector capacities, the changing role of the public sector, and the general drive to improve efficiency in the economy, it is appropriate to revisit the role of PEs and review the policy framework for their operation. Some important issues affecting the future role and operations of PEs are outlined below.

5.23 **Entry and Competition.** Public enterprises continue to dominate several activities. In many cases, where the markets are potentially competitive, this acts to stifle competition and impede entry by private firms, thereby limiting incentives for efficiency improvement. Industries with higher public sector involvement have significantly higher concentration ratios (as measured by the four-firm concentration ratio).[8] Many of the remaining NTBs are in activities where PEs play an important role (e.g., steel, engineering, paper, and food processing); these barriers restrict competition from imports. In some areas, price controls deter entry by private firms. An example is the production of urea fertilizers where prices are kept below the international level, which inhibits private participation in an activity where Indonesia is potentially competitive. A key issue in further improving the performance of PEs is to expose them to greater competition, domestic and external.

5.24 **Non-commercial Objectives.** Non-commercial activities assigned to PEs impair their capacity to improve efficiency, and undermine the accountability of PE managers. Examples include the use of PEs to stabilize or subsidize prices, the use of "strategic" PEs to develop advanced technology, and the support PEs are required to provide to small firms and cooperatives. As discussed in Chapter 3, price controls and rigidities (e.g., controls on fertilizer and public utility pricing) contribute to serious inefficiencies in resource use. The "strategic" PEs have ambitious strategies for increasing the technological content of their operations and for diffusing sophisticated technologies across the industrial sector. Economic benefits of these firms are open to considerable doubt, however. Financially, they account for a large part of PE losses (para. 5.20). Many of the firms have been granted protected markets (including import protection and Government purchases) and provided with substantial Government financial support. Also, their technological links with other firms seem very limited so far. The small business support scheme, for which PEs are expected to allocate 1-5% of their after-tax profits, requires PEs to devote staff and financial resources outside their main sphere of activities, and is unlikely to provide the most efficient mechanism to support small firms. In each of these cases, the Government needs to consider whether the PEs in question provide the most suitable vehicles for attaining the indicated non-commercial objectives, or whether other policy instruments are more appropriate (e.g., targeted and transparent price subsidies on goods and services, development of technology information and support centres, and specialized small business support and financing programs).

5.25 **Regulation and Oversight.** Despite the recent moves toward greater decentralization of decision making, PEs continue to be governed by regulations that constrain their managerial and operational flexibility and place them at a disadvantage compared to private firms. These include: decision-making procedures that continue to involve Boards of Commissioners (BOCs) or the periodic shareholder meetings in non-strategic matters (e.g., obtaining short- or medium-term loans, disposal of obsolete assets, entering into licensing agreements); frequent and detailed reporting requirements to both the Ministry of Finance (MOF) and the sector ministries; and time-consuming procedures for procurement

[8] According to the 1989 manufacturing census, the average (unweighted) four-firm concentration ratio in the nine manufacturing subsectors was 32.5% of the value added. In the two subsectors with the highest PE presence (as % of value added), the concentration ratio was 61.1%; the ratio dropped to 12.8% for the two subsectors with the lowest PE presence.

and for utilizing foreign currency financing. There are also indications of overstaffing in PEs, which may partly be caused by difficulties in laying off excess staff. With regard to oversight, there is a possible conflict of interest between the dual roles of sector ministries in supervising sector PEs and regulating all enterprise activity in their sectors. This is compounded by the direct involvement of ministry staff in BOCs. The functioning of BOCs in turn could be improved by strengthening their strategic—against supervisory/control—role, and opening up membership beyond the limited circle of civil servants and military personnel. The recently introduced system of corporate plans, if effectively utilized, could help develop such strategic orientation.

5.26 **Conditions for Divestiture.** Unlike in many other countries, privatization has not been used as an active tool of PE reform in Indonesia.[9] So far only one large PE (a cement company) has issued public shares, while a few smaller PEs have been sold to their employees or the private sector. International experience shows that a number of conditions need to be met for successful privatization. A competitive environment is necessary to realize the benefits of privatizing PEs that produce private goods or services. Where PE activities are still not exposed to market competition (through trade barriers, entry restrictions, etc.), privatization needs to be underpinned by a removal of such barriers to competition, to avoid converting public into private monopolies. In privatizing PEs operating as public monopolies—in areas such as power, telecommunications, water supply—an appropriate legal and regulatory system with supporting institutions must be in place to protect the public interest. The transparency of procedures—for private entry, valuation, bidding—is crucial. While efforts are under way to develop such regulatory frameworks in several sectors (e.g., power and telecommunications), these will take some time. Also relevant is the capacity of Indonesian capital markets which may not be sufficiently developed yet to absorb a major program of PE divestiture. Securities market regulations are still incomplete, including regulations to protect minority shareholders. Careful attention to these conditions will be needed as privatization becomes a more important element of PE reform in Indonesia in the years ahead.

Directions for Future Reform

5.27 Further PE reform should continue to emphasize improving enterprise efficiency and productivity. This should be complemented by a gradual withdrawal of the State from directly productive activities. Leaving these activities to the private sector would be consistent with the increased capacities and demonstrated higher efficiency of private enterprise, and would allow the public sector to focus its limited financial and managerial capacities on its own areas of comparative advantage, i.e., the provision of public goods. In directly productive activities, the Government's role would switch increasingly from direct management of production to providing an appropriate policy and regulatory environment. A possible long-term scenario would be a PE sector which is considerably reduced in scope, involving a "core" set of enterprises providing public goods in non-competitive markets or considered "essential" for strategic reasons (see Box 5.2 for some international evidence on the benefits of privatization). The foregoing suggests two main elements of the PE reform agenda: further commercialization of existing PEs; and a program for gradual divestiture of non-core PEs.

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[9] During 1980-91, other developing countries privatized or liquidated more than 2,000 PEs. Latin America and the former socialist economies of Eastern Europe account for close to 40% each of these sales. In some developing countries, notably in Latin America, the size of the PE sector has been substantially reduced. Chile sold or liquidated 75% of its PEs, Mexico 37%, Jamaica 14%, and Argentina 5%. Other examples are Guinea (55%), Togo (38%), Nigeria (26%), and Tunisia (12%). In Asia, more than 120 PEs were sold or liquidated during 1980-91.

Box 5.2: Benefits of Privatization: Some International Findings

Recent World Bank research on the economic benefits of the privatization of twelve firms in Chile, Malaysia, Mexico, and the United Kingdom provides systematic evidence concerning the effects of privatization on enterprise efficiency, investment, and consumer welfare. The cases cover telecommunications (three firms), airlines (four firms), electricity (two firms), a lottery company, a port, and a transport company. In eleven of the twelve cases, divestiture improved domestic (and world) welfare. The welfare gains were substantial; estimated perpetual annual benefits to society averaged 26% of the predivestiture annual sales of the firms. The improvements are attributable to several changes brought about by divestiture:

- The most significant change was a dramatic increase in investment. A striking example was Chile, where a local telecommunications company doubled its capacity in the five years following divestiture.
- Nine of the twelve firms showed improved productivity, resulting from improved incentives, better labour-management relations, a reduced work force, and internal reorganization.
- Output prices did not change in five cases, thanks to competition and effective regulation. Where prices did change, they enhanced welfare by moving toward levels that more closely reflected scarcity values.
- Output was diversified in many cases into activities that offered economies of scale.

Source: *The Welfare Consequences of Selling Public Enterprises: Case Studies from Chile, Malaysia, Mexico and the UK*, by Galal, Jones, Tandon and Vogelsang (World Bank).

5.28 **Further Commercialization of Public Enterprises.** Increasing the efficiency and productivity of public enterprises calls for further commercializing their operations. Reforms need to focus on three area:

- ***Competition.*** Of foremost importance is the reduction of barriers to competition in PE markets, including lowering import barriers (tariff and non-tariff) and dismantling domestic impediments to private entry and competition (investment restrictions and price controls). To place PEs on a competitive footing, non-commercial objectives assigned to them need to be reviewed, assessing the costs imposed on the firms and whether PEs are the most appropriate vehicles for achieving such objectives.
- ***Autonomy and Accountability.*** Increased operational and financial autonomy, within a framework of improved accountability, is an important spur to efficiency. Regulations applying to PE operations (e.g., procurement, use of assets, reporting requirements, external financing) need to be reviewed to determine what revisions are called for to improve the flexibility of PE decision-making. The process of upgrading the legal status of PEs, including public utilities, into the more autonomous Perseros, with related organizational restructuring, should continue. To bolster accountability, the roles of MOF and sector ministries in providing PE oversight need to be reviewed, reducing fragmentation and duplication of roles and considering focusing the PE ownership function in a single

institution (MOF). The recent establishment of a separate Directorate General for PE oversight in MOF is a step in the right direction. The Boards of Commissioners of PEs could be further developed into strategic, rather than supervisory/control, organs. Also important is to improve the quality and application of PE corporate plans and work programs (e.g., by improving business analysis, better linking multiyear corporate plans to annual programs, and emphasizing systematic follow-up).

- ***Financial Discipline.*** To strengthen incentives for internal cash generation, financial support from the Government in the form of equity or subsidized loans should be tightened. As much as possible, financing should be provided on market terms, and support from non-Budget sources should be limited.

5.29 **Gradual Divestiture of "Non-Core" Enterprises.** A divestment program could start with the sale of smaller enterprises operating in competitive markets (e.g., textiles, paper, glass). PEs in financial difficulties could also be sold or liquidated early on. Larger PEs could initially develop programs to divest non-essential assets, and involve private participation through joint-ventures. The following are some important elements of a divestiture program:

- Classify PEs by different criteria that would help to establish whether, and when, they should be divested; these could include: the nature of PE markets (natural monopoly, potentially competitive, currently competitive); the enterprise financial condition; the potential for breaking up large PEs into viable and non-viable units, competitive and non-competitive activities, and identification of peripheral assets that could be divested as separate concerns; and the essential or strategic nature of the PE, based on a clear justification for any special status.[10]

- Decide on the divestment methods by types of PEs. These should be transparent and based on competitive bidding procedures where possible. They should also involve mechanisms to draw in broader segments of the population (e.g., employee shares, mutual funds) for equity considerations, and to address concerns about special interest groups. Supportive regulations on the protection of minority shareholders need to be developed.

- Decide on the scope of government financial support prior to PE divestiture. This could include support for legal, organizational or management restructuring, financial restructuring, and assistance in retrenchment of excess labor. Preferably, it should exclude financing of physical enterprise restructuring prior to divestment.

- To facilitate private participation in public utilities, develop the necessary regulatory and institutional framework to protect the public interest.

D. Public Administration and Civil Service Reform

5.30 Besides commercializing and privatizing public enterprises, institutions within the Government need to be strengthened and streamlined to deal effectively with the major structural changes underway in the economy. Efficient Government is essential in ensuring not only that the Indonesian people get the full benefit of public services, but also in providing an environment that induces private

[10] It should be noted that many PEs, which earlier had been classified as essential or strategic by other countries (including airlines, petrochemical plants, cement, steel), are now being opened up for divestiture.

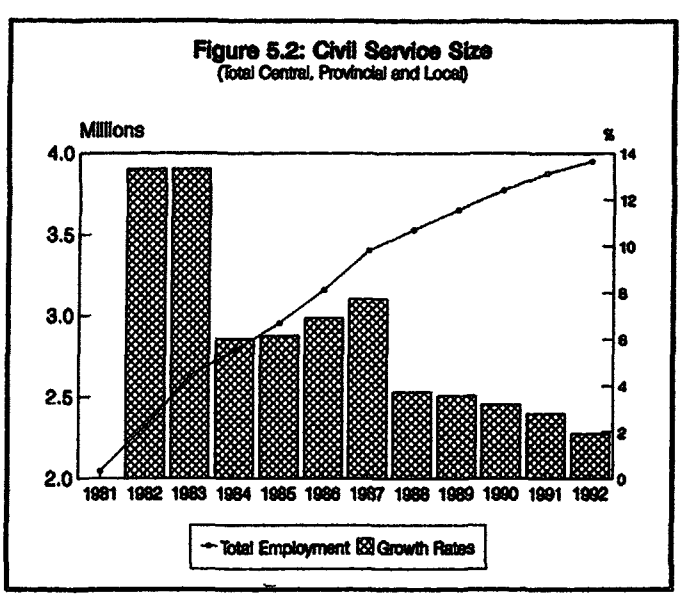
businesses to be efficient, providing goods to domestic consumers and export markets at competitive prices. Effective, stable government policies and efficient public services are also essential for Indonesia to remain an attractive base for both Indonesian and foreign investors.

5.31 A starting point in this process of institutional reform is identifying the ***changes in the functions of government*** and their implications for administrative structures and the civil service. Broadly, the extensive deregulation and debureaucratization undertaken over the past decade imply that a range of direct control and licensing functions can be phased out, shifting the emphasis toward policy analysis and formulation, facilitation, monitoring and coordinating functions. Next, there is a need to analyze changes in ***administrative structures*** that would enable public agencies to fulfill their evolving functions more effectively, including privatizing activities that no longer need to be in the public domain and developing effective ways to decentralize activities to local governments. Changing functions also have implications for ***civil service size, skill mix, compensation and attitudes.***

5.32 The general directions of change in the economy suggest the need for a civil service that is leaner, more focused on key functions, more professional and technically skilled, and transparent, supportive and fair in dealing with clients. As President Soeharto noted in this year's Budget Speech, without a major effort to improve the effectiveness of public institutions, an important source of a "high-cost economy" will persist, resulting in higher costs to both consumers and businesses and slower growth.[11] This section discusses recent trends in public sector employment, reviews current administrative reforms and suggests areas for intensifying the reforms.

Recent Trends in Civil Service

5.33 **Size.** Over the past decade, the civil service grew significantly, averaging over 6% p.a. However, the growth decelerated sharply to less than 3% after 1987 (Figure 5.2). Although the deceleration is welcome, the increased size of the civil service has driven up its share in total government expenditures (excluding debt service) from about 27% in the early 1980s to about 37% in 1991. In interpreting these trends, it is important to note that public school teachers, numbering around 2 million in 1990, are included in the civil service. However, the broad trends noted persist even if teachers are excluded. Overall then, while there has been a deceleration in the growth of the civil service, there is no evidence that deregulation is leading to substantial retrenchment or redeployment. Employment data by ministry show that even in sectors undergoing major deregulation, such as industry and trade, civil service size has continued to increase, albeit at a slower rate.



[11] "...we have to continue and intensify institutional reform, including the improvement of regulations and the enhancement of the capacity and efficiency of all state apparatuses and institutions that enforce these regulations.... Essential elements in institutional reform are deregulation and debureaucratization measures that we must continue to implement aimed at removing once and for all sources of high-cost economy." President Soeharto, 1992/93 Budget Speech, January 7, 1993.

5.34 **Skill Mix.** There has been a significant increase in recruitment of more educated staff. Between 1988 and 1992, while total civil service employment grew by 12%, the employment of university graduates rose by 48%. During the same period, the number of employees that had only primary education dropped by 9%, while the number of junior high school graduates was virtually stagnant. The ratio of high school graduates to university graduates in the civil service fell from 7.0 in 1984 to 3.9 in 1992. This reflects mandated changes in teacher qualifications as well as a possible trend underway to develop a better educated civil service, consistent with the emerging needs of the economy.

5.35 **Compensation.** Trends in civil service compensation, however, are much less encouraging. Average real compensation per civil servant has been stagnant, even falling slightly between 1984/85 and 1990/91. Moreover, during this period of rapid private sector growth, civil service take home pay fell sharply relative to private sector salaries. Although substantial salary increases over the past two years will result in some improvement, they will be insufficient to offset the loss in the competitiveness of civil service salaries. These trends in compensation are inconsistent with building a more highly-trained, professional service. Without higher pay, it will be impossible to recruit and retain the high quality personnel needed to perform the increasingly complex government functions outlined above. Staff who remain in the service may be forced to find other ways to supplement their income, many of which will add to the high cost economy. Taking on multiple responsibilities and moonlighting will become increasingly common, leading to a neglect of primary tasks. The more skilled and qualified staff will tend to leave the public service just at a time when their services are critically needed. Reasonable and competitive salaries are essential to build the kind of civil service Indonesia will need in the years ahead. Such salaries, however, also need to be consistent with the overall fiscal resources, and the loss in civil service competitiveness in the second half of the 1980s reflects this reality. The decline in civil service pay relative to private sector salaries reflects in part the three-year freeze placed on civil service salaries as a necessary part of the Government's adjustment effort in the mid-1980s. Despite this, as noted above, the total civil service compensation bill now absorbs a much larger share of budget expenditures (excluding debt) than it did before. This illustrates the dilemma faced by the Government in trying to develop a more highly trained service within the available resources. Clearly, the only way to resolve the dilemma is to deal with the size of the civil service as well as its compensation, taking an integrated view of the emerging new functions of government, civil service size and compensation.

5.36 **Decentralization.** There has been a gradual trend toward deconcentration over the past decade. Between 1981-91, the proportion of civil servants posted in Jakarta declined slightly from 10.9% to 9.4% of the total, while the proportion of civil servants posted off-Java rose from 39.7% to 47.3%. This trend results primarily from assigning central staff to provincial and district offices, including secondment to local governments. There has been little change in the share of locally-recruited staff in the total civil service.

Ongoing Reforms

5.37 The Government has recognized the need to modernize public administration and adapt it to changing needs. The leading agency for administrative reform is MENPAN, the State Ministry for the Utilization of State Apparatus. MENPAN's terms of reference include eight areas for reform: (a) improved internal management control; (b) application of job analysis; (c) development of functional positions; (d) improved quality of leaders; (e) simplification of civil service procedures; (f) design of management information systems; (g) improved management of public services; and (h) augmentation of regional autonomy. So far, MENPAN's main focus has been on job analysis and development of functional positions (items b and c). This work is based on detailed micro-level analysis in cooperation with the relevant agencies. Job analysis has been carried out in over two-thirds of the ministries, aimed at better job classification and skill identification. Identifying functional positions (as opposed to "structural" or

managerial positions) is intended to improve the use of specialist staff by creating career paths, promotion opportunities and additional compensation (through a "functional allowance") based on a performance scoring system applied to the specific job. These efforts are producing useful results. Job analysis provides an aid to better personnel management, including work planning and performance evaluation. Specifying functional positions can enable the civil service to attract and retain the kinds of specialist staff it will increasingly need. Already some functional staff categories earn more than those holding structural positions at the same level. MENPAN has also used job analysis to help limit the size of the civil service by strengthening the basis for the exercise of control over new positions and recruitment.

5.38 These approaches, however, have limitations resulting from their focus on micro analysis. They tend to take the existing functions of ministries/agencies and the existing jobs as a basis for analysis. It is difficult to identify through such approaches either the emerging new roles and functions of government or those roles that need to be discontinued. This limits the scope to determine the changes needed in organizational structures or to identify staff positions that have become redundant or obsolete and can be phased out through retrenchment, redeployment or attrition. In sum, while contributing to better personnel management at the micro level, these approaches are unequal to the macro task of creating a better fit between economic policy reforms and the structure and staffing of government required to reinforce and sustain those reforms.

5.39 In addition to these main reform efforts, there are several innovations and pilot experiments being made that could help develop new approaches to limit civil service size, improve public services and augment the accountability and incentives of civil servants. In the health sector, a major initiative is hiring new doctors and other medical staff on a contract basis. Such staff will be recruited only for a period of three years, with an option for them to leave the service for the private sector. There is no guarantee that all doctors will be absorbed into the civil service as was the case before. Interesting experiments in the decentralized provision and financing of health services have also been initiated. The concept of self-financing is being applied in selected urban hospitals with a provision for a part of the revenues to be used to improve staff benefits, an innovative approach to link performance and incentives. This approach is being extended to higher education and public works on a selective basis. Increased use is being made of contracting out services, e.g., in road maintenance and land surveying. Increased decentralization has been attempted by the Transport Ministry which has left the management of local transport largely to the regional governments. There are thus several initiatives and experiments from which the Government might learn new lessons for further, more substantial reforms.

Intensifying Administrative Reform

5.40 While useful, administrative reform measures of the kind reviewed above would be more effective if rooted in a broader reform strategy based on an assessment of the implications of the changing role of government, as a result of deregulation and structural change, for administrative structures and the size, skill mix and compensation of the civil service. Such a strategy should provide a coherent framework for the various reform elements, in the context of financial and human resource constraints. In particular, the functions of government, the size and structure of the administrative service and compensation need to be analyzed in an integrated fashion. For example, it is difficult to see how the Government can provide competitive compensation within the available resources unless the size of the civil service is contained and, over time, reduced. Likewise, it is difficult to see how this can be done without a careful redefinition of public sector functions.

5.41 Developing such a broad strategy requires a major effort. The institutional and attitudinal changes required are complex and multi-dimensional, including structure, skill mix, incentives, training

and reorientation, personnel practices and career patterns. A strategic framework is needed to identify and design the key steps required and the sequence in which they should be taken. The outcome should be a realistic action plan with a strong consensus and high-level support behind it. Governments instituting administrative reforms have used different mechanisms to diagnose the problems and to generate new reform ideas. Singapore and Malaysia, for example, have used internal task forces and consultants (see Box 5.3 on Singapore's reforms). Commonwealth countries typically set up commissions consisting of senior officials and respected outsiders. In all cases, active involvement and support from top leadership is evident.

Box 5.3: Administrative Reform in Singapore

In 1981, Prime Minister Lee Kuan Yew asked the Management Services Department (MSD) of the Government to review the distribution of government functions and to propose a streamlined structure. Singapore's leaders believed that both institutional and attitudinal changes in the civil service were necessary to make it an effective instrument of development as the country's economic policies and competitive environment changed. The MSD team's first recommendation was to reduce the portfolio mix in ministries that carried unrelated functions. For example, the Ministry of Social Affairs had three functions that were inconsistent with its mandate: fire and ambulance services, the licensing of moneylenders, and the licensing of hotels. These functions were later transferred to other ministries. MSD's second recommendation was that closely related functions from various ministries should be transferred to one ministry to avoid duplication of work, overlapping coverage, and improper performance of related functions. Responsibilities for the Singapore Port Authority and the Pollution Unit, for example, were transferred from the Prime Minister's Office to the Ministry of Communications and the Ministry of the Environment, respectively. Another proposal was to form a Ministry of Community Development to consolidate the related functions of the former Ministry of Culture and the former Ministry of Social Affairs. In 1982, a Committee on Reorganization of Ministries was set up to review the MSD report. The Prime Minister accepted and implemented the Committee's recommendations.

In 1986, the Government of Singapore initiated a staff reduction exercise to trim the civil service by 10% over five years. This objective was attainable in view of the rationalization of the ministerial functions and activities, computerization, privatization and contracting out of some public services that had already been completed. Every ministry was asked to form scrutiny teams to reduce staff and to improve staff utilization. Ministry activities were examined to see whether they were necessary in the first place and, if so, whether they could be performed at lower costs and with fewer staff. A major outcome of the scrutiny exercise was the Government's adoption of a zero staff growth policy in 1988.

5.42 It would be logical to strengthen MENPAN to play a more active leadership role in administrative reform in Indonesia. For this, MENPAN would need to develop the capability to identify and assess the factors that necessitate major changes in the way government functions. In coordination with other concerned agencies, MENPAN would need to examine systematically the macro trends in the management of government (e.g., structural reforms that necessitate changes in the role and functions of government, trends in civil service size and skill mix, and the impact of personnel practices including compensation on staff performance and behavior). Based on such analyses, MENPAN may be able to provide the Government with an agenda for reform that is both consistent and feasible. It is equally important that MENPAN act as the inhouse catalyst in the Government and advise the President on the institutional mechanisms (e.g., national commissions with internal and external experts, interministerial task forces, pilot tests of innovative reform ideas, etc.) that could be used to generate creative options and action plans for consideration by the Government. High-level involvement and support will be

essential prerequisites of any substantive public administrative reform initiative. Some of the main dimensions of the reform agenda are outlined below.

