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Report No. 9498-IND

# Indonesia
# Developing Private Enterprise

May 9, 1991

Country Department V
Asia Regional Office

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## CURRENCY EQUIVALENTS

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

Annual Average 1979-88

| | |
|---|---|
| 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 |

May 6, 1991 US$1.00 = Rp.1,941

## FISCAL YEAR

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

/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.

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COUNTRY : Indonesia

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ABSTRACT : This report describes Indonesia's efforts to build a more diverse and robust economy by implementing economic policies and structural reforms intended to encourage the sound development of private enterprise. Chapter 1 reviews progress to date in terms of economic performance and living standards and identifies the ongoing challenges in ensuring a healthy environment for a dynamic private sector. These challenges include continued prudent macroeconomic management (Chapter 2), further reform of the structure of incentives, regulations and laws (Chapter 3), strengthening the financial system (Chapter 4), improving the public sector's ability to complement and support private enterprise (Chapter 5), and ensuring widespread participation in the benefits of private sector growth (Chapter 6).

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# INDONESIA: DEVELOPING PRIVATE ENTERPRISE

## Table of Contents



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This report was prepared by a team led by James Harrison. The principal authors were Donald Hanna, Vladimir Konovalov, Kyle Peters, Nicholas Prescott and Dennis Whittle. Sadiq Ahmed and Swati Ghosh made major contributions. Yasmine Hamid prepared the Statistical Annex and, together with Cyrus Talati, provided statistical support. The report also draws on background inputs prepared by Dipak Dasgupta, George Fane (consultant), David Hawes, Gordon Hunting, Andres Liebenthal, Samuel Lieberman, David Mead, A. Shanmugarajah, Tray Sinha, and Vinaya Swaroop.

## Text Tables

## Figures



## Boxes

# EXECUTIVE SUMMARY

## DEVELOPING PRIVATE ENTERPRISE

(i) As oil prices collapsed in the first half of the 1980s, Indonesia began a series of fundamental reforms to restructure the economy to reduce dependence on oil, then the source of 80% of export earnings and 70% of budget revenues. The Government realized that rapidly building a more diverse and robust production structure required that the energies of Indonesia's businessmen, farmers and traders be unleashed to seize profitable opportunities to expand production and create new capacity in areas where Indonesia could compete in the world market.

(ii) Two policy thrusts supported this strategy. First, macroeconomic policies restrained domestic demand through an austere monetary and fiscal stance and established export competitiveness through two large discrete devaluations. Second, structural reforms started to dismantle the web of regulatory barriers and interventions that hampered competition and private initiative. Both sets of policies encouraged a more outward-oriented economic structure. This report documents the impact of this strategy and then sets forth an agenda for sustaining and improving on what has been achieved.

(iii) Chapter 1 provides evidence that this strategy is succeeding. The private sector has responded with rapid increases in output, particularly in non-oil manufacturing and non-oil exports, sharply reducing dependence on oil. In exploiting the opportunities created by the reforms, producers first used existing capacities more fully and reoriented them toward the export market. More recently, private investment has increased sharply, creating new capacity to sustain growth in non-oil output and exports into the future. The deregulated financial sector has helped ensure a rapid flow of funds from savers to these investors, speeding the supply response. The evidence suggests that production and exports have shifted into areas that make productive use of Indonesia's large pool of labor and natural resources. More importantly, the strong growth in the non-oil economy created productive, new job opportunities that reduced unemployment, raised real wages, increased real incomes and consumption, and contributed to a reduction in poverty.

(iv) The strong private sector supply response is already evident even though the impact of some reforms is only beginning and others are not yet complete. This response will support Indonesia's fundamental objective of generating a pace and pattern of growth that will reduce poverty and raise living standards widely. Sustaining the dynamism of the private sector into the 1990s will bring a new set of policy challenges:

- maintaining macroeconomic stability through the coordinated use of monetary, fiscal and exchange rate policies;
- accelerating the ongoing reforms in the framework of incentives, regulations and laws to support non-oil exports and provide greater competition on a level playing field;

- strengthening mechanisms for managing risks in the financial system, especially prudential regulations and supervision of intermediaries to ensure continued sound growth;

- improving the ability of the public sector to complement and support private sector growth, particularly in providing essential infrastructure services; and

- ensuring a widespread participation in the benefits of private sector growth.

To sustain an adequate rate of growth while meeting these policy challenges will call for substantial resources, including continued high levels of financial support from the donor community. This report focuses on how these challenges can be met.

Growth with Stability

(v) To make substantial progress in raising living standards and reducing poverty, Indonesia should seek to maintain 6-7% annual growth in the non-oil economy, or about 5-6% annual growth in GDP. This would imply, given Indonesia's annual population growth of just under 2%, per capita GDP growth in the 3-4% p.a. range. Chapter 2 outlines a macroeconomic framework for realizing such growth, with primary reliance on the private sector. The private sector's potential contribution is demonstrated by the economy's recent rapid growth: between 1987 and 1990, the non-oil economy grew by about 7.8% p.a., with private fixed investment growing at 15.4% p.a.

(vi) Achieving 6-7% growth in the non-oil economy while maintaining macroeconomic stability will call for prudent macroeconomic management. Developments during 1990 demonstrate how aggregate demand could expand, generating pressures on the balance of payments and inflation. Monetary policies in late 1989 and early 1990 reduced interest rates and contributed strongly to a rapid expansion of credit to the private sector (up 58% in 1990). The economy grew at a brisk pace, driven by a 20% expansion in private sector investment and a surge in domestic liquidity. This resulted in a sharp increase in aggregate demand, which was reflected in an acceleration in the demand for imports and pressure on domestic prices, especially for non-traded goods. The rapid increase in non-oil imports, combined with a slowdown in non-oil export growth, caused the current account deficit to widen from 2% of GDP in 1989/90 to 3.8% in 1990/91, despite the windfall from temporarily high ($23/bbl) oil prices. The deceleration in non-oil exports resulted from three factors--a substantial drop in prices of most of Indonesia's primary commodity exports, several special factors limiting exports of particular products (the most notable being the sawn timber export tax), and the high domestic demand for some products (e.g., cement) reducing quantities available for export. Despite the slowdown, the real growth of non-oil manufactured exports was a robust 15%. The rapid growth in private investment has been the main force behind the rise in non-oil imports, with imports of capital goods rising by 50% and accounting for two-thirds of the total increase in imports. Much of this investment is expected to be in export capacity, in line with the rapid expansion of profitable opportunities opened up by the structural reforms. Such investment should generate non-oil exports and improve the balance of payments over time. In this sense, the pressure on the current account

represents the success of the deregulation policies in stimulating a wide array of investment opportunities. It is a success, however, that has created demand pressures that need to be managed carefully to ensure continued growth with stability.

(vii) A decline in foreign exchange reserves in the first half of 1990 and early signs of higher inflation, provided a clear signal of the widening non-oil trade gap and emerging demand pressures. The Government responded promptly by tightening monetary policy, primarily by reducing subsidized, directed credits (liquidity credits) refinanced by Bank Indonesia (BI) and by increasing interest rates on Bank Indonesia Certificates (SBIs). This policy stance resulted in higher deposit and lending rates and a rebuilding of official reserves in the second half of the year. Growth in credit to the private sector remained high, in part due to substantial offshore borrowing by commercial banks, converted into rupiah through BI's swap facility. Subsequent adjustments in the mechanism for setting the swap rate reduced the incentives for offshore borrowing. This, combined with tighter international capital markets, slowed the expansion of commercial bank borrowing by the end of 1990. The Government took major additional steps in February and March 1991 to tighten and improve the effectiveness of monetary policy. Following instructions from the Government, as the owner, public enterprises converted about Rp.10 trillion of their deposits in commercial banks into SBIs. This was combined with a partially offsetting purchase of commercial bank debt instruments (SBPUs) by BI. This maneuver tightened liquidity, caused real interest rates to rise into the 15-18% range, and sent a clear signal to the business community that BI would seek to maintain a tight monetary policy. BI also tightened limits on use of swaps by banks and discontinued short maturity swaps. In fiscal policy, the Government adopted a cautious approach to the use of the windfall oil revenues that accrued during 1990/91 following the Gulf crisis. The Government limited the impact of the windfall on domestic demand and used it mainly to improve the budget balance, creating reserves against revenue shortfalls in future years. Nevertheless, this prudent approach was insufficient to contain the demand pressures generated during the year and reduce the non-oil trade gap. The challenge for the coming year will be to put macroeconomic policies in place that will reduce demand pressures and return the economy to a sustainable growth path.

(viii) The monetary adjustments introduced in February 1991 are a central element of the necessary policy adjustments. Trends in monetary aggregates will need to be watched closely over the year to ensure the monetary stance is having the desired effect and that an adequate reserve cushion is maintained. Given Indonesia's open capital account, the impact of these important monetary measures on demand is likely to be offset over time by inflows of capital. Moreover, maintaining real interest rates at too high a level for an extended period could have unintended negative effects on the financial system and the economy at large. Consequently, these measures need to be supported by fiscal policies designed to contain the growth of aggregate demand. Given the need to protect priority infrastructure investments to support private sector development and expenditure programs to meet the basic needs of the poor, improvements in the fiscal balance could concentrate on revenue mobilization measures, subsidy reductions and reassessment of large investment projects other than essential infrastructure. Revenue mobilization measures could seek continued improvements in tax administration combined with selective increases in those taxes unlikely to affect the poor. Removal of

subsidies and price adjustments could help improve the budget balance as well as promote conservation and more efficient use of resources. As Indonesia's experience in 1983 indicates, a careful review of major projects including those of public enterprises and joint ventures, could identify opportunities for short term savings at little long term cost. At the same time, continued deregulation (discussed below) combined with appropriate exchange rate management should maintain the incentives for non-oil exports, while measures to conserve energy would sustain net oil exports.

(ix) As outlined in Chapter 2, the implementation of such policies would be consistent with GDP growth of 5 to 6% over the next few years, somewhat below what has been achieved recently, but still above the REPELITA V target of 5%. These policies would improve macroeconomic balances and would preserve foreign exchange reserves and borrowing capacity to deal with potential downside risks.

The Framework of Incentives, Regulations and Laws

(x) The surge in investment and imports and the deceleration in non-oil exports over the past year have added new urgency to structural reform. To encourage exports, the remaining export barriers need to be carefully reexamined and reduced. Removing barriers to trade and entry is essential to ensure that the rapid surge in private investment flows into areas in which Indonesia has a comparative advantage. Otherwise the economy will be burdened with high-cost enterprises that drain its vitality. Removal of these barriers will also increase competitive pressure, encouraging greater efficiency. This is particularly important to prevent large firms from exercising market power at the expense of rest of the economy. While agriculture is generally much less protected than manufacturing, there are significant exceptions caused by NTBs and export restrictions that could limit the sector's ability to adjust flexibly to changing patterns of demand and supply. The main directions for policy reforms in trade and investment regulations include: reassessing and rationalizing export restrictions; removing the NTBs remaining in manufacturing (including agroindustries), and reassessing NTBs in agriculture; continuing tariff reforms, lowering the highest rates into the 20-30% range; and reducing the scope of the negative list for investments and the list of products reserved for small scale industry.

(xi) A modern corporate legal framework is also essential for the sound, long-term development of the private sector. Much of the current commercial legal framework dates back to early colonial times. Making a transition to a new framework will be a complex task, but one that offers major benefits: lower transactions costs by standardizing contracts and increasing access to essential information; reduced barriers to entry and greater mobility of private investment; predictable sanctions for infringement of rules; and a transparent, equitable mechanism for enforcement of contracts and dispute settlement. Over the past year, an interministerial working group has been established to identify priorities and approaches to legal reform. The priorities indicated include: a framework of company laws, accounting and audit requirements, and capital market regulations; strengthening courts and arbitration boards to deal effectively with the specialized needs of commercial legal decisions and dispute settlement; and improved flows of legal information.

(xii) Efficient, sustainable private sector development will require a framework of environmental incentives and regulations that causes firms to take increasing account of the environmental costs that their behavior imposes on other firms and society at large. The three main areas for improving the framework of environmental regulations and incentives in Indonesia are water and air pollution on Java, forestry management on the outer islands, and land use management and planning nationwide. Progress has been made in establishing an environmental agency (BAPEDAL), in initiating a process of environmental impact assessments for all public and private sector projects and in issuing industrial pollution standards. The main priorities now are to build the technical and implementation capacity of BAPEDAL and related agencies, and to develop market-based incentives to promote environmental goals, including pricing policies for energy and water.

Strengthening the Financial System

(xiii) The financial system has expanded rapidly following successive stages of deregulation that have made the system competitive, market-oriented and dynamic. Private sector intermediaries have shown especially strong growth. The system has responded to the financing needs of private enterprises with a rapid increase in bank loans and equity finance from the stock market. At the same time, the large increase in the number of financial intermediaries and in the volume of their operations has strained the Government's regulatory capacity. Moreover, the intermediaries themselves have had to manage unprecedented asset growth while lacking sufficient trained staff and well-developed internal controls, raising concerns about asset quality and risk in some cases. Chapter 4 analyses these issues and identifies several priority areas for strengthening the financial sector's capacity to manage risk, establishing a sound framework for future growth:

- developing the legal and regulatory framework, especially the laws now under preparation on banking, pensions, insurance and the central bank, but also including commercial law and accounting standards and reporting requirements;

- systematic supervision, including continued development of BI's supervision capacity and coordination with the Ministry of Finance; further development of capital adequacy norms and other standards; improvements in the quality and availability of data on financial institutions and businesses; and development of private credit rating agencies to reinforce BI's prudential supervision and help private investors make informed choices;

- strengthening technical and managerial capacity, in private banks through their own training programs and flexible hiring of expatriate staff to overcome shortages, and in the main supervisory agencies (BI, Ministry of Finance and BAPEPAM) through intensive training, expansion of staff, and improved compensation to develop a highly skilled cadre of experienced staff; and

- evolving new instruments, including securitization of small loan portfolios as an efficient way to increase financial flows

to small firms, more flexible use of the SBI to support variable interest rate instruments, and the continued phasing out of liquidity credits to create more scope for market-based term lending instruments.

Public Sector Support for Private Enterprise

(xiv) The Government's strategy to increase reliance on the private sector, by removing direct bureaucratic controls and relying increasingly on indirect instruments and market forces to meet the needs of the economy, implies important changes in the public sector's role and effectiveness. Its role will shift from one that uses direct interventions to one that provides an enabling environment for sound private sector development. Such a shift involves a broad agenda of issues, ranging across macroeconomic and sectoral policy formulation, development and implementation of the framework of incentives, regulations and laws, and provision of public goods and services that generate the human capital and physical infrastructure essential for continued development of the private sector. From this broad agenda, Chapter 5 focuses on physical infrastructure services--power, telecommunications, transport and water supply--as critically important public sector activities in which supply constraints could slow the pace and efficiency of private sector growth. Four main areas for action emerge from this analysis:

- there are high priority needs for additional infrastructure capacity, particularly in power and telecommunications, to provide an adequate level and quality of service to support sustained development of the private sector;

- there is scope for improving the efficiency of supply from existing capacity, drawing in some cases on private sector capacities. Important examples of measures to improve service efficiency include: increasing the operational autonomy and strengthening organization and management of the public suppliers such as PLN (the national power utility) and PERUMTEL (the national telecommunications utility); greater coordination of PLN's grid with private captive generation capacity; and opening up selected telecommunications services to competition with the private sector;

- selective use of the private sector to finance, build and/or operate infrastructure services may present important opportunities to ease infrastructure supply constraints by augmenting public sector financial and implementation capacity. Such arrangements can be complex and need to be approached cautiously, however, to ensure that the public interest is served and that the service provided is efficient and cost-effective. It will be important, therefore, to develop a regulatory framework and institutional procedures for designing and negotiating such arrangements and supervising their implementation; and

- appropriate pricing policies have an essential role to play in managing the demand for, and efficient allocation of, infrastructure services and in mobilizing the resources to

expand capacity as needed. More frequent, systematic adjustments in tariffs, especially for electricity, can avoid the shocks that large, long-delayed increases place on users and the financial stress such delays cause the utilities. Moreover, appropriate pricing policies for energy and water, for example, can also have strong positive environmental effects.

(xv) Meeting the needs for improved infrastructure services and dealing with the broader implications of increased deregulation for public sector management highlight the importance of basic institutional reforms in the public sector. Chapter 5 also discusses two important areas of ongoing reform in the public sector: public enterprise reforms and civil service reforms. The public enterprise reforms seek to increase efficiency of the enterprises providing essential public services while gradually divesting activities that no longer need to remain in the public sector. The civil service reforms seek to use an extensive program of job analysis and restructuring to reorient the public sector to deal effectively with its changing role in supporting private sector growth. Reforms in both public enterprises and the civil service are complex and implementation will need to be phased over time. Concentrating efforts on particular enterprises and ministries would help maintain progress and develop experience that would sustain the reform efforts.

Ensuring Widespread Participation

(xvi) A basic objective of the Government in developing private enterprise has been to widen opportunities for the people at large by reducing various controls and barriers to entry and providing an appropriate incentive structure. The data reviewed in Chapter 6 indicate that the benefits of growth so far have been widespread, with increases in employment, real wages, and per capita incomes and consumption, resulting in a decline in the incidence of poverty. Moreover, there appears to have been an improvement in income distribution up to 1987 (the most recent year for which data are available). It is important to recognize, however, that these very positive results will not come automatically in the future. They depend critically on the pace and pattern of growth in the economy, which in turn depend on resource availability and the policy and regulatory framework set by the Government.

(xvii) To permit a widespread sharing in the benefits of growth, it is necessary first for the economy to generate that growth. Chapter 2 charts a strategy for growth rapid enough to raise real per capita GDP from its present level of about US$500 to over US$700 by the end of the decade. For such growth to generate continued improvements in the living standards of the poor will call for the sustained implementation of policies along two broad dimensions:

- measures that promote a level playing field so that firms face the same types of competitive pressures and opportunities within a transparent framework of incentives that continues to encourage a relatively labor-intensive pattern of growth. Important types of measures that support this kind of

environment include: (a) trade and investment deregulation to reduce distortions and entry barriers and to ensure larger firms face effective competition to prevent abuse of market power; (b) strengthening the legal framework and accounting and disclosure regulations; (c) improving access to credit for smaller, newer firms; and (d) developing "arm's length" procedures for contracts, joint ventures, divestitures and other business relationships between the Government and the private sector; and

- expenditure policies that provide for effective programs that enhance the opportunities, productivity and quality of life of the poor, including especially human resource development, agricultural services, and local infrastructure development; and tax policies that improve tax administration and compliance and increase revenues from property taxes and the VAT on luxury goods.

Growth Prospects and Resource Needs

(xviii) Prudent macroeconomic management, combined with continued, consistent implementation of Indonesia's reform agenda, will enable Indonesia to meet the emerging challenges outlined above and to continue a 6-7% annual growth in non-oil GDP in the medium term. Such growth would permit employment to continue to rise rapidly enough to absorb the growing labor force at higher levels of productivity and would enable continued reductions in poverty. Under this scenario, the non-oil current account balance would improve substantially during 1991/92 and in the medium term, reversing the trend of the past two years. Declining world oil prices and higher domestic oil consumption, however, will lower net oil exports and offset this gain initially, leading to a modest increase in the overall current account deficit in 1991/92 before it resumes its downward trend. External debt service indicators would rise slightly in 1991/92, reflecting the substantial increase in foreign borrowing by the private sector in 1990/91, which offsets a continued decline in the public debt burden. With careful debt management and continued prudent borrowing, Indonesia's total debt burden would continue to ease beyond 1991/92. This growth strategy, however, will continue to require substantial resources to finance the rapid expansion of the private sector, especially in non-oil export production. The rapid growth of the private sector over the past several years has also strained infrastructure capacity, generating substantial investment needs following the period of budget austerity in the mid-1980s. Thus continued high levels of foreign capital inflows will be needed as well as a substantial increase in domestic resource mobilization.

(xix) Much of the increase needed in foreign capital inflows will come from higher levels of private borrowing and direct investment, continuing the trends evident in 1990/91. Despite the larger role of private capital flows, public medium- and long-term (MLT) borrowing will also need to increase. The increase in public borrowing would be mainly import-related credits and untied commercial credit. Nevertheless, disbursements of official assistance would need to be about US$3.8 billion in 1991/92, the same level as in 1990/91. Provided an appropriate mix of assistance can be identified, and commitments outside the IGGI remain at the same level, the necessary level of

IGGI disbursements could be obtained in 1991/92 from a commitment level of US$4.7-4.8 billion. The priorities for this assistance are mainly in two areas: (i) investments in infrastructure and human resource development to support private sector development and economic growth; and (ii) investments in social and basic services to reduce further the incidence of poverty. In addition, given the investment needs of the private sector, it will be important to use mechanisms such as two-step operations and financial sector operations to channel resources to the private sector and to strengthen the financial system.

(xx) As noted, achieving the recommended level of disbursements will depend on an appropriate mix of official assistance. An increase in project aid disbursements can help, but in order to reach the recommended level of official disbursements, a substantial share of new commitments will need to be in the form of relatively fast-disbursing operations, including sector loans and two-step operations. This level and mix of assistance will enable Indonesia to pursue its trade and other structural reforms with confidence, while it seeks to improve its external and internal macroeconomic balances. Over the medium term, as the current account deficit resumes its downward trend and the pipeline of project finance builds up, the share of quick-disbursing finance could decline. Given the substantial uncertainties in the world economic outlook, including the possibility of oil prices declining more than projected, Indonesia will need to maintain its substantial foreign exchange reserves and borrowing capacity. Moreover, the donor community should be prepared to respond flexibly to support Indonesia's development efforts in the event of adverse external shocks.

# CHAPTER 1

## DEREGULATION AND THE PRIVATE SECTOR RESPONSE

### A. Introduction

1.01 Indonesia's policies for the private sector have dramatically changed since the early 1980s. The need to reduce the economy's dependence on oil and to tap the dynamic potential of the private sector provided the impetus for regulatory reform in Indonesia. The objectives of the reform strategy have been to promote efficiency and wider participation for the private sector in economic activities. This has been achieved by ensuring a more competitive environment through lower barriers to entry for both domestic and foreign firms and reform of public institutions (such as customs). The overall strategy of deregulation has been supported by monetary, fiscal and exchange rate policies that managed domestic demand and established export competitiveness. The economy has been re-oriented to a more outward-looking growth strategy. Major financial sector reforms have promoted the efficiency of financial intermediation and the development of capital markets. The economy has responded strongly to the Government's balanced adjustment program, with the private sector taking the leading role.

1.02 The main focus of this Chapter is the supply response of the economy and the role of the private sector following deregulation. The expanded opportunities for the private sector in the economy are most noticeable in the manufacturing and financial sectors, where controls were initially the most pervasive and deregulation has progressed furthest. The recent surge in investment in the private sector creates new opportunities and challenges. It provides Indonesia with the chance for impressive growth through the 1990s, but is also placing strains on the economy and on infrastructure. Ensuring that investment is realized within a stable macroeconomic environment and is directed towards productive activities are key challenges for the years ahead. This Chapter identifies the tasks ahead for policy making that are discussed more fully in subsequent chapters. These tasks include ensuring macroeconomic stability, further deregulation and legal reform, promoting a sound financial system, overcoming infrastructure bottlenecks and fostering widespread participation in the benefits of growth.

### B. Policy Reforms for Private Sector Development

1.03 The economy has responded strongly to the Government's balanced adjustment program. Macroeconomic balances improved, growth, investment and non-oil exports increased substantially and the pace and pattern of growth enabled per capita incomes and consumption to rise and led to a significant reduction in the incidence of poverty. Fundamental structural changes took place within the non-oil sector, and particularly manufacturing, providing the main engine of growth. Deregulation has prompted these changes and facilitated a movement of resources towards those activities in which Indonesia has a comparative advantage. In particular the manufacturing, agricultural and financial service sectors are either dominated by the private sector or have exhibited dynamic changes following deregulation.

The Private Sector

1.04 The private sector accounts for the largest part of value-added in the economy. It is estimated that about three quarters of non-oil economic activity comes from the private sector. The vast bulk of this activity is by domestic entrepreneurs. Foreign-owned firms account for only about 7-10% of non-oil GDP. Agricultural production has always been largely private, although the public sector is involved in estate crops and forestry operations. In manufacturing, private firms have led the rapid expansion of textiles and timber industries and their share of total manufacturing activity has grown from about 82% in 1982 to 86% in 1990. Public enterprises are involved in food processing and capital-intensive activities such as basic chemicals, metals and cement. The public sector still accounts for the majority of activity in the financial sector, but its share has dropped sharply during the 1980s. The private sector dominates the construction, transport, trade and tourism and other services sectors.