5.43 There has been no comprehensive review of the government organizational structure since the early years of the New Order Government. Given the structural reforms and transformations anticipated and already underway in the economy, there is a case to reexamine the primary tasks of ministries/agencies and the distribution of functions within them. The government's changing functions will need to be reflected in ***organization and structure***. Special attention needs to be given to ministries whose functions have changed or are expected to change significantly: examples are Industry and Trade (as a result of deregulation) and Public Works (as a result of decentralization). In some sectors, emerging issues call for new organizational approaches: examples are the implications of second-generation issues in health (quality of services, increased private participation, environmental health) for the primarily disease-control-oriented vertical organizational structure of the Ministry of Health, and the need for an area- rather than sector-based approach to water resource management in critical watersheds. Within several agencies, divisions dealing with policy analysis and monitoring of policy implementation will need to be strengthened while those dealing with obsolete functions will need to be phased out. Managing retrenchment by redeployment and attrition will be an important part of this process.

5.44 ***Decentralization*** is an important element of the reform of the administrative structure. Three aspects of decentralization that deserve special attention are: increasing local autonomy through additional sources of revenue; upgrading local capabilities through better training and the placement of competent staff at the local level; and exploring the feasibility of a phased approach to decentralization whereby local governments with greater capabilities are progressively given more autonomy than others.[12] In this context, a career development plan for key categories of civil servants that requires them to spend a minimum number of years at the local level as part of their career development is one way to ensure that talented staff are available at local levels. They can provide leadership and experience to local staff that they might never receive otherwise. When they get back to the center, they would bring with them a better understanding of the problems at the grassroots level. Several countries, for example, India and Pakistan, have adopted this practice. In Indonesia, experiments along these lines are now being made in some ministries, including Transport, Home Affairs and Education.

5.45 Once new functions and appropriate organizational structures to deliver them are mapped out, the issue of ***staff compensation and incentive systems*** needs to be addressed. Any revision of compensation packages should be done in conjunction with a rationalization of ***civil service size***, ***skill mix*** and ***task allocation***, and a performance-oriented promotion and incentive policy. MENPAN and BAKN (the Civil Service Agency) have important and difficult roles in laying down the norms to be observed and to ensure their implementation. A major challenge is to institutionalize the Government's approach to the review of compensation issues and to establish rational, fair guidelines in personnel management. A priority here is to attract and retain skilled staff at the entry level and to create a suitable, professional work environment for them. Compensation reform should be underpinned by budgetary reform to eliminate fragmentation and introduce greater transparency in the funding of compensation.

5.46 The agenda for change outlined above is vast and will evidently be difficult to implement all at once. The approach should be to assess the priority of the items on the agenda and to decide on a sequence of reforms within the broad framework of a long-term vision for change. For example, priority may have to be given to strengthening certain selected functions of government instead of addressing the entire gamut of functions. Similarly, some ministries/agencies may be more important or

[12] Issues relating to decentralization are discussed more fully in the next section.

readier than others for the rationalization of size and structure. Other countries such as Korea and Malaysia have followed such an approach. In Korea, reforms were first introduced in key agencies such as the Economic Planning Board, the Ministry of Finance and the Ministry of Commerce. In Malaysia, the initial beneficiaries of reform were the Cabinet Secretariat, Economic Planning Unit, Federal Establishments Office, and the Treasury. Indonesia itself has examples of agencies (for example BKKBN, the family planning agency) that have adapted their structures, skills and staff incentives to new needs, developing into highly effective and innovative institutions. A selective approach has the merit of taking up challenges consistent with implementation capacity and of creating opportunities to learn from experience so as to improve the reform process over time.

E. Fiscal Decentralization

5.47 As noted above, an important aspect of public institutional reform in line with the changing role of government in Indonesia is to make local governments shoulder greater responsibilities in the provision of public services. A key element of this effort is the reform of inter-governmental fiscal relations, involving the decentralization of government expenditure and revenue authority. Fiscal decentralization can contribute to more efficient provision of local services by allowing a better matching of expenditures with local priorities and preferences. Accountability is promoted through a clearer and closer linkage of the benefits of local services with their costs. These considerations are especially relevant in a large and diverse country such as Indonesia. Increased local fiscal autonomy could also be instrumental in mobilizing more revenues from local sources, and thus could contribute to improving the country's overall fiscal position. Both the need and opportunities for decentralization tend to increase with economic development. Devolution of expenditure responsibilities to local governments tends to become increasingly necessary as the expansion of public services strains the financial and institutional capacities of the central government. Opportunities for decentralization expand with growth in local institutional capacities. The learning involved in shouldering increased responsibilities itself contributes to the development of local institutions. Increasing recognition of the benefits of an appropriate assignment of fiscal responsibilities to local governments is reflected in a recent rash of national commissions and studies on the reform of central-local fiscal relations (examples are recent studies on Argentina, Brazil, China, Colombia, Hungary and Russia). In Indonesia itself, the Government has been following a policy of gradual fiscal decentralization, a policy recently reaffirmed in the President's 1992 Budget Speech and reflected in an important new regulation on regional autonomy issued in 1992 (PP45).

5.48 Issues in reforming central-local fiscal relations can be classified into five areas: appropriate assignment of expenditure responsibilities between the central and local governments[13]; increasing local government revenues, bringing them closer in line with local expenditure responsibilities; establishing an appropriate system of transfers and loan finance to bridge the gap between local expenditures and revenues; adapting the framework for planning, budgeting and monitoring; and enhancing local government institutional capacities. Fiscal decentralization in Indonesia faces challenges in all these respects: the degree of centralization of expenditure responsibilities is relatively high; local governments depend heavily on financial support from the center, being able to finance only a small fraction of their spending from own revenues; the structure of central financial support could be improved to align it better with efficiency and equity objectives; the planning and budgeting system needs to allow greater scope for local decision-making, while arrangements for monitoring local operations need to be made more effective; and local government institutional capacities in general need to be enhanced. The Government

[13] Unless specifically indicated otherwise, "local" governments in this discussion are defined to include all sub-national level governments, which in Indonesia include: 27 provincial governments (Level I); 295 districts (Level II); 3,837 sub-districts (third level); and some 65,000 urban and rural villages.

has been taking steps to address some of these issues. A phased approach to decentralization is appropriate, as it allows time for the build-up of requisite local capacities, but needs to be underpinned by a longer-term strategic overview of needed reforms and linkages among them in order to avoid piecemeal, uncoordinated efforts.

Assignment of Expenditure Responsibilities

5.49 Over the years, the Indonesian Government has assigned increased responsibilities to local governments in the provision of public services. The 1987 Government policy statement on urban development declared the provision of urban infrastructure a largely local responsibility. Where service provision is a shared central and local responsibility, attempts have been made to clarify roles, as through regulations on health services and public works issued in 1987. Nonetheless, overall, the distribution of responsibilities for public service provision remains highly centralized in Indonesia. An indicator of this is the share of central government in total government expenditure in Indonesia, which is high by international standards (Table 5.2). In Indonesia, in 1990/91, 78% of total government expenditure was undertaken directly by the center, and another about 15% was effectively controlled by the center through the conditionality of its transfers to local governments. In contrast, in China for example, which is also a unitary state, direct spending by the center accounts for less than 40% of total government spending. Also, notwithstanding past efforts by the Indonesian Government, the distribution of responsibilities remains less than clear for many services, with the result that *de facto* distribution of expenditure responsibilities often diverges substantially from *de jure* distribution. This remains the case with some urban services, while much of social service provision continues to be characterized by fairly complex joint responsibility arrangements.

Table 5.2: Central-Local Fiscal Relations: Some International Comparisons [a]
(percent)

	Sub-national govt. share in		*Sub-national govt. revenue/ sub-national govt. expenditure*
	Total govt. expenditure	*Total govt. revenue*	
Indonesia	**22**	**7**	**30**
China	64	64	100
Korea	38	18	48
India	54	35	60
Argentina	37	35	65
Brazil	37	22	76
Colombia	32	18	56

[a] The indicators are for 1990/91 for Indonesia, for 1988 for China, and are long-term averages (1974-86) for the other countries.

Source: Indonesia: Ministry of Finance; China: *Intergovernmental Fiscal Relations in China*, R. Bahl and C. Wallich, World Bank Policy Research Paper No. 863, February 1992; and for the other countries: *World Development Report*, 1988.

5.50 Efficient provision of local public services, such as basic health and education, local transport, urban water and sanitation—calls for the responsibility for these services to be vested as much as possible in local governments (reasons include closer attention and responsiveness to local needs and preferences, greater accountability of service providers, elimination of multiple administrative layers, inter-jurisdictional competition and innovation). An important condition for this is that local governments possess requisite institutional capacities. Spatial externalities—spillout of benefits/costs of services provided by one local jurisdiction to others—which could lead local authorities to under/over provide these services can be addressed through appropriately designed central transfers. On the other hand, services whose benefits are national in scope, such as defense, foreign affairs, and national transport networks, need, of course, to be provided centrally. Likewise, services involving significant economies of scale, such as major water supply and power distribution networks, require large jurisdictions for cost-effective provision. Also, there are some policy functions that can be performed effectively only at the national level, such as economic stabilization and preservation of an open domestic market. Redistribution (equity) policies can also be pursued effectively only at the national level—a local jurisdiction that attempts redistribution is likely to drive out the rich. However, while the center needs to assume the dominant role in the overall pursuit of equity, involvement of local governments in implementing specific programs is essential to tailor them to local conditions, such as effective targeting of poverty alleviation programs.[14] Similar considerations of effective central-local partnership apply to the distribution of emerging government responsibilities in environmental management (Section F). It pays to review the assignment of functions and finances to different levels of government periodically, as several countries have found to their advantage.

5.51 In Indonesia, Law No. 5 of 1974 provides the umbrella legal framework guiding the distribution of responsibilities between levels of government. Specific regulations to implement this legislation have been slow in coming. Regulation No. PP45 promulgated in 1992 represents a major attempt to chart a more clearly defined course for the process of decentralization, and to accelerate this process. By this Regulation, the focus of further devolution of responsibilities would be Level II governments (districts), and the devolution envisaged is from both central and Level I (provincial) governments. The following functions are reserved for the center: defense and security affairs; judicial affairs; foreign affairs; part of general administrative affairs concerning Heads of Region; and other administrative affairs that can be more effectively and efficiently managed by the Central Government. All other functions are for consideration for transfer to lower-level governments. The same Regulation also specifies the following functions for Level I governments: inter-municipal (Level II) affairs; affairs that are not central to Level II development; and affairs that are implemented more effectively and efficiently at Level I. All other affairs of Level I governments are to be transferred to Level II governments in a gradual and continuous manner. All transfers are to be accompanied by the transfer of associated budgetary resources. The transfer of responsibilities will be linked to the capacities of Level II governments. The assessment of the readiness of these governments to assume additional responsibilities, and of their capacity-building needs, will be based on a rating of their existing institutional capacities. It is envisaged that some functions could in part be transferred initially for a four-year period, with the transfer completed and made permanent upon assessment of the Level II government performance during this period.

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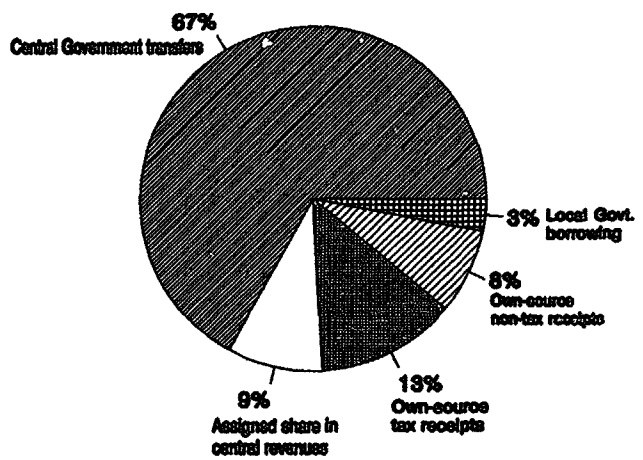
[14] The role of local governments in the effective implementation of poverty alleviation programs was underlined by President Soeharto in his 1992 Budget Speech: "---poor people live inside pockets of poverty that are scattered all over the regions. For this reason, therefore, the best strategy is to grant greater responsibility to the Regional Government and local community on how to deal with this problem. In this respect, the Level-II Region acts as the spearhead in our great struggle to free our less fortunate Brothers and Sisters from poverty."

5.52 Indonesia is fast approaching a stage in its economic evolution where the present degree of centralization in the responsibility for the provision of public services will become increasingly untenable because of both its implications for efficiency and the strain imposed on the financial and institutional capacities of the center. Regulation PP45/92, accordingly, represents a timely initiative. The broad framework it sets out for the transfer of responsibilities to local governments is consistent with general economic principles for inter-governmental assignment of expenditures. Within this framework, the actual allocation of responsibilities for individual services will need to be carefully determined. This process is to be guided by an inter-ministerial body on regional autonomy, and will be supported by studies, some of which are already underway. For local public services, the following may serve as general criteria for the assignment of responsibilities: policy development, standards of service, performance evaluation (center); oversight (provincial level); and provision (local/regional level).

Increasing Local Government Revenues

5.53 A necessary complement to the assignment of additional responsibilities to local governments is the enhancement of their financial capacities. Indeed, even at their present level of expenditure responsibilities, local governments' revenues need to be raised substantially. Local governments raise only 7% of total government revenues (including assigned central revenues), which finance only about 30% of their expenditures. The gap between local government expenditures and revenues is exceptionally large in Indonesia; cross-country studies show that local governments in developing countries typically finance around two-thirds of their spending from own sources. The heavy financial dependence of local governments on the center entails adverse implications for the efficiency and accountability of local service provision. The structure of local government revenues is summarized in Figure 5.3. Bringing local governments' own revenues into closer conformity with their expenditures raises three sets of issues: assignment of tax bases between the central and local governments; raising more revenues from taxes already assigned to or shared with local governments; and making fuller use of local user charges.

Figure 5.3: Financing of Local Government Expenditures, 1990/91



5.54 **Tax Base Assignment.** In Indonesia, the major, most productive direct and indirect taxes are all assigned to the center. Personal and corporate (including oil and gas) income taxes, the main indirect taxes—the VAT, excises and duties on foreign trade—and the property tax are all centrally administered, with revenues from the last of these being shared with lower-level governments (16% to provinces and 65% to districts). Natural resource royalties—for petroleum, mines and forests—are also collected by the center, but shared with lower-level governments. There are no supplementary (piggyback) taxes levied by local governments on the tax bases administered by the center. Tax assignment in Indonesia emphasizes efficiency of tax administration and uniformity of the tax regime across the country. The centralization of taxes is also motivated by concerns for reducing regional disparities in the availability of public resources. While these objectives are legitimate and important, consideration needs to be given to how tax options at the local level can be broadened consistent with

these objectives. The present high degree of centralization of tax authority is an important reason why local governments are able to self-finance only a small proportion of their spending.

5.55 Within the present broad framework of tax assignment in Indonesia, several possibilities for augmenting local tax authority could be considered. First, local governments could be given a greater role in the administration (including rate setting) of the property tax. Levied on immobile assets, this tax is suitable for administration at the local level. A greater local role in its administration would likely improve incentives for collection. The Central Government could retain the assessment function for smaller towns but assume a supervisory role for it in larger urbanized jurisdictions. Second, local governments could be allowed to levy a tax on fuel consumption. At a moderate rate, such a tax could raise sizable revenues, besides supporting energy conservation. A 5% sales tax on gasoline and diesel could raise local own-source revenues by about 65% at the district level (30% at the provincial level) at present consumption levels. Third, local revenues from the property tax could be augmented by the institution of frontage charges. In industrial countries, frontage charges normally amount to about 5% of property tax revenues. Fourth, possibilities for local taxation of some non-basic public services, such as telephone, could be explored.

5.56 **Increasing Revenues from Existing Local or Shared Taxes.** Local governments levy a multiplicity of taxes, over seventy, but only a few of them are significant sources of revenue. About 90% of provincial tax revenue comes from just two taxes (motor vehicle registration and transfer taxes) and about 85% of district-level tax revenue comes from only six taxes (hotels and restaurants tax, street lights tax, entertainment tax, advertisement tax, business registration tax, and slaughterhouse tax). One desirable reform of local taxes would be to eliminate a large number of levies that are unproductive, which would lower the costs of collection and free scarce administrative capacity to focus on the more productive levies, while also reducing tax-induced distortions. There remains much scope for increasing yields from the more important taxes through better administration. Several useful recent initiatives to improve local revenue administration are currently at varying stages of implementation, including the Regional Government Revenue Administration Manual (MAPATDA) and Revenue Improvement Action Plans (RIAPs). Improved coordination among these initiatives, and with the centrally administered property tax improvement project, would increase their overall effectiveness. For some taxes, the base could be extended, such as extending the application of the business registration tax from factories only to all businesses. For others, there is potential for raising receipts by adjusting and restructuring rates; this is particularly the case with motor vehicle taxes, for which the rates are low on average and inappropriately structured for efficient cost recovery. Local governments could be allowed greater discretion, within appropriate central guidelines, in the administration of taxes (e.g., base and rate determination) assigned to them than at present.

5.57 In addition to these general measures to increase revenues from existing local taxes, there are three potentially important sources for higher local revenues from own or shared taxes. First, receipts from the property tax, shared revenue from which forms a major part of local tax receipts (60% at the district level), could be increased substantially by: raising the assessment ratio from its current level of 20%, which yields an effective tax rate of only 0.1%, among the lowest in the world; assessing properties closer to their market value (property valuation currently is believed to fall short of market values by about 50%); and building on the encouraging progress made in recent years in improving the coverage of the tax (of the total taxable land in rural areas, still only about 30% is under taxation). Second, a wider, more effective use could be made of betterment levies that capture part of the gain in land values resulting from public works. One such levy exists in Jakarta, but it has not been widely or effectively used. Several countries, e.g., Korea and Colombia, have successfully employed betterment levies in helping finance urban improvement projects. Third, sizable additional revenue could also be obtained by raising forestry royalties, part of which accrues to local governments. Raising forestry royalties and

fees to increase government rent capture from the current about 20% to 85% over the medium term could more than triple total government forestry revenue from its present level of about Rp.1 trillion, while also supporting more efficient and sustainable use of forests.

5.58 Overall, it is estimated that stronger mobilization of revenues from existing and new local taxes and from shared taxes and fees, as outlined above, could approximately double local government own revenues. Even then, however, the share of such revenues in total government revenues will rise to only about 13%.

5.59 **Making More Effective Use of Local User Charges.** Appropriate charges for public services can raise both revenues and efficiency. User charges are especially important at the local level because, being closer to beneficiaries, local public services are more amenable to such charges than services provided by higher levels of government. In Indonesia, user charges contribute a sizable proportion of local government own revenues (about 15% at the provincial and 50% at the district level). However, the utilization of these charges remains well below potential. At the district level, fees and charges cover less than 10% of the outlay on public services. Heavy dependence on central transfers has created weak incentives for local cost recovery. Many public services are subsidized to make them affordable to the poor, but the subsidies are inefficiently targeted, with large leakages to the better-off, e.g., in urban water supply. The equity objectives of subsidization could be met more effectively, and at a smaller cost in terms of foregone revenue, through better targeting the poor, e.g., through the adoption of "lifeline" charges whereby the service is charged at full marginal cost or higher beyond a level of service use associated with the poor. Better central guidance to local governments on service pricing policies would be helpful, as the responsible local authorities often lack adequate understanding of the concepts of cost recovery. This should be supported by improved accounting practices at the local level to allow a clearer determination of the costs of service provision. Within central guidance on service pricing principles, local governments could be allowed greater authority in adjusting the level of charges, to facilitate timely adjustments. Appropriately designed schemes to allow retention of part of the receipts from user charges by the agencies responsible for service delivery, for direct use on the service, could provide a useful incentive to more vigorous cost recovery, e.g., as currently allowed for some local health services. Finally, reducing the present proliferation of small charges would facilitate collection. In some cases, duplication of collection efforts could be avoided through consolidating charges, e.g., a consolidated water tariff including charges for related sanitation and drainage services.

Inter-governmental Transfers and Loan Finance

5.60 Even with feasible increases in local revenues, the gap between local expenditures and revenues is likely to remain large for some time to come. This underlines the importance of appropriately designing the system of financial support to local governments, in the form of transfers from the Central Government and loan finance.

5.61 **Design of Central-Local Transfers.** Central grants currently finance about two-thirds of local government expenditure. These transfers are of two kinds: block grants, for general purpose local spending subject to some broad central guidelines; and specific grants, for expenditure on uses specified by the center and subject to relatively detailed central controls. The former include INPRES block transfers to each of the three main levels of local government—provinces, districts and villages. The latter include SDO, a transfer that covers virtually all local government personnel expenses, and INPRES sectoral transfers for specific development expenditures on roads, primary schools, public health centers and reforestation. As part of its policy of gradual decentralization, the Government has incrementally

raised the share of block grants in total transfers (it increased from about 15% in 1985 to about 20% in 1992) and has also allowed local governments somewhat greater flexibility in the use of some the specific grants.

5.62 There are several positive features of the design of the Indonesian inter-governmental grant system: the distribution of grants is transparent, determined by formulae utilizing objective criteria; the structure of grants is simple, as both the grants and the criteria used for distribution are few in number; and the grants achieve an overall equalizing effect on regional revenue availabilities. In its transparency and simplicity, the Indonesian grant system compares favorably with the grant systems typically found in developing countries.

5.63 There are, nonetheless, several improvements that could be considered in the design of the Indonesian grant system that would allow it to achieve its efficiency and equity objectives more effectively. First, the recent trend toward increasing the share of block grants in total grants should continue. Second, regional disparities in overall fiscal capacities (revenue-raising potential) could be better reflected in the distribution formulae for block grants, by including a fiscal capacity equalization factor. The criteria currently used for distribution—area, population, equal shares—are all focused primarily on capturing the differential needs of local administrations. Better capturing differential fiscal capacities to meet those needs would contribute to making the distribution of grants more equitable. Third, an element of incentive to local governments to improve their own revenue effort could be included in the grant allocation formulae (the present set of criteria does not include such an incentive element). This could be achieved by supplementing the fiscal capacity indicator with one capturing the extent to which that capacity is actually being utilized. Appropriately designed matching grants could also stimulate the local revenue effort (the Indonesian grant system includes only a very limited matching element). Fourth, the SDO grant could be consolidated with the general purpose block grants to the respective levels of government. As now designed, this grant creates strong incentives for higher government employment/wage bill at the local level. The center tries to circumvent this perverse incentive by retaining major control over government employment at all levels, but this undermines local autonomy and flexibility in the allocation of budgetary resources between personnel and other expenditures. Fifth, the main improvement that can be made in the specific sectoral grants is to continue the shift toward using broad guidelines rather than detailed controls and physical targets in influencing the use of these grants. The allocation criteria for these grants are broadly appropriate, as they adequately serve their main objective (ensuring minimum standards of the targeted basic services across regions); one improvement would be to change the allocation of the reforestation grant from a project to a formula basis, as for the other specific sectoral grants.

5.64 **Framework for Local Borrowing.** Borrowing currently plays a very small part in financing local government expenditures in Indonesia (less than 5%). The bulk of central financial support to local governments takes the form of grants, as discussed above. Whatever local borrowing does take place is predominantly from the Central Government, including the on-lending of foreign loans, much of it to finance urban water supply projects. The limited scale of local borrowing, and the negligible local use of loans from commercial sources, is a reflection of the local governments' weak revenue base. A strengthening of the local revenue position is a prerequisite for greater local use of loan finance. As progress is made in that direction, an increasing proportion of central support for local capital projects could, and should, be provided in the form of loans. This would allow central grants to be focused increasingly on poorer areas. A shift from grant to loan financing of capital projects would induce the adoption of stronger cost recovery policies by the local governments. As local financial capacities grow, non-government sources of loan finance could also be gradually tapped, e.g., through the issuance of municipal bonds, especially by the financially stronger municipalities. For the near future, however, the use of commercial financing by local governments must remain limited.

5.65 The framework for the provision of central loans to local governments has improved with the establishment of a revolving loans account known as the Regional Development Account (RDA). The RDA consolidates into one channel a number of disparate central loan schemes, characterized by narrow earmarking and varying terms, that existed previously. Local borrowing from the center, funded from the center's own resources, now comes from a unified pool and is subject to uniform terms and rules of access. Most central on-lending of foreign loans remains subject to separate, varying subsidiary loan agreements (SLAs). Recently, an arrangement known as subsidiary loan agreement with prefinancing (SLAP) has been introduced on a pilot basis which combines the foreign loan and the domestic counterpart financing into a single loan agreement administered through the RDA. Further development of the RDA framework should include: encouraging an increased role of local governments in the development and evaluation of project proposals for loan financing, helping to make the system more demand than supply driven; establishing clear appraisal criteria and assisting in enlarging local capacities for project preparation and evaluation; moving the interest rate on loans further toward market levels; making the central evaluation and approval process simpler and more transparent, including reducing the multiple approval requirements; and eventually developing the RDA into an independent financial entity, such as a municipal development fund.