Policy Environment

1.05 Policies towards the private sector have changed markedly in the past decade. For much of the 1970s and early 1980s the rapid increase in oil revenues led to an expanded role of the public sector across large parts of the economy. The role of the public sector was seen to be important, among other things, to balance the economic power of the large business groups, and to push industrial development into upstream and high-technology areas. The expanded role of the public sector, combined with a strong orientation toward the domestic market and a philosophy of close guidance of the private sector, led to a proliferation of trade and investment restrictions. As a result, the regulatory environment for private sector activity became distorted and less transparent. The performance of supporting services, especially in the financial and transport sectors, was also constrained by regulatory controls over competition and the dominance of public sector institutions.

1.06 Indonesia faced a sharp deterioration in the external environment that began in 1983, and intensified in 1986 due to declining oil prices and adverse currency fluctuations. The need to restore external balance while restructuring the economy to rely on less volatile sources of growth posed a major challenge to macroeconomic policy making. The Government recognized that restructuring the economy was necessary to enable the private sector and non-oil exports to play a much larger role in providing growth of employment, incomes and exports. The specific policy responses are summarized in Box 1.1 and can be grouped under the following categories:

(a) Sound macroeconomic management based upon prudent monetary and fiscal policy. Budget austerity and more careful selection of projects significantly reduced the level of public investment, while tax reform measures boosted non-oil tax revenues and improved the efficiency of the tax system. Monetary policy was designed to contain inflationary pressure and prevent capital flight. These restraints on domestic demand encouraged an outward orientation.

**Box 1.1: POLICY REFORMS, 1983/84-1990/91**

**Exchange rate**

- Rupiah devalued by 28% in March 1983.
- Exchange rate made more flexible since March 1983.
- Rupiah devalued by 31% in September 1986.
- Nominal exchange rate has depreciated against a falling US Dollar since September 1986, preventing appreciation of real effective exchange rate.

**Fiscal policy**

- Large capital- and import-intensive projects rephased in May 1983.
- Major cutbacks in government real capital spending since 1983.
- Tight control maintained since 1983 on the use of non-concessional import-related credits.
- A major tax reform initiated, starting in January 1984.
- Follow-up steps taken to strengthen tax administration.
- Restraints on civil service employment and salaries.

**Monetary and financial**

- A major financial reform initiated in June 1983, involving removal of interest rate and credit ceilings for state bank operations and introduction of new instruments of monetary control.
- A new set of financial measures introduced in October and December 1988, aimed at enhancing financial sector efficiency and developing capital markets.
- Improved monetary management to control inflation.
- Improved short-term monetary management to curb exchange rate speculation.
- Reduction in directed, subsidized credits starting in 1990.
- Intense efforts to improve supervision of financial system, including restructuring capital market regulations (1990).
- Adopted new capital adequacy and provision standards in February 1991.

**Trade policy**

- An across-the-board reduction in nominal tariffs implemented in March 1985.
- Measures to provide internationally-priced inputs to exporters announced on May 6, 1986.
- Significant reduction in import licensing restrictions initiated through a series of measures in October 1986, January and December 1987 and November 1988.
- Steps taken in December 1987 to reduce the anti-export bias of trade policy by reducing regulatory restrictions for exporters.
- An across-the-board reduction in most nominal tariffs to a ceiling of 40% in May 1990. The package also encompassed a further easing of NTBs.

**Other regulatory reforms**

- Reorganization of customs, ports and shipping operations in April 1985 to reduce freight costs and cut processing time.
- Steps taken through the May 1986, October 1986, January 1987 and December 1987 packages to reduce the investment and capacity licensing requirements, relax foreign investment regulations, and reduce the role of the local content program.
- Substantial deregulation of maritime activities announced in November 1988 to reduce costs and encourage private sector participation.
- Replacement of restrictive positive list of areas open for investment with short negative list in 1989.
- Initial steps towards Public Enterprise reform.
- Deregulation extended to pharmaceutical and some agricultural activities in the May 1990 package.

(b) Appropriate exchange rate policy. Two major devaluations were implemented during the 1980s, and the flexibility of the exchange rate was increased through a more actively managed float. In conjunction with prudent fiscal and monetary policies, these measures supported significant real exchange rate depreciations that played a key role in boosting non-oil exports and reducing current account deficits.

(c) Improved incentives structure. Starting in 1985, the Government initiated a series of trade and other regulatory reforms to support demand management policies and to enable a recovery of economic growth over the medium term. A key component has been several trade reform packages designed to make the economy more outward-looking. Complementary reforms have also been undertaken in customs, ports and shipping operations. The investment process has been streamlined with the policy stance shifting from control to encouragement of investment. These reforms are meant to increase competitive pressure in the economy, reducing opportunities for monopoly profit and restrictions that had produced a 'high cost' economy.

(d) Reform of the financial system. Credit ceilings and interest rate controls on commercial banks were removed in 1983, increasing the flexibility of monetary management and improving credit allocation. A second round of financial measures was initiated in 1988, aimed at enhancing financial sector efficiency through easier entry and greater competition and boosting capital markets. Reforms in 1990 reduced the role of subsidized, directed credits and strengthened the framework for the capital market.

These reforms have already begun to generate a strong supply response in the economy. This response is explored in the following sections.

## C. Effects of Policy Reforms

1.07 Growth has picked up since the mid-1980s, partly due to the strong growth in non-oil exports. There has also been a marked increase in private investment, and an even more rapid rise in investment approvals. The manufacturing and banking sectors have grown particularly strongly. The change in the pattern of incentives resulting from both the macroeconomic and trade/regulatory reforms has drawn resources into relatively labor-intensive activities in which Indonesia is competitive in the world market and this has been the foundation for the strong supply response.

### Macroeconomic Performance

1.08 Macroeconomic balances. The Government's fiscal, monetary and exchange rate management has been at the center of Indonesia's success in reducing internal imbalances and containing inflation (Table 1.1). Restraints on domestic demand combined with continued gradual nominal depreciations (about 5% p.a.) have preserved the competitive advantage of non-oil exports achieved through the 1986 devaluation. The current account deficit was brought down to 2.6% by 1985 but rose again in 1986 when oil prices collapsed.

The current account deficit declined steadily through 1989/90, approaching 2% of GNP, reflecting a rapid growth of non-oil exports. As discussed in more detail in Chapter 2, strong private sector investment demand drove a rapid increase in non-oil imports in 1990/91. This, combined with slower non-oil export growth caused a widening of the current account deficit. Indonesia's debt service ratio fell from a peak of 39.7% of exports in 1986 to 27.3% in 1990 and it is projected to decline further in the medium-term. The implementation of cautious budgets, combined with strong non-oil revenue mobilization, caused the overall public sector deficit to decline from 3.8% in 1986 to about 1% in 1989. In 1990 the overall public sector budget is estimated to be in surplus, reflecting windfall revenues from high oil prices and also stronger than expected non-oil revenues. Budget austerity and appropriate monetary policy have contained inflation to less than 10% in the period since 1985.

Table 1.1: KEY MACROECONOMIC INDICATORS /a
(Growth rates, % p.a.)

| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 (est.) |
|---|---|---|---|---|---|---|---|
| Economic activity | | | | | | | |
| GDP | 7.0 | 2.5 | 5.9 | 4.9 | 5.7 | 7.4 | 7.1 |
| Non-oil GDP | 5.2 | 5.4 | 6.1 | 5.8 | 7.4 | 8.2 | 7.8 |
| Fixed investment | -5.7 | -5.9 | -5.5 | 2.6 | 10.3 | 13.0 | 16.2 |
| Public | -7.2 | 1.2 | -21.4 | -7.7 | 11.4 | 6.8 | 9.6 |
| Private | -4.4 | -12.3 | 10.9 | 10.1 | 9.7 | 16.8 | 19.9 |
| External trade | | | | | | | |
| Non-oil exports | 10.0 | 7.8 | 6.7 | 25.5 | 14.2 | 21.5 | 6.7 |
| Non-oil imports | -8.7 | -13.7 | -14.7 | 5.5 | 8.0 | 18.9 | 25.4 |
| Other indicators | | | | | | | |
| GNP/per capita | 4.0 | 0.7 | 5.6 | 3.5 | 4.1 | 5.5 | 5.3 |
| Consumption per capita | 2.0 | 1.6 | 2.5 | 2.0 | 2.5 | 4.0 | 6.0 |
| Current account/GNP (%) | -3.0 | -2.6 | -5.9 | -2.6 | -2.3 | -2.0 | -3.8 |
| Non-oil exports/GDP (%) | 8.1 | 8.6 | 8.7 | 10.0 | 11.1 | 12.3 | 12.7 |
| Non-oil imports/GDP (%) | 18.9 | 17.1 | 13.7 | 12.7 | 12.9 | 13.7 | 15.3 |
| Domestic inflation /b | 9.1 | 4.7 | 5.8 | 9.6 | 9.3 | 6.3 | 7.9 |
| Debt service ratio (%) /c | 21.3 | 24.6 | 39.7 | 34.8 | 34.4 | 31.6 | 27.3 |
| Overall budget balance (% GDP) | 0.5 | -3.0 | -3.8 | -2.8 | -3.1 | -1.3 | 1.8 |

/a External trade and fiscal data are for fiscal years. Other indicators are for calendar years.
/b As measured by consumer price index (adjusted).
/c Defined as the ratio of interest and amortization payments of total MLT debt to exports of goods and services.

Source: World Bank staff estimates.

1.09 Growth and trade. The effects of the Government's policies to promote private sector development are reflected clearly in growth in GDP and non-oil exports. GDP growth averaged 5.5% p.a. between 1986-88 and has accelerated to 7.25% in the past two years. The non-oil sector has performed even better and is growing at significantly higher levels since deregulation began in the mid-1980's. Non-oil exports have more than doubled from US$6.7 billion in 1986/87 to an estimated US$14.3 billion in 1989/90, an average increase of about 29% p.a. Much of this growth has come from a diversifying base of manufactured goods. Non-oil exports rose from 8.7% of

GDP in 1986 to 12.7% in 1990. The growth of non-oil exports slowed in 1990. Non-oil imports have also expanded in real terms, at a rate of about 14% p.a. on average over the period 1986 to 1990. Non-oil imports remained relatively constant as a share of GDP over the period 1986-89, but increased significantly in 1990 partly due to a strong surge in private investment.

1.10 Investment. The deregulation measures together with sound macroeconomic management, have encouraged a recovery of private sector investment, which increased by 10.2% p.a. during 1986-88 and by 18.3% p.a. during 1989-90. This was a dramatic reversal of the stagnation experienced during earlier years. Much of the new investment has been directed towards export activities. There has been a marked change in the composition of fixed investment since deregulation commenced. Over the past 4 years the private sector has accounted for about 60% of total fixed investment compared with about 52% over the period 1975-83. This investment should be reflected in an increasing share of the private sector in total economic activity over the coming years. The positive effects of the Government's policies have had on private sector investment are further reflected in the recent surge in approvals of both domestic and foreign private investment by the Investment Authority (BKPM). Domestic investment approvals rose by 34% in 1989 and over 200% in 1990 to reach US$30 billion. Similarly after recording a sharp and steady decline since 1983, foreign investment approvals in dollar terms increased by 76% in 1987 and by a remarkable 300% in 1988. After a modest increase in 1989, foreign investment approvals increased by 86% in 1990 to reach US$8.7 billion. There has been considerable investor interest across a broad range of manufacturing and service activities. Even if only part of these approvals are implemented, the figures indicate the widening productive opportunities and pent up demand for investment in the economy.

Structural Change

1.11 Structural changes over the past decade are highlighted in Table 1.2. Over the period 1983-90 real GDP grew at an average of 5.8% p.a.. The non-oil economy grew at an above average 6.6% p.a., a pace that caused its share of GDP to increase from 78% in 1983 to 82% in 1990. The non-oil economy accounted for the vast bulk of growth over the period. Both the traded and non-traded goods sectors of the non-oil economy grew at roughly the same speed. The non-oil traded goods sector increased its share of GDP from 34% in 1983 to 35.8% in 1990. Within the non-oil traded goods sector, agriculture is still the largest activity, although it has gradually declined in relative importance, having grown at 3.6% p.a. over the period. Agriculture now accounts for slightly less than one-fifth of GDP. However, agriculture is far from stagnant -- it is simply overshadowed by more rapidly expanding sectors. In particular, non-oil manufacturing has become the single most important source of economic growth for the economy. The sector grew by over 12% p.a. and accounted for about one-quarter of GDP growth over the period 1983-90. Given the high levels of investment in manufacturing over the past two years, and given the large volume of investment approvals, the sector is expected to become increasingly important in the economy.

1.12 The growing diversification of economic activity is seen in the declining relative importance of oil. Between 1983 to 1990 the oil sector grew at 2.7% p.a., with its share in GDP declining from about 22% to 18%. The oil sector accounted for only 10% of GDP growth. The extent of the structural

transformation of the economy also may be seen in the trends highlighted in Table 1.3. Oil now contributes much less than half of budget revenues and total merchandise exports. Likewise the oil trade ratio (defined as the ratio of oil exports plus imports to GDP) declined continuously since the early 1980's (see Figure 1.1). While the non-oil trade ratio also declined in the first half of the 1980s, it has recovered strongly since then. The rising non-oil trade ratio indicates that deregulation clearly has led to an increased importance of trade and a more open economy.

Table 1.2: SHARES OF GDP BY INDUSTRIAL CATEGORY: 1983-1990
(Constant 1983 prices)

| | Shares of GDP | | Growth Rate (ann. avg) | Contr. to GDP growth |
|---|---|---|---|---|
| | 1983 | 1990 (est.) | 1983-90 | 1983-90 |
| Non-oil traded sector | 34.0 | 35.8 | 6.6 | 39.7 |
| - Agriculture | 22.8 | 19.7 | 3.6 | 13.3 |
| - Other mining | 1.3 | 1.2 | 4.7 | 1.0 |
| - non-oil manufacturing | 9.9 | 14.9 | 12.2 | 25.4 |
| Oil/LNG sector | 22.3 | 18.2 | 2.7 | 9.5 |
| Non-traded sector | 43.7 | 46.0 | 6.5 | 50.8 |
| - Banking & finance | 3.0 | 4.2 | 10.7 | 6.6 |
| - Electricity | 0.4 | 0.6 | 12.6 | 1.1 |
| - Construction | 5.9 | 5.7 | 5.3 | 5.3 |
| - Trade, hotels & restaurants | 14.9 | 16.3 | 7.2 | 15.1 |
| - Transport & communication | 5.3 | 5.4 | 6.1 | 5.3 |
| - Other | 14.3 | 13.8 | 5.2 | 13.2 |
| GDP | 100.0 | 100.0 | 5.8 | 100.0 |
| - Oil/gas sector | 22.3 | 18.2 | 2.7 | 9.5 |
| - Non-oil/gas sector | 77.7 | 81.8 | 6.6 | 90.5 |

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

1.13 The non-traded goods sector grew at 6.5% p.a., over the period 1983 to 1990 and this has allowed it to expand its share of GDP from 43.7% in 1983 to 46% in 1990. Within the non-traded sector the electricity and banking and finance sectors grew fastest, driven in large part by private activity in the traded goods sector. Each grew at over 10% p.a., but their contribution to overall GDP was small because their shares of GDP are still relatively small. The growth of the banking sector has picked up since the deregulation package in 1988. The electricity sector will need to continue rapid growth to serve the rapidly expanding manufacturing sector.

## Non-oil Manufacturing

1.14 The incentives reform has reoriented the traded goods sector, and particularly manufacturing, to a more outward-looking growth strategy. In the mid-1980s the Government looked to the manufacturing sector to increase its role in the economy, provide increasing employment opportunities and expand exports. It is still too early to document fully the response of manufacturing to the changed policy environment. There are lags between policy changes and investment and again between investment and output and exports. Much of the data are either incomplete or not available after 1988

Table 1.3: SIGNIFICANCE OF OIL IN THE ECONOMY, 1981/82-1990/91

| | 1981/82 | 1985/86 | 1990/91 (est.) |
|---|---|---|---|
| Ratios of: | | | |
| Oil/LNG exports to total merchandise exports /a | 81.9 | 68.0 | 44.9 |
| Non-oil exports to non-oil imports /a | 28.6 | 53.8 | 71.0 |
| Oil/LNG revenues to total revenues | 70.6 | 57.1 | 44.2 |

/a Goods only, in current dollars.

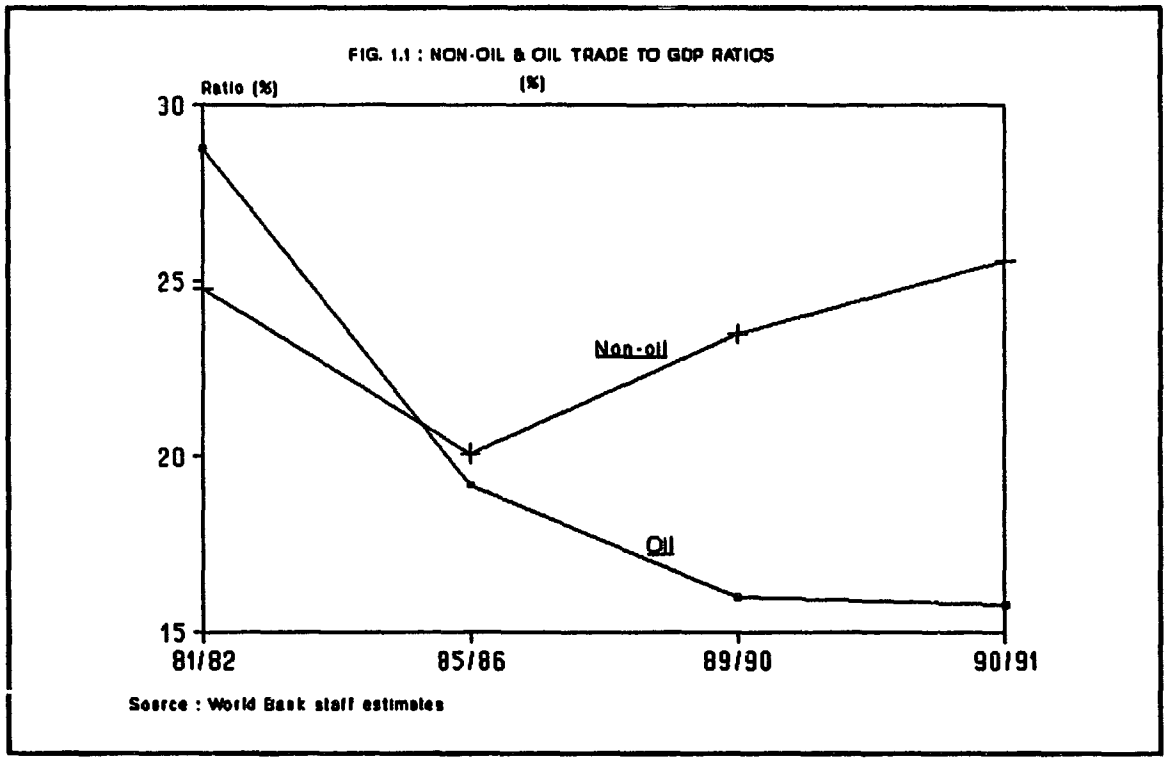
Source: World Bank staff estimates.

and affords little chance to catch the effects of the reform. Nevertheless, it is already apparent that the sector has responded to the challenge -- its strong growth since deregulation has been an important factor in ensuring the success of Indonesia's adjustment program.

1.15 The key role of the private sector. The private sector dominates the manufacturing sector. Small and cottage establishments are predominantly private sector and these employ two-thirds of all workers and produce about 17% of value-added in manufacturing (see Figure 1.2).1/ The vast bulk of output comes from medium and large scale establishments (MLEs). These are also dominated by the private sector, which has accounted for between 80-85% of both value-added and employment in the MLE sector since the early 1980s.

1.16 The private sector has increased its role in MLEs over the 1980s. Initially this was because investment in public enterprises was cut back. The private sector continued to increase its share of industrial activity in the post-deregulation period, particularly in terms of value-added. The private sector accounts for the vast bulk of labor-intensive activities (wearing apparel, footwear, furniture and non-metallic minerals) and resource-intensive activities such as wood and wood products. These activities have grown fastest and now provide most of Indonesia's non-oil exports.

1/ According to definitions by the Central Bureau of Statistics: cottage establishments employ fewer than 5 workers; small establishments employ between 5 and 19 workers; and medium and large establishments employ 20 or more workers. Complete surveys of the cottage and small establishments have been undertaken only in the census years 1974-75 and 1986. However, the methodology of the survey differs between these two years and consequently it is difficult to estimate trends in growth in value-added and employment. Data are more readily available on medium and large scale establishments as they are subject to annual industrial surveys, the most recent being for 1988.




1.17 Growth and exports. Manufacturing industry has been the primary target of deregulation since the mid-1980s and the private sector has been at the leading edge of structural change and growth in recent times. A recent pilot survey of a sample of small and cottage establishments provides some insight into developments in this sector since 1986.2/ The study indicates that the small sector in particular has been thriving since deregulation, with the number of establishments doubling between 1986 and 1989. Employment by the small and cottage establishments has grown by almost 18% p.a. over the same period.

1.18 Growth in the MLE manufacturing sector since the early 1980s is outlined in Table 1.4. Capital-intensive activities were sharply reduced by the cut in imports and public expenditure during the stabilization period of 1982-85 and this is reflected in a slowdown in value-added and employment growth. The faster growth of manufacturing in the period 1985-88 reflects a switch in resources both between and within sectors towards those labor-intensive activities in which Indonesia is internationally competitive. The change in the structure of the manufacturing sector had beneficial effects on exports, which increased from 15% of output in 1982-85 to 26% in 1985-88. It is also encouraging that during the latter period the strongest growth in exports has been across a wide range of manufactured products.

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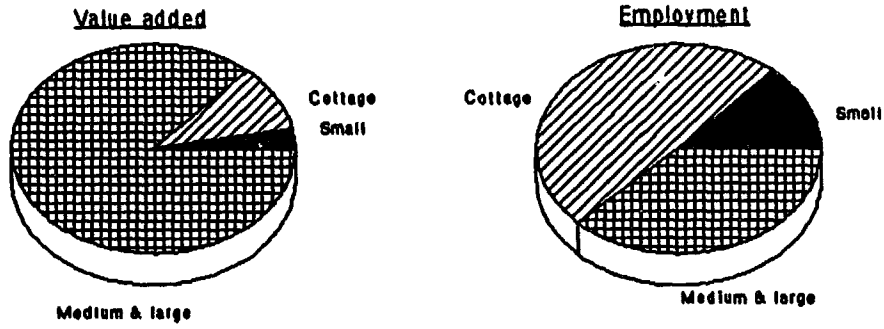
2/ Department of Agriculture (with Central Bureau of Statistics), Pilot Study Agro Industry, September 1990. The study was funded by a USAID grant (No. 497-0357).

FIG. 1.2 : SIZE DISTRIBUTION OF INDUSTRY 1986




Source : CBS and WB staff estimates.

**Table 1.4: PERFORMANCE OF INDUSTRIAL MLES IN INDONESIA: SELECTED PERIODS /a**

| | 1982-85 | 1985-88 |
|---|---|---|
| Growth rates % | | |
| - Real value added | 7.4 | 10.0 |
| - Employment | 6.4 | 6.6 |
| Exports/output ratio /b | 15.0 | 26.0 |

/a The value-added and employment data relate to medium and large scale establishments. There are slight differences between these data and the national accounts due to differences in methodology.

/b Exports include those from all categories of manufacturing industry, except for ISIC 3720 (non-ferrous metals) and 3540 (petrol and coal products).

Source: World Bank staff estimates.

1.19 Resource allocation. The structure of output, exports and imports have all changed significantly over the period 1977-88 (see Table 1.5). The main changes in the structure of output include the decline in the share of resource-intensive activities with a corresponding increase in activities based on unskilled labor and also technology (this largely encompasses the chemical industry). However, within the resource-intensive category, products based on timber resources have increased, while those based on agriculture have declined. The increase in timber products reflects the growth of the plywood industry, which has benefitted from the implicit subsidy from the ban on log exports in the early 1980s. Exports have also increasingly included products using unskilled labor and timber resources. Imports of technology-based products have increased sharply over the period 1977-88. The movement of resources towards timber and textile products is most noticeable in the period since deregulation. These shifts indicate a broad movement of production into areas using Indonesia's abundant supplies of labor and natural resources and a focus of imports on products using technology and skills scarce in Indonesia.

Table 1.5: INDUSTRIAL OUTPUT, EXPORTS, IMPORTS, BY FACTOR INTENSITY: SELECTED PERIODS /a
(in % of period total)

| By Factor Intensity | Output | | Exports | | Imports | |
|---|---|---|---|---|---|---|
| | 1977 | 1988 | 1977 | 1988 | 1977 | 1988 |
| Resource Based | 59.2 | 54.0 | 89.5 | 63.1 | 27.2 | 14.2 |
| - Agriculture | 46.2 | 30.1 | 67.3 | 15.6 | 20.5 | 6.4 |
| - Timber products | 4.6 | 16.0 | 4.8 | 32.5 | 2.2 | 3.7 |
| - Minerals | 8.4 | 7.9 | 17.4 | 15.0 | 4.5 | 4.1 |
| Unskilled Labor | 22.9 | 26.2 | 1.8 | 22.9 | 9.6 | 10.7 |
| Technology | 6.9 | 10.7 | 4.3 | 6.8 | 28.6 | 40.5 |
| Skilled Labor | 11.0 | 9.0 | 4.5 | 7.2 | 34.5 | 34.6 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

/a Medium and large scale enterprises only.

Source: World Bank staff estimates.

1.20 There are a number of issues relating to ownership and industrial structure that will have important implications for the development of the manufacturing sector as the structural reforms continue and deepen. These include remaining distortions in the incentives regime, the role of public enterprises, the slow pace of expansion of medium-scale establishments and overdevelopment on Java. These issues are briefly discussed in the following sections.

1.21 Effective protection. The net effect of incentives such as tariffs and various subsidies in encouraging production activities may be measured by the effective rate of protection (see Table 1.6 and Chapter 3). The various estimates of protection indicate that despite substantial progress, non-oil manufacturing is still relatively highly protected and the incentives regime continues to impart an anti-export bias. As a result, resources continue to be drawn to what are high cost activities, including, in particular, the food, beverages and tobacco and the engineering sectors. The relatively high levels of protection afforded the manufacturing sector lead to high costs throughout the economy. Protection is on a downward trend since deregulation, but there is still considerable room for improvement in the incentives regime for the sector.

Table 1.6: EFFECTIVE PROTECTION IN INDONESIA

| | Output Rp. billion | NRP % | ERP % | RERP % |
|---|---|---|---|---|
| Non-oil manufacturing | 39,363 | 13 | 59 | 43 |
| Agriculture (excl. Forestry) | 29,800 | 11 | 20 | 8 |
| All tradeables | 98,703 | 8 | 14 | 3 |
| Non-oil tradeables | 71,737 | 11 | 24 | 11 |
| Import-competing | 58,485 | 15 | 35 | 21 |
| Export-competing | 40,218 | -1 | -1 | -11 |

Source: World Bank staff estimates. See Annex 4 for definitions of these concepts.

1.22 Public sector involvement in manufacturing. Public sector involvement in manufacturing industry is significant in the more capital-intensive and upstream activities such as basic metals (with two large investments in steel and aluminium), fertilizers and cement. In 1988 the public sector (including joint ventures) accounted for some 17% of value-added and 15% of employment generated by MLEs. This represents a slight decline from the shares achieved in 1982. In many cases public involvement in industry is a carryover from past nationalizations (in the 1960s) and a drive to control the "commanding heights" of industry in the 1970s (facilitated by revenue from the first oil boom). The continuing need for public enterprises to engage in the production of traded goods needs to be reassessed in the context of public enterprise reform (for further details see Chapter 5). Government investment can crowd out potential private initiative in some manufacturing industries. Moreover, some public enterprises, especially high-technology industries may have few linkages with the rest of industry and absorb a significant proportion of skilled engineers, aggravating skill shortages throughout the economy.

1.23 Medium-scale establishments. The manufacturing sector is characterized by a relatively undeveloped network of medium-scale subcontractors, due partly to a preference for larger scale establishments to undertake most production in-house. Possible reasons could include high transaction costs between firms due to an undeveloped legal system and lack of transport infrastructure and the inability of sub-contractors to deliver on time. Most promotion schemes have largely been directed towards improving access to credit. This is exemplified by the January 1990 guidelines from Bank Indonesia that commercial banks direct 20% of their lending to smaller enterprises (defined as having assets of less than Rp.600 million). Certainly access to credit does seem to be a constraint for new entrepreneurs, however, this may simply reflect the risk of default and subsequent service costs by banks. The most useful way to improve access to credit may be to enhance banking skills in loan appraisal and improve collection systems. Access to credit, especially in rural areas, appears to be related closely to the presence of bank branches. Since deregulation there has been a rapid expansion in bank offices and particularly in rural areas.

1.24 Regional balance. Given the concentration of population and economic activity on Java, and the problems associated with overcrowding and pollution, increasing attention is being directed towards achieving a more even distribution of development throughout the country. Means for securing this objective include the provision of funds for infrastructure in areas where growth is to be encouraged, as well as various incentives to business activities. Recent trends in the pattern of regional industrial development, as indicated by value-added from medium and large establishments, are outlined in Table 1.7.3/ Most industrial activity by MLEs is located on Java. However, there have been substantial changes since the mid-1980s. Since then Java's share of industrial value-added accounted has declined from 76% in 1985 to 72% in 1988. A number of factors account for this decline, including shifts in population and the effect of the rapid growth in resource industries in Sumatra and Kalimantan. There has also been a similar change in the composition of regional employment. The data also indicate that industrial activity is generally more labor-intensive in Java and East Indonesia and more resource-intensive in Sumatra and Kalimantan. On the surface, these trends point to reasonably broad-based industrial development over the past decade that has, if anything, accelerated since the adjustment period in the early 1980s.

## Agriculture

1.25 Agriculture has been a major source of economic growth and employment during the past two decades, and its performance has made a significant contribution to the impressive reduction of poverty over the period. Much of the growth in agriculture can be attributed to the increase in rice production made possible by private farmers effectively adopting high yielding varieties of rice (HYV) supported by large public investments in irrigation and fertilizer subsidies. Agriculture has always been substantially a private

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3/ These shares would not significantly change if small and cottage industry were included. They would do so, however, if oil and gas were included. In this case the shares would be roughly as follows: 50% for Java; 26% for Sumatra; 21% for Kalimantan; and 3% for East Indonesia.

Table 1.7: SHARES OF INDUSTRIAL VALUE ADDED AND EMPLOYMENT /a BY REGION-SELECTED YEARS

| | 1977 | | 1982 | | 1985 | | 1988 | |
|---|---|---|---|---|---|---|---|---|
| | Value-Added | Employment | Value-Added | Employment | Value-Added | Employment | Value-Added | Employment |
| Java | 0.79 | 0.83 | 0.79 | 0.80 | 0.76 | 0.77 | 0.72 | 0.76 |
| Sumatra | 0.17 | 0.13 | 0.15 | 0.13 | 0.14 | 0.13 | 0.16 | 0.14 |
| Kalimantan | 0.02 | 0.02 | 0.04 | 0.04 | 0.06 | 0.06 | 0.09 | 0.06 |
| East Indonesia /b | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.04 | 0.03 | 0.04 |

/a Medium and large establishments only.
/b Includes Bali.

Source: Central Bureau of Statistics.

sector activity with a high degree of domestic competition and a relatively low average level of protection (Table 1.6). Consequently, agriculture has not been subject to the same deregulatory pressures as the manufacturing and the financial sector. For the future, it appears that growth in rice yields as well as demand for rice will slow, and growth will have to come increasingly from non-rice commodities, livestock and fisheries. The Government will need to redirect resources to support non-rice based farming systems, especially in the Outer Islands. In particular, it will be necessary to ease production controls and restrictions on trade of a number of crops, since these may be preventing the private sector from responding efficiently to changing patterns of demand and emerging opportunities.

1.26 The private sector. Private farmers and private estates are responsible for nearly all agricultural output and employment. The private sector produces over 98% of agricultural value added, and this share has been rising slowly since the early 1980s as private investment has outpaced public enterprise investment in agriculture. The private sector also provides the vast bulk of total agricultural employment. Public enterprises are significant only in plantations (estate crops), but even in this subsector their share has been falling steadily since 1983. This is partly a result of financial and management problems combined with a rapid increase in private sector investment. There are also some large public enterprises in the forestry subsector.

1.27 The dynamism of Indonesia's small, private farmers, combined with Government support programs that encouraged the adoption of improved technology, enabled the agriculture sector (excluding forestry) to grow at an average of over 4.5% p.a. from 1975-85 (Table 1.8). This growth was driven by rapid increases in rice production, which accounts for over 25% of agriculture GDP. The introduction of high-yielding varieties (HYVs), combined with heavy Government investments in irrigation and subsidies on fertilizer, helped raise rice yields and production by 4.1% p.a. and 5.7% p.a., respectively, over the period 1975-85.

1.28 Non-forestry agriculture sector growth slowed by about one third in the latter half of the 1980s. This slowdown also reflected developments in

Table 1.8: GROWTH IN AGRICULTURE 1975-1990
(% p.a. at constant 1983 prices)

| | 1975-80 | 1980-85 | 1985-90 | Share in total 1975 | 1980 | 1985 | 1990 |
|---|---|---|---|---|---|---|---|
| Farm food crops | 4.4 | 4.4 | 2.5 | 66 | 67 | 66 | 62 |
| Farm non-food crops | 9.1 | 4.7 | 3.7 | 12 | 14 | 14 | 15 |
| Estate crops | -3.9 | 10.0 | 4.7 | 3 | 2 | 2 | 3 |
| Livestock | 0.9 | 5.8 | 4.1 | 12 | 10 | 11 | 12 |
| Fishery | 6.6 | 3.7 | 4.9 | 7 | 7 | 7 | 8 |
| Total non-forestry | 4.5 | 4.7 | 3.1 | 100 | 100 | 100 | 100 |
| Forestry | 3.8 | -12.1 | 5.9 | | | | |

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

rice production. By the time Indonesia achieved its goal of rice self-sufficiency in the mid-1980s, a large proportion of farmers (especially on Java) were already applying heavy doses of fertilizer and using HYVs on irrigated land. Consequently, growth in rice yields and production slowed dramatically -- to 1.5% and 2.6% p.a., respectively. This growth was enough for Indonesia to maintain trend self-sufficiency in rice, but it led to much lower growth (3% p.a.) for non-forestry agriculture as a whole. All other subsectors, with the exception of fisheries, also showed lower growth in the second half of the 1980s. Nevertheless, estate crops, livestock, and fisheries continued to grow at over 4% p.a., and these subsectors contributed a much higher proportion of agricultural growth than during 1975-85.

1.29 Growth in the forestry subsector over the past 15 years has fluctuated in part due to export restrictions. The subsector grew by nearly 4% p.a. from 1975-80, but export restrictions reduced demand and caused forestry value added to fall by a total of nearly 50% from 1980-85. As the domestic processing industry for forest products was developed in the latter half of the 1980s, increased demand led to 6% p.a. growth in forestry output. The imposition of further export restrictions in 1990 pushed down growth to below 5%, however, and these restrictions may continue to slow growth in the first half of the 1990s.

1.30 There have been major programs to increase production of sugar and soybeans with the objective of eliminating imports of these commodities. The Government has mandated certain cropping patterns, subsidized inputs, and maintained the domestic output prices of both commodities well above world levels. Sugar and soybean production have increased rapidly but these gains have been made at substantial cost to the economy as a whole, since Indonesia is not currently a low cost producer of these crops. Not only have consumers paid higher prices for both commodities,but sugar producers have also suffered income losses. Farmers required to produce sugar on irrigated land could generate at least twice as much income if they were allowed to grow rice. If subsidies were removed from input and output prices for these crops,

production would fall by an estimated 30-35%, as farmers shifted production into crops such as rice and corn which are more profitable and in which Indonesia appears to have a comparative advantage.4/ Lower sugar and soybean prices would benefit consumers.

1.31 During the 1980s, the Government launched a number of schemes to promote the development of tree crops, which are the only agronomically and environmentally sustainable crops in many areas of the Outer Islands. Indonesia has a strong comparative advantage in producing tree crops because of low labor costs. Unfortunately, problems with financing, cost recovery, project design, and management have limited the number of smallholders that have benefitted from these programs, and these problems have temporarily brought the smallholder tree crop programs nearly to a halt.5/ To date, only 15% of rubber smallholders and about 5% of coconut smallholders have received assistance from such programs. The Government is currently considering ways to address the financing and cost recovery problems, as well as new approaches that would increase the number of smallholders that can be reached each year.

1.32 Agriculture has also been an important source of export earnings in the 1980s, with revenues (excluding forestry) increasing by 11% p.a. from 1981-88 (Table 1.9). At the height of the oil boom in 1980, agriculture contributed only 9% of total exports, but almost half of non-oil exports. With the collapse of oil prices in the mid-1980s, agriculture's contribution to total exports more than doubled, to 21%. Although agriculture's share of non-oil exports fell due to the response of the manufacturing sector to the Government's deregulation measures, agricultural exports nevertheless provided an important "bridge" during the adjustment period of 1985-88 by growing at over 16% p.a.. A sharp drop in commodity prices caused agriculture's contribution to fall substantially in 1989 and 1990.

1.33 Exports of primary forest products fell by nearly 25% over the decade due primarily to two successive sets of trade restrictions. The first, a ban on log exports, was phased in during the early 1980s, causing log exports to fall from about $500 million in 1981 to zero in 1985. The log export ban provided a heavy subsidy to the plywood industry, which strongly expanded exports (classified under manufacturing) over the 1980s. Sawn timber exports also increased from about $250 million in 1981 to about $600 million in 1989. In 1990, a prohibitive export tax on sawn timber reduced sawn timber exports to almost zero, providing further protection to the wood products industries.

1.34 Effective protection. The various estimates of protection suggest that agriculture is generally competitive and, if anything, is taxed by the

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4/ See "National Food Crops Policy Model: Policy Applications" Research Brief no. 2, CARD/MOA, July 1989.

5/ The only exception is the PIR-Trans program, which is implemented by the private sector using subsidized government loans. The land planted is initially owned entirely by estate companies, and it is unclear how much of the land being planted in this program will eventually be turned over to smallholders.

Table 1.9: AGRICULTURE EXPORTS
(US$ millions)

| | 1981 | 1985 | 1988 | 1989 | 1990 (est.) |
|---|---|---|---|---|---|
| Total Non-Forestry | 1,978 | 2,592 | 4,063 | 3,616 | 3,389 |
| Rubber | 770 | 714 | 1,236 | 1,005 | 942 |
| Palm Oil | 79 | 170 | 313 | 295 | 271 |
| Coffee | 343 | 659 | 572 | 490 | 403 |
| Shrimp | 165 | 228 | 541 | 518 | 583 |
| Total as % of: | | | | | |
| Total exports | 9 | 14 | 21 | 16 | 12 |
| Non-oil exports | 48 | 41 | 33 | 26 | 21 |
| Agriculture GDP /a | 10 | 13 | 21 | 18 | 15 |
| Total Forestry /b | 752 | 369 | 794 | 1,080 | 575 |

/a Excludes forestry.
/b Includes sawn timber; excludes plywood.

Source: Bank Indonesia and World Bank staff estimates.

incentives regime compared to other non-oil traded goods activities (see Table 1.6). However, the average levels of protection mask significant variations, with high effective protection for some products such as soybeans and sugar indicating significant lack of competitiveness. Moreover non-tariff barrier (NTBs) protection is common in agriculture and such restrictions allow higher levels of protection if domestic costs increase.

Financial sector

1.35 Financial sector reforms have been a central element in the Government's deregulation effort, reflecting the need to ensure the sector effectively mobilizes savings and provides investment resources. The reforms have been extensive, leaving Indonesia with one of the most dynamic and least-distorted financial sectors in the developing world. The removal of interest rate controls and relaxation of barriers to entry led to accelerated growth, especially by the private sector banks, more diversified products and services, and greater competition and cost efficiency. The very rapid expansion of the financial system is mobilizing the resources needed by the private sector to restructure the economy.

1.36 Asset growth. The rapid growth and changing structure of the financial sector are illustrated in Table 1.10 and Figure 1.3. Value-added for the sector grew by more than 10% p.a. between 1982 and 1990, while financial sector assets grew by more than 20% p.a. The private sector has

been the dominant force behind these impressive growth rates, expanding its share of the financial sector activity from 35% in 1982 to 42% in 1990. Developments in the financial system over this period can be divided into two separate periods corresponding to the first two major reform packages (see Box 1.1). At the beginning of the first period (1982-88) the financial system was dominated by banking, which in turn was dominated by state commercial banks (SCBs). The value of the banking system's assets as a ratio to GDP was relatively small, only 33% in 1982. In more financially developed countries this ratio was three to four times larger.

Table 1.10: INDONESIA: STRUCTURE AND GROWTH OF THE FINANCIAL SECTOR, 1982-90 /a

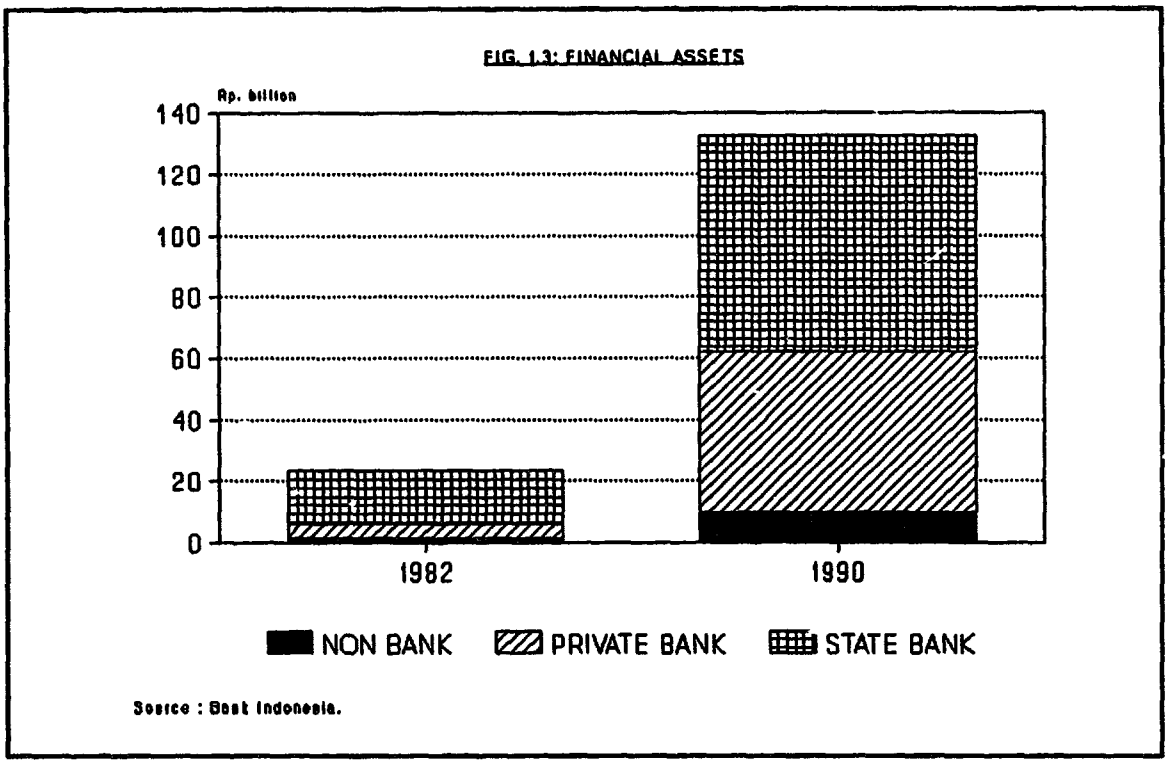
| | Number in | | | Assets (Rp. bln) | | | Asset Growth (% p.a.) /b | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1988 | 1990 | 1982 | 1988 | 1990 | 1982-88 | 1988-90 |
| Bank Indonesia | 1 | 1 | 1 | 13,707 | 42,445 | 49,045 | 18.8 | 7.2 |
| Deposit money banks | 118 | 111 | 166 | 17,105 | 65,693 | 135,992 | 22.4 | 36.4 |
| State commercial banks | 5 | 5 | 5 | 12,257 | 39,862 | 64,760 | 19.7 | 24.3 |
| Private foreign exchange banks /c | 10 | 12 | 23 | 1,168 | 10,189 | 37,311 | 36.1 | 64.9 |
| Foreign banks | 11 | 11 | 26 | 1,172 | 3,215 | 9,777 | 16.8 | 55.6 |
| Other commercial banks /d | 60 | 51 | 80 | 720 | 4,972 | 10,823 | 32.2 | 38.9 |
| Development banks | 29 | 29 | 29 | 1,336 | 5,046 | 10,247 | 22.1 | 35.4 |
| Savings banks /f | 3 | 3 | 3 | 452 | 2,409 | 3,074 | 27.9 | 12.2 |
| Nonbank financial institutions /e | 13 | 13 | 13 | 805 | 3,063 | 4,730 | 22.3 | 21.7 |
| Insurance companies | 83 | 106 | 117 | 528 | 1,883 | 2,566 | 21.2 | 30.9 |
| Leasing companies | 17 | 83 | 83 | 114 | 1,735 | 2,711 /h | 45.4 | 22.3 |
| Other credit institutions /g | 5,808 | 5,783 | 5,994 | 86 | 637 | 856 | 33.4 | 14.8 |
| All institutions | 6,040 | 6,097 | 6,374 | 32,345 | 115,456 | 195,900 | 21.2 | 26.4 |

Source: Bank Indonesia and World Bank staff estimates.

/a Organized financial sector; end of period.
/b Annual compound rates.
/c Includes five SCBs. The remainder are national private banks.
/d National private banks undertaking only domestic currency business.
/e Nine investment finance, three development finance, and two other finance companies.
/f One state savings bank and two private savings banks.
/g Village and rural banks.
/h Estimated.

1.37 The reform process dramatically altered this structure. The banking system responded to the initial reforms freeing interest rates with a rapid expansion -- assets grew at 21% p.a. between 1982 and 1988. As a share of GDP, financial assets held by the banking system rose to 57% in 1988. Financial savings were spurred as well, with M2 growth at 22% p.a. (with the fastest growth in time deposits and savings accounts). The growth of the financial system was dominated by the private sector. Private banks grew twice as fast as state commercial banks. Private commercial banks (PCBs) increased their share of deposit money bank assets from 9.5% in 1982 to 24% in 1988.

1.38 The importance of PCBs was boosted further by the second round of reforms in 1988-90 that focused primarily on reducing barriers to entry and special privileges for state banks. Once again, overall financial assets responded with a rapid expansion--26% p.a. between 1988 and 1990, and their share in GDP continued to climb, reaching 66% in 1990. This time the growth




of assets was based upon the creation of new banks. Since the lowering of entry barriers, 40 new domestic banks and 15 new joint venture banks have been established. No new state banks have been created. Meanwhile, branches of banks have also grown significantly, from 1640 in April 1988 to 2842 in March 1990. These have chiefly been private bank branches, as branches of these banks were more tightly controlled under the old regulatory regime. The branches are particularly important in providing more even access to credit and other services.

1.39 Product diversification. The financial sector reforms have also sparked major innovations in the types of financial products and services available to borrowers and savers. The explosive growth in stocks, after years of stagnation, is a particularly important example, since non-debt finance can help provide a more stable financial base for the rapidly expanding private sector. Since 1988, when deregulation removed many restrictions on the capital market, about Rp.12 trillion has been raised by over 100 companies, all of them private. This is equal to roughly a quarter of the increase in bank loans over the same period. Other newly popular products and services include domestic syndicated loans, mortgage and consumer loans, mutual funds, and a variety of attractive savings accounts.