Framework for Planning, Budgeting and Monitoring

5.66 Reform of the central-local fiscal relations needs to be underpinned by complementary adaptations in the institutional arrangements for planning, budgeting, implementation and monitoring. An important general need is for greater clarity in the distribution of responsibilities between the different levels of government. To support efficient operations and proper accountability, regulations should define comprehensively the responsibilities of each level of local government in terms of the decentralized functions, as distinct from deconcentrated and coadministered functions. A related need is to reduce fragmentation in the sources of funds for the decentralized functions (e.g., there are as many as ten sources of funds for health service delivery at the district level, with one of them—health INPRES grant—further split into nine separately specified elements). All central financial support to local governments for the provision of decentralized services should eventually be in the form of grants, or loans, administered through respective local budgets. One implication of this is that direct and separate higher-level government budgetary interventions in the provision of the *decentralized* services (e.g., through central development budget expenditures known as DIPs) be phased out. Some initiatives toward that end have been taken, under donor-assisted projects, for the decentralized urban and health services (Box 5.4).

5.67 Local governments need to be involved more closely in the preparation of the national five-year development plan (REPELITA) to ensure consistency between the national plan and the equivalent plans of the local governments. For this purpose, a "bottom-up" central- local consultation process similar to that currently in place for annual budget preparation would be appropriate. Consideration could be given to instituting medium-term (e.g., three-year) rolling financial programs, as a more effective and efficient means of achieving inter-government consultation on expenditure plans and financing arrangements than the current process focused on the details of annual planning and budgeting. Detailed annual budgets themselves would emerge from the annual update and roll-forward of these programs. Even if the Central Government feels unable to adopt the medium-term programming approach for itself, it could help local governments adopt it by providing indicative information on the medium-term prospects for grant allocations and the centrally administered expenditures at the local level. Some recent Government initiatives seek to develop this medium-term programming concept at the local level, most notably in the group of urban subsectors covered by the Integrated Urban Infrastructure Development Program (IUIDP) framework. Also, a substantial reduction could be achieved in the degree of detailed

Box 5.4: An Experiment in Decentralizing Health Services

The Third Health Project (THP), being implemented in Kalimantan Timur and Nusa Tenggara Barat with World Bank assistance, has three objectives related to decentralization: decentralized and integrated health planning and budgeting; decentralized management; and decentralized fiscal responsibility, with emphasis on local resource mobilization.

A key innovation under THP was the establishment of an integrated health plan and budget identifying all financing sources and flows to health programs, in contrast to the previous fragmented system. The project increased the involvement of local managers in budget decision-making by having them participate with BAPPENAS and MOF in the *final* budget decisions. Six separate central budgets (DIPs) for community health at the district level were consolidated into a single budget for basic health services and the budget authority decentralized to local government staff. Managers were empowered to adjust funding and activities as implementation proceeded. These steps gave local staff a clearer idea of the available resources and greater flexibility in their use, while streamlining the system of budget flows.

In Indonesia, given the wide variations in regional health service needs, centralized management is both difficult and inefficient. Local managers implementing centrally directed activities also do not feel sufficiently accountable. One of THP's objectives, given the dual administration of health services (by Kanwil/central and Dinas/local government), has been to give greater authority to the Dinas. A major step was to transfer the authority for some centrally funded budgets initially from the Kanwil to the Dinas (Level I), and then to delegate more control over the budget to the district-level health officer (DHO). The DHO is now fully responsible and accountable for specific health program targets, and provided with the planning and budgetary authority to ensure their effective implementation. The Kanwil and Dinas (Level I) staff are gradually shifting their role to technical guidance, monitoring and evaluation.

The sustainability of operational expenditures after project completion has been a concern of THP. The project has introduced resource mobilization measures such as tariff adjustments. It is also piloting the use of geographic price discrimination whereby lower prices are charged at facilities serving poorer populations. As a result of the tariff adjustments, operation and maintenance expenditures for health facilities in some districts are now being financed fully by the local government. Additionally, revolving funds for drugs are being implemented in one of the provinces to ensure the sustainability of funding for drugs. Retention of fees, by up to 50%, has been permitted in selected facilities. Such revenue retention has encouraged autonomy and created incentives for efficient collection and use of funds at the facility level.

While there have been some transitional problems in this experiment, the response from the lower-level governments has been encouraging. The Ministry of Health is now proposing that these measures, particularly the delegation of full responsibility for the delivery of basic health services to the DHO, form the basis of proposed revisions to existing legislation (PP7/87) on the decentralization of health services.

central prescription in, and control over, local governments' use of funds and financial management procedures. This would allow central-local consultation and interaction to focus more on broader, more important issues of policy, financing and coordination. A complementary need is to improve the format of local government budgets to facilitate well-informed, policy-oriented decision-making on the allocation of available resources.

5.68 Improved systems for monitoring and auditing of local government performance would facilitate reduced central reliance on direct, detailed controls on the local use of funds. Within local administrations, the monitoring systems in place are basically sound in concept but implementation and follow-up need improvement. Monitoring of local government performance by the Central Government

would benefit from some consolidation of the present multiplicity of (often overlapping) monitoring arrangements and databases maintained by central and line departments, and from a rationalization of the extreme detail of some of the reporting requirements (especially those for some INPRES grants, such as the local roads INPRES). External inspection and audit of local governments need to be substantially upgraded. These functions are currently diluted among several agencies, and coordination among them is weak. The effectiveness of local government external financial and management audit would gain from the consolidation of this task in a single strong, competent and widely respected body that is independent of any other government department.

Building Local Government Institutional Capacities

5.69 It is axiomatic that the decentralization of service planning and delivery responsibilities, accompanied by funding structure reforms, of the kind discussed in the preceding sections be supported by the development of local government institutional capacities. The Central Government has a crucial role in this effort. First and foremost is the need to raise the quality of local government staff. Adequate, well-focused training facilities are important. While several government training programs are in place (e.g., in fiscal management, planning, integrated urban management), their effectiveness would benefit if they were informed by a clear central strategy for the identification of local training needs and the delivery of training to meet those needs. The State Administration Institute (LAN), the central civil service training agency, and the Education and Training Centre (Badan Diklat) of the Ministry of Home Affairs are exerting efforts to develop such a strategic overview and help coordinate its implementation. The work underway to rate local governments by their institutional capacities (para. 5.51) should help direct training support to those local governments most in need of it in undertaking existing and additional decentralized responsibilities. Over time, the provision of training should evolve from the offering of a few standard, centrally administered courses, to which local governments nominate participants, toward a "market-based" approach that would encourage a wide variety of public and private agencies to provide competing courses from which local governments would be free to select. This would serve to improve both the quality and relevance of training. Full advantage should be taken of the possibilities for learning by doing. One reason why local government capacities for project planning and design, in contrast to implementation, are weak is that much of the responsibility effectively transferred to them to date concerns implementation. This reinforces the case made above for fuller participation of local governments in the planning process. Alongside better training, on and off the job, improving personnel quality would require improved career prospects. Civil service reform efforts, discussed in Section D, should adequately cover issues relating to local government personnel. An aspect of these efforts is the institution of a system of regular staff transfers between the Central and local governments, as is currently being experimented by some agencies (para. 5.44).

5.70 Second is the need to dev lop sound organizational structures congruent with the functions and responsibilities of the local governments. The center can assist by providing guidance on organizational principles and operational systems, but should avoid taking a prescriptive approach that undermines adaptability to local needs. Periodic evaluation of the adequacy of organizational structures and management systems should be an important duty of the strengthened external financial and management audit service suggested above (para. 5.68).

5.71 Third, an important aspect of central departments' advisory role to local governments is to provide them with appropriate technical and managerial software packages, or "tools", for use in their operational and management systems. Technical assistance for the development of such tools is often incorporated into donor-assisted projects. Adequate local government involvement in the design of such tools, coordination to ensure compatibility and avoid duplication, and follow-up (institutionalization,

adaptation, updating) are important determinants of the effectiveness of these efforts.[15] The proposed establishment of a high-level Steering Committee, supported by a permanent Central Technical Unit, in the Ministry of Home Affairs to supervise and coordinate these efforts is a useful initiative.

F. Institutional Framework for Environmental Management

5.72 Indonesia has already established important elements of a policy and regulatory framework for environmental protection. As in many countries, however, the institutions responsible for environmental management face a variety of constraints in carrying out their mandates effectively. As a result, environmental concerns are not yet effectively integrated into development planning and implementation. Closing the large gap between policy and implementation calls for strengthening the institutional framework and capacities for environmental management. Where feasible, reliance on market-based instruments in further developing the environmental policy framework, as discussed in Chapter 3, would economize on the scare administrative capacity. In building institutional capacities, stepped-up efforts would be needed on three main fronts: improving the systems for environmental information and analysis to inform priority-setting and policy design; strengthening the institutions responsible for environmental management, including clarifying their roles and improving coordination; and enhancing local participation in policymaking, monitoring and enforcement.

Improving Information and Analysis

5.73 Accurate and timely information about environmental conditions and trends is essential for an understanding of the risks they may pose to human health, productivity and future growth. A careful analysis of costs and benefits is needed to establish rational priorities for action and adopt least-cost approaches to tackling specific concerns. For development planning and implementation, area-specific information and project-specific environmental impact analyses are required, with subsequent monitoring of actual results. Education and awareness campaigns can help to build political support for difficult policy reforms and to guide public and private decision-making. Public disclosure can greatly enhance public sector accountability and private sector compliance with environmental standards and regulations. Indonesia is making encouraging progress in all of these respects. Examples are the environmental data being compiled and published by the State Ministry of Population and Environment (KLH) and the Central Bureau of statistics (BPS), environment-related information developed by concerned line agencies such as the Forestry and Agriculture Ministries, the AMDAL program which requires environmental impact assessments (EIAs) to be prepared for projects expected to have significant environmental effects, and the public education and awareness campaign under the PROKASIH (Clear Rivers) program. These, however, are only parts of a foundation that Indonesia will need to build on considerably in the future.

5.74 Strengthening the environmental information systems will require concerted and sustained multi-agency efforts. Main areas for attention include: the expansion of efforts to collect field data on

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[15] Potential problems arising from insufficient coordination are illustrated by a multiplicity of systems packages developed in connection with urban sector projects and programs, namely: Financial Management and Planning Improvement; Program Financial Accounting and Monitoring System (PFAMS); Planning and Financial Programming, Analysis, Control and Coordination (PAFPAK); Performance-Oriented Maintenance Management System (POMMS); Medium-Term Financial Program (PJM); Revenue Improvement Action Plan (RIAP); Local Institutional Development Action Plan (LIDAP); and Regional Government Revenue Administration Manual (MAPATDA). All of these are wholly or partially concerned with the introduction of financial management improvement tools. While useful individually, there is substantial overlap/duplication between these packages.

environmental conditions (e.g., surveying forest land, of which only about 0.2% has been intensively surveyed so far); the development of "environmental indicators" by the relevant line agencies (e.g., ambient water and air quality, aggregate emissions of urban and industrial pollution); improvements in the capability of government laboratories; the computerization of data compilation, analysis and management; and the improvement of public access to data on environmental conditions and trends. Improved environmental information needs to be complemented by stronger policy analysis capabilities. Environmental considerations need to become intrinsic to policymaking. Environmental impact statements are already becoming important to project analysis; they need to be extended to policy reforms. While all concerned institutions share the need to develop environmental skills, as discussed below, a priority is to create a strong policy analysis capability at the national level, responsible to KLH and with a mandate to review the environmental implications of macroeconomic and sectoral policies, and to carry out cost-benefit analysis of proposed measures for environmental protection.

Developing Institutional Arrangements

5.75 A sizable institutional framework for environmental management has evolved in Indonesia over the past decade or so. The main national institution is the environment ministry, KLH, charged with policy formulation, coordination and oversight responsibilities in environmental protection. During much of the 1980s, KLH focused on putting in place the essential elements of a strategy for sustainable development, including laws and regulations, and a "support network" of environmental organizations. It has important accomplishments to its credit, such as the passage of Law No. 4 in 1982 ("Basic Provisions for the Management of the Living Environment"), which provides the legal foundation for environmental management in Indonesia; the issuance of Regulation No. 29 in 1986, which provides implementation guidelines for Indonesia's EIA process; the initiation in 1989 of the PROKASIH program; and the establishment in 1990 of an environmental protection agency (BAPEDAL) to enforce environmental standards and regulations, to which KLH then transferred the responsibilities for the implementation of the AMDAL (EIA) and PROKASIH programs. Besides KLH and BAPEDAL, other national agencies with important roles in environmental management include the line agencies responsible for the management and use of natural resources (e.g., Forestry, Agriculture, Industry) and the agencies responsible for key aspects of development planning and coordination (the State Planning Agency, BAPPENAS, and the Ministry of Home Affairs, responsible for regional government administration). At the provincial level, appreciable authority in environmental management is vested in provincial governments and their concerned agencies. Since 1987, each province has set up an AMDAL commission to review project EIAs.

5.76 While the institutional framework has expanded, its effectiveness remains subject to several important constraints. Institutional roles are in many instances less than clearly defined, and mechanisms for coordination are still weak. KLH has been hampered by its lack of authority over the environment-related activities of other line ministries, such as Forestry and Agriculture, which have primary responsibility for the management of respective sectoral natural resources. Lack of clarity in the mandates of BAPEDAL and other relevant agencies at the national and provincial levels has constrained the establishment of an integrated monitoring and enforcement system, a prerequisite for the development of legally enforceable standards, the design of a pollution permit system, and the initiation of effective monitoring and enforcement of compliance. Difficulties in inter-agency coordination have been a constraint on the effectiveness of the AMDAL program. Effective coordination is especially important for programs aimed at environmental objectives that cut across sectors and regional boundaries, e.g., in water resource management. At the provincial level, weak institutional capacities resulting from a shortage of skilled staff and the effective dominance of central direction have kept local participation in the design and management of environmental programs limited, notwithstanding the authority vested at that level in principle. While especially acute at the provincial level, skill shortages affect institutional capacities

at all levels and in all agencies. To increase the supply of environmental skills, an important initiative taken by KLH has been the development of university-based environmental studies centers (PSLs). Also, government-sponsored and non-profit research organizations (e.g., the Center for Policy and Implementation Studies) are beginning to get involved in environmental management issues. Yet, the supply of skills remains quite limited relative to demand.

5.77 The foregoing suggests the following priorities for institutional development:

- clarifying legal and institutional mandates, at both central and provincial levels, especially for environmental issues that cross jurisdictional boundaries (these may necessitate, in some cases, area-wide organizations that go beyond individual provinces, such as for river basin management in critical watersheds in Java);
- improving environmental planning and coordination through a more concerted effort at the national level to achieve cross-sectoral coordination, and by effectively devolving planning and implementation responsibilities to provincial governments;
- establishing effective monitoring and enforcement capacity, primarily at the provincial level, including the development of a pollution permit system and eventual establishment of pollution monitoring and control agencies in each province; and
- reducing the skills gap, including an increase in the number of university graduates in the relevant disciplines, an expanded program of staff training (especially at the provincial level), the effective use of local and expatriate consultants, and where feasible, the contracting out of monitoring, inspection and audit services.

5.78 Developing institutional capacities for environmental management will be a long-term endeavor. Many of Indonesia's problems, in pollution control and natural resource management, however, require immediate attention. While the long-term institutional strengthening is underway, creative "interim" solutions to such problems will need to be found. Box 5.5 outlines some guiding principles.

Enhancing Local Participation

5.79 Involving local communities offers three main advantages: it gives planners a better understanding of local needs, knowledge and values; it mobilizes community support for project-objectives and community help with local implementation; and it can help resolve conflicts over resource use. There is a growing body of evidence accumulated by development agencies, based on their project experience, which shows that greater participation improves the chances of success—in terms of development effectiveness and economic sustainability (Box 5.6). Most of this evidence relates to projects that directly affect the environmental sustainability of development (e.g., farmers' involvement in agricultural and irrigation projects), and to projects with a close link between poverty and environmental quality (e.g., community—especially women's groups'—involvement in village water supply and sanitation).

5.80 There is also growing evidence, from Indonesia and elsewhere, of the unintended negative consequences of development that may arise from the failure of existing legal and institutional arrangements to ensure appropriate burden-sharing in conflicts over the use of natural resources. Social conflict is often an unforseen outcome of ecologically unsustainable development. The prospects for

avoiding such consequences through consultations between project sponsors and the affected communities—including negotiated settlements that lead to mutually beneficial outcomes—appear to be quite encouraging in the case of Indonesia.

Box 5.5: Environmental Management: The Search for Creative Solutions

Institutional development for environmental management is a long-term process. If the experience of industrial countries is any guide, major progress in some respects may take a generation or more. Some problems cannot wait. In the interim, it will be necessary to find creative solutions to allow these problems to be addressed despite the existing institutional shortcomings. Such solutions need to be based on a few key principles:

- *Targeting*: in recognition of the limited financial and administrative resources, interim solutions should focus on the most critical problems and the major causal factors underlying them;
- *Power-sharing*: to overcome conflicting or diffuse legal mandates, interim solutions should emphasize the improvement of inter-agency coordination through the development of innovative combinations of high-level leadership and formal—but non-structured—sharing of political power and administrative authority by existing agencies;
- *The Skills Gap*: to deal with the scarcity of critical environmental skills, interim solutions should minimize the need for such skills by government agencies, and make effective use of private skills wherever possible;
- *Publicity*: to take advantage of Indonesia's unique cultural characteristics, interim solutions should rely on the power of publicly available information—on environmental trends and conditions, and on the performance of public agencies and private firms—to mobilize popular support and to enhance accountability and compliance with standards and regulations; and
- *Community Involvement*: since most environmental problems occur at the local level, and their resolution must be tailored to local conditions, interim solutions should build on the special knowledge and existing cultural and institutional arrangements of the affected communities, with the full support and encouragement of national and local authorities.

Indonesia's PROKASIH program (Box 1.1) is one of the best examples of the application of these principles. The same principles can be applied in at least three other areas: co-opting KLH in the EKUIN-coordinated review of proposed economic policy decisions where environmental implications are relevant; targeting a limited number of large and/or potentially damaging projects for special attention within the AMDAL program; and establishing temporary regional "natural resource management councils", chaired by the relevant BAPPEDA (provincial planning board) and including representatives of concerned line agencies, the private sector and the local community, pending the issuance of implementing regulations under the recently approved Spatial Planning Law and the development of specific spatial plans for major urban areas and critical rural ecosystems (watersheds, coastal zones, conservation areas).

Box 5.6: Local Participation Fosters Development Effectiveness and Sustainability

A recent World Bank report, *Participatory Development and the World Bank*, richly documents the benefits of local participation in development. It is but one of a growing number of studies linking participation positively to development effectiveness and sustainability:

- A 1976 report by Development Associates, Inc., reviewing experience with rural development projects in 10 African and Latin American countries, found that small farmers' involvement in project decision-making, and their willingness to make a resource commitment to the project, were key factors in whether or not the projects achieved their development objectives.

- A 1985 impact evaluation study by the World Bank analyzed 25 Bank projects (mostly in agriculture and rural development) five to ten years after completion, and documented positive links between grass-root participation and project sustainability.

- A 1987 World Bank study of 42 irrigation projects found that economic returns were consistently higher for projects that involved farmers in the planning and management of the irrigation systems.

- A 1990 study by U.S. AID of 52 projects in different sectors demonstrated a positive correlation between participation and project success, almost as strong as the correlation between project success and the availability of finance.

- Preliminary results from a study being undertaken by the UNDP-World Bank Water and Sanitation Program indicate strong associations between overall project effectiveness, sustainability and participation-related variables. While participation appears to be highly correlated with improved quality of project design and implementation, the linkages are even stronger for the involvement of women.

Evidence is also growing on the importance of participation where changes are required in community behavior (e.g., in natural resource management) or the behavior of individuals and households (as in family planning and water and sanitation programs). The positive impact on program effectiveness and sustainability in these areas is often attributed to a sense of joint ownership and responsibility fostered by the cooperative effort, reinforced by evidence of the benefits of participation accruing to all of those involved.

INDONESIA

COUNTRY ECONOMIC REPORT

STATISTICAL ANNEX [a]

List of Tables

Population and Employment

National Income Accounts

International Trade & Balance of Payments

External Debt & Capital Flows

Public Finance

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[a] With the exception of the tables on External Debt, the Statistical Annex is a compilation of official data from Government sources. In some instances, these data may differ from data in the main text due to different Bank definitions and methodologies in constructing the statistical series.

Monetary Statistics

Agricultural Statistics

Industrial Statistics

Prices

Investment Statistics

Table 1.1

INDONESIA

COUNTRY ECONOMIC REPORT

Population And Growth Rates by Province, 1930-1990

Region	Population ('000)						Average growth rate (% p.a.)				
	1930	1961 /a	1971 /a	1980	1985	1990	1930-61	1961-71	1971-80	1980-85	1985-90
Java	41,718	63,059	76,086	91,270	99,852	107,528	1.3	1.9	2.0	1.8	1.5
DKI Jakarta	811	2,973	4,579	6,503	7,885	8,225	4.3	4.4	4.0	3.9	0.8
West Java	10,586	17,615	21,624	27,454	30,830	35,380	1.7	2.1	2.7	2.3	2.8
Central Java	13,706	18,407	21,877	25,373	26,945	28,519	1.0	1.7	1.7	1.2	1.1
DI Yogjakarta	1,559	2,241	2,489	2,751	2,930	2,915	1.2	1.1	1.1	1.3	-0.1
East Java	15,056	21,823	25,517	29,189	31,262	32,490	1.2	1.6	1.5	1.4	0.8
Sumatra	8,255	15,739	20,809	28,017	32,603	36,436	2.1	2.8	3.4	3.1	2.2
Lampung	361	1,668	2,777	4,625	5,905	6,006	5.1	5.2	5.8	5.0	0.3
Bengkulu	323	406	519	768	943	1,181	0.7	2.5	4.5	4.2	4.6
South Sumatra	1,378	2,773	3,441	4,630	5,370	6,278	2.3	2.2	3.4	3.0	3.2
Riau	493	1,235	1,642	2,169	2,548	3,283	3.0	2.9	3.1	3.3	5.2
Jambi	245	744	1,006	1,446	1,745	2,016	3.6	3.1	4.1	3.8	2.9
West Sumatra	1,910	2,319	2,793	3,407	3,698	4,001	0.6	1.9	2.2	1.7	1.6
North Sumatra	2,542	4,965	6,622	8,361	9,422	10,254	2.2	2.9	2.6	2.4	1.7
Aceh	1,003	1,629	2,009	2,611	2,972	3,417	1.6	2.1	3.0	2.6	2.8
Kalimantan	2,179	4,102	5,155	6,723	7,722	9,111	2.1	2.3	3.0	2.8	3.4
West Kalimantan	802	1,581	2,020	2,486	2,819	3,237	2.2	2.5	2.3	2.5	2.8
Central Kalimantan	203	497	702	954	1,118	1,398	2.9	3.5	3.5	3.2	4.6
South Kalimantan	836	1,473	1,699	2,065	2,273	2,599	1.8	1.4	2.2	1.9	2.7
East Kalimantan	329	551	734	1,218	1,512	1,877	1.7	2.9	5.8	4.4	4.4
Sulawesi	4,231	7,079	8,528	10,409	11,554	12,519	1.7	1.9	2.2	2.1	1.6
Central Sulawesi	390	693	914	1,290	1,511	1,705	1.9	2.8	3.9	3.2	2.4
North Sulawesi	748	1,310	1,719	2,115	2,313	2,480	1.8	2.8	2.3	1.8	1.4
South Sulawesi	2,657	4,517	5,181	6,062	6,610	6,983	1.7	1.4	1.8	1.7	1.1
Southeast Sulawesi	436	559	714	942	1,120	1,351	0.8	2.5	3.1	3.5	3.8
Other Islands	4,219	7,106	8,630	11,071	12,316	13,654	1.7	2.0	2.8	2.2	2.1
Bali	1,101	1,783	2,120	2,470	2,649	2,779	1.6	1.7	1.7	1.4	1.0
West Nusa Tenggara	1,016	1,808	2,203	2,725	2,995	3,371	1.9	2.0	2.4	1.9	2.4
East Nusa Tenggara	1,344	1,967	2,295	2,737	3,061	3,270	1.2	1.6	2.0	2.3	1.3
Maluku	579	790	1,089	1,410	1,609	1,853	1.0	3.3	2.9	2.7	2.9
Irian Jaya	179	758	923	1,174	1,371	1,631	4.8	2.0	2.7	3.2	3.5
East Timor	n.a	n.a	n.a	555	631	750	n.a	n.a	n.a	2.6	3.5
Total Indonesia	60,593	97,085	119,208	147,490	164,047	179,248	1.5	2.1	2.4	2.2	1.8

/a Includes adjustment for the exclusion of rural Irian Jaya.