1.40 Competition and cost efficiency. Competition among banks for loans and deposits has been keen in the past several years as evidenced by the rapid expansion of branches and the wider array of products and services. Shrinking bank profit margins also show increasing competitive pressures. Measures of profitability have all declined since 1982, with the sharpest drops at private banks. Competition has especially lowered fees and commissions. As banks

have lowered their spreads, they have promoted the use of the domestic financial system through reducing the costs to borrowers of a loan for any given payment to depositors. SCBs have been able to maintain their profitability by using their historical relations with public enterprises to limit increases in interest expense, thereby widening their interest margin. Higher levels of debt write-offs, however, have brought their overall profit margin in line with private banks. While growing competitive pressure has reduced bank profit rates, it has also resulted in increased cost efficiency until very recently. Non-interest operating costs dropped from 4.3% of total assets in 1982 to 3.1% in 1989. In 1990, the increase in bank offices and the attendant overhead expenses these entail have boosted these costs to 3.8% of total assets. Still private banks have been better able to contain the increases in non-operating costs than state banks.

1.41 The rapid expansion and the strong competition just described have created a new challenge: to consolidate this growth through strengthening the legal, regulatory and human infrastructure of the financial system. The increase in the number of banks and financial intermediaries has complicated the regulatory responsibilities of the Government. At the same time, shortages of qualified staff, inadequate internal controls, as well as the sheer pace of asset growth, have, in some cases, generated concern about asset quality. As a result, as discussed in Chapter 4, there are intensive efforts to strengthen financial institutions and develop the framework of legislation, prudential regulation and supervision to deal more effectively with a modern, rapidly-growing financial sector.

Employment, Incomes and Poverty

1.42 Overall, employment grew about 3% p.a. in the second half of the 1980s, somewhat faster than the growth in the labor force. Labor intensity appeared to increase as the elasticity of employment rose with respect to output from 0.44 in 1976-82 to 0.67 in 1982-88. The changing pattern of output and employment in agriculture and manufacturing was supported by: the depreciation of the real exchange rate which improved the incentives for non-oil exports in both agriculture and manufacturing; decontrol of interest rates which helped to reduce the bias towards capital-intensive production; and trade deregulation which increased the efficiency of production while also significantly reducing the bias against exports. The productive employment of a rapidly growing labor force is a key issue for the 1990s. Indonesia's population in 1990 reached 179 million and is growing at slightly less than 2% p.a..6/ Given current labor force participation and unemployment rates this translates into a demand for new jobs of over 2 million p.a. during the 1990s. With a productivity growth of 2%, the creation of these jobs would require real GDP growth of over 5% p.a..

1.43 The manufacturing sector employed slightly less than 7.0 million workers in 1990. About two-thirds of this labor force was employed in small and cottage industries and the remainder (or some 2.4 million workers) in MLEs. The most important export-oriented activities, namely textiles and timber products, accounted for the vast bulk of new jobs. The growth of these

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6/ See Annex 2 for a discussion of the preliminary results of the 1990 census.

labor-intensive activities has been stimulated by the reform in incentives since the mid-1980s. Low labor costs have provided the foundation for the rapid expansion of manufacturing industry. For example, in late 1988 the average daily wage of industrial production workers was Rp.2,800 (or about $1.66). The daily wage varied from Rp.2,187 for textile workers to Rp.4,150 for workers in the base metal industry. Creating new jobs while increasing real wages will require both growth and improvements in labor productivity. So far the private sector has shown a capacity to train workers as needed and productivity could be expected to increase as labor moves into manufacturing from agriculture, or manufacturing capacity expands in the more productive sectors and as capital deepening takes place. The share of agriculture in total employment fell from about 64% in 1971 to 55% in 1982, where it remained throughout the 1980s. Agriculture has thus continued to be the main source of employment in the economy, providing over 13 million new jobs during the last two decades. Labor productivity in the sector as a whole has risen as well, at least through 1986. Labor productivity appears to have fallen during 1987 and 1988, however, due to a combination of slow agricultural growth (primarily because of the drought's effect on rice production) and rapid employment growth.

1.44 The trends in real wages for unskilled agricultural and industrial workers are shown in Table 1.11. Using wages for unskilled agricultural workers in Java as a proxy for wages of lower income groups, real wages for these groups increased by 2.3% p.a. during 1983-90. The increase was relatively uniform across Java. These results are consistent with the available evidence from village surveys, and also are closely correlated with changes in the incidence of poverty during the adjustment period. In industry, real wages increased by 3.4% p.a. during 1983-89. The evidence indicates that this growth is still slower than increases in average labor productivity.

Table 1.11: TRENDS IN REAL WAGES, 1983-90
(index numbers, 1983=100)

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 (est.) | Average Growth Rate (% p.a.) 1983-90 |
|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 100.0 | 105.4 | 115.9 | 117.1 | 115.9 | 112.9 | 114.9 | 117.0 | 2.3 |
| West Java | 100.0 | 105.7 | 112.4 | 114.9 | 115.9 | 113.1 | 115.8 | 117.6 | 2.3 |
| Central Java | 100.0 | 102.0 | 113.5 | 115.4 | 115.1 | 111.3 | 112.9 | 115.1 | 2.0 |
| Yogyakarta | 100.0 | 99.9 | 115.3 | 128.6 | 125.5 | 122.8 | 128.0 | 129.7 | 3.8 |
| East Java | 100.0 | 108.4 | 121.2 | 119.5 | 115.6 | 113.3 | 114.6 | 116.8 | 2.2 |
| Industry | 100.0 | 105.2 | 115.2 | 120.4 | 120.3 | 118.7 | 122.4 | n.a. | 3.4 /a |

/a For 1983-89 only.

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

1.45 In general, the growth of the economy through the 1980s, and particularly since deregulation, has been associated with rising living standards for the community. As outlined in Table 1.1, the growth in GNP per capita averaged about 3.6% p.a. in 1984-88, but has increased to about

5.4% p.a. in the past two years. Similarly, growth has occurred in consumption per capita. A remarkable feature of Indonesia's adjustment experience has been the continued reduction of poverty in both urban and rural areas.7/ The success in reducing poverty is attributable partly to the conditions prevailing prior to the external shocks but chiefly to the nature and speed of the Government's policy response to the external shocks of the mid-1980s. By improving overall economic efficiency, by shifting resources away from inward-oriented, capital intensive public sector industrial activities, and by protecting public expenditure priorities in poverty-oriented sectors relative to other sectors, the reform program allowed Indonesia to make solid progress towards restoring financial stability while sustaining a steady growth of consumption. The Indonesian experience offers clear evidence of the possibility of combining successful structural adjustment with poverty reduction.

## D. The Tasks Ahead

1.46 Indonesia has continued to grow strongly within a stable macroeconomic policy framework despite large external shocks and considerable uncertainty in the world trading environment. Growth has been based upon dynamic private sector activity in the non-oil sector, and in particular on the manufacturing and financial sectors. The positive business environment has led to keen investor interest as it is clear there are widespread profitable opportunities in the economy. Taking full advantage of the investor interest will provide the foundation for impressive growth over the next few years. However, the surge in private sector activity calls for careful management across a broad range of policies. The following chapters outline the tasks ahead and these include:

- sustaining a stable macroeconomic framework to provide a sound environment for private sector development. Chapter 2 elaborates this issue and indicates that in the short run, economic management will need to ensure that the recent surge in investment activity does not place too much pressure on prices and the balance of payments. The longer run goal of macroeconomic policy remains the attainment of sustained growth to enable continued poverty reduction, growth of productive employment opportunities and balanced regional development;

- identifying and removing distortions in the incentive system to ensure that the private sector develops in a competitive environment. Chapter 3 argues that further reductions in protection will help ensure that private investment be directed towards activities where Indonesia is competitive. Also it is an opportune time to reassess the framework of incentives for agriculture and renew the drive for deregulation. Non-oil export performance could be improved by a reduction in the scope of export controls. Improving the regulatory and legal framework will underpin market competition, remove factor

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7/ Indonesia: Strategy for a Sustained Reduction in Poverty, A World Bank Country Study, World Bank, 1990.

market rigidities, and establish a level playing field for private sector firms. Finally Chapter 3 highlights the need to deal effectively with environmental issues posed by the rapid development of the private sector;

- ensuring a sound financial system that promotes financial discipline by mobilizing and allocating resources according to prudential financial criteria. Chapter 4 discusses the strategic role of the financial sector in ensuring the smooth flow of resources to efficient, competitive firms;

- the need for improvements in the efficiency and performance of the public sector as well as facilitating private sector participation in the provision of infrastructure. Chapter 5 highlights the complementary roles of the public and private sectors in providing physical infrastructure and identifies priority areas for program improvements; and

- broadening the participation in the benefits of future economic growth. Chapter 6 outlines the measures that could help achieve this objective including: more equal access to economic opportunities through deregulation and more transparent decisions; directing increased resources toward education and social services; and re-examining subsidy and regional development programs.

# CHAPTER 2

# A MACROECONOMIC FRAMEWORK FOR GROWTH WITH STABILITY

## A. Introduction

2.01 Chapter 1 demonstrated the positive effects of the structural reform underway in Indonesia since the mid-1980s. A strong private sector response to the deregulation measures, combined with a reduced dependence on oil earnings is creating the basis for sustained growth in the 1990s. Sustaining growth rates in the range of 5-6% p.a. will be critical for meeting Indonesia's fundamental development challenge of raising living standards and reducing poverty. Continued skillful macroeconomic management will be essential in sustaining such growth. This chapter outlines a macroeconomic framework for Indonesia designed to meet these development challenges. Section B discusses recent economic developments. This analysis shows that economic growth during 1990/91 has put pressures on the balance of payments and prices. The Government is implementing measures, however, that should ease these pressures and return the economy to a sustainable growth path. Section C outlines a macroeconomic framework which will reduce aggregate demand pressures in the near term while providing the growth Indonesia needs to raise living standards, reduce poverty and ease the debt burden over the medium term. The medium-term prospects for growth based on this macroeconomic framework are then discussed in Section D. A review of policy options for enhancing public resource mobilization is contained in Section E. Section F discusses the financing requirements for the medium-term macroeconomic scenario and a strategy for managing Indonesia's external debt.

## B. Recent Economic Developments

### Background

2.02 As noted in Chapter 1, the Indonesian economy was buffeted by a series of external shocks during the 1980s, as the terms of trade deteriorated severely, primarily due to the collapse of oil prices, and as the US Dollar depreciated. The Government responded effectively to the challenges posed by these adverse developments by implementing, since 1983, a broad range of adjustment measures including prudent fiscal policies, appropriate exchange rate management, supportive monetary and financial sector policies, and structural reforms.1/ This adjustment program was successful in achieving macroeconomic stability, maintaining economic growth, stimulating structural change and reducing poverty (see Table 2.1). A stable macroeconomic

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1/ The nature of the external shock and the Government's adjustment program were discussed in detail in the last two economic reports. See Indonesia: Strategy for Growth and Structural Change, Report No. 7758-IND, World Bank, May 3, 1989 and Indonesia: Foundations for Sustained Growth, Report No. 8455-IND, World Bank, May 4, 1990.

Table 2.1: Key Macroeconomic Indicators /a

| | 1975-83 | 1983-87 | 1988 | 1989 | Estimated 1990 |
|---|---|---|---|---|---|
| Average growth rates (% p.a.) | | | | | |
| GDP | 6.5 | 5.0 | 5.7 | 7.4 | 7.1 |
| Non-oil GDP | 7.0 | 5.7 | 7.4 | 8.2 | 7.8 |
| Agriculture | 3.5 | 3.3 | 4.7 | 4.3 | 2.5 |
| Manufacturing | 10.6 | 12.0 | 12.8 | 11.6 | 12.8 |
| Mining | 6.8 | 3.4 | 4.8 | 11.0 | 4.1 |
| Construction | 10.8 | 1.1 | 9.5 | 11.8 | 12.1 |
| Other Services | 8.6 | 6.0 | 6.9 | 8.5 | 8.2 |
| GNY | 8.5 | 3.4 | 6.2 | 7.7 | 8.2 |
| Non-oil exports | 10.5 | 12.2 | 14.2 | 21.5 | 6.7 |
| Non-oil imports | 13.8 | -8.2 | 8.0 | 18.9 | 25.4 |
| Fixed investment | 10.7 | -3.7 | 10.3 | 13.0 | 16.2 |
| Public | 12.6 | -9.1 | 11.4 | 6.8 | 9.6 |
| Private | 9.1 | 0.6 | 9.7 | 16.8 | 19.9 |
| Consumption | 8.9 | 4.0 | 4.3 | 5.9 | 7.9 |
| Macroeconomic balances (%) /b | | | | | |
| Current account/GNP | -7.8 /d | -2.6 | -2.3 | -2.0 | -3.8 |
| Non-interest current account/GNP | -6.0 /d | 1.9 | 2.1 | 2.2 | 0.1 |
| Overall public sector balance/GDP | -4.3 /d | -2.8 | -3.1 | -1.3 | 1.8 |
| MLT debt service/exports | 16.8 /d | 34.8 | 34.4 | 31.6 | 27.3 |
| MLT debt/exports | 127.6 | 234.5 | 218.1 | 185.8 | 183.1 |
| MLT debt/GNP | 33.1 | 65.6 | 60.3 | 54.6 | 58.6 |
| Structure of the economy (%) /b | | | | | |
| Non-oil manufacturing/GDP | 9.9 | 12.8 | 13.6 | 14.1 | 14.9 |
| Non-oil exports/non-oil imports | 37.4 | 80.8 | 89.7 | 87.0 | 71.0 |
| Public savings/GDP | 8.9 | 4.8 | 5.4 | 6.5 | 9.6 |
| National savings/GDP | 21.0 | 19.1 | 19.8 | 21.4 | 21.4 |
| Fixed investment/GDP | 25.1 | 19.2 | 20.0 | 21.2 | 22.9 |
| Private fixed investment/ total fixed investment | 52.1 | 59.0 | 57.7 | 61.4 | 63.0 |
| Consumption/GDP | 73.9 | 75.6 | 75.0 | 73.6 | 73.7 |
| Consumption/GNY | 73.9 | 76.9 | 75.7 | 74.5 | 74.4 |
| Prices | | | | | |
| Oil prices (US$/bbl) /b | 28.9 | 17.6 | 15.1 | 17.9 | 22.6 |
| Non-oil terms of trade (1983/84=100) /b | 100.0 | 96.3 | 101.1 | 95.9 | 92.0 |
| Domestic inflation (% p.a.) /c | 16.2 | 7.9 | 9.3 | 6.3 | 7.9 |

/a Balance of payments and fiscal data are for fiscal years (starting April 1). Other indicators are for calendar years.
/b For last year of multi-year periods.
/c As measured by the consumer price index, with an adjustment for rice prices during 1987-89
/d For 1982/83.

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

environment was maintained by reducing the current account deficit; concurrently, the Government's fiscal and monetary management succeeded in lowering fiscal imbalances and domestic inflation. Despite the stringent adjustment measures, reforms of trade and industrial policy elicited a strong supply response that fostered GDP growth averaging 5.5% between 1986-88, and then accelerating to over 7% in 1989 and 1990. A remarkable feature of

the Indonesian adjustment experience has been the continued reduction in the incidence of poverty in both urban and rural areas.2/

Economic Developments During 1990/91 3/

2.03 Economic activity continued at a brisk pace during 1990. GDP growth is estimated at 7.1% with non-oil GDP rising by about 7.8%, indicating that the economy continued to respond strongly to the ongoing structural reforms (see Table 2.1). The driving force behind economic activity has been the private sector, particularly private investment demand, which grew by nearly 20% in response to the widespread opportunities afforded by deregulation. Private consumption expenditures also increased sharply (7.9%) after several years of modest growth. These trends were accommodated by monetary and credit policies during 1989 and early 1990. Both Government consumption and investment also grew strongly in 1990, adding to pressures in the domestic economy. This surge in domestic demand translated into a rapid growth of imports, mostly for investment goods, and was accompanied by a slowdown in exports, substantially diminishing the contribution of the external sector to GDP growth. Sectorally, growth in the non-oil manufacturing sector accelerated to 12.8% in 1990, providing a strong impulse to economic growth. As the exports of non-oil manufacturing goods slowed during 1990, growth in this sector was driven by consumer goods industries and domestic construction activities.

2.04 Trends in inflation in 1990/91 suggest that the economy began to experience capacity constraints arising from the surge in domestic economic activities. The consumer price index (CPI) showed an average annual growth rate of 7.9% in 1990 compared with 6.3% in 1989; but, the CPI in December 1990 was 9.9% higher than in December 1989, reflecting the rising trend in inflation during the year.4/ Moreover, the prices of non-traded goods, those most sensitive to domestic demand conditions, increased by 12.6% during 1990 compared to 5.2% in 1989 (see Table 10, Annex 1). Inflation began to slow towards the end of fiscal year 1990/91. But, the Government remains concerned about the reemergence of inflationary pressures in the economy and will continue to monitor trends in price levels closely.

2.05 Since Indonesia's economy is very open, much of the domestic demand pressure translated into pressure on the balance of payments during 1990/91. The non-oil trade deficit widened sharply (see Figure 2.1). This was partly due to a slowdown in non-oil exports but mainly due to a rapid increase in non-oil imports. Non-oil export growth slowed due to three factors: a sharp downturn in commodity prices; diversion of exports into the local market; and special factors, such as the emergence of capacity constraints in some

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2/ For further details, see Indonesia: Strategy for a Sustained Reduction in Poverty, A World Bank Country Study, World Bank, November 1990.

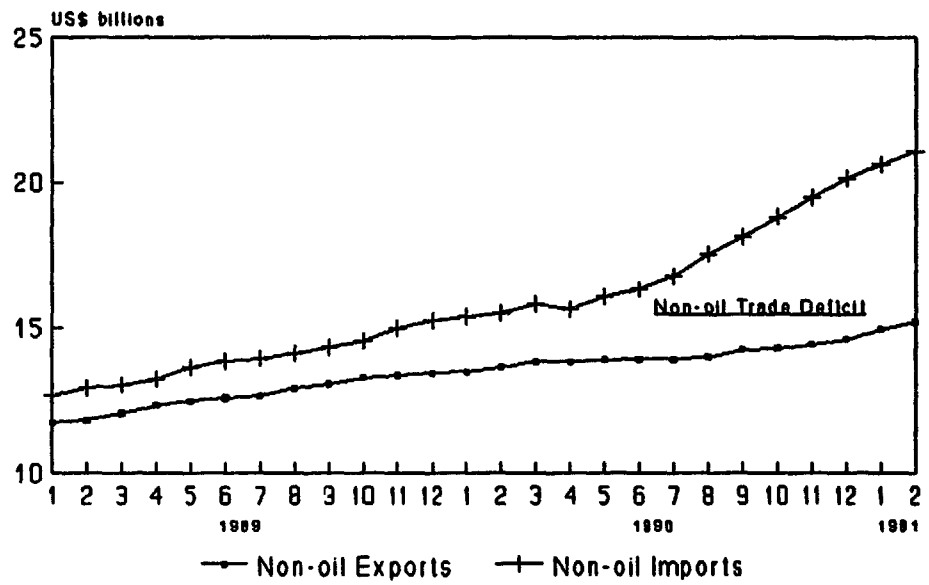
3/ Economic developments during 1990/91 are analyzed in greater detail in Annex 1.

4/ The average annual rate of inflation is calculated as the percentage change between the simple average of the monthly 27-city CPI in 1989 and the average in 1990.

manufacturing activities, production difficulties (e.g. aluminum), and the imposition of a prohibitive export tax on sawn timber. On the other hand, non-oil imports rose rapidly, growing by about 25% in real terms. Capital goods accounted for two thirds of the increase in imports, reflecting the rapid increase in private investment. A large proportion of capital good imports was machinery, especially for textile and footwear exports. Consumer goods imports also began to grow rapidly, albeit from a small base. Although the brisk pace of economic activity largely explains the surge in non-oil imports, accommodating monetary policy designed to lower interest rates in late 1989 and early 1990 also contributed. Higher imports during 1990/91 were partly offset by higher earnings from oil/LNG due to higher oil prices and oil production as a result of the Gulf crisis; the oil/LNG current account surplus improved to US$5.9 billion in 1990/91, about US$2.0 billion higher than in 1989/90 (see Table 2.2). Net non-oil service receipts remained at roughly the same level as in 1989/90. Overall, the current account deficit widened to US$3.8 billion (about 3.8% of GNP), roughly double the 1989/90 level.

2.06 There were important changes in the sources of financing for the current account deficit. Gross public disbursements declined substantially to US$4.9 billion in 1990/91; as a result, net disbursements were only slightly positive. This reflects the fall in commitments of special assistance, as expected, and a large decline in the use of commercial credits. A substantial increase in private capital inflows was the main source of balance of payments

Fig. 2.1 : Trends in Non-oil Trade /a
1989-1991




/a Cumulative Non-oil trade data for the previous 12 months.
Source : Central Bureau of Statistics.

Table 2.2: BALANCE OF PAYMENTS, 1986/87-1990/91
(US$ billion at current prices)

| | Actual | | | | Estimated |
|---|---|---|---|---|---|
| | 1986/87 | 1987/88 | 1988/89 | 1989/90 | 1990/91 |
| Merchandise exports (fob) | 13.7 | 18.3 | 19.8 | 23.6 | 28.1 |
| Oil & LNG | 7.0 | 8.8 | 7.6 | 9.3 | 12.6 |
| Non-oil | 6.7 | 9.5 | 12.2 | 14.3 | 15.5 |
| Merchandise imports (cif) | -12.8 | -14.9 | -16.2 | -19.5 | -26.0 |
| Oil & LNG | -2.4 | -3.1 | -2.6 | -3.1 | -4.2 |
| Non-oil | -10.4 | -11.8 | -13.6 | -16.4 | -21.8 |
| Trade balance | 0.9 | 3.4 | 3.6 | 4.1 | 2.1 |
| Non-factor services (net) | -1.5 | -1.2 | -1.2 | -1.2 | -0.7 |
| Interest payments (MLT) | -2.5 | -2.7 | -3.0 | -3.1 | -3.1 |
| Other factor services and transfers (net) | -1.1 | -1.4 | -1.3 | -1.6 | -2.1 |
| Current account balance | -4.2 | -1.9 | -1.9 | -1.8 | -3.8 |
| Oil/LNG current account | 2.6 | 3.6 | 3.0 | 3.9 | 5.9 |
| Non-oil current account | -6.8 | -5.5 | -4.9 | -5.7 | -9.7 |
| Public MLT loans (net) | 2.4 | 1.8 | 3.2 | 1.5 | 0.5 |
| Disbursements | 5.2 | 6.0 | 7.3 | 6.1 | 4.9 |
| Principal repayments /a | -2.8 | -4.2 | -4.1 | -4.6 | -4.4 |
| Other capital (net) | -0.7 | 1.0 | -1.6 | 0.3 | 7.4 |
| Use of net foreign assets | 2.5 | -0.9 | 0.3 | 0.0 | -4.1 |
| Use of official reserves | 0.7 | -1.0 | 0.6 | -0.3 | -3.4 |
| Use of comm. bank reserves | 1.8 | 0.1 | -0.3 | 0.3 | -0.7 |
| Memo items: | | | | | |
| Net official reserves (US$ bln.) /b | 5.0 | 6.0 | 5.4 | 5.7 | 9.1 |
| - Months of imports /c | (4.1) | (4.4) | (3.3) | (2.6) | (3.9) |
| Total net foreign assets (US$ bln.) | 10.0 | 10.9 /d | 10.6 | 10.6 | 14.7 |
| Current account/GNP (%) | -5.9 | -2.6 | -2.3 | -2.0 | -3.8 |
| Non-interest current account balance (% of GDP) | -1.7 | 1.9 | 2.1 | 2.2 | 0.1 |
| MLT debt service/exports (%) /e | 39.7 | 34.8 | 34.4 | 31.6 | 27.3 |

/a Includes prepayments of US$626 million in 1987/88, US$341 million in 1988/89 and US$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 imports (oil/LNG and non-oil) of goods.

/d Excludes US$326 million of prepayments, committed during the year but not completed until June 1988.

/e 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.

financing during 1990/91. Data on financial commitments between the private sector and offshore financial institutions indicate that disbursements of private debt were about US$6 billion, which implies a doubling in the level of private non-guaranteed debt during 1990.5/ This increase in private non-guaranteed debt largely reflects inflows related to private sector investment. These private sector inflows were in sharp contrast to the past. While the majority of the inflow was related to private investment, state and private commercial banks borrowed substantially abroad in order to lend to domestic customers.6/ Much of the private foreign borrowing was swapped with Bank Indonesia (BI), leading to a sharp increase in swaps outstanding with BI. Higher private inflows and a reduction in the net foreign assets of commercial banks more than offset the decline in net public borrowing and the current account balance. This allowed BI's net official reserves to increase to US$9.1 billion, more than three months of next years' expected imports. However, about half of these reserves are swaps, which are a contingent liability of BI.

2.07 The Government took a number of important policy measures during 1990/91 to curb demand pressures. These pressures were generated primarily by the private sector's response to deregulation, but monetary policy actions during the previous fiscal year also contributed by expanding liquidity credits and reducing interest rates. Signs of domestic demand pressures emerged in the first quarter of 1990/91 through a loss of international reserves, emerging inflationary pressures, and a deterioration in the non-oil trade balance. In the face of these trends, the Government began to tighten monetary policy. The main instrument was a reduction in subsidized liquidity credits, which had been announced in January 1990.7/ Liquidity credits decreased by Rp.3.8 trillion by end-December 1990 from their peak at end-March 1990 and reserve money growth was restrained to 19% during 1990. The loss of international reserves was quickly reversed by the higher domestic interest rates resulting from tighter monetary policy (see Figure 2.2).

2.08 A number of factors, however, limited the effectiveness of the tightening of monetary policy in slowing domestic demand. First, Indonesia's open capital account, in combination with the removal of restrictions on offshore borrowing by domestic financial institutions and the availability of international capital, generated large private capital inflows. The exchange risk on these capital inflows also could be hedged on attractive terms through BI's swap facility. Second, tax receipts, which are normally held at BI, and forestry fees were allowed to accumulate in the Government's accounts with the state commercial banks. Third, the dynamics of the newly deregulated

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5/ These disbursements are included in "other capital net" in Table 2.2.

6/ As indicated by the growth in credit, a portion of this lending, particularly from the private national banks, was for consumer loans and real estate transactions, particularly in the first half of the fiscal year.

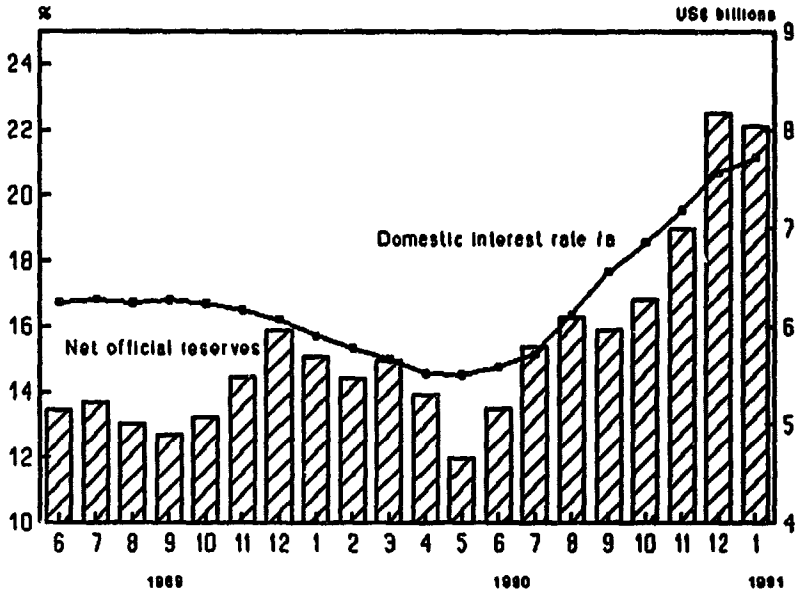
7/ The Government also made efforts to increase the sales of SBIs (BIs money market instruments), but the stock of SBIs outstanding actually declined during 1990, largely reflecting the BI's reluctance to allow SBI interest rates to rise to the levels needed to increase the stock outstanding.

financial sector contributed to excessive credit growth as private national banks aggressively sought to expand their market share, often at the expense of short-term profitability. This also led to dramatic changes in the relationships among monetary aggregates, complicating monetary management. Finally, expectations were that the monetary tightening would be short-lived and therefore, the private sector was slow in adjusting its activities. As a result, domestic liquidity continued to grow rapidly, with broad money rising by 44% during 1990 and domestic credit to the private sector rising by 58% (see Figure 2.3).

2.09 The Government subsequently took steps to improve the effectiveness of monetary policy. The swap premium was adjusted to reflect more accurately the differential between domestic deposit rates and offshore rates. This reduced the incentive to arbitrage borrowing between on-shore and off-shore markets. Tax revenues were also required to be transferred to BI. The Government tightened monetary policy further by requiring, in February 1991, a massive transfer of public enterprise deposits from the banking system into SBIs. To offset the loss of deposits in the banking sector, BI purchased SBPUs of various maturities from the banking system. The increased stock of SBIs and the shorter-maturity SBPUs will give BI considerable flexibility to conduct monetary policy during 1991. In March 1991, the Government took further steps to improve the effectiveness of monetary policy. These included limiting the use of the swap facility and reducing the net open position in foreign exchange from 25% of equity to 20%. It is expected that these measures will lead to a significant slowdown in the growth of money and credit. Nevertheless, trends in monetary aggregates will need to be monitored carefully to ensure that the monetary stance is having the desired effect.

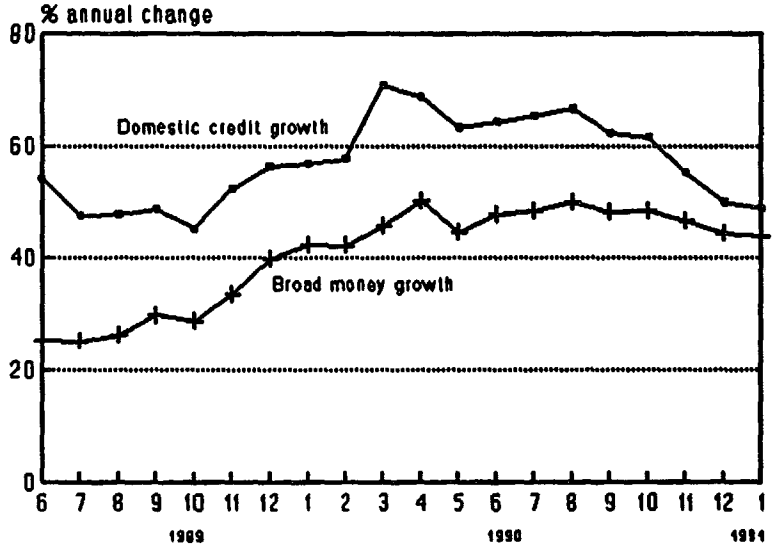
2.10 Fiscal policy in 1990/91 was conservative compared to previous years, despite the large increase in oil revenues. The 1990/91 budget would have implied a deficit of about 1.9% of GDP. Higher oil revenues combined with a better non-oil revenue performance permitted a surplus of 2.0% of GDP (see Table 2.3). Evidence of the Government's conservative budgetary stance was the decision to allocate Rp.2 trillion of the oil revenue windfall into a reserve fund for development expenditures. Nevertheless, the conservative budgetary stance was insufficient to constrain aggregate demand, primarily because private sector demand, especially investment demand, grew much more rapidly than expected. This suggests the need for cautious fiscal policy in 1991/92 to complement the monetary policy measures taken in February and March 1991. The 1991/92 Budget explicitly acknowledged the important complementarity between fiscal and monetary policy, noting the need to improve the balance of payments and to reduce inflationary pressures. It also notes the need to reduce and, in time, eliminate the subsidies on domestic fuel and electricity. The Budget assumed a US$19/barrel price of oil, which at the time of the Budget Speech (January 1991) was a conservative assumption. It also implied a decrease in net domestic expenditures from 2.2% of GDP in 1990/91 to 1.2% in 1991/92. However, total expenditures were budgeted to rise by 18% compared to the 1990/91 Budget, with development expenditures increasing by over 23%, resulting in a shift from a fiscal surplus to a

FIGURE 2.2:
TRENDS IN INTEREST RATES AND RESERVES




/a 3 month State bank time deposit

FIGURE 2.3:
TRENDS IN MONETARY AGGREGATES
(percentage change year on year)




Source : Bank Indonesia

Table 2.3: CENTRAL GOVERNMENT BUDGET, 1986/87-1991/92
(Rp. trillion at current prices)

| | Actual | | | | Estimated | Budget |
|---|---|---|---|---|---|---|
| | 1986/87 | 1987/88 | 1988/89 | 1989/90 | 1990/91 | 1991/92 |
| Revenue and grants | 16.7 | 21.8 | 23.9 | 30.0 | 42.6 | 40.2 |
| Oil and LNG taxes | 6.3 | 10.6 | 9.9 | 11.8 | 18.9 | 15.0 |
| Non-oil taxes | 7.9 | 8.8 | 11.9 | 15.4 | 20.7 | 22.4 |
| Non-tax revenues /a | 2.2 | 2.0 | 1.6 | 2.1 | 2.3 | 2.8 |
| Grants | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.0 |
| Current expenditures | 13.4 | 15.3 | 16.8 | 19.8 | 24.0 | 24.8 |
| External interest | 2.8 | 3.7 | 4.3 | 4.5 | 4.8 | 5.2 |
| Subsidies | 0.9 | 1.4 | 1.0 | 1.5 | 4.0 | 1.4 |
| Other | 9.7 | 10.2 | 11.5 | 13.8 | 15.2 | 18.2 |
| Government savings | 3.3 | 6.5 | 7.1 | 10.2 | 18.7 | 15.4 |
| Capital expenditures | 6.8 | 9.0 | 10.6 | 11.6 | 14.7 | 16.9 |
| Budget balance | -3.5 | -2.5 | -3.5 | -1.4 | 4.0 | -1.4 |
| Financed by: | | | | | | |
| External loans (net) | 3.2 | 2.3 | 5.0 | 2.6 | 1.2 | 1.5 |
| Disbursements | 6.8 | 8.8 | 11.5 | 10.2 | 8.8 | 10.4 |
| Principal repayments | 3.6 | 6.5 | 6.5 | 7.6 | 7.6 | 8.9 |
| Asset drawdown | 0.3 | 0.2 | -1.5 | -1.2 | -5.2 /d | 0.0 |
| Memo items (% of GDP): | | | | | | |
| Non-oil taxes (% of non-oil GDP) | 9.3 | 8.6 | 10.0 | 11.2 | 12.9 | 12.2 |
| Government savings | 3.0 | 5.0 | 4.8 | 5.9 | 9.5 | 6.9 |
| Budget balance | -3.3 | -1.9 | -2.4 | -0.8 | 2.0 | -0.7 |
| Total expenditure | 18.8 | 18.9 | 18.6 | 18.3 | 19.7 | 18.7 |
| Net domestic expenditure /b | 3.2 | 3.8 | 2.7 | 2.4 | 2.2 | 1.2 |
| Primary balance /c | -0.5 | 1.0 | 0.6 | 1.9 | 4.6 | 1.7 |

/a Includes domestic oil surplus in 1986/87.
/b Defined as the domestic content of expenditure less non-oil revenues.
/c Budget balance net of external interest payments.
/d Includes Rp.2.0 trillion allocated to reserves in the development budget.

Source: Ministry of Finance and World Bank staff estimates.

deficit. The Government, however, recognizes the need to avoid exacerbating existing demand pressures in the economy and plans to maintain a prudent fiscal policy stance.

2.11 Exchange rate management continued to be directed towards maintaining the competitiveness of non-oil exports. After a small appreciation in the first half of 1990, the real effective exchange rate (REER) depreciated by almost 7% in the twelve months ending in January 1991, as the Government has moved to maintain non-oil export competitiveness by accelerating the depreciation of the Rupiah against the US Dollar.

2.12 In summary, recent economic developments can be characterized by rapid economic growth, higher inflation and a deteriorating non-oil trade balance. Private sector demand, particularly investment demand, has been the driving force behind this surge in economic activity, reflecting a vigorous response to the Government's deregulation policies of the last several years. Monetary and credit policies in late 1989 and early 1990 lowered domestic interest rates and accommodated this rapid growth in demand. In response to the emerging macroeconomic pressures, the Government has acted to slow aggregate demand. Monetary measures taken during 1990/91 raised interest rates and stopped the capital outflows experienced early in the fiscal year. Fiscal policy was restrained during 1990/91, with budgetary expenditures (net of the oil subsidy) contained at about the 1990/91 Budget levels despite a significant increase in oil revenues and higher non-oil tax receipts. However, fiscal policy was insufficiently tight to ease inflationary pressures and contain the deficit on the non-oil trade account. During 1991/92, macroeconomic policies need to ensure that higher inflation and a deteriorating non-oil trade balance do not erode the gains of the past several years in restoring macroeconomic stability, easing the debt burden, and reducing the economy's dependence on oil.

## C. A Macroeconomic Strategy and Policy Framework for the 1990s.

2.13 Macroeconomic policy during the 1990s needs to support a sustained, rapid growth in non-oil GDP at around 6-7% p.a. to enable Indonesia to realize its development objectives of increasing per capita incomes and reducing poverty. The dramatic structural changes of the 1980s have positioned the economy to make progress towards achieving these development objectives during the 1990s. An important aspect of macroeconomic policy during the 1990s will be to ensure that the growth path is consistent with macroeconomic stability so that Indonesia's sizeable debt burden is eased. In the 1980s, the Government demonstrated the ability to take firm and timely actions to restore macroeconomic stability and this will be equally important during the 1990s. However, managing an economy in which the private sector has a larger and more important role will be the key macroeconomic challenge of the 1990s. Structural changes have dismantled many of the Government's direct controls over the economy, such as credit and interest ceilings, limits on offshore borrowing, import restrictions, and industrial and investment regulations. Fundamental reforms of the financial sector have also changed the underlying relationships among monetary aggregates, complicating monetary management. Consequently, macroeconomic management will have to rely increasingly on indirect mechanisms. This implies the need for careful monitoring of economic

trends so that timely policy adjustments can be made, thereby avoiding costly interruptions in the growth process and maintaining the confidence of the business community.

2.14 The emergence of inflationary pressures and a deteriorating non-oil trade balance during 1990/91, coupled with the expected slowdown in the world economy and uncertainties surrounding the oil price, require that decisive actions be taken in the near term to ensure that the economy follows a sustainable growth path. This will stabilize the economy with little cost to medium-term growth and without undermining the confidence of the domestic and international community in Indonesia's macroeconomic prospects. Restoring macroeconomic stability in the near term, while preserving the economy's medium-term growth prospects, implies policy actions in three interrelated areas: (a) a continuation of policies to support non-oil export growth; (b) monetary policy designed to complement fiscal policy and preserve Indonesia's international reserves; and (c) fiscal policies to dampen aggregate demand while preserving key expenditure priorities, particularly in infrastructure. Given the substantial uncertainties in the world economic outlook, including the possibility of oil prices declining more than projected, Indonesia will need to maintain its substantial foreign exchange reserves and borrowing capacity. This will provide Indonesia with the flexibility needed to respond to adverse external shocks.

2.15 Export growth. A continuation of policies to support non-oil export growth is central to Indonesia's macroeconomic strategy for the 1990s. This includes maintaining a competitive exchange rate through coordinated fiscal, monetary and exchange rate policies. More reliance on monetary and fiscal policy to slow domestic inflation will help minimize inflation differentials between Indonesia and its trading partners, thereby reducing the need for nominal adjustments of the exchange rate to maintain a competitive REER. This would also reduce inflationary expectations. Domestically-imposed restrictions on non-oil exports are an important factor behind the slow growth of non-oil exports in 1990/91. The prohibitive export tax on sawn timber alone has resulted in a net loss of more than US$500 million in export receipts during 1990/91.8/ Other direct export restrictions, such as those on rattan and cement, and indirect export restrictions, such as those contained in some investment licenses, also have reduced non-oil exports growth. Restoring non-oil export growth will require reducing the scope of export restrictions further.9/ Policies to conserve energy and slow the growth in domestic demand for oil products will help sustain net oil exports in the medium-term.

2.16 Monetary policy. Given Indonesia's open capital account, domestic interest rates are closely tied to international interest rates and exchange rate expectations. This limits the ability of monetary policy to influence

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8/ If increased taxation on wood is desirable for environmental reasons, this could be accomplished more efficiently through an increase in the stumpage fee, as this does not discriminate between domestic and export activities.

9/ A continuation of the Government's deregulation policies will also be extremely important to non-oil competitiveness over the medium-term; this is discussed extensively in Chapter 3.

interest rates except in the short term. An expansionary monetary policy designed to achieve low domestic interest rates, as was attempted during 1990, will lead to higher inflation, capital outflows and balance of payments instability. Conversely, efforts to contract demand through tight monetary policy will raise domestic interest rates, leading to capital inflows that will push down interest rates and offset the decline in domestic credit. The movements of net foreign assets and domestic credit to the private sector during 1990/91 illustrate this process. In an open capital account, monetary policy is most effective in achieving a target level of foreign exchange reserves. Once that target is reached, fiscal and exchange rate policies are needed to reinforce monetary policy. Lower domestic interest rates can only be sustained in two ways: (i) through coordinated monetary and fiscal policies that result in lower inflation and dampen expectations of exchange rate depreciation, thereby reducing the margin between domestic and international interest rates; and (ii) through the full implementation of financial sector reforms and other measures that strengthen the financial sector, and improve efficiency, thereby reducing intermediation margins.

2.17 The conduct of monetary policy during 1990/91 pointed out several areas for improvement. First, full information on monetary aggregates is available only after a three-month delay. This, to some extent, prevented the Government from making timely adjustments to monetary policy. Faster collection and compilation of data from deposit money banks through an automated bank reporting system would enhance the Government's ability to conduct monetary policy. Second, monetary policy needs to be better coordinated among the various Government departments. The Monetary Board or its Secretariat is well positioned to ensure effective coordination of monetary policy between Government departments and agencies and Bank Indonesia. Third, the main monetary policy instrument of Bank Indonesia, the SBI, has not been effective in contracting base money for several reasons: (i) the maturity of SBIs was very short, only up to six months; (ii) there is no secondary market in SBIs; and (iii) the achievement of quantity targets for SBI auctions has been constrained by interest rate targets. The recent tightening of monetary policy in February and March 1991 has increased significantly the stock of SBIs outstanding and lengthened the maturity of SBIs to one year. However, for the SBIs to be an effective tool of monetary management, a quantity target must be set and the SBI interest rate allowed to rise until the target is reached.

2.18 The monetary adjustments introduced in February and March 1991 were an important step in achieving a tighter monetary policy stance in order to reduce pressures on the balance of payments and prices. Trends in monetary aggregates will need to be watched closely over the year to ensure that the monetary stance is having the desired effect and that an adequate reserve cushion is maintained. In this regard, the continued implementation of the Government's policy to reduce liquidity credits will be essential. Finally, given the experience gained in the conduct of monetary policy since the reforms of October 1988 and the important capital adequacy standards and other prudential norms recently introduced, it is an opportune time to assess the scope for modifying reserve requirements, including the possibility of establishing norms for bank liquidity.

2.19 <u>Fiscal Policy</u>. Monetary policy needs to be supplemented by a more

active use of fiscal policy. This will require raising revenues, reducing subsidies, and curtailing other budget and off-budget expenditures. To be effective in restraining demand, the resulting budgetary surplus will need to be retained by increasing the Government's financial assets or spending only in ways that do not add to aggregate demand. Over the medium term, the correction of macroeconomic imbalances, coupled with improvements in public resource mobilization will allow an expansion of capital spending in priority areas.

2.20 Reducing budgetary subsidies will help to ease demand pressures and improve resource allocation through better price signals. As President Soeharto noted in the 1991/92 Budget speech,

> "our oil resources are not excessive....The price of fuel oils constitutes...a very important element in enhancing the efficient use of energy....Consequently, from time to time, we must make adjustments to energy prices, both for fuel oils and electric power. Although subsidies are still being provided in the 1991/92 Draft State Budget, gradually and conscientiously, we must reduce and, at the right moment, stop them."

Regarding oil product prices, a rapid growth of domestic demand is reducing Indonesia's exportable surplus, thereby contributing to the deterioration in the balance of payments and bringing nearer the day when Indonesia becomes a net importer of oil. Moreover, at present oil prices, there is little incentive for the efficient use of energy. Other Asian countries have recognized the positive benefits of higher domestic fuel prices for energy efficiency, the balance of payments and the environment and have raised prices to levels which are significantly higher than those prevailing in Indonesia (see Table 2.4). The situation is similar for electricity prices. Higher electricity prices would help slow demand growth in the power sector. This would result in slower growth in domestic oil consumption (since power generation accounts for a large share of domestic oil), lower investment requirements in power generation and higher public revenues. Finally, the subsidy on fertilizer amounted to about Rp.660 billion in 1990/91. Adjustments to these prices will help to improve efficiency of resource use, while reducing demand pressures in the economy.

2.21 The Government's priorities in public resource mobilization need to be intensified. Additional non-oil tax revenues could be generated through improving tax administration and selective rate increases, targeted towards the better off. Increasing these non-oil tax revenues is also likely to have a positive effect on income distribution, as well as helping to manage aggregate demand. Policies to strengthen the Government's resource mobilization and to improve local government's finances are discussed in Section E below.

2.22 An important determinant of the Government's fiscal policy stance is the level of public expenditures both in the Budget and by public enterprises. The 1991/92 Budget appropriately places priority on expenditures in two key areas: infrastructure (power, transport and telecommunications) to support private sector development; and poverty-related sectors. These expenditure priorities are critical to preserving the economy's medium-term growth

Table 2.4: COMPARATIVE DOMESTIC SALES PRICES FOR PETROLEUM PRODUCTS, 1990/91 (Rp./liter)

| | Indonesia | Malaysia | Singapore | Thailand | Philippines | Korea |
|---|---|---|---|---|---|---|
| Avgas | 330 | 1,405 | 1,998 | ... | ... | ... |
| Avtur | 330 | 280 | 785 | ... | ... | ... |
| Gasoline | 450 | 741 | 1,222 | 768 | 1,352 | 1,000 |
| Kerosene | 190 | 497 | 454 | 647 | 536 | 498 |
| ADO | 245 | 455 | 499 | 623 | 536 | 480 |
| IDO | 235 | 301 | 489 | 608 | 536 | 488 |
| Fuel oil | 220 | 210 | 281 | 315 | 356 | 354 |
| Average /a | 267 | 475 | 594 | 611 | 664 | 565 |

/a Weighted by Indonesia's estimated product mix for 1991/92. Excludes Avgas and Avtur.

Source: Ministry of Finance.

prospects and to maintaining the momentum on poverty reduction. Moreover, many expenditures planned by public enterprises are designed to create infrastructure and avoid the emergence of infrastructural bottlenecks that could be detrimental to the economy in the long run. However, given existing demand pressures in the economy and the need to improve macroeconomic balances, the overall public expenditure program (including public enterprises) needs to be reviewed carefully. Those expenditures not directly related to the Government's overall expenditure priorities may need to be reduced or rephased. In 1983, many large import- and capital-intensive projects were rephased resulting in rapid improvements in the balance of payments without adversely affecting economic growth. The sharpening of expenditure priorities which resulted was a key factor in the Government's progress on reducing poverty during 1983-88. Similarly, a sharpening of priorities in 1991/92 will allow the Government to focus expenditures in the critical areas necessary to enhance the economy's long term growth prospects, while improving macroeconomic balances in the near term.

## D. Medium-Term Macroeconomic Projections

### Growth Prospects

2.23 This section provides illustrative macroeconomic projections based on the World Bank's current forecast of the external environment (see Annex 3) and on the Government implementing the macroeconomic strategy as described in Section C. The correction of emerging macroeconomic imbalances will constrain aggregate demand in the short term. Both consumption and investment growth rates will decline. This in turn will lower growth in construction and services sectors. Higher interest rates and a tighter fiscal policy stance

will also tend to slow the growth of output in the economy in the short term to about 5.7%. However, this is still a rapid rate of growth and is above the target set for REPELITA V. The agriculture sector is expected to return to its trend growth path, reversing the slowdown in 1990 and providing an impetus to non-oil GDP growth. Even so, non-oil GDP growth will slow to 6.0% p.a. during the next two years, as compared with an average of 8% over the past two years (see Table 2.5).