Source: Central Bureau of Statistics, Population Census Reports, 1961, 1971, 1980 and 1990; Statistical Yearbook of Indonesia, 1984; and SUPAS 1985.

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Distribution of Population by Age Group and Sex, 1961-1990 /a
('000)

Age Group	1961			1971			1980			1985			1990		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	8,529	8,649	17,178	9,675	9,560	19,235	10,872	10,422	21,294	11,008	10,543	21,551	10,766	10,120	20,887
5-9	7,744	7,701	15,445	9,593	9,302	18,895	10,889	10,446	21,335	11,379	10,739	22,118	11,791	11,290	23,081
10-14	4,353	3,892	8,245	7,406	6,875	14,281	9,179	8,525	17,704	10,783	10,113	20,896	10,998	10,438	21,437
15-19	3,865	3,905	7,770	5,627	5,779	11,406	7,552	7,806	15,358	8,335	8,232	16,567	9,553	9,367	18,920
20-24	3,480	4,373	7,853	3,627	4,461	8,088	6,010	7,055	13,065	6,385	7,903	14,288	7,662	8,686	16,148
25-34	7,392	8,610	16,002	7,722	9,226	16,948	9,685	9,920	19,605	12,026	12,442	24,468	13,962	14,770	28,732
35-44	5,765	5,406	11,171	7,062	7,119	14,181	7,876	8,172	16,048	8,538	8,685	17,823	9,778	9,475	19,253
45-54	3,587	3,511	7,098	4,360	4,213	8,573	5,761	5,856	11,617	6,418	6,514	12,932	7,036	7,284	14,320
55-64	1,913	1,865	3,778	2,224	2,373	4,597	3,297	3,354	6,651	4,150	4,474	8,624	4,615	4,887	9,502
65+	1,183	1,245	2,428	1,450	1,539	2,989	2,200	2,593	4,793	2,619	2,954	5,573	3,213	3,749	6,962
Not stated	60	57	117	7	8	15	11	9	20	4	3	7	3	5	8
Total	47,871	49,214	97,085	59,753	60,455	119,208	73,332	74,158	147,690	81,645	82,402	164,047	89,376	89,872	179,248
						Percentage distribution									
0-4	17.8	17.6	17.7	16.5	15.8	16.1	14.8	14.1	14.4	13.5	12.8	13.1	12.0	11.3	11.7
5-9	16.2	15.6	15.9	16.3	15.4	15.9	14.8	14.1	14.5	13.9	13.0	13.5	13.2	12.6	12.9
10-14	9.1	7.9	8.5	12.6	11.4	12.0	12.5	11.5	12.0	13.2	12.3	12.7	12.3	11.6	12.0
15-19	8.1	7.9	8.0	9.6	9.6	9.6	10.3	10.5	10.4	10.2	10.0	10.1	10.7	10.4	10.6
20-24	7.3	8.9	8.1	6.2	7.4	6.8	8.2	9.5	8.9	7.8	9.6	8.7	8.6	9.4	9.0
25-34	15.4	17.5	16.5	13.1	15.3	14.2	13.2	13.4	13.3	14.7	15.1	14.9	15.6	16.4	16.0
35-44	12.0	11.0	11.5	12.0	11.8	11.9	10.7	11.0	10.9	10.5	10.3	10.4	10.9	10.5	10.7
45-54	7.5	7.1	7.3	7.4	7.0	7.2	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.1	8.0
55-64	4.0	3.8	3.9	3.8	3.9	3.9	4.5	4.5	4.5	5.1	5.4	5.3	5.2	5.4	5.3
65+	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.5	3.2	3.2	3.6	3.4	3.6	4.2	3.9
Not stated	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Central Bureau of Statistics, Census Reports, 1961, 1971, 1980, and 1990; Intercensal Population Survey, 1985.

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COUNTRY ECONOMIC REPORT

Employment by Main Industry , 1971-1990 /a

Main Industry	1971		1980		1982		1985		1990	
	million	%	million	%	million	%	million	%	million	%
Agriculture, forestry, hunting & fishery	26.5	64.2	28.0	54.8	31.6	54.7	34.1	54.6	35.5	50.1
Mining and quarrying	0.1	0.2	0.4	0.7	0.4	0.7	0.4	0.7	0.7	1.0
Manufacturing	2.7	6.5	4.4	8.5	6.0	10.4	5.8	9.3	8.2	11.6
Electricity, gas & water	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Construction	0.7	1.6	1.6	3.1	2.2	3.7	2.1	3.4	2.8	4.0
Wholesale and retail trade & restaurants	4.3	10.3	6.6	12.9	8.6	14.8	9.4	15.0	10.6	15.0
Transportation, storage & communications	1.0	2.3	1.5	2.9	1.8	3.1	2.0	3.1	2.7	3.8
Finance, insurance, real estate & business services	0.1	0.2	0.2	0.4	0.1	0.2	0.3	0.4	0.5	0.7
Public services	4.1	10.0	7.7	15.1	7.1	12.3	8.3	13.3	9.7	13.7
Others	1.9	4.6	0.7	1.4	0.0	0.0	0.1	0.1	0.0	0.0
Total	41.3	100.0	51.2	100.0	57.8	100.0	62.5	100.0	70.8	100.0

/a Refers to population 10 years of age and above who worked during the week previous to the census.

Source: Central Bureau of Statistics, Statistical Yearbook of Indonesia, 1975, 1982, 1985 and 1990 Census.

Table 1.4

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COUNTRY ECONOMIC REPORT

Population Distribution by Province and Urban & Rural, 1980-1990

Region	1980 Urban	1980 Rural	1990 Urban	1990 Rural	Growth Rates (% p.a.) Urban	Growth Rates (% p.a.) Rural
Java	22,926,377	68,290,593	38,335,297	69,182,666	5.28	0.00
DKI Jakarta	6,071,748	408,906	8,222,515	0	3.08	0.00
West Java	5,770,868	21,678,972	12,208,176	23,170,307	7.78	0.67
Central Java	4,756,007	20,611,337	7,694,539	20,822,247	4.93	0.10
DI Yogyakarta	607,267	2,142,861	1,294,056	1,618,555	7.86	-2.77
East Java	5,720,487	23,448,517	8,916,011	23,571,557	4.54	0.05
Sumatera	5,481,488	22,514,439	9,293,747	27,128,739	5.42	1.88
Lampung	576,872	4,047,366	747,327	5,256,782	2.62	2.65
Bengkulu	72,492	695,496	240,192	938,759	12.73	3.04
South Sumatra	1,267,009	3,360,710	1,839,492	4,438,453	3.80	2.82
Riau	588,212	1,575,684	1,047,454	2,233,592	5.94	3.55
Jambi	182,846	1,261,630	432,727	1,581,327	9.00	2.28
West Sumatra	433,120	2,973,012	807,983	3,190,694	6.43	0.71
North Sumatra	2,127,436	6,223,514	3,638,832	6,613,479	5.51	0.61
Aceh	233,501	2,377,027	539,740	2,875,653	8.74	1.92
Kalimantan	1,441,300	5,275,596	2,506,657	6,596,249	5.69	2.26
West Kalimantan	416,923	2,067,968	642,989	2,592,377	4.43	2.29
Central Kalimantan	98,257	855,919	245,249	1,150,612	9.58	3.00
South Kalimantan	440,901	1,622,326	702,950	1,893,697	4.78	1.56
East Kalimantan	485,219	729,383	915,469	959,563	6.55	2.78
Sulawesi	1,654,190	8,746,358	2,761,021	9,750,142	5.26	1.09
Central Sulawesi	115,472	1,169,056	281,134	1,422,196	9.31	1.98
North Sulawesi	354,607	1,760,215	564,795	1,913,151	4.76	0.84
South Sulawesi	1,096,075	4,963,489	1,685,443	5,295,146	4.40	0.65
Southeast Sulawesi	88,036	853,598	229,649	1,119,649	10.06	2.75
Other Islands	1,342,474	9,659,008	2,494,449	11,150,256	6.39	1.45
Bali	363,336	2,106,388	734,237	2,043,119	7.29	-0.30
West Nusa Tenggara	383,421	2,340,257	582,180	2,789,519	4.26	1.77
East Nusa Tenggara	205,457	2,531,531	372,242	2,895,677	6.12	1.35
Maluku	152,944	1,255,507	352,438	1,498,649	8.71	1.79
Irian Jaya	237,316	869,975	395,131	1,233,956	5.23	3.56
East Timor	0	555,350	58,221	689,336	0.00	2.18
Total Indonesia	32,845,829	114,485,994	55,391,171	123,808,052	5.36	0.79

Source : Central Bureau of Statistics

Table 2.1

INDONESIA

COUNTRY ECONOMIC REPORT

Gross Domestic Product by Industrial Origin at Current Market Prices, 1981-1991 /a
(Rp. billion)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Agriculture	13,693	15,093	17,696	20,420	22,513	24,871	29,116	34,278	39,164	42,149	44,218
Farm food crops	7,825	9,162	11,057	12,692	13,850	15,085	17,540	21,124	24,492	25,908	25,826
Farm non-food crops	2,048	1,915	2,205	2,739	2,979	3,534	4,140	4,389	4,694	5,027	5,590
Estate crops	254	270	375	593	715	690	978	1,245	1,502	1,640	1,979
Livestock products	1,478	1,611	1,754	2,034	2,427	2,640	3,015	3,545	3,814	4,368	5,032
Forestry	1,077	920	924	939	938	1,001	1,247	1,448	1,615	1,855	1,992
Fishery	976	1,114	1,220	1,373	1,595	1,921	2,196	2,528	3,027	3,352	3,799
Mining and quarrying	13,218	12,153	16,107	16,938	13,571	11,503	17,267	17,162	21,823	25,448	30,901
Oil & natural gas	12,673	11,648	15,103	15,917	12,584	10,502	15,979	15,525	19,283	21,509	25,648
Other	544	505	1,004	1,021	987	1,001	1,287	1,637	2,540	3,940	5,253
Manufacturing	7,057	7,482	9,636	13,113	15,503	17,185	21,150	26,253	30,323	40,030	48,336
Refinery oil	180	155	359	1,013	1,864	1,915	1,820	2,026	2,148	3,561	4,311
LNG	1,202	1,615	1,871	2,707	2,424	1,969	2,097	2,949	3,299	4,848	5,473
Other	5,676	5,712	7,666	9,394	11,216	13,301	17,233	21,278	24,876	31,621	38,553
Electricity, gas & water	202	241	314	354	396	647	747	869	1,008	1,258	1,575
Construction	3,980	3,780	4,597	4,757	5,302	5,314	6,097	7,169	8,884	10,749	12,856
Trade	8,781	8,947	11,541	13,435	15,417	17,122	21,048	24,379	28,856	33,873	37,726
Retail & wholesale trade	7,585	8,567	9,903	11,371	12,962	14,235	17,561	20,389	24,441	28,585	31,597
Hotels & restaurants	1,196	1,380	1,638	2,063	2,455	2,887	3,487	3,991	4,415	5,288	6,130
Transport & communications	2,370	3,164	4,098	5,051	6,100	6,497	7,443	8,140	9,306	11,000	13,467
Transport	2,192	2,942	3,694	4,611	5,539	5,770	6,639	7,227	8,280	9,694	11,887
Communications	183	222	404	440	562	637	804	913	1,025	1,306	1,581
Banking, etc.	1,495	1,789	2,359	3,058	3,496	4,037	4,795	5,322	6,667	8,287	10,084
Ownership of dwellings	1,624	1,731	2,356	2,573	2,775	2,976	3,349	3,736	4,151	4,891	5,925
Public admin. & defence	4,209	4,786	5,712	6,470	7,925	8,397	8,912	9,446	11,174	12,891	14,622
Other services	2,099	2,392	3,001	3,718	3,999	4,315	4,909	5,351	5,830	6,434	7,453
Gross Domestic Product	59,137	62,476	77,676	89,885	96,997	102,693	124,817	142,106	167,184	196,919	227,163

/a In 1988, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-1988 series.
/b Preliminary figures.

Source : Central Bureau of Statistics.

Table 2.2

INDONESIA

COUNTRY ECONOMIC REPORT

Gross Domestic Product by Industrial Origin at Constant 1983 Market Prices, 1981-1991 /a
(Rp. billion)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Agriculture	17,270	17,497	17,696	18,513	19,300	19,799	20,224	21,214	21,918	22,357	22,657
Farm food crops	10,639	10,736	11,057	11,650	11,936	12,287	12,415	12,974	13,489	13,558	13,479
Farm non-food crops	2,219	2,274	2,295	2,349	2,576	2,581	2,693	2,835	2,868	2,981	3,127
Estate crops	343	363	375	446	511	562	565	623	681	743	786
Livestock products	1,634	1,703	1,754	1,859	2,037	2,064	2,111	2,212	2,244	2,328	2,441
Forestry	1,295	1,165	994	894	851	889	968	1,013	974	1,003	993
Fishery	1,139	1,167	1,220	1,253	1,341	1,418	1,472	1,557	1,663	1,745	1,832
Mining & quarrying	16,340	13,876	16,107	17,120	15,480	16,209	16,366	15,899	16,664	17,489	19,108
Oil & natural gas	15,767	13,249	15,103	16,187	14,513	15,237	15,219	14,692	15,391	16,039	17,385
Other	573	627	1,004	933	968	1,072	1,146	1,201	1,273	1,459	1,723
Manufacturing	7,878	7,973	9,896	12,079	13,431	14,678	16,235	18,182	19,856	22,277	24,461
Refinery oil	170	142	359	626	767	927	938	981	990	1,090	1,124
LNG	1,712	1,782	1,871	2,790	2,919	2,923	3,233	3,595	3,685	4,037	4,376
Other	5,997	6,049	7,666	8,663	9,746	10,828	12,064	13,607	15,181	17,150	18,961
Electricity, gas and water	361	422	314	324	361	430	495	549	616	726	843
Construction	4,368	4,409	4,597	4,394	4,508	4,602	4,803	5,259	5,878	6,673	7,403
Trade	10,968	11,603	11,541	11,811	12,399	13,399	14,356	15,657	17,338	18,565	19,557
Retail & wholesale trade	9,436	10,057	9,933	10,028	10,412	11,238	12,005	13,035	14,447	15,421	16,165
Hotels & restaurants	1,532	1,546	1,608	1,783	1,987	2,161	2,351	2,621	2,891	3,143	3,393
Transport & communications	3,309	3,549	4,098	4,443	4,487	4,669	4,939	5,212	5,812	6,368	6,816
Transport	3,083	3,276	3,694	4,008	4,032	4,178	4,394	4,626	5,151	5,596	5,950
Communications	226	263	404	435	455	490	545	586	660	772	867
Banking, etc.	1,762	2,073	2,359	2,829	3,029	3,483	3,659	3,752	4,291	4,894	5,517
Ownership of dwellings	1,823	1,879	2,356	2,412	2,461	2,545	2,654	2,762	2,878	2,999	3,120
Public admin. & defence	4,692	5,329	5,712	5,997	6,455	6,862	7,366	7,932	8,397	8,783	9,039
Other services	2,792	2,851	3,091	3,117	3,180	3,299	3,422	3,570	3,791	3,931	4,192
Gross Domestic Product	71,553	71,361	77,676	83,037	85,082	90,081	94,518	99,932	107,437	115,110	122,705

/a In 1989, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-1988 series.
/b Preliminary figures.

Source : Central Bureau of Statistics.

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Expenditure on GDP at Current Market Prices, 1981-1991 /a
(Rp. billion)

Table 2.3

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Private consumption	32,294	37,924	47,063	54,057	57,201	63,355	71,989	81,045	88,752	106,312	125,143
Government consumption	6,452	7,229	8,077	9,122	10,893	11,329	11,764	12,756	15,698	17,573	20,861
Gross fixed investment	14,135	15,822	19,468	20,136	22,367	24,782	30,980	36,803	45,650	55,633	61,060
Changes in stock /c	3,189	1,584	2,847	3,406	4,837	4,243	8,166	8,007	13,155	16,394	18,595
Exports of goods and nonfactor services	16,177	15,103	19,846	22,999	21,534	20,010	29,874	34,666	42,505	51,953	62,322
Less: Imports of goods and nonfactor services	14,119	15,186	19,625	19,845	19,835	21,036	27,956	31,171	38,601	50,946	60,819
Gross Domestic Product	**58,127**	**62,476**	**77,676**	**89,885**	**96,997**	**102,683**	**124,817**	**142,105**	**167,158**	**196,919**	**227,163**

/a In 1989, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-1988 series.
/b Preliminary figures.
/c Residual.

Source: Central Bureau of Statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

Expenditure on GDP at Constant 1983 Market Prices, 1981 - 1991 /a
(Rp. billion)

Table 2.4

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Private consumption	39,699	42,172	47,063	48,942	49,448	50,530	52,200	54,225	56,476	62,053	66,707
Government consumption	7,567	8,291	8,077	8,353	8,991	9,241	9,226	9,924	10,965	11,317	12,136
Gross fixed investment	17,659	18,740	19,468	18,297	19,616	21,422	22,597	25,201	28,568	32,732	33,537
Changes in stock /c	5,475	3,239	2,847	4,452	6,641	6,333	5,049	1,120	1,366	3,196	641
Exports of goods and nonfactor services	21,163	19,242	19,846	21,145	19,495	22,460	25,745	26,016	28,733	28,863	35,879
Less: Imports of goods and nonfactor services	20,010	20,323	19,625	18,151	19,109	19,906	20,299	16,504	18,723	23,050	26,196
Gross Domestic Product	71,553	71,361	77,676	83,037	85,082	90,081	94,518	99,981	107,385	115,110	122,705

/a In 1989, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-1988 series.
/b Preliminary figures.
/c Residual.

Source : Central Bureau of Statistics.

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COUNTRY ECONOMIC REPORT

Distribution of GDP at Current Market Prices, 1981-1991 /a
(%)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Economic sectors											
Agriculture, forestry, fishery and livestock	23.6	24.1	22.8	22.7	23.2	24.2	23.3	24.1	23.4	21.4	19.5
Mining & quarrying	22.7	19.5	20.7	18.8	14.0	11.2	13.8	12.1	13.1	12.9	13.6
Manufacturing	12.2	12.0	12.7	14.6	16.0	16.7	16.9	18.5	18.1	20.3	21.3
Electricity, gas and water	0.5	0.5	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.7
Construction	6.0	6.0	5.9	5.3	5.5	5.2	4.9	5.0	5.3	5.5	5.7
Transport & communication	4.1	5.1	5.3	5.6	6.3	6.2	6.0	5.7	5.6	5.6	5.9
Other services	30.9	32.8	32.1	32.5	34.7	35.8	34.5	33.9	33.9	33.7	33.4
Gross Domestic Product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Expenditure categories											
Private consumption	55.6	60.7	60.6	60.2	59.0	61.7	57.7	57.0	53.1	54.0	55.1
Government consumption	11.1	11.6	10.4	10.1	11.2	11.0	9.4	9.0	9.4	8.9	9.2
Gross domestic investment	29.8	27.9	28.7	26.2	28.0	28.3	31.4	31.5	35.2	36.6	35.1
Net exports	3.5	-0.1	0.3	3.5	1.8	-1.0	1.5	2.5	2.3	0.5	0.7
Gross Domestic Product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

/a In 1989, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-88 series.
/b Preliminary figures.

Source: Tables 2.1 and 2.3.

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COUNTRY ECONOMIC REPORT

Distribution of GDP at Constant 1983 Market Prices, 1981 - 1991 /a
(%)

Table 2.6

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991 /b
Economic Sectors											
Agriculture, forestry, fishery and livestock	24.1	24.4	22.8	22.3	22.7	22.0	21.4	21.2	20.4	19.4	18.5
Mining & quarrying	22.8	19.4	20.7	20.6	18.2	18.1	17.3	15.9	15.5	15.2	15.6
Manufacturing	11.0	11.2	12.7	14.5	15.8	16.3	17.2	18.2	18.5	19.4	19.9
Electricity, gas and water	0.5	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7
Construction	6.1	6.2	5.9	5.3	5.3	5.1	5.1	5.3	5.5	5.8	6.0
Transport & communications	4.6	5.0	5.3	5.4	5.3	5.2	5.2	5.2	5.4	5.5	5.6
Other services	30.8	33.3	32.1	31.5	32.3	32.8	33.3	33.7	34.1	34.1	33.8
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Expenditure categories											
Private consumption	55.5	59.1	60.6	58.9	58.1	56.1	55.2	54.2	52.6	53.9	54.4
Government consumption	10.6	11.6	10.4	10.1	10.6	10.3	9.8	9.9	10.2	9.8	9.9
Gross domestic investment	32.3	30.8	28.7	27.4	30.9	30.8	29.2	26.3	27.9	31.2	27.9
Net exports	1.6	-1.5	0.3	3.6	0.5	2.8	5.8	9.5	9.3	5.0	7.9
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

/a In 1989, Government released a revised national account series for the period 1983-1988. Since the 1978-1982 series has not yet been revised, it is not directly comparable with the 1983-198 1983-1988 series.
/b Preliminary figures.

Source : Tables 2.2 and 2.4.

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COUNTRY ECONOMIC REPORT

Balance of Payments, 1978/79 - 1992/93
(US$ million)

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93 /c
1. Net oil exports /a	3,785	6,309	9,345	8,379	5,788	6,016	5,845	4,004	1,426	2,334	1,535	2,311	2,682	2,619	1,613
2. Net LNG exports /a	225	667	1,256	1,392	1,578	1,555	1,971	2,119	1,158	1,426	1,525	1,600	3,128	2,554	2,049
3. Non-oil exports (net)	-5163	-6777	-8470	-12351	-14205	-11522	-9784	-7955	-6035	-5456	-6918	-5510	-9751	-9256	-8204
Exports, fob	3,979	6,171	5,587	4,170	3,928	5,367	5,907	6,175	6,731	9,302	12,184	14,493	15,389	18,225	21,070
Imports, cif	-7543	-9028	-11837	-14561	-15824	-14346	-12921	-11186	-10585	-11763	-13585	-16478	-21609	-23854	-26001
Services (nonfreight)	-1601	-1920	-2220	-2160	-2309	-2563	-2770	-2944	-2981	-3205	-3517	-3525	-3522	-3927	-4073
4. Current account (1+2+3)	-1153	2,199	2,131	-2780	-7039	-4151	-1968	-1832	-4051	-1786	-1858	-1599	-3741	-5992	-4543
5. Official capital disbursements	2,101	2,620	2,684	3,521	5,011	5,793	3,519	3,432	5,472	4,573	6,588	5,516	5,026	5,437	5,561
IGGI	1,567	2,257	2,406	2,415	2,905	4,255	3,169	2,751	3,978	4,960	5,468	4,668	4,897	5,103	5,541
Program aid	94	239	116	50	21	84	52	38	48	30	23	6	0	0	0
Project aid	1,473	1,998	2,288	2,365	2,884	4,171	3,137	2,713	3,930	4,938	5,445	4,662	4,897	5,103	5,541
ODA	814	1,106	1,299	995	1,356	1,902	1,442	1,332	1,932	2,807	3,973	3,583	3,756	3,915	4,537
Non-ODA	659	892	989	1,369	1,528	2,269	1,695	1,381	1,998	1,531	1,472	1,079	1,151	1,293	1,004
Non-IGGI	534	453	278	1,106	2,106	1,538	350	681	1,494	207	1,120	848	109	329	20
Cash loan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Amortization	-632	-692	-615	-809	-926	-1010	-1292	-1644	-2129	-2949	-3763	-3696	-4092	(4,431)	(4,726)
7. Other capital (net)	542	-1312	-361	1,149	1,795	1,191	499	272	1,292	1,209	-211	275	5,056	3,797	3,529
Direct investment	271	217	140	142	311	193	245	299	252	544	585	722	1424	1,654	1,739
Oil sector	75	-1237	-685	791	1,322	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Others	196	-292	184	207	162	998	254	273	980	1165	-796	-147	4,432	2,143	1,790
8. Total (4 through 8)	836	2,884	3,832	1,052	(1,159)	1,823	758	328	524	1,529	756	895	3,032	404	21
9. Errors and omissions	-62	-1256	-1165	-2030	-2121	247	-91	-498	-1262	57	-1432	-558	263	-52	0
10. Monetary movements /b	-724	-1628	-2674	988	3,280	-2070	-667	-30	738	-1586	676	-248	-3302	-352	-21

/a Gross exports less imports of goods and services of the oil and LNG sector respectively.
/b A negative amount refers to an accumulation of assets.
/c Projections.