2.24 Over the medium term, as macroeconomic balance is restored, the rate of growth in the non-oil economy can rise and be sustained at around 7% p.a. This will be fuelled by improvements in productivity resulting from structural reforms and a strong investment effort. Substantial buildups of production capacity in the agriculture and manufacturing sectors, as well as supporting improvements in economic infrastructure are incorporated in the base case projections. This capacity creation will allow non-rice agriculture, non-oil manufacturing and non-oil exports to provide the main stimuli to future growth. Accordingly, fixed investment is projected to grow quite rapidly (about 8% p.a.), reaching around 27% of GDP by 2000, five percentage points higher than the 1990 level. To finance this increase at the same time that the current account deficit is being reduced, national savings will have to grow faster than investment. This will require effective public resource mobilization combined with expenditure restraint. Structural change in the economy will continue, with the share of non-oil manufacturing increasing from about 15% of GDP in 1990 to nearly 24% in 2000.

External Balance

2.25 The balance of payments projections assume that the Government takes decisive actions to correct the widening gap in the non-oil trade balance (see Table 2.6). These actions include: measures to slow the growth of domestic fuel consumption to about 10% in 1991/92; coordinated fiscal and monetary policy to slow aggregate demand growth; and trade policies to stimulate non-oil export growth. These actions are expected to constrain import growth in 1991/92, with non-oil imports increasing by only 1% in real terms. This, combined with an improvement in non-oil export growth, results in a substantial improvement in the non-oil current account balance in 1991/92, which continues into the medium-term, reversing the trend of the past two years. Nevertheless, lower prices for oil exports and increased domestic oil consumption offset these gains in 1991/92. Consequently, the current account deficit is projected to rise to US$4.3 billion in 1991/92 (about 4.1% of GNP) and decline only to US$4.1 billion in 1992/93 (about 3.6% of GNP). Financing current account deficits of this magnitude while maintaining the level of reserves will require additional efforts to mobilize quick-disbursing official assistance, continuing inflows of private capital and commercial borrowing.

2.26 Over the medium term, the pressures on the balance of payments can be expected to ease, as new export capacity comes on stream. In the base scenario, world demand for Indonesia's exports picks up and the demand for imports return to more normal levels. This is expected to reduce the current account deficit steadily over the medium term, reaching 1.8% of GNP by the year 2000. However, management of the balance of payments throughout the 1990s will require a careful balancing between the growth required to absorb the labor force at increasing levels of productivity and the need to achieve further improvement in Indonesia's debt-servicing capacity.

Table 2.5: PROJECTIONS OF KEY MACROECONOMIC INDICATORS /a

| | Estimated | Projected | | |
|---|---|---|---|---|
| | 1990 | 1991 | 1991-95 | 1995-2000 |
| **Average growth rates (% p.a.)** | | | | |
| GDP | 7.1 | 5.7 | 5.6 | 5.9 |
| Non-oil GDP | 7.8 | 6.0 | 6.6 | 7.0 |
| Agriculture | 2.5 | 3.0 | 3.4 | 3.5 |
| Manufacturing | 12.8 | 10.0 | 10.7 | 11.0 |
| Mining | 4.1 | 5.0 | 5.7 | 6.0 |
| Construction | 12.1 | 7.0 | 7.5 | 7.8 |
| Other services | 8.2 | 5.8 | 6.2 | 6.3 |
| GNY | 8.2 | 4.7 | 6.2 | 6.6 |
| Non-oil exports | 6.7 | 12.2 | 10.5 | 7.6 |
| Non-oil imports | 25.4 | 1.0 | 8.1 | 6.9 |
| Fixed investment | 16.2 | 6.5 | 7.9 | 8.6 |
| Public | 9.6 | 3.1 | 6.7 | 7.6 |
| Private | 19.9 | 8.3 | 8.5 | 9.1 |
| Consumption | 7.9 | 5.0 | 5.2 | 5.9 |
| **Macroeconomic Balances /b** | | | | |
| Current account/GNP | -3.8 | -4.1 | -2.0 | -1.8 |
| Non-interest current account/GNP | 0.1 | 0.5 | 1.7 | 0.9 |
| Overall public sector balance/GDP | 1.8 | 1.6 | 1.2 | 0.8 |
| MLT debt service/exports | 27.3 | 31.2 | 25.9 | 19.9 |
| MLT debt/exports | 183.1 | 177.2 | 145.2 | 110.0 |
| MLT debt/GNP | 58.6 | 57.6 | 50.3 | 39.2 |
| **Structure of the economy /b** | | | | |
| Non-oil manufacturing/GDP | 14.9 | 15.5 | 18.8 | 23.7 |
| Non-oil exports/non-oil imports | 71.0 | 79.3 | 91.3 | 95.7 |
| Public savings/GDP | 9.6 | 10.2 | 10.1 | 10.2 |
| National savings/GDP | 21.4 | 20.8 | 24.3 | 27.3 |
| Fixed investment/GDP | 22.9 | 23.3 | 24.8 | 27.5 |
| Private fixed investment/ Total fixed investment | 63.0 | 63.1 | 64.2 | 65.9 |
| Consumption/GDP | 73.7 | 74.0 | 71.1 | 69.2 |
| Consumption/GNY | 74.4 | 74.6 | 72.2 | 70.2 |
| **Prices** | | | | |
| Oil prices (US$/bbl) /b | 22.6 | 19.4 | 21.3 | 31.3 |
| Non-oil terms of trade (1983/84=100) /b | 92.0 | 92.4 | 97.5 | 98.4 |

/a Balance of payments and fiscal 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 estimates.

Table 2.6: BALANCE OF PAYMENTS PROJECTIONS, 1990/91-2000/01
(US$ billion)

| | Estimated | Projected | | | | |
|---|---|---|---|---|---|---|
| | 1990/91 | 1991/92 | 1992/93 | 1993/94 | 1995/96 | 2000/01 |
| Gross merchandise exports (fob) | 28.1 | 30.1 | 32.4 | 36.3 | 43.4 | 71.3 |
| Oil and LNG | 12.6 | 11.1 | 9.7 | 10.4 | 11.7 | 15.2 |
| Non-oil | 15.5 | 19.0 | 22.7 | 25.9 | 31.7 | 56.1 |
| Gross merchandise imports (cif) | -26.0 | -28.2 | -30.4 | -33.5 | -39.2 | -67.1 |
| Oil and LNG | -4.2 | -4.2 | -3.9 | -4.4 | -4.5 | -8.5 |
| Non-oil | -21.8 | -24.0 | -26.5 | -29.1 | -34.7 | -58.6 |
| Trade balance | 2.1 | 1.9 | 2.0 | 2.8 | 4.2 | 4.2 |
| Net non-factor services | -0.7 | -0.6 | -0.4 | -0.3 | -0.3 | -0.1 |
| MLT interest payments | -3.1 | -3.9 | -4.0 | -4.0 | -4.2 | -4.7 |
| Other factor services and transfers (net) | -2.1 | -1.7 | -1.7 | -2.0 | -2.6 | -3.5 |
| Current account balance | -3.8 | -4.3 | -4.1 | -3.5 | -2.9 | -4.1 |
| Oil/LNG current account | 5.9 | 4.2 | 3.3 | 3.2 | 3.7 | 1.9 |
| Non-oil current account | -9.7 | -8.5 | -7.4 | -6.7 | -6.6 | -6.0 |
| Public MLT loans (net) | 0.5 | 0.6 | 0.5 | 1.3 | 2.8 | 3.4 |
| Disbursements | 4.9 | 5.3 | 5.3 | 6.4 | 7.2 | 10.4 |
| Principal repayments | -4.4 | -4.7 | -4.8 | -5.1 | -4.4 | -7.0 |
| Other capital (net) | 7.4 | 3.7 | 3.6 | 3.0 | 2.5 | 4.4 |
| Use of net foreign assets | -4.1 | 0.0 | 0.0 | -0.8 | -2.4 | -3.7 |
| Memo items: | | | | | | |
| Net official reserves (US$ bln)/a | 9.1 | 9.1 | 9.1 | 10.5 | 13.7 | 31.0 |
| (in mons. of imports) /b | (3.9) | (3.6) | (3.3) | (3.4) | (3.8) | (5.0) |
| Total net foreign assets (US$ bln) | 14.7 | 14.7 | 14.7 | 15.5 | 19.8 | 36.8 |
| Current account/GNP (%) | -3.8 | -4.1 | -3.6 | -2.9 | -2.0 | -1.8 |
| Non-interest CA/GNP | 0.1 | 0.5 | 0.7 | 1.2 | 1.7 | 0.9 |
| MLT debt service/ exports (%) | 27.3 | 31.2 | 30.9 | 29.6 | 25.9 | 19.9 |

/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 imports (oil/LNG and non-oil) of goods.

Source: World Bank staff estimates.

2.27 Non-oil exports are projected to grow by 8% a. in real terms during the 1990s. This will require maintaining the competitiveness of the exchange rate, and reducing the domestic cost of production through continued deregulation of trade policy, particularly a reduction in export restrictions, and other regulations and provision of supporting services. The prospects for Indonesia's non-oil exports remain bright despite the slowdown in 1990. First, in the near term, substantial export capacity in labor-intensive, non-oil manufacturing sectors is expected to come on stream, easing existing capacity constraints. Capacity in existing export industries is being expanded and investments in new, manufacturing export industries are growing dramatically. Data obtained from the Investment Coordinating Board (BKPM) on recent investment approvals for foreign and domestic investment also indicate that these investment outlays are being directed into export-oriented activities, particularly in textiles, footwear, agroprocessing and wood processing industries. Second, Indonesia's share of the market for most manufacturing products (excluding plywood and textiles) is still small, leaving room for expansion. Market access is also being enhanced since much of the investment in non-oil manufacturing export capacity is from Korea, Taiwan and Japan, allowing Indonesia to raise its exports to these growing markets, as well as to take advantage of their market access and marketing infrastructure in Europe and North America. Accordingly, the base case assumes that although non-oil export growth will slow from the rate of the past several years, their growth will still be robust (about 11% p.a.) in the near term, and then slow to about 8% p.a. over the medium term (see Table 2.7).

Table 2.7: NON-OIL EXPORT GROWTH PROJECTIONS
(real growth rates, % p.a.)

| | Actual | | Projected | | |
|---|---|---|---|---|---|
| | 1985/86-1989/90 | Estimated 1990/91 | 1991/92 | 1992/93-1995/96 | 1996/97 2000/01 |
| Non-oil manufactures | 23.6 | 17.4 | 10.9 | 13.3 | 8.4 |
| Textiles | 28.2 | 24.5 | 20.0 | 14.5 | 9.0 |
| Plywood | 19.1 | 7.0 | 0.0 | 3.2 | 2.0 |
| Other | 24.0 | 19.4 | 11.0 | 16.9 | 9.9 |
| Agriculture | 8.6 | -6.5 | 15.5 | 5.1 | 5.3 |
| Metals and minerals | 9.5 | 0.3 | 9.3 | 8.5 | 7.8 |
| Total non-oil exports | 14.9 | 6.7 | 12.2 | 10.5 | 7.6 |

Source: Bank Indonesia and World Bank staff estimates.

2.28 There are several important implications of the base case scenario for the external financing requirements and external debt (see Section F for a further discussion). First, Indonesia will continue to require substantial

amounts of official assistance to finance priority public investments in support of higher economic growth and poverty reduction. Moreover, a substantial portion of this official assistance will need to be in the form of quick-disbursing, sector-type loans in order to ensure adequate disbursements into the balance of payments. Second, the projections assume a large inflow of private non-guaranteed capital, but at a lower level than 1990/91. Two factors are important: (i) the projections incorporate some reduction in the availability of private foreign capital flows to developing countries during 1991/92; if flows are lower than projected, then the Government will need to take further measures to preserve its reserve position; and (ii) the indebtedness of the private sector increases substantially by the end of 1991/92, which has implications for exchange rate management and the overall debt service ratio. While the effect of this trend is expected to remain manageable, Indonesia needs to monitor trends in private sector indebtedness carefully as they can affect Indonesia's creditworthiness. Indeed, the debt service indicators are projected to rise slightly in 1991/92, reflecting the increase in private sector borrowing, which offsets a continued decline in the public debt burden. Finally, given the projected growth in non-oil exports, the debt service ratio for public and private medium- and long-term debt (MLT) declines from 27% in 1990 to below 20% in the year 2000. Similar declines are also achieved in the Debt/Exports and Debt/GNP ratios, indicating an improvement in Indonesia's creditworthiness and borrowing capacity.

Internal Balance

2.29 Reducing the current account deficit to more sustainable levels over the medium-term will require that savings, particularly private savings, increase from the depressed level of the early 1990s (see Table 2.8). Even allowing for gains in economic efficiency, the rate of fixed investment will need to expand from 23% of GDP currently to 27.5% of GDP by 2000 to support the projected growth rate. These trends imply that investment and saving will have to grow faster than output and consumption. This expansion in investment is particularly important given the low rates of investment, especially in public infrastructure, during the last half of the 1980s, and the need for critical investments to support infrastructure (e.g., power, telecommunications, roads and ports). Substantial amounts of private investment will also be required to create the capacity for non-oil exports, especially in the manufacturing sector. To achieve this projected expansion of private investment, further progress with trade and industrial sector reforms, as well as improvements in the financial sector, will be essential to enhance the profitability of private investment. Macroeconomic policy will also be important in maintaining an environment conducive to private sector investment, as it affects expectations regarding exchange rates, interest rates and inflation. In order to finance this higher level of investment activity while reducing the current account deficit, national savings will need to rise from 21% of GDP in 1990 to about 27% in 2000. Part of the increase in national savings will be achieved through an increase in private savings to 17.1% of GDP in 2000 from 14.9% in 1989. Household savings are expected to improve with sustained higher economic growth, while business savings will respond positively to higher profitability. However, these factors alone will be inadequate to achieve the required increases in national savings; public savings will need to rise almost one percent of GDP from the already high level of 1990. This will require a strong effort at public

resource mobilization because the higher oil revenues which contributed to public savings in 1990 are unlikely to persist over the medium term (see Section E).

2.30 The likely improvements in public resource mobilization will be adequate to allow a growth of real public investment of about 8% p.a. during the 1990s, which should be sufficient to achieve the Government's expenditure priorities. Given the projected progress in resource mobilization, this expansion of public expenditures would allow a growing role for the private sector while maintaining macroeconomic stability. To ensure the complementarity of public investment with private investment, the public sector investment effort will need to focus on basic infrastructure (power, roads, and telecommunications) and essential social services (health, basic education, water supply and sanitation, and kampung improvement).10/

Table 2.8: Savings-Investment Balances, 1981-2000 /a
(% of GDP at current prices)

| | Annual Average 1981-82 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | Estimate 1990 | Projection 1995 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross domestic investment | 29.5 | 27.0 | 25.3 | 24.0 | 23.0 | 22.5 | 22.2 | 23.5 | 24.6 | 26.4 | 29.0 |
| - Fixed investment | 25.1 | 25.1 | 22.3 | 20.5 | 20.1 | 19.2 | 20.0 | 21.2 | 22.9 | 24.9 | 27.5 |
| - Change in stocks | 4.4 | 1.9 | 3.0 | 3.5 | 2.9 | 3.3 | 2.2 | 2.3 | 1.7 | 1.5 | 1.5 |
| Gross national savings | 25.2 | 21.0 | 21.7 | 21.5 | 17.5 | 19.1 | 19.9 | 21.4 | 21.4 | 24.4 | 27.3 |
| Savings-investment gap /b | -4.3 | -6.0 | -3.6 | -2.5 | -5.5 | -3.4 | -2.3 | -2.1 | -3.2 | -2.0 | -1.7 |
| Public sector | | | | | | | | | | | |
| Gross domestic investment /c | 11.7 | 12.0 | 10.2 | 10.3 | 8.5 | 7.9 | 8.4 | 8.2 | 8.5 | 8.9 | 9.4 |
| Public savings | 8.7 | 8.9 | 10.0 | 8.1 | 4.9 | 4.9 | 5.4 | 6.5 | 9.6 | 10.0 | 10.2 |
| Savings-investment gap | -3.0 | -3.1 | -0.2 | -2.2 | -3.6 | -3.0 | -3.0 | -1.7 | 1.1 | 1.1 | 0.8 |
| Private sector | | | | | | | | | | | |
| Gross domestic investment | 17.8 | 15.0 | 15.1 | 13.7 | 14.5 | 14.6 | 13.8 | 15.3 | 16.1 | 17.5 | 19.6 |
| - Fixed investment | 13.4 | 13.1 | 12.1 | 10.2 | 11.6 | 11.3 | 11.6 | 13.0 | 14.4 | 16.0 | 18.1 |
| - Change in stocks | 4.4 | 1.9 | 3.0 | 3.5 | 2.9 | 3.3 | 2.2 | 2.3 | 1.7 | 1.5 | 1.5 |
| Savings | 16.5 | 12.1 | 11.7 | 13.4 | 12.6 | 14.2 | 14.5 | 14.9 | 11.8 | 14.4 | 17.1 |
| Savings-investment gap | -1.3 | -2.9 | -3.4 | -0.3 | -1.9 | -0.4 | 0.7 | -0.4 | -4.3 | -3.1 | -2.5 |

/a All data converted to calendar-year basis. As a result, the data on the current account deficit and the public sector deficit differ slightly with other tables.
/b The inverse of the current account deficit expressed in calendar years.
/c Fixed investment only. Investment in stock changes is assumed to be financed by the private sector.

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

## Sources of Growth and Implications for Employment

2.31 Non-oil GDP growth is expected to slow somewhat in the near term, but return to 7% over the medium-term. At the sectoral level, the primary impetus to economic growth is provided by the non-oil manufacturing sector. This sector is projected to grow by about 10-11% p.a. during the 1990s, raising manufacturing's share of GDP to almost 24% by the year 2000. Given that the ongoing program of trade and industrial deregulation will continue to open up

10/ Expenditure priorities to support private sector development are discussed in Chapter 5.

profitable areas for efficient export industries which are relatively labor intensive, manufacturing growth will also make an important contribution to employment growth.11/ Agriculture will increase by 3.5% p.a., the same pace as during the 1980s. The pattern of agricultural growth is likely to change gradually over this period. Increases in rice production are likely to decelerate somewhat in the 1990s, while other activities, such as non-rice food crops, smallholder tree crops, and other non-food farm activities will grow more rapidly. However, this pattern of agricultural development needs to be supported by policies that encourage farmers to raise their productivity and diversify their production within an efficient cropping system.12/ Nevertheless, agriculture's share of GDP can be expected to decline to about 16% by 2000, although its role in employment creation, particularly off-Java will continue to be significant. The construction and services sectors will increase in line with overall economic activity during the 1990s. Infrastructure-based services, such as telecommunications, electricity and transport, will need to grow rapidly in the first half of the 1990s to avoid infrastructural bottlenecks which could slow growth in the industrial and agricultural sectors. The contribution of the oil/LNG sector to the Indonesian economy is projected to remain constant until the late 1990s when it is expected to decline gradually, although the increased pace of exploration activities currently underway could push growth in this subsector higher.13/ If higher oil/LNG production is realized, GDP growth would be higher than currently projected with positive implications for the balance of payments.

2.32 This projected pace and pattern of economic activity, coupled with complementary specific programs and policies, should allow Indonesia to absorb its expanding labor force at higher levels of productivity and income. While a strong agricultural sector will be essential to absorb a large proportion of the incremental labor force, the manufacturing sector will need to play a dynamic role in absorbing a much larger proportion of new employment than in the past. Again, this underlines the importance of expanding manufactured exports and maintaining the policies necessary to induce this expansion, including an incentive pattern consistent with labor-intensive growth. The projected rate of growth of output and investment will also spur productivity growth in the services sector. The projected level of economic activity is,

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11/ Policies to stimulate robust, export-oriented, and labor-intensive growth in the non-oil manufacturing sector that are consistent with the macroeconomic scenario outlined in this section are discussed in detail in Chapter 3.

12/ Policies to effect this shift in the pattern of agricultural growth require a process of deregulation which will bring the pattern of input and output prices more closely in line with world prices and which reduce existing regulatory restrictions. These policies are also discussed in Chapter 3.

13/ Current projections for the oil sector indicate that production (including condensates) will be maintained around 1.5 mbd. through 1997 and then will decline to 1.4 mbd. by 2000. This is a significant increase over the levels in last year's economic report, because of two important new finds and higher output levels from existing fields.

therefore, likely to lead to improved earnings for workers currently engaged in low-wage activities, as well as to generate additional productive employment opportunities in the sector. Continued deregulation in transportation and other services, as well as a strengthening of financial services, will be critical in this regard. Furthermore, the attitude of local governments towards service sector activities will also be important, as regulations and restrictions on informal traders and transportation could inhibit growth in services, which would have an adverse effect upon employment, particularly for the poor.

Table 2.9: GROWTH AND COMPOSITION OF GDP, 1984-2000 /a

| | Growth Rates (% p.a.) | | | | Share in GDP /b | |
|---|---|---|---|---|---|---|
| | 1984-87 | 1988-90 | 1991-95 | 1996-2000 | Estimate 1990 | Projected 2000 |
| Non-oil GDP | 5.7 | 7.8 | 6.6 | 7.0 | 81.8 | 89.5 |
| Agriculture | 3.3 | 3.8 | 3.4 | 3.5 | 19.7 | 15.7 |
| Manufacturing | 12.0 | 12.4 | 10.7 | 11.0 | 14.9 | 23.7 |
| Other services | 5.3 | 8.2 | 6.3 | 6.5 | 47.2 | 50.1 |
| Oil/LNG | 2.8 | 2.5 | 1.5 | -1.2 | 18.2 | 10.5 |
| Total GDP | 5.0 | 6.7 | 5.6 | 5.9 | 100.0 | 100.0 |

/a Based on revised National Accounts Statistics.
/b In 1983 prices.

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

## Risks and Uncertainties

2.33 The macroeconomic scenario outlined above is subject to several risks and uncertainties. First, it assumes that the Government takes decisive actions to slow domestic demand. Without these strong stabilization measures, macroeconomic balance could be undermined in the near term. Second, the assumptions regarding the external environment are subject to considerable downside risks; the projected recovery in the world economy may not materialize while oil prices could fall significantly below projected levels, especially in the short term. These concerns are exacerbated by the uncertainties surrounding the GATT negotiations which could presage an increase in protectionism in the industrialized countries. Finally, the medium-term projections discussed above assume considerable progress on implementing policy reforms in trade and industrial policy, the legal system and the financial sector. Without this progress, growth of non-oil exports could be significantly lower, leading to slower growth and delaying progress in achieving Indonesia's fundamental development objectives. In general, therefore, Indonesia's medium-term prospects could be adversely affected by three types of risks: (a) a deterioration in macroeconomic balances through

excessive expansion of the economy; (b) a deterioration in the external environment; and (c) inadequate progress on measures to sustain private sector growth over the medium term.

2.34 Macroeconomic balance. Without decisive measures to control aggregate demand and reduce pressures on the balance of payments, the current account deficit could widen significantly in 1991/92 leading to pressures on the Government's reserves and necessitating higher levels of commercial borrowing. Several examples illustrate the importance of cautious macroeconomic management. First, the projections assume only 1% real growth in non-oil imports in 1991/92 (compared to 25% in 1990/91) as a result of fiscal policy measures, coordinated with continued tight monetary policies. If imports grew at their long-term trend rate for 1985/86-1990/91, non-oil imports could grow by another US$3 billion in 1991/92. Second, these projections assume that restrictions on exports are reduced, yielding additional export receipts during 1991/92. Finally, the projections assume that measures are taken to slow the growth in domestic fuel consumption to only 10% (compared to a growth of 13% in 1990/91). Without this slowdown in domestic consumption growth, the surplus on the oil/LNG current account would decline and the oil surplus would be reduced further in future years, accelerating the time at which Indonesia becomes a net importer of oil. The Government has already taken important measures in early 1991 to tighten monetary policy, and other measures to contain aggregate demand are under consideration. The measures already taken and the Government's successful record in macroeconomic management indicate a high probability that an appropriate macroeconomic policy stance will be maintained.

2.35 Adverse external environment. A number of uncertainties cloud the outlook for the external environment: world growth and trade could be slower; and oil prices could be lower than projected. A sharper decline of oil prices to US$15, for example, would imply a loss of about US$1.5 billion in the oil/LNG current account projected for 1991/92 in Table 2.6. To protect against this risk in the short-run, the strategy outlined in Section C maintains Indonesia's foreign exchange reserves and borrowing capacity at relatively high levels. Nevertheless, in the event of either an unexpectedly large decline in world economic activity or a rapid decline in oil prices, it would be important to move quickly using the full range of macroeconomic instruments to ensure that the current account deficit remains manageable. Macroeconomic measures outlined in Section C would need to be accompanied by additional measures to improve competitiveness and promote investment in the non-oil tradeable sector. In the short term, economic growth would be lower than projected. However, growth could recover over the medium term, if supported by accelerated economic reforms. Under such circumstances it would be important that the donor community stand ready to support the Government's efforts with additional fast-disbursing assistance, or even renewed special assistance. To protect against uncertainties in the external environment, the Government should consider various options to reduce its risks, e.g. forward sales of oil products and more active external asset and liability management.