Source: Bank Indonesia.

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COUNTRY ECONOMIC REPORT

Non - oil Exports, 1984/85 - 1991/92

Table 3.2

	Value (US $ million)								Volume ('000 tons)							
	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92
Agricultural	3,663	3,635	4,493	5,764	6,927	7,011	7,260	7,888								
Timber	1,167	1,217	1,586	2,461	2,884	3,454	3,414	3,715	5,201	4,670	5,309	6,578	7,368	7,561	6,279	6,666
a. Log	135	2	0	0	0	0	0	0	1,223	79	0	0	0	0	0	0
b. Plywood	697	848	1,160	1,851	2,095	2,437	2,764	2,950	2,105	2,495	2,959	3,849	4,381	5,086	5,351	5,599
c. Sawn timber	320	349	321	483	592	600	90	84	1,789	2,017	1,600	1,872	2,093	1,739	97	110
d. Other	16	18	105	127	197	416	561	681	84	79	750	857	894	736	831	957
Rubber	856	714	749	1,037	1,229	956	887	897	1,042	1,082	1,062	1,187	1,220	1,222	1,221	1,262
Palm oil	95	170	114	214	313	279	284	345	175	504	569	703	808	943	1,098	1,115
Coffee	568	659	753	499	577	452	371	362	308	294	309	275	323	399	426	409
Tea	211	134	106	119	137	181	154	162	91	102	93	98	110	118	112	127
Tobacco	44	55	72	47	43	44	72	65	23	21	24	20	20	17	21	23
Pepper	66	82	152	158	144	94	78	71	34	25	33	36	53	44	52	56
Copra cake	18	35	34	41	43	51	56	47	213	433	348	384	355	460	632	467
Tapioca	31	42	52	93	154	98	121	99	418	534	439	833	1,368	1,303	1,268	1,033
Rattan	96	80	99	162	37	0	0	0	101	92	116	135	30	0	0	0
Hides	40	37	45	59	68	70	58	43	2	8	10	6	4	4	2	4
Other foodstuff	98	122	122	153	202	250	324	403	748	884	1,338	2,122	1,224	1,143	1,181	1,215
Animal products	219	274	390	488	839	781	1,076	1,291	87	109	132	194	245	316	411	558
of which shrimps	183	228	297	352	541	520	711	892	44	52	53	86	91	137	133	233
Others	155	14	221	234	258	302	365	389	n.a	3	n.a	n.a	n.a	n.a	n.a	n.a
Mineral	775	799	719	1,112	1,556	1,585	1,439	1,555								
Tin	252	248	156	143	165	213	147	137	22	23	24	22	24	26	26	28
Copper	132	133	144	186	238	321	446	555	242	279	271	290	318	341	477	683
Nickel	121	139	112	152	438	404	326	288	955	943	1,288	1,456	1,592	1,965	1,615	1,740
Aluminum	208	223	201	245	301	267	202	186	153	219	177	151	124	164	136	136
Granite	9	8	8	6	6	9	14	14	1,300	1,194	1,272	858	860	1,083	1,718	1,675
Others	53	49	98	379	407	371	305	374	n.a	65,546	n.a	n.a	n.a	n.a	n.a	n.a
Manufactured	1,469	1,739	1,519	2,626	3,701	5,897	6,680	8,782								
Textiles	418	577	713	1,128	1,571	2,219	2,731	3,740	n.a	111	n.a	n.a	n.a	n.a	n.a	n.a
Handicraft	116	30	30	67	184	250	357	443	n.a	15	n.a	n.a	n.a	n.a	n.a	n.a
Electrical app.	134	109	46	55	105	176	259	449	n.a	7	n.a	n.a	n.a	n.a	n.a	n.a
Cement	14	23	47	54	85	128	69	54	516	955	2,012	2,316	3,316	4,008	1,752	1,300
Fertilizer	31	109	97	117	136	167	214	284	208	1,047	1,212	1,266	1,011	1,716	1,553	1,810
Others	757	892	585	1,205	1,619	2,958	3,051	3,813	n.a	2,494	n.a	n.a	n.a	n.a	n.a	n.a
Unclassified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Non-oil Exports	5,907	6,173	6,731	9,502	12,184	14,493	15,379	18,225								

Source: Bank Indonesia (based on PEB Export Declaration Form).

Table 3.3

INDONESIA

COUNTRY ECONOMIC REPORT

Value of Exports by Principal Country of Destination, 1978-1992
(US$ million)

Countries	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 /a
Asean	1,478	2,233	3,054	3,415	3,499	3,476	2,487	1,982	1,515	1,703	2,079	2,429	2,515	3,197	2,852
Malaysia	21	66	67	75	59	58	98	77	82	94	184	220	253	342	309
Thailand	18	38	35	35	26	49	98	81	83	87	151	234	189	267	246
Philippines	198	165	181	411	293	242	166	199	108	71	87	149	161	168	121
Singapore	1,241	1,964	2,771	2,894	3,121	3,128	2,126	1,626	1,239	1,449	1,653	1,818	1,902	2,410	2,162
Brunei	0	0	0	0	0	0	0	0	2	3	4	8	11	10	15
Hongkong	43	99	152	135	145	182	261	348	345	420	554	549	618	703	618
Japan	4,566	7,192	12,042	11,950	11,193	9,678	10,353	8,594	6,644	7,393	8,018	9,321	10,923	10,767	7,693
Other Asia	631	807	802	805	970	891	1,254	1,475	1,170	1,869	2,415	2,934	4,035	5,540	4,637
Africa	37	32	56	37	57	79	140	160	179	150	272	217	199	394	281
USA	2,962	3,171	4,801	4,852	3,546	4,267	4,505	4,040	2,902	3,349	3,074	3,497	3,365	3,509	3,100
Canada	30	28	28	22	19	28	46	46	60	94	101	108	139	172	227
Other America	766	431	956	1,960	929	1,015	1,031	326	182	48	47	50	102	184	220
Australia	107	190	339	447	674	298	275	149	159	310	293	387	403	628	552
Other Oceania	7	51	109	211	278	264	296	81	83	43	31	59	84	39	37
EEC	874	1,173	1,388	1,063	894	953	1,036	1,113	1,340	1,541	2,152	2,338	3,928	3,742	3,413
United Kingdom	54	89	142	131	126	199	168	191	197	212	349	384	517	654	596
Netherlands	355	399	415	347	265	289	332	392	453	493	646	681	723	838	764
West Germany	226	338	389	239	253	252	246	255	334	361	456	493	750	907	669
Belgium & Luxemburg	18	18	25	18	20	33	63	45	91	109	177	173	210	258	292
France	54	77	122	52	77	53	49	71	93	102	164	209	286	386	361
Denmark	40	43	40	15	10	4	6	3	6	13	20	36	54	74	75
Ireland	1	0	1	0	0	1	4	2	2	7	17	22	35	43	34
Italy	126	210	254	168	142	120	167	152	152	175	221	234	276	382	419
Greece	0	0	0	93	1	1	1	3	6	3	2	4	9	18	21
Portugal	0	0	0	0	0	0	0	0	7	10	22	24	17	14	11
Spain	0	0	0	0	0	0	0	0	0	55	78	80	152	169	172
Soviet Union	52	55	73	80	22	50	59	78	52	82	38	100	91	40	58
Others in Europe	91	130	152	167	102	145	286	194	174	133	144	171	183	229	163
Total	11,643	15,590	23,950	25,165	22,328	21,146	21,888	18,587	14,805	17,136	19,219	22,159	25,675	29,142	23,850

/a January-September 1992.

Source: Central Bureau of Statistics.

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COUNTRY ECONOMIC REPORT

Value of Imports by Principal Country of Origin, 1978-1992
(US$ million)

Table 3.4

Countries	1978	1979	1980	1981	1982	1983	1984 /a	1985	1986	1987	1988	1989	1990	1991	1992 /b
Asean	652	839	1,350	1,702	3,302	3,915	1,948	962	1,121	1,244	1,305	1,765	2,430	2,464	1,787
Malaysia	22	35	36	60	56	60	86	52	50	139	276	369	326	407	377
Thailand	101	219	288	146	199	209	55	48	72	75	96	210	183	278	301
Philippines	76	49	90	253	228	182	15	23	28	82	36	63	649	81	40
Singapore	453	536	936	1,243	2,819	3,465	1,791	839	969	947	896	1,122	1,272	1,699	1,068
Brunei	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0
Hongkong	142	102	139	68	87	65	86	52	94	104	133	179	273	232	186
Japan	2,016	2,103	3,413	3,989	4,279	3,793	3,308	2,644	3,128	3,596	3,386	3,767	5,300	6,327	4,683
Other Asia	995	1,249	1,992	1,986	2,452	2,220	2,338	1,727	1,681	1,924	2,266	3,203	4,639	5,156	4,079
Africa	69	132	130	252	202	135	171	160	103	153	201	202	170	195	175
USA	832	1,028	1,409	1,795	2,417	2,534	2,560	1,721	1,483	1,415	1,736	2,218	2,520	3,397	2,771
Canada	83	73	97	102	138	186	219	198	214	203	274	311	407	354	249
Other America	77	56	111	266	166	129	139	191	174	211	224	455	519	597	368
Australia	218	223	378	362	365	402	372	461	413	463	578	925	1,186	1,378	1,004
Other Oceania	38	43	76	98	96	72	78	69	71	89	96	98	115	118	105
EEC	1,267	1,074	1,445	2,200	2,656	2,234	2,062	1,706	1,796	2,353	2,510	2,575	4,061	4,704	3,951
United Kingdom	208	198	261	547	445	364	297	305	342	325	340	360	440	603	566
Netherlands	146	119	116	205	185	257	266	215	189	316	258	248	550	505	318
West Germany	594	462	685	905	1,193	741	820	677	719	836	887	920	1,502	2,061	1,568
Belgium & Luxemburg	33	63	56	86	97	124	102	101	89	142	159	167	232	254	267
France	166	143	236	344	571	591	432	284	281	392	465	406	643	544	609
Denmark	60	19	12	14	54	21	20	18	26	26	22	31	61	69	79
Ireland	2	2	3	4	4	8	8	9	4	6	6	8	74	13	14
Italy	59	67	76	96	104	125	113	101	144	237	248	348	410	536	422
Greece	0	0	0	0	3	3	4	0	0	2	3	3	6	5	6
Portugal	0	0	0	0	0	0	0	0	2	6	3	2	6	4	2
Spain	0	0	0	0	0	0	0	0	0	66	120	82	136	131	102
Soviet Union	15	14	20	41	39	25	12	3	5	16	45	51	53	48	29
Others in Europe	287	269	274	412	668	641	490	365	435	510	494	611	764	899	708
Total	6,690	7,203	10,834	13,272	16,859	16,352	13,882	10,259	10,719	12,370	13,249	16,360	22,431	25,869	20,194

/a Since 1984, excludes the value of processing deals in the oil sector.
/b January-September 1992.

Source: Central Bureau of Statistics.

Table 4.1

INDONESIA

COUNTRY ECONOMIC REPORT

Summary of External Debt Data, 1981-92

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
External debt data	(US$ million)											
Disbursed and outstanding debt (DOD) /b	15,908	18,318	21,494	22,266	26,777	32,634	40,908	41,241	41,092	45,016	48,043	50,962
Bilateral/multilateral	10,096	10,913	11,818	12,203	15,063	18,565	24,788	26,552	28,256	33,300	37,256	39,935
Other /c	5,813	7,405	9,676	10,063	11,714	14,069	16,120	14,689	12,836	11,716	10,787	11,027
Total debt outstanding, including undisbursed (TDO)	26,953	32,008	35,298	36,352	42,784	50,089	60,443	60,076	59,715	65,096	69,004	70,911
Bilateral/multilateral	17,705	19,326	20,556	21,496	25,359	29,480	37,334	38,984	41,454	44,494	53,415	55,612
Other /c	9,248	12,682	14,741	14,856	17,425	20,609	23,114	21,093	18,261	20,602	15,589	15,299
Commitments	4,951	7,070	5,687	4,816	4,638	4,103	5,992	6,088	7,166	6,243	8,001	6,199
Bilateral/multilateral	2,157	2,593	2,294	2,745	2,421	2,004	4,791	4,779	5,752	5,257	6,310	5,067
Other /c	2,795	4,477	3,393	2,071	2,217	2,099	1,202	1,308	1,413	986	1,692	1,113
Gross disbursements	2,672	3,951	4,979	3,890	3,553	4,240	5,463	6,423	6,472	4,753	5,633	6,645
Bilateral/multilateral	1,362	1,595	1,737	1,937	1,625	1,900	3,694	4,287	4,265	4,151	4,556	5,309
Other /c	1,310	2,356	3,242	1,953	1,928	2,340	1,769	2,136	2,206	602	1,077	1,337
Net disbursements	1,618	2,847	3,699	2,290	1,223	1,618	2,057	1,985	2,036	623	1,461	1,638
Bilateral/multilateral	985	1,126	1,186	1,368	1,010	1,007	2,543	2,952	2,890	2,517	2,748	3,289
Other /c	633	1,721	2,503	922	212	611	(486)	(966)	(854)	(1,893)	(1,288)	(1,651)
Net resource transfers	628	1,715	2,456	661	(420)	(454)	(216)	(540)	(485)	(1,911)	(1,185)	(1,190)
Bilateral/multilateral	654	732	733	802	314	81	1,462	1,643	1,495	919	957	1,2..
Other /c	(26)	983	1,723	(141)	(733)	(535)	(1,677)	(2,183)	(1,980)	(2,830)	(2,143)	(2,469)
Public debt service	2,045	2,236	2,523	3,229	3,972	4,694	5,679	6,963	6,936	6,664	6,818	7,835
Amortization	1,054	1,104	1,290	1,600	2,330	2,622	3,406	4,438	4,435	4,129	4,172	5,007
Interest	991	1,132	1,233	1,629	1,643	2,072	2,273	2,525	2,501	2,535	2,646	2,828
Public debt service	2,045	2,236	2,523	3,229	3,972	4,694	5,679	6,963	6,936	6,664	6,818	7,835
Bilateral/multilateral	708	863	1,004	1,135	1,311	1,819	2,232	2,645	2,770	3,232	3,598	4,030
Other /c	1,336	1,373	1,519	2,093	2,661	2,875	3,447	4,319	4,166	3,432	3,220	3,806
Disbursement indicators	(%)											
Undisbursed debt/TDO /b	41	43	39	39	37	35	32	31	31	31	30	28
Bilateral/multilateral	43	44	43	43	41	37	34	32	32	25	30	28
Other /c	37	42	34	32	33	32	30	30	30	43	31	28
Gross disbursements/commit.	54	56	88	81	77	103	91	106	90	76	70	107
Bilateral/multilateral	63	62	76	71	67	95	77	90	74	79	72	104
Other /c	47	53	96	94	87	111	147	163	156	61	64	120
Gross disbursements/undisbursed debt and commitments /d	21	24	38	28	24	27	22	28	32	9	14	25
Bilateral/multilateral	14	14	16	16	13	15	21	25	23	21	21	26
Other /c	21	24	38	28	24	27	22	28	32	9	14	25
Net disbursemnts/gross disbs.	61	72	74	59	34	38	38	31	31	13	26	25
Bilateral/multilateral	72	71	68	71	62	53	69	69	68	81	60	62
Other /c	48	73	77	47	11	26	(27)	(45)	(39)	(315)	(120)	(123)
Net resource transfers/gross disbs.	23	43	49	17	(12)	(11)	(4)	(8)	(7)	(40)	(21)	(18)
Bilateral/multilateral	48	46	42	41	19	4	40	38	35	22	21	24
Other /c	(2)	42	53	(7)	(38)	(23)	(95)	(102)	(89)	(471)	(199)	(185)

/a Data in this sector refer to public medium and long term loans. Loans with a maturity of less than one year, credits for LNG expansion, LPG and paraxylene projects, and grants are not included.
/b End of year.
/c Suppliers' credits, loans from financial institutions, export credits, bonds and nationalization only.
/d Gross disbursements as a percentage of undisbursed debt (TDO-DOD) at beginning of year plus commitments during the year.

Source: IBRD Debtor Reporting System, based on data provided by Bank Indonesia.

Table 4.2
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INDONESIA

COUNTRY ECONOMIC REPORT

External Public Debt Outstanding as of December 31, 1991
(US$ '000)

Type of creditor/ creditor country	Debt outstanding			Major reported new commitments Jan 1-Dec 31 1991
	Disbursed	Undisbursed	Total	
Suppliers' Credits				
Finland	12,186	23,691	35,877	21,757
France	37		37	0
Japan	2,348,984	647,391	2,996,375	85,660
Korea, Republic of	4,129		4,129	0
Pakistan	3,805		3,805	0
Switzerland	1,203		1,203	0
Total suppliers' credits	2,370,344	671,082	3,041,426	107,417
Financial Institutions				
France	252,647	9,630	262,277	0
Germany, Fed. Rep. of	1,737		1,737	0
Hong Kong	948,936	1,099,680	2,048,616	0
Italy	2,359		2,359	0
Japan	3,148,244	883,882	4,032,126	400,000
Multiple Lenders	93,750		93,750	0
Netherlands	945		945	0
Singapore	67,436		67,436	0
United Kingdom	147,953	187,070	335,023	0
United States	252,873	130,000	382,873	0
Total financial institutions	4,916,882	2,310,262	7,227,142	400,000
Bonds				
Germany, Fed. Rep. of	197,889		197,889	0
Netherlands	11,693		11,693	0
Switzerland	82,500		82,500	0
United Kingdom	88,100		88,100	0
United States	300,000		300,000	0
Total bonds	680,182	0	680,182	0
Nationalization				
Netherlands	120,907		120,907	0
Total nationalization	120,907	0	120,907	0
Multilateral Loans				
Asian Dev. Bank	4,365,715	2,939,604	7,305,319	990,000
EEC	4,243		4,243	0
IBRD	10,597,020	4,460,794	15,057,814	1,532,600
IDA	829,079		829,079	0
Intl. Fund Agr. Dev. (IFAD)	53,239	61,988	115,227	0
Islamic Dev. Bank	472		472	0
Nordic Invest. Bank	105,023	33,470	138,493	42,098
Total multilateral loans	15,954,791	7,495,856	23,450,647	2,564,698

Table 4.2
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COUNTRY ECONOMIC REPORT

External Public Debt Outstanding as of December 31, 1991
(US$ '000)

Type of creditor/ creditor country	Debt outstanding			Major reported new commitments Jan 1-Dec 31 1991
	Disbursed	Undisbursed	Total	
Bilateral Loans				
Australia	386,057	101,413	487,470	0
Austria	42,831	23	42,854	0
Belgium	94,059	34,943	129,002	30,868
Brunei	100,000		100,000	0
Bulgaria	912		912	0
Canada	349,619	63,410	413,029	11,848
China	22,913		22,913	0
Czechoslovakia	30,408		30,408	0
Denmark	22,749	41,790	64,539	38,324
Egypt, Arab Republic of	1,274		1,274	0
France	756,481	316,580	1,073,061	9,806
German Dem. Rep.	25,008		25,008	0
Germany, Fed.Rep.of	1,887,509	1,490,012	3,377,521	742,698
Hungary	7,585		7,585	0
India	10,263	3,163	13,426	0
Italy	48,895	50,195	99,090	14,849
Japan	13,084,409	5,405,146	18,489,555	2,395,977
Korea, Republic of	2,041	9,711	11,752	0
Kuwait	65,572	60,115	125,687	0
Netherlands	1,249,512	69,116	1,318,628	0
New Zealand	853		853	0
Other	20,000		20,000	0
Pakistan	3,096		3,096	0
Poland	42,712		42,712	0
Romania	6,123		6,123	0
Saudi Arabia	74,968	61,288	136,256	0
Spain	40,297	29,797	70,094	36,429
Switzerland	27,530	10,094	37,624	0
United Arab Emirates	3,980		3,980	0
United Kingdom	43,739	67,556	111,295	0
United States	2,310,505	702,340	3,012,845	320,768
USSR	445,663		445,663	0
Yugoslavia	51,195		51,195	0
Total bilateral loans	21,258,760	8,516,692	29,775,453	3,601,568
Export Credits				
Austria	170,094	280,814	450,908	248,538
Belgium	131,641	152,979	284,620	60,577
Denmark	0	15,213	15,213	15,213
France	1,158,607	646,572	1,805,179	307,676
Germany, Fed.Rep.of	163,798	36,873	200,671	0
Hong Kong	96,510		96,510	89,885
Japan	202,527	59,250	261,777	15,000
Netherlands	216,157	147,824	363,981	92,623
Norway	483		483	0
Singapore	3,375		3,375	0
Spain	82		82	0
Sweden	155,487		155,487	0
Switzerland	83,402	63,612	147,014	58,456
United Kingdom	649,505	459,294	1,108,799	278,757
Total export credits	3,031,669	1,862,431	4,894,098	1,166,726
Total external public debt	48,333,533	20,856,323	69,189,855	7,840,409

Source: IBRD Debtor Reporting System, based on data provided by Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Service Payments, Commitments, Disbursements and Outstanding Amounts of External Public Debt
(US$ '000)

	Debt outstanding at end of period		Transactions during period					Other Changes	
	Disbursed only	Including Undisbursed	Commitments	Disbursements	Service Payments: Principal	Service Payments: Interest	Service Payments: Total	Cancellations	Adjustment /a
Actual									
1980	15,027,314	24,509,975	4,277,373	2,550,505	939,494	823,811	1,763,305	118,261	-
1981	15,908,458	26,953,145	4,951,129	2,672,429	1,054,106	990,708	2,044,814	163,286	-1,290,566
1982	18,317,545	32,007,959	7,069,817	3,951,336	1,104,100	1,132,291	2,236,391	5,472	-
1983	21,493,904	35,297,509	5,686,879	4,979,024	1,289,872	1,233,096	2,522,968	197,669	-909,788
1984	22,265,831	36,352,169	4,816,038	3,889,587	1,599,633	1,628,892	3,228,525	25,234	-2,136,511
1985	26,777,250	42,784,096	4,637,815	3,552,669	2,329,754	1,642,524	3,972,278	514,815	4,638,680
1986	32,633,661	50,088,546	4,103,343	4,240,035	2,621,963	2,071,669	4,693,632	183,468	6,006,538
1987	40,907,509	60,447,572	5,992,347	5,462,822	3,405,766	2,272,912	5,678,678	635,218	8,407,663
1988	41,240,885	60,076,075	6,087,470	6,422,860	4,437,776	2,525,349	6,963,125	589,490	-1,431,701
1989	41,092,228	59,715,366	7,165,685	6,471,469	4,435,217	2,501,122	6,936,339	293,194	-2,797,982
1990	45,016,923	65,095,595	6,243,163	4,752,808	4,129,417	2,534,505	6,663,922	898,612	4,165,096
1991	48,043,553	69,003,554	8,001,231	5,632,684	4,172,108	2,645,766	6,817,874	1,956,864	2,035,669
1992	50,962,270	70,910,847	6,199,226	6,645,429	5,007,001	2,828,308	7,835,309	253,740	968,809
Projected									
1993	50,809,050	62,998,203	-	5,501,984	5,654,058	2,823,404	8,477,463	2,257,439	-1,146
1994	50,422,964	58,073,420	-	4,538,697	4,924,783	2,754,667	7,679,450	-	-
1995	48,593,847	53,188,600	-	3,055,729	4,884,847	2,664,849	7,549,695	-	26
1996	46,560,217	49,206,602	-	1,948,386	3,982,015	2,518,182	6,500,197	-	18
1997	44,001,920	45,372,450	-	1,275,898	3,834,196	2,367,603	6,201,199	-	43
1998	40,830,562	41,506,757	-	694,369	3,865,727	2,191,528	6,057,255	-	35

/a This column shows the amount of arithmetic imbalances in the amount outstanding, including undisbursed, from one year to the next. The most common causes of imbalance are changes in exchange rates and transfers of debts from one category to another in the table.

Source: IBRD Debtor Reporting System, based on data provided by Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

DEVELOPMENT ASSISTANCE FLOWS, 1986-1991 /a
(US$ million)

COUNTRIES	1986			1987			1988			1989			1990			1991		
	Comm. /b	Disb. /c		Comm. /b	Disb. /c		Comm. /b	Disb. /c		Comm. /b	Disb. /c		Comm. /b	Disb. /c		Comm. /b	Disb. /c	
		Gross	Net		Gross	Net		Gross	Net		Gross	Net		Gross	Net		Gross	Net
CGI members :																		
AUSTRALIA	42.1	42.0	42.0	32.2	48.2	48.2	84.0	71.7	71.7	106.2	83.1	83.1	62.8	77.4	77.4	105.7	72.9	72.9
AUSTRIA	0.2	0.2	0.2	17.6	0.6	0.6	19.2	10.5	6.9	20.7	15.7	4.4	26.8	34.3	21.2	124.1	49.3	36.1
BELGIUM	5.6	13.4	11.3	7.1	5.8	5.8	11.9	13.3	6.2	10.7	10.7	10.7	6.5	6.5	-1.6	6.5	42.4	37.6
CANADA	54.2	54.2	52.1	37.6	45.4	43.0	88.9	43.3	40.1	81.7	38.4	33.4	37.6	51.9	48.4	14.1	45.4	42.7
FRANCE	8.3	45.9	39.2	46.7	43.5	37.3	137.2	67.6	57.1	288.9	115.3	108.9	209.7	136.0	122.4	209.7	141.6	126.5
GERMANY	44.8	183.0	126.1	139.0	140.4	61.8	151.4	190.2	97.6	179.4	138.8	52.4	268.2	211.4	99.0	621.8	253.8	135.8
ITALY	15.7	12.4	11.8	3.9	19.8	19.4	8.1	2.8	1.3	48.4	21.2	17.5	0.5	11.3	9.8	18	15.8	14.3
JAPAN	165.6	337.4	160.8	1,336.3	941.1	707.3	1,701.0	1,264.7	984.9	1,455.2	1,407.1	1,145.3	1,500.9	1,131.9	867.8	1500.9	1382.5	1065.5
NETHERLANDS	102.3	108.8	90.5	113.7	165.0	140.3	254.6	186.5	156.2	222.2	191.0	161.5	202.6	228.4	190.1	234.6	180.5	139.4
NEW ZEALAND	1.2	2.1	2.4	2.1	2.1	2.1	2.4	2.3	2.3	-	2.2	2.2	3.3	3.1	3.1	1.8	2.4	2.4
SPAIN	-	-	-	-	-	-	-	-	-	-	0.1	-	-	23.2	23.2	-	23.2	23.2
SWITZERLAND	20.0	9.7	9.7	16.8	7.4	7.4	8.3	28.4	28.4	7.0	21.4	21.4	19.6	19.4	19.4	53.4	13.8	13.8
UNITED KINGDOM	9.4	10.9	7.3	33.3	14.5	10.4	35.6	21.7	17.2	45.2	18.2	14.5	317.0	26.4	22.4	103	42.9	38.9
UNITED STATES	109.7	104.0	46.0	124.2	96.0	36.0	79.8	86.0	22.0	64.4	97.0	31.0	54.2	101.0	31.0	69.4	83	18
Other DAC countries :																		
DENMARK	0.1	0.2	-0.2	-	0.8	0.3	-	1.1	0.6	3.4	11.5	11.1	0.6	5.7	4.9	0.8	3	2.2
FINLAND	5.3	1.4	1.4	1.7	1.8	1.8	8.9	3.3	3.3	0.6	5.8	5.8	3.9	2.7	2.7	1.7	3.1	3.1
IRELAND	-	-	-	0.1	0.6	0.1	-	-	-	-	-	-	-	-	-	0	-	0
NORWAY	4.6	4.2	4.2	3.1	0.8	0.6	-	2.2	2.0	-	1.2	0.5	-	0.3	-0.2	0.3	0.8	-0.2
SWEDEN	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0	0.2	0.2
ARAB COUNTRIES	24.7	33.5	20.4	42.4	24.4	11.2	19.7	27.9	9.1	-	20.5	1.9	0.7	39.2	23.0	0.4	23.1	9
SUBTOTAL	613.8	963.3	625.2	1,957.8	1,558.2	1,133.6	2,611.0	2,023.5	1,506.9	2,534.0	2,199.2	1,705.6	2,714.9	2,110.2	1,564.1	3,066.2	2,379.7	1,781.4
MULTILATERAL																		
AS.D.B.	457.3	205.3	170.0	585.2	355.0	311.0	561.1	530.4	470.1	694.9	700.7	631.1	1,049.6	778.1	667.8	-	-	-
E.E.C.	24.0	7.3	7.3	37.2	6.3	6.3	2.9	8.3	8.3	1.2	13.9	13.9	26.1	13.9	12.4	27.7	12	12
IBRD	982.1	810.1	579.5	1,418.0	1,359.9	1,004.1	1,066.9	1,647.9	1,219.2	2,007.4	1,256.4	783.4	1,565.2	987.3	436.4	-	-	-
IDA	-	18.1	12.4	-	14.4	8.7	-	1.3	-4.8	-	1.1	-7.0	-	-	-11.2	-	-	-
IFAD	0.2	17.6	13.2	13.7	16.9	15.6	0.3	12.2	10.8	-	12.6	10.1	21.9	12.8	8.6	-	9.6	4.4
U.N. AGENCIES	43.9	40.0	40.0	50.2	44.9	44.9	47.2	40.6	40.6	53.6	45.2	45.2	51.6	43.3	43.3	58.4	49.2	49.2
UNDP	-	15.6	15.6	-	21.2	21.2	-	20.6	20.6	-	19.1	19.1	-	17.0	17.0	-	17.2	17.2
UNTA	-	3.6	3.6	-	5.1	5.1	-	3.7	3.7	-	5.2	5.2	-	4.3	4.3	-	6.7	6.7
UNICEF	-	9.3	9.3	-	10.5	10.5	-	11.9	11.9	-	11.3	11.3	-	10.0	10.0	-	11.3	11.3
UNRWA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
WFP	-	9.0	9.0	-	5.2	5.2	-	2.7	2.7	-	7.6	7.6	-	8.0	8.0	-	7.6	7.6
UNHCR	-	2.5	2.5	-	2.9	2.9	-	1.7	1.7	-	2.0	2.0	-	4.0	4.0	-	6.4	6.4
OTHER MULTILATERAL	-	4.0	4.0	-	5.3	5.3	-	6.7	6.7	-	10.0	10.0	-	8.4	8.4	-	9.3	9.3
ARAB AGENCIES	-	5.3	4.3	-	0.2	-1.0	-	0.3	-1.4	-	-	-1.0	-	-	-2.0	-	1.6	1.3
SUBTOTAL	1,507.5	1,107.6	830.8	2,104.3	1,802.9	1,394.9	1,678.4	2,247.7	1,749.5	2,757.1	2,039.8	1,485.7	2,714.4	1,843.8	1,163.7	86.1	81.7	76.2
TOTAL	2,121.3	2,070.9	1,456.0	4,062.1	3,361.1	2,528.5	4,289.4	4,271.2	3,256.4	5,291.1	4,239.0	3,191.3	5,429.3	3,954.0	2,727.8	3,152.3	2,461.4	1,857.6

/a Calendar year.
/b Commitments.
/c Disbursements.

Source : OECD : "Geographical Distribution of Financial Flows to Developing Countries"; For Spain, As.D.B., IBRD and IDA : Debtor Reporting System, World Bank.

INDONESIA

COUNTRY ECONOMIC REPORT

Central Government Budget Summary, 1983/84-1993/94
(Rp. billion)

Table 5.1

	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
1. Domestic revenues	14,433	15,906	19,253	16,141	20,803	23,004	28,740	39,546	41,585	47,453	52,769
2. Routine expenditures /a	8,412	9,429	11,952	13,559	17,482	20,739	24,331	29,998	30,228	34,031	37,095
3. Government saving (1-2)	6,021	6,477	7,301	2,581	3,322	2,265	4,409	9,549	11,357	13,421	15,674
4. Development expenditures	9,899	9,952	10,873	8,332	9,477	12,251	13,834	19,453	21,766	24,137	25,227
5. Balance (3-4)	(3,878)	(3,475)	(3,572)	(5,751)	(6,156)	(9,985)	(9,426)	(9,905)	(10,409)	(10,716)	(9,553)
Financed by:											
6. Program aid	15	69	69	1,958	728	2,041	1,007	1,397	1,563	512	427
7. Project aid	3,868	3,409	3,503	3,795	5,430	7,950	8,422	8,508	8,846	10,204	9,126
8. Change in balances (- = increase)	(4)	(3)	(1)	(2)	(2)	(5)	(4)	(0)	(0)	(0)	0

/a Includes debt service payments.

Source: Ministry of Finance.

INDONESIA

COUNTRY ECONOMIC REPORT

Central Government Receipts, 1983/84 - 1993/94
(Rp. billion)

	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Taxes on income	11,605	12,847	13,625	8,798	12,986	13,901	17,330	25,278	25,494	28,344	31,296
Income tax	399	451	675	2,271	2,663	3,949	5,488	6,755	9,580	11,913	14,849
Corporate tax /a	757	1,670	1,638								
Corporate tax on oil /b	9,520	10,430	11,144	6,338	10,047	9,527	11,252	17,712	15,039	15,330	15,128
Witholding tax /b	628										
IPEDA/property tax /c	132	157	168	190	275	424	590	811	875	1,101	1,320
Others /d	168	138									
Taxes on domestic consumption	1,392	1,510	3,479	5,156	4,719	6,187	7,589	9,624	11,452	13,455	14,755
Sales/value added tax	575	637	2,327	2,900	3,390	4,505	5,837	7,463	8,926	10,714	11,683
Excises	773	873	944	1,056	1,106	1,390	1,477	1,917	2,223	2,381	2,498
Other oil revenues /e	0	0	0	1,010	0	0	0	0	0	0	210
Miscellaneous levies	44	0	208	190	223	292	276	244	303	360	364
Taxes on international trade	916	862	658	1,099	1,122	1,348	1,759	2,530	2,152	2,661	3,136
Import duties	557	530	607	960	938	1,192	1,587	2,486	2,133	2,652	3,106
Sales tax on imports /f	255	241									
Export tax	104	91	51	79	184	156	172	44	19	9	30
Nontax receipts	520	687	1,492	1,147	1,977	1,569	2,062	2,115	2,487	2,993	3,583
Domestic revenue	14,433	15,906	19,253	16,141	20,803	23,004	28,740	39,546	41,585	47,453	52,769
Development funds	3,882	3,478	3,573	5,752	6,158	9,991	9,429	9,905	10,409	10,716	9,553
Program aid	15	69	69	1,958	728	2,041	1,007	1,397	1,563	512	427
Project aid /g	3,868	3,409	3,503	3,795	5,430	7,950	8,422	8,508	8,846	10,204	9,126
Total revenues	18,315	19,384	22,825	21,893	26,961	32,995	38,169	49,451	51,994	58,168	62,322

/a Since 1986/87 included in income tax.
/b Since 1984/85, witholding tax eliminated as separate category and combined with income tax.
/c Since January 1986, Ipeda replaced by land and building tax.
/d Classification changed to other tax (included in miscellaneous levies which consist of other taxes and stamp duty).
/e Oil subsidies shown as Government expenditures from 1977/78 (see Table 5.3).
/f Since 1984/85 classification changed to value-added tax and tax on luxury goods.
/g Includes commercial bank and suppliers' credits for development projects.

Source: Ministry of Finance.

INDONESIA

COUNTRY ECONOMIC REPORT

Central Government Expenditures, 1983/84 - 1993/94
(Rp. billion)

Table 5.3

	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Personnel expenditures	2,757	3,047	4,018	4,311	4,617	4,998	6,202	7,054	8,103	9,466	10,895
Wages and salaries	1,996	2,207	3,073	3,330	3,561	3,833	4,826	5,571	6,299	7,533	8,868
Rice allowance	346	407	402	406	451	518	588	640	922	888	905
Food allowance	261	271	300	288	299	327	373	382	393	473	482
Other	88	90	161	177	176	185	243	264	279	313	342
External	66	72	82	110	130	135	171	198	209	259	297
Material expenditures	1,057	1,183	1,367	1,366	1,329	1,492	1,702	1,830	2,373	2,870	2,980
Domestic	1,007	1,134	1,310	1,294	1,239	1,378	1,569	1,670	2,217	2,681	2,786
External	50	49	58	73	90	114	133	160	155	189	194
Subsidies to region /a	1,547	1,883	2,489	2,650	2,816	3,038	3,566	4,237	4,834	5,283	6,029
Irian Jaya	42	0	0	0	0	0	0	0	0	0	0
Other region	1,505	1,883	2,489	2,650	2,816	3,038	3,566	4,237	4,834	5,283	6,029
Debt service payments	2,103	2,777	3,323	5,058	8,205	10,940	11,939	13,395	13,434	15,217	16,712
Internal	30	39	20	0	39	78	149	250	251	275	286
External	2,073	2,737	3,303	5,058	8,166	10,863	11,790	13,145	13,183	14,942	16,426
Other expenditures	948	540	754	174	515	271	923	3,483	1,484	1,195 /d	480
Food subsidy	0	0	0	29	0	0	0	0	-	0	0
Oil subsidy	928	507	374	0	0	0	0	0	-	692	0
Others /b	20	33	380	145	515	271	923	3,483	-	503	480
Routine expenditures	8,412	9,429	11,952	13,559	17,482	20,739	24,331	29,998	30,228	34,031	37,095
Development expenditures /c	9,899	9,952	10,873	8,332	9,477	12,251	13,834	19,452	19,998	24,135	25,227
Total expenditures	18,311	19,381	22,825	21,891	26,959	32,990	38,165	49,450	50,225	58,166	62,322

/a Since 1984/85, this item is sub-divided into wage/salary and non wage/salary expenditures without identifying regions.
/b This line shows debt service transfers to PERTAMINA (1976/77 - Rp. 31.0 billion, 1977/78 - Rp. 86.4 billion), PERTAMINA subsidy (1979/80 - Rp. 81.0 billion) and expenditures on the general election (1976/77 - Rp. 37.0 billion, 1981/82 - Rp. 81.0 billion, 1985/86 - Rp. 40.0 billion).
/c For details see Tables 5.4 and 5.5.
/d Included oil subsidy.

Source: Ministry of Finance.

INDONESIA

COUNTRY ECONOMIC REPORT

Development Expenditures, 1983/84 - 1993/94
(Rp. billion)

Table 5.4

	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
1. Departments	3,220	3,474	4,467	2,004	2,113	1,861	2,509	4,854	5,971	7,858	9,265
2. General INPRES programs	539	540	575	568	656	714	706	1,058	1,407	1,853	2,203
Subsidies to provinces	253	253	287	293	290	334	324	486	574	701	783
Subsidies to kabupatens	194	195	189	188	263	267	270	392	583	825	1,030
Subsidies to villages	92	93	99	86	102	112	112	181	250	327	390
3. Sectoral INPRES programs	771	824	754	721	451	429	536	1,282	1,838	2,296	2,624
Primary schools	549	572	526	496	193	131	100	374	521	655	748
Health	87	65	111	108	74	99	122	193	269	320	393
Markets	11	26	4	12	3	3	3	3	2	2	5
Replanting/reforestration	59	61	43	31	16	17	17	33	75	95	104
Roads	65	101	70	75	164	180	295	679	972	1,225	1,373
4. PBB /b	132	157	168	171	223	344	478	657	709	892	1,069
5. Irian Jaya and East Timor	5	4	7	7	5	0	0	0	0	0	0
Total (2-5) : Transfer to local governments	1,448	1,526	1,503	1,467	1,334	1,486	1,720	2,998	3,953	5,040	5,896
6. Fertilizer subsidy	324	732	477	467	756	200	278	265	301	175	175
7. Government capital participation (PMP)	592	336	412	86	336	125	141	323	470	150	126
8. Others	449	475	511	514	515	629	765	505	722	708	639
9. Development expenditures in reserves	:	:	:	:	:	:	:	2,000	1500.0	:	:
Total (1 - 8)	6,032	6,543	7,370	4,537	5,054	4,301	5,413	10,944	12,919	13,931	16,101
9. Project aid /a	3,868	3,409	3,503	3,795	4,423	7,950	8,422	8,508	8,846	10,204	9,126
Total (1 - 9)	9,899	9,952	10,873	8,332	9,477	12,251	13,835	19,452	21,764	24,135	25,227

/a For 1987/88 excluding project aid in Rupiah.
/b Land and Building tax = transfer from Central Government to local governments (IPEDA prior to December 1985).

Source: Ministry of Finance.

INDONESIA

COUNTRY ECONOMIC REPORT

Development Expenditures by Sector, 1983/84 - 1993/94
(Rp. billion)

Table 5.5

Sector	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture and irrigation	913	1,699	1,138	890	1,937	1,614	2,049	2,308	2,713	3,240	3,082
(of which fertilizer subsidy)	(324)	(732)	(477)	(467)	(756)	(200)	(278)	(265)	(301)	(175)	(175)
Industry and mining	2,153	839	1,189	681	335	565	420	714	722	861	822
Electric power	660	911	1,447	960	1,085	1,955	1,397	1,707	2,286	3,042	2,993
Transportation and tourism	1,528	1,428	1,484	1,131	1,598	2,011	3,006	3,743	3,910	4,537	4,667
Manpower and transmigration	456	422	665	292	200	266	281	580	718	897	954
Regional development	749	791	850	939	930	1,137	1,369	1,938	2,478	2,920	3,562
Education	1,032	1,231	1,413	1,184	1,181	1,606	1,507	2,052	2,417	3,147	3,565
Population & Health	279	320	398	326	225	329	470	723	891	957	1,087
Housing and water supply	221	224	335	337	432	481	495	677	802	1,053	972
General public services /a	899	927	977	769	652	733	909	1,247	1,345	1,606	1,580
Government capital participation	234	292	221	211	219	238	625	335	411	409	394
Others /b	776	1,599	1,235	1,078	684	1,305	1,306	1,429	1,572	1,466	1,551
Development budget in reserves	-	-	-	-	-	-	-	2,000	1,500	-	-
Total development expenditures	9,899	9,952	10,873	8,332	9,477	12,251	13,834	19,452	21,764	24,135	25,227
Total (excluding fertilizer subsidy)	9,575	9,220	10,396	7,865	8,721	12,051	13,556	19,187	21,463	23,960	25,052

/a Law and order, defence and security, government apparatus.
/b Trade and cooperatives, religion, information and science. From 1979/80 includes natural resource development and environment.

Source: Ministry of Finance.

INDONESIA

COUNTRY ECONOMIC REPORT

Project Aid by Sector, 1983/84 - 1993/94
(Rp. billion)

	Actual										Budget
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture and irrigation	155	472	180	237	576	1,087	1,345	1,513	1,763	2,169	1,888
Industry and mining	1,051	671	668	632	267	327	240	409	454	709	647
Electric power	1,182	653	1,172	791	769	1,783	1,269	1,314	1,830	2,400	2,237
Transportation and tourism	889	601	688	729	845	1,424	2,174	1,976	1,507	1,388	1,084
Manpower and transmigration	45	76	36	123	62	98	83	91	83	52	33
Regional development	7	1	8	25	4	45	121	155	240	22	10
Education	211	180	59	346	718	1,236	1,085	957	1,045	1,204	1,325
Population & Health	37	78	56	100	38	..	177	188	188	32	25
Housing and water supply	51	84	77	139	273	400	351	444	514	648	552
General public services	152	255	186	257	350	382	566	471	567	728	602
Government capital participation	45	160	203	185	168	213	419	100	116	235	213
Others /a	42	179	171	231	355	855	594	890	539	616	509
Total project aid /b	3,867	3,409	3,503	3,795	4,423	7,950	8,422	8,508	8,846	10,204	9,126

/a Since 1979/80 includes natural resources development and environment.
/b Includes commercial credits for development programs/projects.

Source: Ministry of Finance.

Table 5.6

Table 6.1

INDONESIA

COUNTRY ECONOMIC REPORT

Money Supply, 1981 - 1992
(Rp. billion)

End of	Total	Currency		Demand deposits		Change over period	
		Amount	(%)	Amount	(%)	Amount	(%)
1981	6,486	2,557	39	3,929	61	1,491	30
1982	7,121	2,934	41	4,187	59	635	10
1983	7,569	3,333	44	4,236	56	448	6
1984	8,581	3,712	43	4,869	57	1,012	13
1985	10,104	4,440	44	5,664	56	1,523	18
1986	11,677	5,338	46	6,339	54	1,573	16
1987	12,685	5,782	46	6,903	54	1,008	9
1988	14,392	6,246	43	8,146	57	1,707	13
1989	20,114	7,426	37	12,688	63	5,722	40
1990	23,819	9,094	38	14,725	62	3,705	18
1991	26,342	9,346	35	16,996	65	2,523	11
1992	28,779	11,478	40	17,301	60	2,437	9

Source: Bank Indonesia.

Table 6.2

INDONESIA

COUNTRY ECONOMIC REPORT

Changes in Factors Affecting Reserve Money Supply, 1981-1992
(Rp. billion)

End of period	Public Sector			Claims on business & individuals	Net other items	Total change in Money Supply	
	Net foreign assets	Net claims on Central Government	Claims on official entities & public enterprises			Amount	Percentage (%)
1981	149	-591	593	1,756	83	1,491	30
1982	-1,237	129	689	2,260	-591	635	10
1983 /c	1,180	-1,286	-42	2,183	815	448	6
1984	3,531	-3,359	190	3,646	882	1,012	13
1985	1,750	-214	511	3,333	-115	1,523	18
1986 /d	1,870	469	252	4,547	-2496	1,573	16
1987	2,444	1,538	729	6,245	-4710	1,008	9
1988	-549	247	659	11,069	-3053	1,707	13
1989	409	-1175	1,444	22,132	-6156	5,722	40
1990	-2171	-3877	-921	35,809	-2498	3,705	18
1991	7,430	-1356	105	20,263	-12095	2,523	11
1992	-419	792	-318	-666	1,121	2,437	9

/a Refers to government accounts blocked for special purposes.

/b Does not include revaluation adjustment to foreign exchange balances resulting from the rupiah devaluation of November 15, 1978. The adjustments amount to Rp. 650 billion in net foreign assets; Rp. 46 billion in net claims on Central government; Rp. 551 billion in claims on official entities; Rp. 164 billion in blocked account; Rp. 41 billion in claims on businesses and individuals; Rp. 83 billion in time and savings deposits; and Rp. 1,041 billion in net other items.

/c Does not include revaluation adjustment to foreign exchange balances resulting from the rupiah devaluation of March 30, 1983. The adjustments amount to Rp. 1,962 billion in net foreign assets; Rp. 131 billion in net claims on Central government; Rp. 146 billion in claims on official entities and public enterprises; Rp. 106 billion in blocked account; Rp. 148 billion in claims on businesses and individuals; Rp. 620 billion in time and savings deposits; and Rp. 1,399 billion in net other items.

/d Includes revaluation adjustment due to devaluation on September 12, 1986.