2.36 Policy reform. The scenario above assumes continued policy reforms in trade, industry and investment and a further strengthening of the financial sector. An alternative scenario, without adequate policy improvements, would result in slower non-oil export growth over the medium term. Moreover, without an appropriate incentive framework, private sector investment could be

channelled into areas which are uneconomic. Similarly without determined efforts to mobilize public resources, the Government will be unable to finance the investments in infrastructure required to support private sector development. The growth prospects of the economy over the medium term would be adversely affected by policy slippage in any of these three areas. However, as long as the existing reform programs are producing the kinds of positive results in economic growth and poverty reduction seen to date, there is little reason to expect a weakening in the Government's commitment to policy reform.

## E. Public Resource Mobilization

2.37 An important element in reconciling Indonesia's medium term development objectives with the need to reduce demand pressures in the economy in the near term is higher public resource mobilization. In addition to financing higher levels of public investment and dampening private sector demand, there is also an important role for public resource mobilization, particularly tax policy, in helping to maintain an equitable pattern of growth. Greater public resource mobilization will primarily involve increasing non-oil tax revenues and reducing subsidies. In addition, enhancing local government resource mobilization, particularly the property tax, is also important.

### Central Government's Non-oil Tax Effort

2.38 Recent tax reforms, in conjunction with improvements in tax administration, have been very successful in generating additional government revenues. Between 1983/84 and 1990/91 non-oil tax revenues have increased more than four-fold. In terms of non-oil GDP, non-oil revenues have risen from 7% in 1983/84 to almost 13% in 1990/91. Inspite of these gains, the tax effort in Indonesia remains low relative to other countries in Asia. For example, in 1988 the tax to GDP ratio for Thailand and Pakistan stood at 16.2% and 13.6% respectively.

2.39 The tax effort could be raised through either higher tax rates or improvements in tax administration. Three factors argue for concentrating primarily on improving tax administration. First, there is considerable non-compliance. Actual non-oil tax revenues are still significantly below their potential, (at the current statutory rates), 14/ and filing ratios are still low (see Table 2.10). Second, raising tax rates, in the face of non-compliance, is likely to lead to greater tax avoidance. Finally, lack of

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14/ There are two indirect indicators of low compliance. First, only a small percentage of the personal tax revenue is paid by the self-employed. Since many individuals with high income would fall under this category, the share of the self employed in total personal income taxes is small. Second, a large proportion of total company tax revenue is still generated by public enterprises, suggesting that a significant part of the corporate sector still remains outside the tax system, although there has been some improvement over the past years.

adequate and uniform enforcement may also lead to the application of de facto tax rates that are inconsistent with the efficiency and equity goals of the original tax reform.

Table 2.10: TAX COMPLIANCE INDICATORS

| | Registered Taxpayers (000's) | | | | Filing Ratios (%) | | |
|---|---|---|---|---|---|---|---|
| | 1983 | 1987 | 1989 | 1990 | 1987 | 1988 | 1989 |
| Personal income tax | 322.7 | 674.5 | 703.1 | 856.0 | 63.0 | 75.6 | 72.4 |
| Corporate income tax | 91.3 | 178.1 | 211.4 | 248.3 | 46.3 | 64.7 | 60.4 |
| Value added tax | n.a. | 75.9 | 134.2 | 149.9 | 42.0 | 43.9 | 43.2 |

Source: Ministry of Finance and World Bank staff estimates.

2.40 A useful benchmark for assessing the room for further progress in tax administration is the ratio of actual to theoretical potential tax revenues. This ratio, the administrative efficiency ratio (AER), illustrates the scope for increasing tax revenues through improved tax administration. In Indonesia, the AER is around 50% for the major non-oil taxes (see Table 2.11).15/ Therefore, there is still considerable leeway to raise non-oil income taxes within the existing tax structure through further improvements in tax administration.

Table 2.11: ACTUAL AND POTENTIAL REVENUE OF MAIN CATEGORIES OF TAXES, 1988/89
(Rp. billion)

| Tax | Actual Revenue | Potential Revenue /a | AER |
|---|---|---|---|
| Personal income tax | 1,159 | 2,365 | 0.49 |
| Corporate income tax | 2,348 | 4,515 | 0.52 |
| Value-added tax | 4,505 | 8,500 | 0.53 |

/a The theoretical tax potential is obtained by estimating the tax base of each particular tax and applying it to the corresponding statutory tax rates.

Source: Ministry of Finance and World Bank staff estimates.

15/ The theoretical potential represents the maximum achievable revenues under the current tax structure. A realistic AER would probably be around the range of 80-85%, even in industrial countries.

2.41 Improving non-oil tax administration. Further progress in raising Central Government tax revenues requires the following actions:

- completing the reorganization of the Tax Directorate at the district level by streamlining or eliminating the reporting function, as the new payments control system is installed;

- increasing taxpayer regi :ation by cross checking the recipients of Government payments and registered tax payers, or trade and industry data and registered taxpayers;

- reducing under-reporting through regular tax audits. To date, significant progress has been made in the auditing of income taxes. This effort needs to be extended to the VAT, as the VAT is not necessarily self-enforcing. Increasing the supply of trained auditors is the most important step in this regard. This implies the need for further budgetary support for training and a modification of the job rotation policy that now allows tax auditors to be assigned to non-auditing duties;

- reducing non-filing through full enforcement of penalties in cases of non-compliance. Currently, the penalty process tends to stop at the issuing of warning letters in most cases, with little follow-up through to confiscation and auctions of properties.

Local Government Taxes

2.42 The most important source of tax revenues for local governments is the property tax. The land and building tax (PBB)--Indonesia's property tax--was introduced in 1986 as a replacement for the old land tax (IPEDA) and the net wealth tax (PKk). In line with the tax reform, it aimed to broaden the local government's tax base and simplify tax administration, as well as promote equity through fiscal policy. The PBB is levied by the Central Government. The Central Government is also responsible for the valuation of property. Despite its relative importance for local government revenues in Indonesia, property taxes account for only a small proportion of local government revenues. This stems primarily from two factors. First, the effective legal rate of the property tax in Indonesia, at 0.1%, (5% tax rate on an assessment rate of 20% of estimated market value) is also among the lowest in the world. In the Philippines for example, the effective legal rate ranges from 0.4% to 1.4%, while in Thailand and India the respective rates are 0.8% and 2.6%. Second, tax administration is poor, particularly in urban areas where the potential additional revenues from the urban property tax are estimated to be at least 62% higher than actual revenues.

2.43 Property taxes can play, therefore, a more important role in financing the cost of local government services, as well as addressing the Government's equity concerns. The Government has been attempting to improve the administration of the PBB through several pilot schemes. These pilot schemes are: (i) establishing a valuation standard for properties; (ii) improving staff training in property valuation; (iii) increasing property registration; and (iv) introducing a new payments control system. The effects of these pilot schemes are not fully reflected in PBB revenues and as further progress is made in extending these pilot schemes, further increases in

property tax revenues can be expected. However, there is still considerable room for increasing revenues even under the current system:

- Since the same tax ID number is now used for all Central Government taxes, including the property tax, cross checking with Central Government taxes needs to be undertaken.

- Better enforcement is needed. Although the PBB establishes clear deadlines for payment and has well-defined penalties, enforcement is weak and sanctions are rarely used.16/

- There is also a tendency to establish revenue targets for property taxes. If other indicators of tax administration performance such as number of registered properties, filing ratios etc., are included as targets, the incentives for improvements in tax administration would be greatly enhanced.

These measures could lead to substantial gains in PBB revenues. However, if the property tax is to play a more appropriate role in the mobilization of local government resources, an increase in the effective legal rate will also need to be considered. Additional revenue could easily be obtained through higher tax rates, without jeopardizing economic efficiency. In the medium term an increase in the effective rate to 0.15-0.20% could be considered. This would not require a change in the statutory rate, since an increase in the official assessment ratio from 20% to 30-40% would achieve the increase in effective rates.

2.44 There are also a large number of local taxes, fees, and user charges. The main provincial taxes are those on the ownership and transfer of vehicles, while the major district taxes are the hotel, restaurant and entertainment taxes. Of the plethora of other local taxes, many cost more to administer than they yield in revenues. Some of these taxes also introduce distortions and barriers to interprovincial trade (see Chapter 3) and have an adverse effect upon income distribution (see Chapter 6). The Government is currently working on reform proposals for the system of local taxes. This reform will seek to rationalize the local government tax structure by eliminating many provincial and district taxes, as well as introducing some new taxes to expand the local government revenue base. The speedy finalization and implementation of this reform will be an important step in improving the finances of local governments.

## F. External Borrowing and Debt Management

2.45 Projections of Indonesia's external capital requirements and sources are based on the macroeconomic scenario presented in Section D (see Table 2.6). The persistence of large current account deficits during the next two years and the need to protect Indonesia's international reserves will necessitate higher levels of capital inflows. The gross financing requirement

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16/ In 1989/90 for example, actual revenues received from the urban PBB amounted to only 73% of total billings.

is projected to average US$11.2 billion over the next two years. Furthermore, once allowance is made for rising debt service requirements (both interest and principal repayments) and, over the medium term, the need to rebuild and maintain adequate reserves (in relation to the growing import requirements), the annual financing requirement is projected to continue rising, averaging US$13.0 billion during 1993/94-1995/96.

2.46 As discussed in last year's economic report, an important recent change in the sources of external financing is the increasing share of private capital flows--in the form of direct foreign investment and disbursements of private MLT loans. In 1990/91, preliminary data from banking sources indicate that there were about US$ 6 billion in recorded debt agreements between the Indonesian private sector (including state banks) and offshore financial institutions; Indonesian banks accounted for about US$ 2.5 billion (of which US$ 1.5 billion was state banks), and non-bank institutions accounted for the remaining US$ 3.5 billion. This change reflects the surge in domestic and foreign private investment in Indonesia. Based upon recent trends in foreign investment approval, the macroeconomic projections assume that net private capital flows (excluding short-term trade credits) will total about US$5 billion during 1991/92-92/93.17/ This is a decline from 1990/91 due primarily to the anticipated slowdown in lending by international banks. Over the medium term, private non-guaranteed debt and direct foreign investment are assumed to grow more slowly, but in line with future investment trends.

Table 2.12 : EXTERNAL CAPITAL REQUIREMENTS AND SOURCES
(annual averages in US$ billion)

| | Actual 1989/90 | Estimated 1990/91 | Projected 1991/92-1992/93 | Projected 1993/94-1995/96 | Projected 1996/97-2000/01 |
|---|---|---|---|---|---|
| Requirements | 7.3 | 13.3 | 11.2 | 13.0 | 17.0 |
| Current account deficit | 1.8 | 3.8 | 4.2 | 3.2 | 3.6 |
| (of which interest payments) | (3.1) | (3.1) | (3.9) | (4.1) | (4.4) |
| Principal repayments | 5.5 | 5.4 | 7.0 | 8.2 | 10.0 |
| Increase in net foreign assets | 0.0 | 4.1 | 0.0 | 1.6 | 3.4 |
| Sources | 7.3 | 13.3 | 11.2 | 13.0 | 17.0 |
| Direct foreign investment | 0.7 | 0.9 | 1.1 | 1.4 | 2.1 |
| Disbursement of private MLT loans | 1.5 | 6.4 | 3.6 | 4.0 | 4.3 |
| Short-term and other capital (net) /a | -1.0 | 1.1 | 1.2 | 0.8 | 1.4 |
| Disbursements of public MLT loans | 6.1 | 4.9 | 5.3 | 6.8 | 9.2 |
| of which: | | | | | |
| Project aid | 2.2 | 2.5 | 3.8 | 4.2 | 4.6 |
| Special assistance /b | 1.7 | 1.3 | - /d | - | - |
| Others /c | 2.2 | 1.1 | 1.5 | 2.6 | 4.6 |

/a Includes errors and omissions, oil export credit, and valuation adjustments.
/b Fast-disbursing program aid and local-cost financing.
/c Import-related credits, untied commercial credits, and credits for LNG expansion, LPG and paraxylene projects.
/d Disbursements of commitments in previous years are included under project aid.

Source: World Bank staff estimates.

17/ These flows are estimated from data collected by Bank Indonesia on the planned financing of foreign investment which indicate that about 22% is in the form of foreign equity, 67% in foreign debt and the remainder from domestic sources.

2.47 These levels of private capital flows have several important implications for Indonesia's macroeconomic situation in the 1990s. First, rapid progress on removing the remaining distortions in the policy environment is critical, in order to ensure that private capital flows are being used to finance economically viable and export-oriented projects. Second, higher borrowings by the private sector and the quasi-public sector -- especially borrowings for large, capital- and import-intensive projects -- could "crowd out" the public sector from international capital markets, by either limiting the access of the public sector to commercial credits or raising the spreads. Borrowing for a few such large projects could also crowd out a large number of smaller private sector projects. Third, the borrowings of state enterprises, particularly state banks, as well as of state enterprises in joint ventures with the private sector need to be as closely monitored as Central Government debt, as foreign borrowing under these arrangements could develop into public sector liabilities (as could liabilities of the private sector under extreme situations). Guidelines and reporting requirements for these "public" enterprises need to be established and enforced rigorously. Finally, large private capital inflows increase the vulnerability of the private sector to exchange risk, and thereby, raise the costs of employing the exchange rate as an instrument of macro management.

2.48 Despite the increasing importance of private capital flows, Indonesia's needs for development assistance remain substantial. Given the projected increase in the current account deficit, disbursements of official assistance will need to be maintained at about US$3.8 billion in 1991/92, the same level as in 1990/91. Provided an appropriate mix of assistance can be identified and commitments outside the IGGI remain at the same level, the level of IGGI commitments to Indonesia would need to be US$4.7-4.8 billion in 1991/92, slightly higher than pledged in 1990/91. The priorities for this assistance are mainly in two areas: (i) investments in physical, financial and social infrastructure to support private sector development and economic growth; and (ii) investments in social and basic services to reduce further the incidence of poverty. In addition, it will be important to strengthen mechanisms to channel aid funds to the private sector, such as two-step operations and financial sector operations. The change in the composition of development assistance will require close cooperation among BAPPENAS, the line agencies and the donor community. In this regard, the Government needs to give careful consideration to encouraging bilateral donors to cofinance their operations with multilateral institutions.

2.49 Maintaining the level of disbursements from official assistance will be difficult. An increase in project aid disbursements can make up some of the gap. The pipeline of undisbursed project aid has increased due to higher commitment levels in the past several years. Disbursement ratios can also be raised. But, the increase from project disbursements from these sources is likely to be small. Consequently, as recommended in last year's economic report, faster-disbursing, sector-type operations will also be required. This faster disbursing assistance will ensure that adequate foreign exchange is available for the private sector to invest in productive, export-oriented capacity.

2.50 Since the decline in oil prices and the depreciation of the US Dollar versus other major currencies in the mid-1980s, special assistance, in the form of fast-disbursing program aid and local-cost financing, has played a

critical role in supporting Indonesia's adjustment and development strategy. Special assistance was designed to provide temporary support to Indonesia while it implemented policies to adjust the balance of payments and the budget to external shocks, caused by lower oil prices and adverse exchange rate movements, while removing trade and investment restrictions. The response from IGGI members has been substantial, with disbursements of special assistance totalling US$6.7 billion since 1986/87. Our projections assume that no new commitments of special assistance are made in 1991/92, beyond those already pledged. But in order to maintain the level of official disbursements, a substantial portion of new commitments, virtually the same as in 1990/91, will need to be in the form of relatively fast disbursing operations, including sector-type loans and two-step operations. Moreover, the donor community should be prepared to respond flexibly in the event that the external environment, particularly oil prices, deteriorates substantially from that which is envisaged under the base case. This level and mix of assistance will enable Indonesia to pursue its trade and other structural reforms with confidence while it seeks to improve its external and internal macroeconomic balances.

2.51 Indonesia has reduced its reliance on import-related credits in recent years. This trend reflects the Government's decision in earlier years to reduce public investment in large, capital-intensive projects and to place strict limits on the use of non-concessional credit under Presidential Instruction No.8 of 1984. The projections presented in Section D assume that new commitments of import-related credits rise over the medium term, reflecting the emergence of opportunities for new investments. However, as in the past, it will be important to review these proposals carefully, to ensure that the projects warrant priority in the public investment program and that the financing arrangements are appropriate. Disbursements of untied commercial credits, which declined during the adjustment period, were less than US$100 million during 1990/91.18/ During 1991/92, new commitments are assumed to total only about US$ 0.5 billion to finance the increase in the current account deficit in 1991/92. Indonesia will need to preserve its lines of commercial credit for use in case of adverse external shocks. Even with the projected US$0.5 billion increase in commercial borrowing, Indonesia's exposure to commercial banks will decline in 1991/92 as US$ 1.3 billion in repayments are due. Over the medium term as Indonesia's external debt burden eases, greater use of commercial credits is anticipated, especially since these credits are untied and therefore, can be used more flexibly than import-related credits.

2.52 Implications for external debt management. Despite the higher current account deficits, Indonesia's creditworthiness is expected to improve significantly over the medium term (see Table 2.13). Medium- and long-term (MLT) public and private external debt disbursed and outstanding (DOD) is projected to rise from US$56.9 billion at end-1990 to an estimated US$60.1 billion at end-1991, an increase of about 6%. Reflecting the higher levels of inflows of private capital, private non-guaranteed debt is estimated

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18/ Indonesia's pipeline of undisbursed syndicated loans totalled about US$2.0 billion at end 1990/91, an increase of US$ 0.3 billion reflecting exchange rate movements and the new commitment signed, but not drawn, in July 1990.

to total US$11.7 billion at end-1991. The total debt service ratio is expected to increase to 31.2% in 1991. However, the public debt service ratio will be lower, while the ratio for private non-guaranteed debt will be higher, reflecting the substantial private sector borrowing in 1990. The trend in the debt ratios in the near term illustrates the need for Indonesia to exercise caution in its balance of payments management, as larger financing requirements will imply increases in Indonesia's indebtedness. Since most of the increase in borrowing over the past several years has been in the form of official assistance, there has been a significant improvement in the overall maturity and term structure of Indonesia's external public debt. Furthermore over the medium term, a substantial improvement in all of the key debt indicators can be achieved. By the year 2000 Indonesia's debt service ratio is projected to decline to below 20% under the assumptions of the base case scenario. The ratios of DOD to GNP and exports also fall significantly over the medium term.

Table 2.13: MEDIUM - AND LONG-TERM DEBT INDICATORS, 1988-2000
(%)

| | Actual | | | Projected /a | | |
|---|---|---|---|---|---|---|
| | 1988 | 1989 | 1990 | 1991 | 1995 | 2000 |
| DOD/GNP | 60.3 | 54.6 | 58.6 | 57.6 | 50.3 | 39.2 |
| Public | 55.0 | 49.2 | 48.1 | 46.4 | 40.0 | 32.4 |
| Private | 5.3 | 5.4 | 10.5 | 11.2 | 10.3 | 6.8 |
| DOD/exports /b | 218.1 | 185.8 | 183.1 | 177.2 | 145.2 | 110.0 |
| Public | 199.0 | 167.3 | 150.2 | 142.7 | 115.4 | 90.8 |
| Private | 19.1 | 18.5 | 32.9 | 34.5 | 29.8 | 19.2 |
| Debt service/exports /b /c | 34.4 | 31.6 | 27.3 | 31.2 | 25.9 | 19.9 |
| Public | 29.0 | 26.6 | 22.7 | 22.4 | 15.2 | 13.2 |
| Private | 5.4 | 5.0 | 4.6 | 8.8 | 10.7 | 6.7 |
| Interest/exports /b | 13.8 | 11.9 | 10.1 | 11.4 | 8.5 | 5.9 |
| Public | 12.0 | 10.2 | 8.6 | 8.6 | 6.1 | 4.4 |
| Private | 1.8 | 1.7 | 1.5 | 2.8 | 2.4 | 1.4 |

/a Based on exchange rates of December 31, 1990.
/b Denominator is gross exports of goods and services.
/c Debt service excludes prepayments.

Source: Bank Indonesia and World Bank staff estimates.

2.53 The Government continues to handle the administration of its external debt payments in an efficient manner, with no significant errors or delays. However, two areas of debt management require attention. The priority is to establish a unified debt reporting and analysis system, which can provide up-to-date and comprehensive information to policy makers on the status of

Indonesia's public external debt. Currently, there are at least four debt reporting systems in operation within the Central Government. Unifying and streamlining debt reporting activities in one place will improve information flows and thereby, help to guide more efficiently the Government's overall borrowing strategy. The system should also be expanded to include state enterprises, such as Garuda, Pertamina and the state banks which are currently considered private. Second, given that private sector debt is increasing rapidly, there is also a need to monitor closely trends in private non-guaranteed debt, without impeding individual transactions.

# CHAPTER 3

# THE FRAMEWORK OF INCENTIVES, REGULATIONS AND LAWS

## A. Introduction

3.01 Beginning in 1984, the Government embarked upon a concerted effort to reduce and simplify economic regulations in order to encourage the private sector. Deregulation has gathered momentum over the past six years, culminating in a series of major reforms on trade policy, investment licensing and transport regulations. This Chapter argues that the momentum for reform should be maintained, because it is important that future investments be directed towards those activities in which Indonesia has a comparative advantage. The need to stimulate non-oil exports calls for a reassessment and reduction of export controls. Deregulation could also reduce the scope for the exercise of monopoly power by larger enterprises.

3.02 A well-functioning legal system would also promote competition by reducing legal barriers to entry and increasing mobility of private investment. In this way the legal system would complement the deregulation taking place in the incentives framework. Company law should better provide for the formation of limited liability companies and thereby improve access of business to risk capital. A proper accounting system would help to make the legal system more effective and extend the operations of the capital market. The whole legal process could be made more effective with wider publications of laws, interpretations and decisions. The reform of land laws are of particular urgency as delays in obtaining clear title to land is becoming a bottleneck for investors.

3.03 Natural resources are critical to Indonesia's development. Exploitation of some natural resource-intensive activities has adversely affected the environment and raised concerns about the sustainable use of these resources. Indonesia's key environmental concerns are: land degradation; deforestation; inefficient use of water; and pollution. Some corrective steps have been taken recently to reduce environmental degradation, particularly through regulatory instruments. However, environmental objectives could be better achieved through more extensive use of market-based instruments and fiscal policies (such as taxes, charges, subsidies, marketable permits and ownership rights). Correcting the distortions in energy prices would also result in a more environmentally sound pattern of energy production and consumption.

## B. Trade Policy and Domestic Regulations

### The Changing Pattern of Price Incentives

3.04 Since the mid-1980s, the Government has embarked on a series of trade and deregulation measures to reduce the high cost of doing business in Indonesia and enhance the international competitiveness of domestic production. These measures have supported demand management policies in

reducing macroeconomic imbalances and enabled a recovery of economic growth. To maintain balance of payments stability the Government has adopted an active exchange rate policy. Significant real exchange rate depreciations in 1983 and 1986 played a key role in boosting non-oil exports and reducing the current account deficit. A central component of economic strategy has been trade reform. Between 1985-89, four major policy packages were introduced, addressing three principal areas: (a) non-tariff barriers (NTBs); (b) tariffs; and (c) duty-free inputs for exporters. In May 1990 the Government issued a new deregulation package which encompassed measures to reform the trade regime further and streamline investment licensing procedures.

3.05 Non-tariff barriers. Trade policy reforms have been designed mainly to move away from import licenses towards tariffs. The removal of NTBs through the various reform packages up to November 1988 reduced the share of total domestic production protected by import licensing from 41% in mid-1986 to 29% by end December 1988 (see Table 3.1). The reduction in NTBs was concentrated in the manufacturing sector, where both nominal and effective rates of protection were highest. The share of domestic manufacturing protected by NTBs declined from 68% of production in 1986 to 45% in 1988.