Source: Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Consolidated Balance Sheet of the Monetary System, 1981-1992
(Rp. billion)

Table 6.3

End of period	1981	1982	1983 /a	1984	1985	1986 /b	1987	1988	1989	1990	1991	1992
Net foreign assets	6,811	5,565	8,837	12,368	14,119	15,989	18,433	17,884	18,293	16,122	23,552	30,634
Domestic credit	5,651	8,846	9,744	10,345	14,325	19,323	26,729	39,802	62,131	93,142	112,154	126,612
Claims on public sector												
Central government	-4,330	-4,193	-5,739	-9,098	-9319	-8798	-8366	-7036	-8309	-12202	-13582	-14873
Claims on official entities and public enterprises	4,247	4,979	5,040	5,230	6,034	5,993	6,725	7,381	8,825	7,904	8,009	8,501
Government-blocked account	-360	-252	-240	-116	-52	-81	-84	-66	-40	-24	0	0
Claims on private enterprises and individuals	6,094	8,312	10,683	14,329	17,662	22,209	28,454	39,523	61,655	97,464	117,727	132,984
Loans	5,844	7,995	10,184	13,550	16,392	20,409	26,072	36,502	55,933	90,109	105,599	115,190
Other claims	250	317	499	779	1,270	1,800	2,382	3,021	5,722	7,355	12,128	17,794
Assets = liabilities	12,462	14,411	18,581	22,713	28,444	35,312	45,162	57,686	80,424	109,264	135,706	157,246
Import deposits	298	300	242	218	268	402	424	684	632	1,048	966	890
Net other items	2,448	3,036	3,676	4,558	5,291	7,651	11,277	15,688	21,087	23,586	35,681	37,303
Money and quasi money	9,716	11,075	14,663	17,937	23,153	27,661	33,885	41,998	58,705	84,630	99,059	119,053
Money	6,485	7,121	7,569	8,581	10,104	11,677	12,685	14,392	20,114	23,819	26,342	28,779
Currency	2,557	2,934	3,333	3,712	4,440	5,338	5,782	6,246	7,426	9,094	9,346	11,478
Demand deposits	3,928	4,187	4,236	4,869	5,664	6,339	6,903	8,146	12,688	14,725	16,996	17,301
Quasi money	3,231	3,954	7,094	9,356	13,049	15,984	21,200	27,606	38,591	60,811	72,717	90,274

/a Includes changes resulting from the exchange rate adjustment of March 30, 1983 from Rp. 702.50 to Rp. 970 per US$.
/b Includes changes resulting from the exchange rate adjustment on September 12, 1986 from Rp 1,134 to Rp 1,644 per US$.

Source: Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Banking System Credits by Economic Sector, 1981-1992 /a
(Rp. billion)

Table 6.4

Sectors	1981	1982	1983 /f	1984	1985	1986 /g	1987	1988	1989	1990	1991	1992
Agriculture	813	1,025	1,226	1,318	1,656	2,097	2,657	3,648	5,350	7,368	8,465	10,281
In rupiah	813	1,025	1,226	1,318	1,656	2,097	2,631	3,610	5,281	7,176	7,979	9,173
In foreign exchange	0	0	0	0	0	0	26	38	69	192	486	1,108
Mining /b	1,693	1,472	806	384	258	394	381	144	591	615	743	762
In rupiah	1,693	1,472	806	384	258	394	371	124	456	570	614	605
In foreign exchange	0	0	0	0	0	0	10	20	135	45	129	157
Manufacturing industry /c	2,762	3,923	5,207	6,667	7,592	9,005	10,912	14,956	20,333	30,502	33,131	37,458
In rupiah	2,376	3,429	4,595	6,205	7,069	8,839	10,503	13,994	17,654	25,002	24,828	26,197
In foreign exchange	386	494	612	462	523	166	409	962	2,679	5,500	8,303	11,261
Trade /d	3,062	4,129	5,132	6,344	7,255	8,399	10,247	13,888	20,109	29,737	33,949	32,944
In rupiah	3,046	4,009	4,781	6,299	7,214	8,329	10,065	13,682	19,342	27,267	28,842	28,100
In foreign exchange	16	120	351	45	41	70	182	206	767	2,470	4,207	4,844
Service rendering industry /e	1,385	1,867	2,271	3,169	4,183	4,345	5,460	7,382	10,424	17,867	20,066	25,899
In rupiah	1,382	1,860	2,253	3,088	4,047	4,130	5,151	6,917	9,600	14,913	16,683	21,979
In foreign exchange	3	7	24	81	136	215	309	465	824	2,954	3,383	3,920
Others	444	606	651	931	1,213	2,162	3,187	3,721	1,866	11,709	17,571	15,574
In rupiah	444	606	651	929	1,210	2,156	3,143	3,667	1,709	11,197	16,526	14,653
In foreign exchange	0	0	0	2	3	6	44	54	157	512	1,045	921
Total	10,159	13,022	15,299	18,813	22,157	26,402	32,844	43,739	58,673	97,798	112,825	122,918
In rupiah	9,754	12,401	14,312	18,223	21,454	25,945	31,864	41,994	54,042	86,125	95,272	100,707
In foreign exchange	405	621	987	590	703	457	980	1,745	4,631	11,673	17,553	22,211

/a Credits outstanding end of period. Includes investment credits, KIK and KMKP. Excludes interbank credits, credits to central government and to nonresidents, and foreign exchange component of project aid.
/b Includes credits to PERTAMINA for repayment of foreign borrowing. Since March 1979, credit in foreign exchange to PERTAMINA has been converted to rupiah credits.
/c Processing of agricultural products is classified under manufacturing industry according to International Standard Industrial Classification (ISIC 1968). Starting 1980, credits for construction which were previously included in manufacturing industry are now included in service-rendering industry.
/d Includes credits for food procurement and hotel projects.
/e Credits for electricity, gas and water supply are included in service-rendering industry sector.
/f Includes foreign exchange revaluation amounting to Rp. 251 billion.
/g Includes revaluation adjustment due to the devaluation of September 12, 1986.

Source: Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Banking Credits Outstanding in Rupiah and Foreign Exchange by Group of Banks, 1981-1992 /a
(Rp. billion)

	1981	1982	1983 /b	1984	1985	1986 /c	1987	1988	1989	1990	1991	1992
Bank Indonesia direct credits /d	2,649	2,771	2,356	870	964	1,144	1,347	1,547	696	718	783	771
In rupiah	2,649	2,771	2,356	870	964	1,144	1,347	1,547	696	718	783	771
In foreign exchange	0	0	0	0	0	0	0	0	0	0	0	0
State commercial banks /e	5,881	8,031	9,787	13,345	15,374	17,782	21,676	28,631	39,579	55,826	59,861	68,236
In rupiah	5,523	7,474	8,910	12,959	14,925	17,711	21,225	27,614	37,151	50,648	52,628	58,133
In foreign exchange	358	557	877	386	449	71	451	1,017	2,428	5,178	7,233	10,103
National Private Banks /f	1,081	1,554	2,294	3,552	4,746	6,272	8,423	11,910	20,216	34,975	44,452	45,352
In rupiah	1,069	1,534	2,279	3,480	4,631	6,061	8,175	11,536	18,955	31,458	39,467	39,685
In foreign exchange	12	20	15	72	115	211	248	374	1,261	3,517	4,985	5,667
Foreign Banks	548	666	862	1,046	1,073	1,204	1,406	1,913	3,115	6,177	8,512	9,330
In rupiah	513	622	767	914	934	1,029	1,122	1,559	2,173	3,039	3,177	2,889
In foreign exchange	35	44	95	132	139	175	284	354	942	3,138	5,335	6,441
Total	10,159	13,022	15,299	18,813	22,157	26,402	32,852	44,001	63,606	97,696	113,608	123,689
In rupiah	9,754	12,401	14,312	18,223	21,454	25,945	31,869	42,256	58,975	85,863	96,055	101,478
In foreign exchange	405	621	987	590	703	457	983	1,745	4,631	11,833	17,553	22,211

/a Credits outstanding at end of period. Includes investment credits, KIK and KMP. Excludes interbank credits, credits to Central Government and to non-residents, and foreign exchange component of project aid.
/b Includes foreign exchange revaluation amounting to Rp. 251.0 billion.
/c Includes revaluation adjustment due to devaluation on September 12, 1986.
/d Excludes liquidity credits, includes credits to Pertamina for repayment for foreign borrowing.
/e Includes state development bank and liquidity credits.
/f Includes liquidity credits. National private banks refer to national private commercial banks and regional development banks.

Source : Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Investment Credits by Economic Sector, 1981-1992 /a
(Rp. billion)

End of period	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Credits approved /b	1,906	2,679	3,900	4,509	5,898	7,966	9,814	13,500	18,263	26,450	32,906	42,333
Agriculture	340	467	734	809	1,402	2,274	2,584	3,393	5,009	6,811	9,788	11,534
Mining	40	54	57	179	229	363	382	495	481	502	517	525
Manufacturing industry	911	1,369	1,983	2,374	2,765	3,253	3,540	5,182	7,615	10,742	11,774	16,910
Trade	87	134	129	237	277	369	355	536	1,012	2,298	3,375	4,475
Service rendering industry	516	641	986	866	1,173	1,638	2,900	3,788	4,021	4,914	6,336	7,724
Others	12	14	11	44	52	69	53	106	125	1,183	1,116	1,165
Credits outstanding /b	1,436	2,099	2,861	3,802	5,471	6,486	7,635	10,422	14,292	19,961	25,748	35,994
Agriculture	202	322	477	555	948	1,292	1,690	2,284	3,357	4,361	5,450	7,050
Mining	26	34	49	178	224	367	342	372	358	372	459	459
Manufacturing industry	741	1,095	1,635	2,102	2,781	3,098	3,567	4,817	6,424	8,866	10,484	15,416
Trade	73	120	115	168	396	443	435	632	1,022	1,859	3,372	4,099
Service rendering industry	390	519	576	770	1,098	1,215	1,560	2,249	3,010	4,060	5,032	7,896
Others	4	9	9	29	24	71	41	68	121	443	951	1,074

/a Excludes investment credits from Bank Indonesia; includes State Development Bank and Local Development Banks.
Data with the same classification prior to 1980 are not available.
/b Excludes Small Scale Investment Credits, investment credits to the Central Government and foreign exchange components of project aid.

Source: Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Outstanding Bank Funds in Rupiah and Foreign Exchange by Group of Banks, 1982-1992 /a
(Rp. billion)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Deposits											
State Banks	6,169	8,381	10,035	12,916	15,193	18,111	22,527	29,731	40,638	41,812	52,600
Private Banks	1,284	2,119	3,020	4,550	5,435	8,040	11,167	19,655	33,951	43,143	51,079
Regional Development Banks	411	498	700	825	797	954	1,300	1,674	2,550	3,228	3,697
Foreign Banks	1,004	1,398	1,743	1,883	2,086	2,226	2,516	3,315	6,016	6,935	7,474
Total	8,868	12,396	15,498	20,174	23,511	29,331	37,510	54,375	83,155	95,118	114,850
Share in Total Deposits											
State Banks	69.6	67.6	64.8	64.0	64.6	61.7	60.1	54.7	48.9	44.0	45.8
Private Banks	14.5	17.1	19.5	22.6	23.1	27.4	29.8	36.1	40.8	45.4	44.5
Regional Development Banks	4.6	4.0	4.5	4.1	3.4	3.3	3.5	3.1	3.1	3.4	3.2
Foreign Banks	11.3	11.3	11.2	9.3	8.9	7.6	6.7	6.1	7.2	7.3	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Annual Growth Rate in Deposits											
State Banks	2.2	30.6	18.0	25.2	16.2	17.6	21.8	27.7	31.3	2.9	25.8
Private Banks	40.0	50.1	35.4	41.0	17.8	39.2	32.9	56.5	54.7	27.1	18.4
Regional Development Banks	16.1	19.2	34.0	16.4	-3.4	18.0	30.9	25.3	42.1	26.6	14.5
Foreign Banks	27.2	33.1	22.1	7.7	6.5	6.5	12.2	27.6	59.6	15.3	7.8
Total	10.2	33.5	22.3	26.4	22.1	22.1	24.6	37.1	42.5	14.4	20.7

/a Total funds are the sum of demand, time and savings deposits. Figures differ from the monetary survey because these include Central Government accounts. Rural credit banks are excluded.

Source : Bank Indonesia.

INDONESIA

COUNTRY ECONOMIC REPORT

Interest Rates on Deposits at Commercial Banks, 1981-1992 /a
(% p.a)

End of Period	Demand Deposits /b	TABANAS Savings Deposits /c	TASKA Savings Deposits /d	Certificate of Deposits /e	Time Deposits									
					State Bank					Private National Bank /a				
					Less than 3 mos /f	3 mos	6 mos	12 mos	24 mos	Less than 3 mos /f	3 mos	6 mos	12 mos	24 mos
1978 /h	1.8-3	6-15	9.0	7.6	-	-	6.0	9.0	12-15	12.8	12.5	15.6	17.2	20.7
1981	1.8-3	6-15	9.0	10.9	12.1	10.2	6.0	9.0	12-15	15.4	17.4	17.9	19.4	19.0
1982	1.8-3	6-15	9.0	12.5	7.7	8.6	6.0	9.0	12-15	16.9	17.1	18.5	19.3	18.8
1983 /g	1.8-3	12-15	9.0	15.4	14.4	14.8	13.1	17.5	12.5	18.7	17.4	18.8	19.7	19.3
1984	1.8-3	12-15	9.0	16.5	15.1	17.1	17.2	18.7	17.2	19.8	20.7	20.7	20.4	21.0
1985	1.8-3	12-15	9.0	14.5	13.4	14.6	16.0	17.8	18.3	14.6	15.9	17.8	19.8	21.3
1986	1.8-3	12-15	9.0	14.0	13.3	14.2	14.7	15.2	16.0	14.8	15.5	16.2	17.3	20.1
1987	1.8-3	15.0	9.0	15.6	15.5	17.0	17.3	17.0	17.4	17.3	18.6	19.3	19.1	19.9
1988	1.8-3	15.0	9.0	15.9	15.8	18.1	18.4	18.7	18.8	20.2	20.1	20.3	20.2	20.9
1989	n.a	n.a	n.a	16.3	15.1	16.2	17.2	18.7	18.8	17.0	18.0	18.8	19.7	20.5
1990	n.a	n.a	n.a	15.9	20.5	20.7	20.7	20.5	20.0	20.9	21.3	21.3	21.2	21.0
1991	8.9	n.a	n.a	19.0	20.0	21.3	22.3	22.5	21.0	21.8	22.6	23.3	23.4	18.6
1992	7.2	n.a	n.a	15.7	14.6	15.7	17.3	18.6	20.7	16.5	17.7	18.9	19.6	16.6

/a Weighted average rate of interest at selected banks.
/b From March 1983, 3% for amounts above Rp. 50 million, 1.8% for Rp. 1 to 50 million, and individually determined for amounts less than Rp. 1 million.
/c "TABANAS" or "Tabungan Pembangunan Nasional" (National Development Savings) is an ordinary savings account sponsored by "Bank Tabungan Negara" (State Saving Bank) and offered by all state owned and some private national commercial banks, and post offices. Until June 1, 1983: 15% for amounts of Rp. 200,000 or less; 6% above Rp. 200,000. From June 1983: 15% for Rp 1 million or less; 12% for more than Rp. 1 million. From July 1987 to November 1989 : 15% for all denominations. Thereafter left to banks' descretion.
/d "TASKA" or "Tabungan Asuransi Berjangka " (Insured Time Deposits) is an ordinary time deposits sponsored by "Bank Tabungan Negara" and offered by the same institutions described in (c) above.
/e Midpoint of range for six months rates.
/f One month time deposits rate used as representative rate.
/g Ceiling on time deposit interest rates at state banks removed on June 1, 1983. 12% legal minimum rate starting in June 1983 for 24 months State Bank time deposit.

Source: Bank Indonesia.

Table 6.8

INDONESIA

COUNTRY ECONOMIC REPORT

Principal Agricultural Products by Subsectors, 1981-1991
('000 tons)

Table 7.1

Product	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 /a
Food crops											
Rice /b	22,286	22,837	35,302	38,134	39,033	39,726	40,078	41,676	44,726	45,179	44,321
Corn	4,509	3,235	5,087	5,288	4,330	5,920	5,155	6,652	6,193	6,734	6,209
Cassava	13,301	12,988	12,103	14,167	14,037	13,312	14,356	15,471	17,117	15,830	15,813
Sweet potato	2,094	1,676	2,213	2,156	2,161	2,091	2,013	2,159	2,224	1,971	1,978
Soya beans (shelled)	704	521	536	769	870	1,227	1,161	1,270	1,315	1,487	1,541
Groundnuts (shelled)	475	437	460	535	528	642	533	589	620	651	646
Fisheries											
Saltwater fish	1,408	1,490	1,682	1,713	1,822	1,923	2,017	2,170	2,272	2,370	2,505
Freshwater fish	506	524	533	548	573	607	653	711	765	793	807
Meat and dairy											
Meat	596	629	650	742	808	860	895	937	971	1,028	1,099
Eggs	275	297	319	355	370	432	452	443	456	484	510
Milk /c	86	117	143	179	192	220	235	265	338	346	360
Cash crops											
Rubber	963	980	1,007	1,033	1,055	1,109	1,130	1,176	1,209	1,275	1,284
Palm oil	748	884	979	1,147	1,243	1,350	1,505	1,800	1,965	2,413	2,658
Coconut/copra	1,812	1,718	1,604	1,750	1,920	2,114	2,075	2,139	2,208	2,332	2,305
Coffee	295	281	305	315	311	339	380	386	401	413	419
Tea	110	94	110	126	127	136	126	137	141	155	158
Cloves	40	32	41	49	42	55	58	61	55	65	84
Pepper	39	34	46	46	41	40	49	56	68	70	71
Tobacco	118	105	109	108	161	164	113	116	81	156	161
Cane sugar	1,700	1,627	1,628	1,810	1,899	1,894	2,176	1,918	2,108	2,119	2,253
Cotton /d	10	13	14	12	45	53	48	39,731	38,374	32,857	38,000
Forestry /e											
Teakwood	578	692	718	758	777	798	689	725	725	780	778
Other timber	14,024	13,236	24,180	27,716	24,277	27,403	28,255	28,485	24,409	25,312	23,892

/a Preliminary figures.
/b Paddy production starting 1983.
/c In million of liters.
/d In tons.
/e In '000 cubic meters.

Source: Supplement to the President's Report to Parliament, August 15, 1992.

Table 7.2

INDONESIA

COUNTRY ECONOMIC REPORT

Production of Major Crops by Type of Estate, 1981-1991
('000 tons)

Product	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991/a
Smallholders											
Rubber	740	586	673	704	720	763	795	939	853	913	919
Coconut/copra	1,789	1,707	1,590	1,737	1,905	2,098	2,055	2,117	2,193	2,313	2,285
Coffee	276	262	287	291	288	316	359	362	377	384	390
Cloves	40	32	40	48	41	53	57	59	53	64	62
Tea	22	17	23	24	30	31	25	26	25	31	32
Sugar	1,364	1,375	1,249	1,397	1,450	1,417	1,744	1,499	1,621	1,609	1,610
Tobacco	103	97	100	104	156	159	110	113	77	152	97
Pepper	39	34	46	46	41	40	49	56	68	70	71
Cotton	10	13	14	12	45	53	48	40	38	33	38
Palm oil	0	0	0	0	0	0	0	0	0	0	0
Palm kernel	0	0	0	0	0	0	0	0	0	0	0
Private estates											
Rubber	114	125	133	121	124	150	135	143	141	145	146
Coconut/copra	23	11	14	13	15	16	20	22	15	19	20
Coffee	6	6	8	9	10	10	8	10	11	13	13
Cloves	0	0	1	1	1	2	1	2	2	2	2
Tea	18	16	17	18	17	18	21	23	26	29	30
Sugar	116	72	88	83	106	106	109	103	181	204	257
Tobacco	0	0	0	0	0	0	0	0	0	0	0
Pepper	0	0	0	0	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0	0	0	0	0
Palm oil	206	285	269	329	339	385	352	435	597	789	884
Palm kernel	37	47	68	69	71	73	76	87	119	179	181
Government estates											
Rubber	192	189	201	208	211	196	200	194	215	217	219
Coconut/copra	0	0	0	0	0	0	0	0	0	0	0
Coffee	13	13	10	15	13	13	13	14	13	16	16
Cloves	0	0	0	0	0	0	0	0	0	0	0
Tea	70	61	70	84	80	87	80	88	90	95	96
Sugar	220	182	291	330	343	371	323	316	306	306	386
Tobacco	15	9	9	4	5	5	3	3	4	4	4
Pepper	0	0	0	0	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0	0	0	0	0
Palm oil	542	599	713	818	904	965	1,154	1,365	1,368	1,624	1,774
Palm kernel	98	110	98	178	187	193	243	273	274	325	370
Total											
Rubber	1,046	900	1,007	1,033	1,055	1,109	1,130	1,176	1,209	1,275	1,284
Coconut/copra	1,812	1,718	1,604	1,750	1,920	2,114	2,075	2,139	2,208	2,332	2,305
Coffee	295	281	305	315	311	339	380	386	401	413	419
Cloves	40	32	41	49	42	55	58	61	55	66	64
Tea	110	94	110	126	127	136	126	137	141	155	158
Sugar	1,700	1,627	1,628	1,810	1,899	1,894	2,176	1,918	2,108	2,119	2,253
Tobacco	118	106	109	108	161	164	113	116	81	156	101
Pepper	39	34	46	46	41	40	49	56	68	70	71
Cotton	10	13	14	12	45	53	48	40	39	33	38
Palm oil	748	884	982	1,147	1,243	1,350	1,506	1,800	1,965	2,413	2,658
Palm kernel	135	157	166	247	258	266	319	360	393	504	551

/a Preliminary figures.

Source: Supplement to President's Report to Parliament, August 15, 1992.

Table 7.3

INDONESIA

COUNTRY ECONOMIC REPORT

Rice - Area Harvested, Production and Yield, 1981-1991

Year	Area harvested ('000 ha)	Average yield (tons/ha)	Paddy output ('000 tons)	Rice output /a ('000 tons)
1981	9,382	3.49	32,774	22,286
1982	8,988	3.74	33,584	22,837
1983	9,162	3.85	35,302	24,006
1984	9,764	3.91	38,134	25,933
1985	9,902	3.97	39,033	26,542
1986	9,988	4.00	39,726	26,784
1987	9,923	4.04	40,078	27,253
1988	10,138	4.11	41,676	28,340
1989	10,531	4.25	44,726	29,072
1990	10,502	4.30	45,179	29,366
1991	10,187	4.35	44,321	28,809

/a Estimated on the basis of a conversion factor of 0.68 from paddy into rice for the years prior to 1989, and a factor of 0.65 for the years 1989 and following.

Source: Central Bureau of Statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

BULOG Rice Program, 1981/82 - 1992/93
('000 tons)

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 /c	1990/91	1991/92 /g	1992/93 /h
Beginning stock	1,242	1,623	1,045	1,497	2,432	2,172	1,867	755	1,077	1,499	978	957
Domestic procurement	1,952	1,933	1,195	2,382	1,953	1,647	1,215	1,801	2,178	1,348	1416	2000
Import:	437	506	1,115	187	0	41	79	315	150	30	762	295
PL-480	46	0	65	54	0	0	0	0	0	0	0	0
Other food /e	48	0	140	0	0	41	79	315	150	30	89	295
Commercial	343	506	910	133	0	0	0	0	0	0	673	0
Total availability	3,631	4,062	3,355	4,066	4,385	3,860	3,161	2,871	3,405	2,877	3,156	3,252
Distribution /a	2,014	2,972	1,872	1,612	2,186	1,967	2,372	1,768	1,878	1,871	2,167	2,130
Government	806	1,320	1,373	1,368	1,414	1,498	1,525	1,512	1,559	1,589	1610	1650
State enterprises	95	105	89	59	77	94	97	106	94	94	89	100
Market operations /f	1,033	1,518	399	69	277	175	640	142	57	175	450	350
Other /d	80	29	11	116	418	200	110	8	168	13	18	30
Losses	26	45	28	22	27	26	34	26	28	28	32	31
End stock	1,591	1,045	1,455	2,432	2,172	1,867	755	1,077	1,499	978	957	1091
Memorandum item:												
Rice production /b	22,286	22,837	24,006	25,933	26,542	27,014	27,253	28,340	29,072	29,366	28,808	29,725

/a Since June 1982, all regions have received rice in kind; formerly, surplus regions received food allowances in money.
/b On calendar year basis.
/c Provisional figures.
/d Includes export of 95,000 tons in 1984/85 and 400,000 tons in 1985/86, 173,750 tons in 1986/87 and 100,000 tons in 1987/88.
/e In 1987/88, the figure shows repayment of rice loans.
/f Includes special sales at reduced prices of submarket standard rice of 130,000 tons in 1985/86 and 150,000 tons in 1986/87.
/g Preliminary.
/h Estimates.

Source: BULOG (Badan Urusan Logistic/State Logistic Board).

Table 7.5

INDONESIA

COUNTRY ECONOMIC REPORT

Area Covered Under Rice Intensification Programs, 1981-1991
('000 ha)

Year	BIMAS /a	INMAS /b	Total	Of which INSUS /c
1981	1,384	4,802	6,186	1,706
1982	1,296	5,047	6,343	2,945
1983	1,308	5,387	6,695	3,477
1984	434	6,936	7,369	3,806
1985	200	7,461	7,661	4,100
1986	258	7,533	7,791	4,480
1987	n.a	n.a	8,035	4,922
1988	n.a	n.a	8,283	5,837
1989	n.a	n.a	8,826	6,847
1990	n.a	n.a	8,876	7,260
1991	n.a	n.a	8,642	7,146

/a BIMAS = Bimbingan massal (Mass rice planting guidance program).
/b INMAS = Intensifikasi massal (Mass intensification program).
/c INSUS = Intensifikasi khusus (Special intensification program).

Source: Supplement to the President's Report to Parliament, August 15, 1992.

INDONESIA

COUNTRY ECONOMIC REPORT

Index of Manufacturing Production by Selected Industry Group, 1986-1991 /a
(1983 = 100)

Table 8.1

Code of Industry Group	Description /b	1986	1987	1988	1989	1990	1991
31121	Condensed and dried milk, creamery and processed butter, fresh and preserved cream (6)	87.5	94.0	123.3	122.5	142.2	154.1
31330	Malt liquor and malt (5)	94.4	113.2	116.4	117.2	146.8	160.1
31420	Clove cigarettes (80)	147.4	166.5	177.7	196.2	226.4	165.5
31430	Other cigarettes (13)	78.8	81.9	79.2	78.2	80.7	95.2
32111	Yarn and thread (53)	129.9	130.5	169.0	196.2	253.5	273.6
32112	Weaving mills (except jute weaving products (409)	130.7	144.3	172.9	187.6	216.9	215.0
32114	Batik (65)	95.8	81.8	83.9	111.1	144.0	218.5
32130	Knitting mills (73)	219.2	233.3	239.8	312.8	347.2	450.7
32400	Footwear (32)	113.1	91.5	111.2	184.9	208.2	230.9
33113	Plywood (40)	139.3	192.7	24[illegible]2.1	266.2	256.7	273.7
34111	Paper manufacture (all kinds) (23)	159.2	159.7	24[illegible]2.0	251.5	298.1	292.3
35110	Basic chemicals (except fertilizer) (50)	119.0	156.4	139.0	152.9	174.0	189.9
35120	Fertilizer (10)	166.0	121.8	129.7	143.7	158.1	158.1
35210	Paint, varnish, and lacquers (25)	135.6	126.5	91.2	129.9	136.6	127.2
35232	Matches (8)	108.7	142.3	175.5	154.4	167.3	178.4
35510	Tyres and tubes (22)	109.5	79.2	109.7	141.2	157.4	205.4
36210	Glass and glass products (21)	178.0	149.3	124.6	145.2	163.3	253.9
36310	Cement (7)	144.4	150.9	149.8	198.1	206.4	217.9
37100	Basic iron and steel industries (16)	154.9	147.1	167.4	199.0	259.1	409.0
38130	Structural metal products (59)	110.2	118.7	125.7	180.6	224.4	191.1
38312	Drycell batteries (7)	123.9	115.5	158.6	179.1	192.6	158.7
38320	Radio, TVs, cassettes, other communication equipment and apparatus (23)	90.6	86.9	118.1	153.9	180.6	115.0
38430	Motor vehicles assembly and manufacture (23)	114.7	126.8	115.8	132.5	200.0	213.3
38440	Motor cycles and three wheel motor vehicles, assembly and manufacture (11)	98.0	81.3	76.8	106.0	104.9	187.4
	General index	128.4	143.5	164.2	184.1	209.4	227.7

/a The annual figures shown here are calculated as the average of quarterly indices.
/b Figures in brackets "( )" indicate the number of establishments covered in that group.

Source: Central Bureau of statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

Production of Minerals, 1981-1991

Year	Petroleum (mln bbls)	Tin concentrate	Copper ore concentrate	Nickel ore ('000 tons)	Bauxite	Coal	Iron sand concentrate	Gold /a (kg)	Silver /a (kg)	Natural gas (mcf)
1981	584.8	35.4	188.5	1,543.2	1,203.4	392.8	86.6	183.1	2,000.2	1,123.8
1982	488.2	33.8	223.7	1,640.9	700.2	588.0	144.5	222.7	3,057.9	1,111.9
1983	490.5	26.6	205.0	1,278.0	777.9	648.2	132.9	2,391.5	35,473.1	1,186.4
1984	516.5	23.2	190.3	1,066.8	1,003.2	1,468.2	83.0	2,247.1	38,794.7	1,506.7
1985	483.8	21.8	223.4	961.9	830.5	1,491.7	130.9	2,619.4	38,327.3	1,580.0
1986	507.2	24.0	251.2	1,533.1	648.8	1,725.4	152.3	3,303.5	46,596.0	1,628.9
1987	479.0	26.1	259.8	1,825.7	635.3	1,887.0	194.0	3,752.8	50,485.4	1,731.1
1988	484.7	30.6	294.7	1,733.2	505.8	2,854.5	202.8	4,730.9	61,538.0	1,852.6
1989	514.2	31.3	331.5	2,020.9	862.3	4,553.1	142.7	5,239.3	62,395.9	1,925.2
1990	530.5	31.3	398.6	2,179.1	1,163.8	7,330.2	142.1	10,653.0	66,723.5	2,159.0
1991	580.8	30.3	656.5	2,336.8	1,384.6	13,715.2	173.2	17,024.5	79,519.4	2,379.7

/a Since 1983, production of gold and silver in-luding private enterprises.

Source: Central Bureau of Statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

Crude Oil Production by Company, 1981-1992
('000 bbls)

	PERTAMINA	LEMIGAS	Contract of work			Subtotal	Production sharing contract	Total	Average daily output
			Caltex	C & T	Stanvac				
1981	29,515	175	255,515	1,799	13,141	270,455	284,693	584,838	1,602
1982	27,375	195	175,928	1,422	13,214	190,564	270,055	488,189	1,338
1983 /a	26,947	233	191,307	1,411	11,766	204,484	286,384	518,048	1,419
1984	31,002	203	-	1,533	4,372	5,905	513,652	550,762	1,505
1985	30,071	170	-	1,358	5,130	6,488	453,190	489,919	1,342
1986	29,328	193	-	1,228	6,085	7,313	478,078	514,912	1,411
1987	26,775	210	-	1,236	8,354	9,590	475,854	512,429	1,404
1988	24,789	/b	-	1,368	13,413	14,781	451,941	491,511	1,343
1989	25,567	/b	-	2,044	13,233	15,277	473,341	514,185	1,409
1990	24,483	/b	-	1,972	10,587	12,559	496,664	533,706	1,462
1991	24,988	/b	-	1,461	8,845	10,306	545,937	581,231	1,592
1992	24,763	/b		1400	8125	9,525	516,697	550,985	1,505 /c

/a Since May 1983, contract of work data have been consolidated.
/b Since 1988, Lemigas data have been included in Pertamina.
/c November and December reconciliation.

Source: Ministry of Mines and Energy, Directorate General Oil & Gas.

Table 8.3

INDONESIA

COUNTRY ECONOMIC REPORT

Petroleum Product Supply and Demand, 1981 - 1992
(million bbls)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Production of crude	584.8	488.2	518.0	550.8	489.9	514.9	512.4	491.5	514.2	533.7	581	551
2. Crude imports	37.0	22.0	25.7	34.2	32.1	27.7	30.2	31.2	28.1	45.7	54	57.9
3. Subtotal (1+2)	621.8	510.2	543.7	585.0	522.0	542.6	542.6	522.7	542.3	579.4	635.0	608.9
4. Crude exports	383.4	320.9	336.2	354.6	295.1	327.4	291.9	276.6	291.5	288.7	330.5	292.9
5. Crude available for refineries (3-4)	238.4	189.3	207.5	230.4	226.9	215.2	250.7	246.1	250.8	290.7	304.5	316.0
6. Changes in crude stocks (decrease = -)	44.7	6.7	23.5	39.7	27.1	-2.3	16.9	0.3	3.2	16.9	19.7	14.3
7. Refinery input (including swaps) (5-6)	193.7	182.6	184.0	190.7	199.8	217.5	233.8	245.8	247.6	273.8	284.8	301.7
8. Refinery consumption	6.5	6.5	7.2	9.2	13.1	13.3	13.0	13.0	13.9	14.3	16.0	15.3
9. Refinery output (7-8)	187.2	176.1	176.8	181.5	186.7	204.2	220.8	232.8	233.7	259.5	268.8	286.4
10. Exports of refined products (11+12)	49.9	39.0	43.3	66.0	47.3	55.2	62.4	63.7	55.4	57.8	56.0	66.1
11. Waxy residues	47.9	33.7	40.5	49.9	32.1	34.9	42	45.3	40.6	42.0	43.3	53.6
12. Bunker fuel, AVTUR, etc.	2.0	5.3	2.8	16.1	15.2	20.3	20.4	18.4	14.8	15.8	12.7	12.5
13. Available for domestic consumption (9-10)	137.3	137.1	133.5	115.5	139.4	149.0	158.4	169.1	178.3	201.7	212.8	220.3
14. Product imports	42.6	28.0	23.5	5.0	2.7	5.4	10.3	13.3	21.3	23.9	21.8	23.8
15. Total supply (13+14)	179.9	165.1	157.0	120.5	142.1	154.4	168.7	182.4	199.6	225.6	234.6	244.1
16. Domestic consumption	156.0	161.1	155.5	157.6	155.3	152.8	162.9	171.3	183.6	211.4	225.6	246.2
17. Changes in refined stocks (15-16)	23.9	4.0	1.5	-37.1	-13.2	1.6	5.8	11.1	16.0	14.2	9.0	-2.1

Source: Ministry of Mines and Energy, Directorate General Oil & Gas.

Table 8.4

INDONESIA

COUNTRY ECONOMIC REPORT

Domestic Sales of Petroleum Products, 1981-1992 /a
('000 bbls)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 /b	1991	1992
Aviation gas	110	103	83	73	66	63	56	60	60	59	58	54
Aviation turbo	4,869	4,899	3,686	4,374	4,442	3,806	4,199	4,445	4,286	4,607	4,889	5,315
Premium gasoline	392	238	247	523	738	1,024	1,431	1,838	2,451	1,047	/b	/b
Regular gasoline	25,648	25,709	24,380	24,909	25,206	27,083	29,048	30,855	33,199	39,005	43,023	45,308
Kerosene	52,497	51,778	48,224	45,213	43,954	43,618	43,352	44,664	46,601	49,472	50,573	53,850
Motor diesel	44,737	48,918	49,790	48,567	47,682	47,421	54,075	59,143	64,508	72,950	80,837	92,061
Industrial diesel	9,391	9,311	9,978	10,285	10,329	8,855	8,319	8,809	9,515	10,720	10,806	11,318
Fuel oil	17,587	19,341	21,149	23,625	22,863	18,004	19,054	18,097	18,329	24,847	28,899	29,313
Total	155,231	160,297	157,537	157,569	155,280	149,874	159,534	167,911	178,949	202,707	219,085	237,219

/a Excluding lubricating oil and similar products.
/b Provisional.

Source: Ministry of Mines and Energy, Directorate General Oil and Gas.

Table 8.5

Table 9.1

INDONESIA

COUNTRY ECONOMIC REPORT

Consumer Price Index, 1979 - 1992 /a /b
(April 1977 - March 1978 = 100)

End of	Foodstuff	Housing	Clothing	Others	Total	Change (%) /c
1979	141.1	140.9	168.2	137.7	143.1	21.8 /d
1980	165.6	168.7	190.8	159.1	167.6	16.0
1981	179.3	182.3	198.2	168.8	179.8	7.1
1982	192.7	209.8	205.0	189.3	197.9	9.7
1983	212.7	238.1	214.0	221.5	221.5	11.5
1984	226.4	270.0	220.6	246.5	241.6	8.8
1985	230.9	289.4	228.0	259.7	252.2	4.3
1986	263.9	302.9	250.4	275.0	275.3	9.2
1987	296.1	321.4	270.4	297.9	300.8	9.2
1988	320.1	335.4	280.0	307.4	317.6	5.6
1989	104.1	109.6	108.1	105.7	106.4	6.1
1990	111.5	123.9	113.4	118.6	117.0	9.9
1991	122.6	133.7	119.5	135.0	128.6	9.9
1992	130.2	140.0	128.3	139.7	135.1	5.0

/a The consumer price index for Indonesia has been used commencing March 1979 to replace the Jakarta cost of living index.
/b Starting 1989, using new base period (April 1988-March 1989 = 100).
/c End-year basis
/d Percentage change of CPI for the period January through December 1979 using the rate of increase of the Jakarta cost of living index for period January through March 1979.

Source: Central Bureau of Statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

Indonesia Wholesale Price Index, 1983-1992 /a
(1983 = 100)

Sectors /b	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture (44)	100	113	118	128	145	163	177	191	206	225
Mining & quarrying (6)	100	109	117	125	132	143	156	169	188	201
Manufacturing (140)	100	103	115	123	143	156	166	176	194	206
Imports (53)	100	113	119	129	158	164	178	191	201	208
Exports (38)	100	111	112	85	118	118	131	159	153	159
Excluding petroleum (34)	100	114	115	130	170	183	195	195	203	212
Petroleum (4)	100	112	113	73	103	99	112	148	139	143
General index (281)	100	111	116	116	142	149	162	178	187	197
General index excluding exports (243)	100	111	117	127	149	160	173	185	199	210
General index excluding exports of petroleum (224)	100	110	116	125	146	161	172	182	198	211

/a This new index replaces the previous WPI based on 1975. Figures show the average for year.
/b Figures within brackets "( )" indicate the number of items represented in that sector.
/c November 1991.

Source: Central Bureau of statistics.

INDONESIA

COUNTRY ECONOMIC REPORT

Domestic Prices of Petroleum Products,1980-1992
(Rp./liter)

Table 9.3

	1980 /a	1981	1982 /b	1983 /c	1984 /d	1985 /e	1986	1987	1988	1989	1990 /f	1991 /g	1992
Aviation gas	150	150	240	300	300	330	250	250	250	250	330	400	400
Aviation turbo	150	150	240	300	300	330	250	250	250	250	330	400	400
Premium gasoline	220	220	360	400	400	440	440	440	440	440	/h	/h	/h
Regular gasoline	150	150	240	320	350	385	385	385	385	385	450	550	550
Kerosene	38	38	60	100	150	165	165	165	165	165	190	220	220
Motor diesel	53	53	85	145	220	242	200	200	200	200	245	300	300
Industrial diesel	45	45	75	125	200	220	200	200	200	200	235	285	285
Fuel oil	45	45	75	125	200	220	200	200	200	200	220	220	220

/a From May 1980.
/b Price increased on January 1.
/c Price increased on January 7.
/d Price increased on January 12.
/e Price increased on April 1, due to the application of 10% VAT.
/f Price increased on May 25.
/g Price increased on July 11.
/h Discontinued.

Source: Ministry of Mines and Energy, Directorate General Oil and Gas.

INDONESIA

COUNTRY ECONOMIC REPORT

Approved Foreign Investment by Sector, 1981-1992 /a
(US$ million)

Sector	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture	25	9	10	0	9	126	117	8	122	117	14	66
Forestry	115	32	7	0	0	0	5	26	4	20	1	138
Fishery	22	3	21	0	11	4	12	46	47	20	11	28
Mining & quarrying	29	0	0	0	0	0	0	0	0	116	0	2,313
Manufacturing	834	1,120	2,615	1,002	687	537	852	3,828	4,246	5,822	3,970	5,639
Food	41	6	83	77	6	34	54	231	223	99	382	213
Textiles & leather	139	26	12	1	7	9	118	213	581	1,094	532	587
Wood & wood products	124	5	13	0	0	32	45	104	106	218	62	33
Paper & paper products	49	0	722	0	25	47	109	1,506	211	730	822	686
Chemicals & rubber	236	317	183	96	338	294	209	1,544	2,512	1,991	923	2,331
Nonmetallic minerals	20	57	50	0	3	0	251	30	184	125	133	837
Basic metals	85	3	836	609	65	39	7	61	106	825	197	43
Metal products	141	706	716	210	244	82	57	129	292	460	856	857
Others	0	0	1	9	0	0	3	10	30	281	62	51
Construction	49	11	44	17	122	65	42	2	16	77	26	41
Trade & hotels	0	17	78	84	0	0	196	405	98	874	4,019	919
Wholesale trade	0	0	0	0	0	0	0	0	0	0	0	0
Hotels	0	17	78	84	0	0	196	405	98	874	4,019	919
Transport & communicatio	0	0	0	4	0	70	213	3	5	803	167	14
Real estate and business s	18	204	108	0	29	25	20	117	181	902	570	1,134
Total	1,091	1,397	2,882	1,107	852	826	1,457	4,435	4,719	8,750	8,778	10,292

/a Intended Capital Investment. Amount represents original approvals plus expansions minus cancellations.

Source: Investment Coordinating Board (BKPM).

INDONESIA

COUNTRY ECONOMIC REPORT

Approved Domestic Investment by Sector, 1981-1992 /a
(Rp billion)

Table 10.2

Sector	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture, fisheries and livestock	60	62	681	277	899	1,879	2,885	2,698	3,418	6,435	3,468	1,952
Forestry	175	93	149	19	37	21	640	487	252	593	1,472	534
Mining	13	52	578	8	38	89	290	111	94	147	182	236
Manufacturing	1,306	1,419	3,792	1,332	1,632	1,842	5,518	9,747	12,931	43,240	26,465	19,079
Textiles	195	110	104	127	97	263	1,289	2,309	3,563	12,612	3,648	2,539
Chemicals	193	205	766	272	928	773	2,047	3,039	4,062	12,643	8,429	3,322
Electrical goods	0	0	0	0	0	0	0	0	0	0	0	0
Other manufacturing	918	1,104	2,922	933	607	806	2,183	4,399	5,307	17,985	14,388	13,219
Construction	8	16	195	67	270	74	50	31	146	87	275	715
Hotels	54	76	255	214	312	17	139	537	1,265	4,974	3,897	3,115
Real estate	5	74	204	31	267	169	174	846	936	1,790	3,504	1,746
Others /b	70	157	1,151	1	296	325	569	460	551	2,614	1,822	2,465
Total	1,691	1,949	7,005	1,949	3,750	4,417	10,265	14,916	19,594	59,878	41,085	29,342

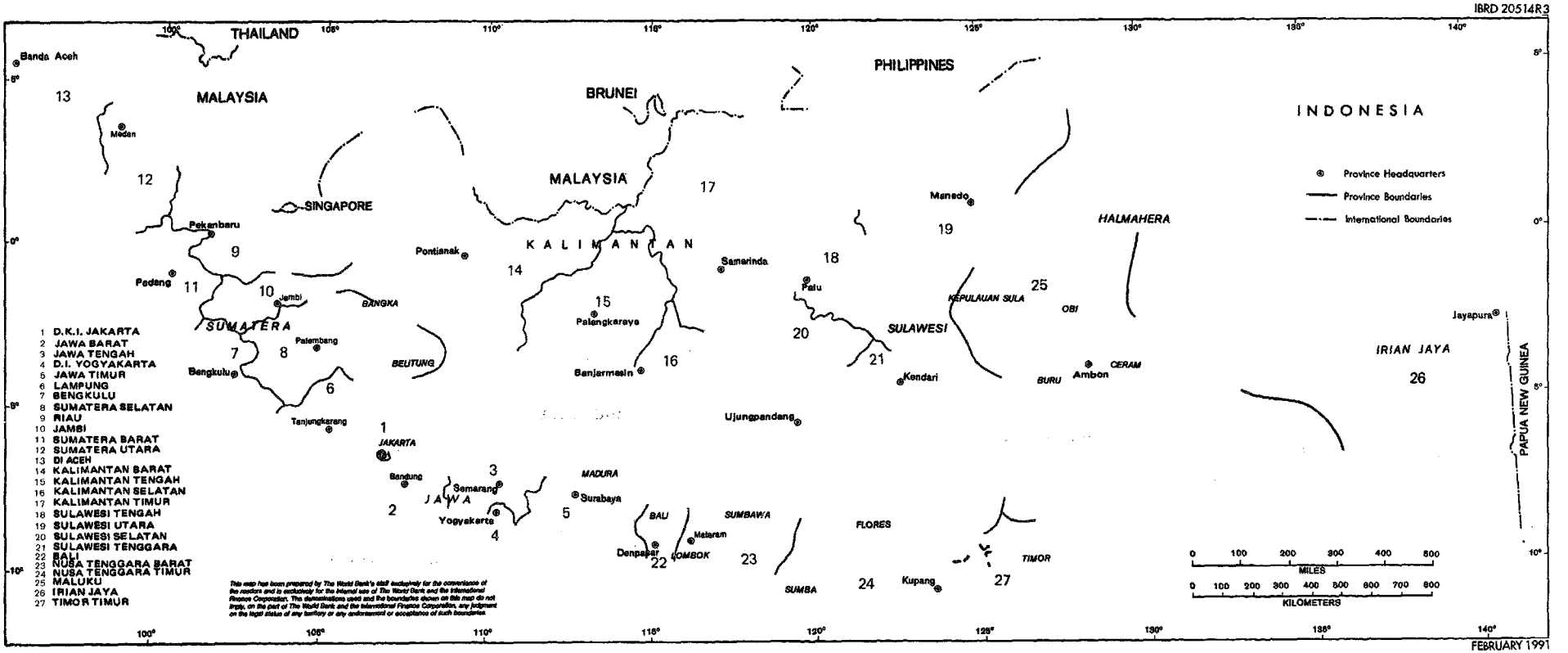
/a Figures refer to intended capital investments, and represent original approvals plus approved expansion minus cancellations.
/b Includes transportation sector.

Source: Investment Coordinating Board.

NOTES

NOTES

MAP SECTION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JAWA
MADURA
BALI
SUMBAWA
FLORES
TIMOR
SUMBA
LOMBOK
HALMAHERA
KEPULAUAN SULA
OBI
BURU
CERAM
BANGKA
BELITUNG
IRIAN JAYA
PAPUA NEW GUINEA
Banda Aceh
Medan
Pekanbaru
Padang
Jambi
Palembang
Bengkulu
Tanjungkarang
Pontianak
Palangkaraya
Banjarmasin
Samarinda
Palu
Manado
Kendari
Ujungpandang
Ambon
Jayapura
Kupang
Denpasar
Mataram
Surabaya
Semarang
Yogyakarta
Bandung
JAKARTA
Province Headquarters
Province Boundaries
International Boundaries
1 D.K.I. JAKARTA
2 JAWA BARAT
3 JAWA TENGAH
4 D.I. YOGYAKARTA
5 JAWA TIMUR
6 LAMPUNG
7 BENGKULU
8 SUMATERA SELATAN
9 RIAU
10 JAMBI
11 SUMATERA BARAT
12 SUMATERA UTARA
13 DI ACEH
14 KALIMANTAN BARAT
15 KALIMANTAN TENGAH
16 KALIMANTAN SELATAN
17 KALIMANTAN TIMUR
18 SULAWESI TENGAH
19 SULAWESI UTARA
20 SULAWESI SELATAN
21 SULAWESI TENGGARA
22 BALI
23 NUSA TENGGARA BARAT
24 NUSA TENGGARA TIMUR
25 MALUKU
26 IRIAN JAYA
27 TIMOR TIMUR
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0 100 200 300 400 500
MILES
0 100 200 300 400 500 600 700 800
KILOMETERS
FEBRUARY 1991