3.06 The May 1990 package reduced NTB coverage by about 10%. Most of the changes have taken place within manufacturing where the production coverage ratio has been reduced to 33%. Very little change occurred in the agricultural sector. In the May 1990 reform the Government removed import licensing restrictions on some 335 products, including non-metallic minerals, fertilizers, synthetic yarns and some machinery and electronic products. The incidence of the remaining NTB protection varies across sectors. Over 60% of NTB coverage is attributable to restrictions on imports of rice and rice products. For such products, import licensing has been used to achieve domestic distribution and food security objectives, and not necessarily to protect domestic producers. After the May 1990 reforms, and excluding rice and rice milling, only about 10% of traded goods production benefits from import licensing protection. In the manufacturing sector, NTBs remain extensive within food, beverages and tobacco, engineering and paper products. In these sectors NTBs continue to protect over 30% of domestic production.

3.07 The removal of NTBs has increased competitive pressure on local industry and improved the profitability of many exporting operations. Domestic producers can import inputs more easily, benefitting not only from lower prices but also from more certain delivery times and improved quality. Such 'non-price' factors are crucial for export production and encourage domestic producers of inputs to become more cost and quality conscious. Finally, the move towards tariffs based protection has greatly increased the transparency of the trade regime.

3.08 Tariffs. In 1985, the tariff schedule was rationalized together with an across the board reduction in rates. This lowered the import-weighted tariff to 13%, and the production-weighted tariff to 19%. Between 1986 and May 1990 there were few further improvements to the tariff schedule, except for the almost complete elimination of specific rates of duty (see Table 3.2). However, this progress was partly offset by a proliferation of import tariff surcharges and split tariff positions.

Table 3.1: IMPACT OF REFORM PACKAGES ON IMPORT LICENSING COVERAGE SINCE 1986 /a

| | Mid-1986 | End-1987 | End-1988 | Early 1990 | May 1990 |
|---|---|---|---|---|---|
| % of CCCN items | 32 | 22 | 16 | - | - |
| % of HS items | - | - | - | 17 | 14 |
| % of import value | 43 | 25 | 21 | 17 | 15 |
| % of total production value | 41 | 38 | 29 | 28 | 25 |
| Memo items: | | | | | |
| % of domestic production coverage of NTBs: | | | | | |
| - Manufacturing | 68 | 58 | 45 | 38 | 33 |
| - Agriculture | 54 | 53 | 41 | 40 | 38 |
| - Mining and minerals /b | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

/a There is a discontinuity in the series from end-1988 due to two causes: the shift from CCCN to the HS system of tariffs; and the update from 1985 to 1987 production as the basis for calculating production coverage ratios of NTBs. However, this discontinuity does not compromise the analysis of trends since 1986. It should be noted that the food, beverages and tobacco industries are included in the manufacturing sector.
/b Including oil and gas.

Source: World Bank staff estimates.

3.09 The May 1990 package changed almost one-third of the 9662 tariff items. The vast bulk of these changes reduced tariff duties and surcharges. The intention was to move towards a tariff ceiling of 40%. However, at the

Table 3.2: CHANGES IN THE TARIFF SCHEDULE SINCE 1985 /a

| | Pre-1985 | 1985 | 1988 | 1989 | May 1990 |
|---|---|---|---|---|---|
| Average tariff rates (%) | | | | | |
| Unweighted | 37 | 27 | 24 | 27 | 22 |
| Weighted | | | | | |
| - by import value | 22 | 13 | 15 | 12 | 10 |
| - by domestic production | 29 | 19 | 18 | 19 | 17 |
| Index of dispersion /b | 62 | 108 | 90 | 93 | 89 |

/a Includes surcharges.
/b Measured by the coefficient of variation.

Source: World Bank staff estimates.

same time the tariffs on some lightly dutiable items were increased. Some of the changes focused on specific industries. For example, the structure of protection of the electronics industry was rationalized by lowering tariffs on inputs into the industry in order to encourage assembly operations in Indonesia. This is an example where tariff reductions could lead to increased effective protection. With this most recent reform, the import-weighted tariff has declined by almost a fifth to the current level of 10%. The production-weighted tariff has also declined. Importantly, the index of dispersion has now declined, which reverses a troublesome trend of earlier years. This reversal is largely due to the reduction in the tariff ceiling and also the reduction in the number of split tariffs.

3.10 Despite the progress made, there is still much to be done to increase competitive pressure on local industry. Some 468 items (or 5% of the total) are still subject to duties in excess of 40% and these exceptions significantly increase the average tariff levels. The highest rates of duty are levied on transport equipment (cars, buses and motorcycles), footwear, handtools and meat products. The rates of duty on these products range from 70% to 200%. Also the tariff changes to date have had the largest impact on the manufacturing sector. Within manufacturing, reductions in tariff rates for textiles and leather, non-metallic, and wood and wood products are unlikely to have had much effect on effective rates of protection. This is because Indonesia is already generally competitive in these activities.

3.11 Surcharges have become an increasingly important source of distortion in the tariff regime. The number of surcharges has increased from 376 to 542 as a result of the May 1990 package, in part to compensate for the elimination of NTBs and reductions in tariffs. Surcharges provide a means for made-to-measure protection for specific firms or product lines, undermining the effectiveness and transparency of the tariff reform by enabling selected firms to escape competitive pressures. Concerns about dumping have also been used as a justification for surcharges, but they do not constitute an appropriate anti-dumping mechanism. Surcharges apply to whole commodities over a period of time whereas anti-dumping procedures constitute essentially legal actions by one party (for example, a firm) against another with respect to a particular shipment. Thus, the appropriate response to dumping is the imposition of specific penalties on a particular supplier rather than measures that apply to a broad commodity group. If dumping is indeed a significant problem within certain industries, then the appropriate response is to establish anti-dumping procedures aligned with GATT rules.1/ Where surcharges are used to allow a firm to adjust to the sudden removal of protection from a NTB or a very high tariff, they should be temporary with a clearly specified expiration date.

3.12 Effective rate of protection. The net effect of changes in tariffs on the value-added of economic activities is captured by the concept of the effective rate of protection (ERP). Estimates of ERPs across the traded goods sector are outlined in Table 3.3, which shows small reductions between 1987

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1/ GATT principles require that duties only be imposed to the extent of any dumping margin and after it has been established that: (a) dumping has occurred; (b) injury has been caused or threatened to a domestic industry; and (c) there is a causal link between dumping and injury.

and 1990. Specifically between these two years the ERP for manufacturing declined from 68% to 59%, while that for agriculture fell from 16% to 15%. The real effective rate of protection (RERP), which takes into account the

Table 3.3: PROTECTION IN BROAD ECONOMIC SECTORS, 1987 AND 1990

| Industry sector | Output (Rp billion) | NRP 1/ 1987 % | NRP 1/ 1990 % | ERP 1/ 1987 % | ERP 1/ 1990 % | RERP 1/ 1987 % | RERP 1/ 1990 |
|---|---|---|---|---|---|---|---|
| Food crops | 15768 | 9 | 11 | 18 | 20 | 6 | 8 |
| Estate & Other crops | 6202 | 6 | 5 | 14 | 12 | 2 | 1 |
| Livestock | 5306 | 22 | 21 | 33 | 31 | 19 | 18 |
| Forestry | 1543 | -17 | -38 | -20 | -43 | -29 | -49 |
| Fishing | 2525 | 12 | 12 | 15 | 16 | 3 | 4 |
| Oil & LNG | 15397 | 0 | 0 | -1 | -1 | -11 | -11 |
| Non-oil mining | 1031 | 1 | 3 | 0 | 1 | -11 | -9 |
| Food and tobacco | 17984 | 14 | 14 | 122 | 124 | 99 | 102 |
| Textiles, cloth & footwear | 4348 | 32 | 12 | 102 | 35 | 81 | 21 |
| Wood products | 2812 | 2 | -5 | 25 | 33 | 12 | 20 |
| Paper products | 977 | 22 | 13 | 31 | 20 | 17 | 8 |
| Chemicals | 3129 | 6 | 5 | 14 | 13 | 2 | 2 |
| Oil refining | 11569 | 0 | 0 | -1 | -1 | -12 | -11 |
| Non-metal products | 3065 | 17 | 14 | 57 | 49 | 40 | 34 |
| Basic metals | 1823 | 7 | 6 | 13 | 10 | 1 | -1 |
| Engineering | 4929 | 40 | 38 | 152 | 139 | 126 | 115 |
| Other | 297 | 40 | 26 | 124 | 79 | 101 | 61 |
| Agriculture | 31343 | 9 | 8 | 16 | 15 | 4 | 3 |
| Excl. forestry | 27276 | 11 | 11 | 19 | 20 | 7 | 8 |
| Manufacturing total | 50932 | 13 | 10 | 39 | 33 | 24 | 20 |
| Excl. oil refining | 39363 | 17 | 13 | 68 | 59 | 50 | 43 |
| All tradeables | 98703 | 9 | 8 | 16 | 14 | 4 | 3 |
| Excl. oil sector | 71737 | 13 | 11 | 26 | 24 | 13 | 11 |
| Import-competing /2 | 58485 | 17 | 15 | 39 | 35 | 24 | 21 |
| Export-competing /2 | 40218 | -1 | -1 | -2 | -1 | -12 | -11 |

Anti-trade bias of commercial policy /1 1987 = 41% 1990 = 36%
Nominal wage effect of commercial policy /1 1987 = 12% 1990 = 11%

/1 The definitions of these concepts are outlined in Annex 4.
/2 The dividing line between export- and import-competing sectors is whether they involve exports of more or less than 20% of output.

Source: World Bank Staff estimates.

effect of trade policy on general prices, shows a similar pattern, with the RERP for manufacturing declining from 50% to 43% and that for agriculture declining from 4% to 3%.

3.13 While the movements in average protection rates for agriculture and farming between 1987 and 1990 are only small, there have been significant changes in protection of individual commodities. Since the agricultural trade regime is characterized primarily by direct controls rather than import tariffs and export taxes, many of these changes are due to movements in world and domestic prices rather than to changes in trade policies. For example, the recovery in world prices for crude palm oil (CPO) raised the implicit taxation in the sector. This taxation arises from a Government scheme whereby producers are directed to sell a certain amount of output to refiners at a low price. This allocation price was substantially below the FOB price in 1990.

3.14 Average levels of protection can mask very large differences between various activities. For example, in manufacturing, food beverages and tobacco, engineering and other manufactured goods have ERPs well above the average. Agricultural activities are in general much less protected than manufacturing, but there are significant variations. Thus, despite the low average protection rate in agriculture there remains substantial scope for improving the incentive framework for many commodities. Within agriculture, several import-competing goods significantly benefit from the structure of protection while most export-competing goods are effectively taxed (see Table 3.4).

3.15 Recent changes in agricultural incentives. Overall, the effects of trade reform on agriculture have been mixed reflecting the main focus of the reforms on manufacturing. The May 1990 package extended deregulation to some agricultural products and this has been a positive development. Specifically the package decontrolled cassia, nutmeg and tengkawang exports (previously controlled by government-sanctioned marketing associations) and exports of vegetables from North Sumatra. Until 1989/90, coffee exports were also subject to control by a marketing association, within a government-administered scheme that allocated rights to export to International Coffee Organization (ICO) countries in proportion to exports to non-ICO countries. ICO quotas were suspended in July 1989, and the coffee marketing association was abolished in May 1990. Some of the restrictions on the size of poultry farms were also lifted, allowing poultry producers to take advantage of economies of scale. In the fishery subsector, the Government began to allow the leasing (but not purchase) of foreign vessels. Earlier reforms of international trade in corn and pepper reinforced this deregulatory stance.

3.16 Other developments in agriculture, however, have led to increased regulation in some areas. For example, in 1990, Government granted to a private consortium the exclusive rights to international and domestic trade in cloves (Box 3.1). The 1986 ban on the export of raw rattan was extended to semi-finished rattan in 1988, with a subsequent drop in the farmgate price of up to 75% in some areas (Box 6.1). The ban on the export of logs, introduced in the early 1980s, was followed in March 1989 by an export tax on sawn logs of certain species, and the tax was raised to prohibitive levels in November 1989. Since 1987, bans have also been imposed on the export of certain low grades of rubber and coffee. While the intention of these bans is to upgrade quality and thus improve the image of the commodities on the world market, the

Table 3.4: PROTECTION OF SELECTED AGRICULTURAL PRODUCTS

| Industry sector | Output (Rp billion) | NRP 1987 % | NRP 1990 % | ERP 1987 % | ERP 1990 % | DERP 1987 % | DERP 1990 % |
|---|---|---|---|---|---|---|---|
| Import-competing sector | | | | | | | |
| of which | | | | | | | |
| Rice | 7611 | 20 | 0 | 11 | 11 | -1 | 0 |
| Corn | 928 | 10 | 0 | 25 | 12 | 12 | 1 |
| Peanuts | 566 | 46 | 30 | 63 | 45 | 44 | 30 |
| Soybeans | 462 | 60 | 38 | 101 | 74 | 80 | 57 |
| Vegetables | 2284 | 21 | 21 | 28 | 29 | 15 | 16 |
| Fruit | 1608 | 28 | 25 | 31 | 28 | 17 | 15 |
| Sugarcane | 576 | 33 | 35 | 90 | 93 | 70 | 74 |
| Brown sugar | 413 | 33 | 35 | 69 | 78 | 51 | 60 |
| Tobacco | 581 | 14 | 13 | 36 | 35 | 22 | 21 |
| Cloves | 487 | 5 | 0 | 8 | 3 | -3 | -8 |
| Livestock | 1293 | 15 | 15 | 17 | 17 | 4 | 5 |
| Milk livestock | 105 | 100 | 0 | 600 | -42 | 600 | -47 |
| Poultry | 1501 | 22 | 17 | 29 | 21 | 15 | 9 |
| Freshwater fish etc. | 671 | 29 | 29 | 34 | 35 | 20 | 21 |
| Dried smoked fish | 721 | 21 | 21 | 34 | 35 | 20 | 21 |
| Avg. import-competing | 23286 | 14 | 13 | 25 | 23 | 11 | 10 |
| Export-competing sectors | | | | | | | |
| of which | | | | | | | |
| Cassava | 1343 | 0 | 33 | 1 | 35 | -10 | 22 |
| Dried cassava | 243 | 0 | 33 | -1 | 39 | -12 | 25 |
| Rubber | 345 | 0 | 0 | 5 | 5 | -6 | -6 |
| Coconuts | 884 | 0 | 0 | 3 | 3 | -8 | -7 |
| Coconut oil | 319 | 0 | 0 | -2 | -2 | -12 | -12 |
| Palm oil | 542 | 0 | -7 | 9 | -1 | -3 | -11 |
| Coffee | 949 | 0 | 0 | 2 | 2 | -9 | -8 |
| Tea | 239 | 0 | 0 | 2 | 2 | -9 | -8 |
| Nutmeg | 38 | -19 | 0 | -19 | 3 | -28 | -8 |
| Wood and bamboo | 1328 | -18 | -38 | -21 | -43 | -30 | -49 |
| Marine fish etc. | 1133 | 0 | 0 | -1 | -1 | -12 | -11 |
| Avg. export-competing | 8058 | -4 | -3 | -4 | -3 | -14 | -13 |

Source: World Bank staff estimates.

bans are unlikely to have the desired effect. There are well-defined niches for all grades of these products in the world market and the effort should be focused on maintaining appropriate standards for each grade. Efforts to improve quality control through bans may induce processors to mix these lower grades into a final product that was previously of a higher quality, lowering the proportion of exports in the higher quality grades. The allocation system for the EEC export quota for cassava, the production and import controls on sugarcane and sugar, and the import ban on soybean meal are other interventions in the agricultural trade regime that appear to distort incentives. The sugar controls raise costs to consumers and provide excessive incentives to produce sugar, while the soybean meal ban has important downstream effects by raising livestock feed costs throughout the economy.

3.17 A recently introduced scheme to subsidize private sector timber plantations could prove both to be costly and to provide inappropriate incentives. Under the scheme, the Government provides one-third of total project costs through a loan at zero interest. This is equivalent to a subsidy of over 25% of total costs and exceeds the size of the equity contribution of the private partner. This subsidy has been justified on the grounds that timber plantations developed on degraded land generate valuable

**Box 3.1: EFFECTS OF THE CLOVE TRADING MONOPOLY**

Due to increased production at home and abroad, the farmgate price of cloves in Indonesia fell from over Rp.15,000/kg in the late 1970s to Rp.4,000/kg in early 1990. In an attempt to increase prices, the Government recently accepted the offer of a private consortium of traders to operate a buffer stock. In exchange for operating the buffer stock, the consortium was given monopoly control over the domestic market for cloves. Under the agreement, the farmgate floor price will be set at Rp.7,000/kg. All cloves must be sold through cooperatives (KUDs), which will receive a margin of Rp.570/kg, plus a non-cash "equity share" in the private consortium. The consortium will thus receive the cloves at a financial cost of Rp.7,570/kg, while the estimated price charged to the cigarette manufacturers will be Rp.10,525 to 12,000/kg. This would result in a margin to the consortium of about Rp.3,000 to Rp.4,500/kg, at least double the trading margin of the current free trade system. The scheme is not fully operational, however, as the consortium has not been able to put in place a nationwide trading system. Confusion over trading arrangements in some areas has made it impossible for farmers to sell their cloves.

Even if the consortium is able to develop an adequate trading network, it will be impossible to purchase all cloves at the floor price over the long term without massive subsidies. Farmers are already increasing production in response to higher prices, and cigarette companies are now pursuing the development of synthetic flavorings that could significantly reduce clove use. Traders and cigarette producers already hold an estimated 2 to 3 years of clove stocks. The consortium will face rising stocks and carrying costs, forcing it to stop purchases. The resulting oversupply in the market would cause the farmgate price to fall, probably below the levels prevailing before the scheme. Over the medium-term, then, the welfare of farmers may be reduced by the attempt to over-ride market forces in setting prices directly.

environmental benefits that cannot be realized by the private investor. Preliminary analyses indicate, however, that the type of investments likely to be made under this scheme would have high financial returns if regulatory obstacles were to be removed. In addition, some of the schemes proposed would actually involve cutting down existing forests, raising questions about their positive environmental impact. Improving the regulatory framework would allow the objectives to be achieved at a lower cost.

## Directions for Future Reform

3.18 Continued steps to deregulate the trade regime are of high priority. First, without such reforms, much of the rapid increase in actual and planned private sector investment could flow into products that cannot be exported and in which Indonesia is uncompetitive. This would impose costs on the economy for years to come. Second, import deregulation will stimulate competition, lowering costs and increasing incentives for greater productivity.

Competition will also prevent the larger domestic firms from exercising market power to earn excessive profits while imposing high costs on the rest of the economy. Third, the need to stimulate non-oil exports calls for a reassessment and reduction of export controls as well as a rapid reduction in protection, which still creates a high-cost economy and an anti-export bias.

3.19 Non-tariff import barriers. The Government has indicated that a main priority in this area is to remove remaining NTBs in manufacturing in the near future. The focus will be on products with high levels of protection that generate high costs to the economy and distort investment incentives. Removal of the manufacturing NTBs would reduce the coverage of NTBs from 25% of production of tradeable goods to less than 20%.

3.20 Further substantial reduction in NTBs will call for reforms in the agricultural sector. Given the low average level of protection in the sector and the strong competitive forces generated by millions of private farmers, the focus should be on removing interventions that prevent farmers from making appropriate adjustments to changing market signals and that result in high costs to consumers and downstream producers. The recent decontrol of imports of pepper and corn are steps in this direction. Other areas where deregulation could offer significant benefits include removing NTBs on imports of sugar, wheat and soybean meal and removing area and production quotas on sugarcane. Where necessary, tariffs could replace NTBs. Food security concerns may make decontrol of rice trade difficult to consider and the relatively low level of distortions suggests the short-term gains may be small. Conversely, Indonesia appears to produce adequate supplies of rice competitively, and this suggests that rice production can 'hold its own' so that the need for intervention on the present scale may no longer be great.

3.21 Tariff reform. Some progress has recently been made in reducing the incidence of tariff duties and these are now largely within a ceiling of 40%. The Government has indicated that it intends to reduce tariff levels in stages so that only a few rates lie above a range of 20-30%. Higher rates would be limited and temporary, allowing only a specified time for concerned activities to adjust to the tariff reduction in an orderly fashion. Such a reform would reduce the range of protection provided to different economic activities, lower the tax on domestic consumers, and remove the pressures to provide special treatment.

3.22 In addition, the Government intends to "tidy up" the tariff schedule by eliminating the remaining split tariff positions. The existing surcharges are also to be reviewed and it is expected that a substantial proportion of them will be eliminated. Concerns about dumping may need to be addressed through an appropriate anti-dumping procedure aligned with GATT rules. More generally, there continues to be a need for the Government to monitor how the reform program is proceeding and assess its effects in an economy-wide context. This task could be best addressed by a unit within the Government able to provide quantitative information and analysis concerning the effects of reform and represent the public interest in dealing with the inevitable lobbying for exceptions. Further, trade reform needs to be implemented within a balanced macroeconomic framework which takes into account adjustments in the trade regime.

3.23 Export restrictions. The need to revitalize non-oil export growth calls for a reassessment and reduction of the remaining export controls. Accordingly, the Government is undertaking a review of these restrictions. The priority areas for reassessment include:

- the export tax on sawn timber, the bans on rattan exports, and the licensing of palm oil exports, 2/
- the export quota allocation procedures for cassava, and possibly other products, by developing a quota auction system that would also generate revenues for the budget,
- the bans on lower quality grades of commodities such as rubber and coffee,
- the ban on cement exports.

## C. Domestic Regulations

### Domestic and Foreign Investment

3.24 To improve domestic incentives and the regulatory environment for the private sector, the Government combined trade reform with a series of other regulatory measures over 1985-89. In investment licensing and the regulation of foreign direct investment, the policy stance has shifted sharply from control of investment to encouragement. In particular, the Government replaced a long list of activities open to both domestic and foreign investment with a short list of activities that are closed. Investors have reported that investment applications are being processed and approved speedily on the basis of the negative list. Most new investment approvals are directed towards export activities and the dramatic response is discussed in Chapter 1.

3.25 In the May 1990 package, the Government has further deregulated investment procedures in agriculture and the pharmaceutical industry. In agriculture various restrictions in the poultry, livestock, and fisheries industries have been eased. In the poultry industry, the reform eliminated the restriction on the maximum farm size and eased limits on foreign investment. Likewise, in the livestock industry licensing has been reduced in scope, procedures simplified and licenses made permanent. To promote the fishing industry, certain licensing procedures have been delegated to provincial authorities, while licensing requirements have been eliminated for small indigenous fishermen. At the same time, quality control procedures have been deregulated. For the pharmaceutical industry, the reform has eased

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2/ If the primary goal of the prohibitive export tax on sawn timber is to reduce deforestation, a more economically efficient means would be to increase fees on the basis of trees felled in the natural forest. This would avoid the adverse effects that the export tax has in providing protection to domestic wood processing and would not discourage export of sawn timber produced from plantation-grown wood such as rubber.

licensing procedures for both production and distribution. In addition, the processing requirements for applications and registration of drugs have been simplified. These changes complement the reduction in levels of import protection for pharmaceutical production and should facilitate increased competition in the industry, leading to increased efficiency and lower health care costs. At the same time, the Government intends to supervise the quality control systems of the industry more tightly.

3.26 Although most fields of investment have been declared open to domestic and foreign private investment, there are still 165 sectors where entry is restricted in the negative investment list. These restricted sectors are concentrated in the metal products subsector (71 items); food, beverages and tobacco subsector (44); wood products subsector (13); the chemicals subsectors (13); and the paper subsector (6). In addition, there are a large number of production activities where entry is limited to small-scale domestic investors. Although these restrictions are not applied rigidly, they are a source of uncertainty and a potential barrier to new investment. The restrictions are particularly important in the food and textiles sectors and could prevent small firms growing into an efficient scale of operations.

3.27 The policy objective and criteria for selecting goods to be included in the negative list could be re-examined. In general, there are likely to be few grounds apart from national security, for maintaining a negative list. With the adoption of the negative list, the capacity expansion license has become redundant. Steps to reduce entry barriers that would also be more consistent with efficient investment could be to: reduce the number of products restricted to the small-scale sector; raise the limits of the definition of a small industry; and permit foreign investment in the small-scale sector by reducing the minimum foreign investment requirement.

Labor Regulations

3.28 Labor markets in Indonesia are flexible and barriers to labor mobility are low. The relatively smooth functioning of the labor market has underpinned the structural transformation of the economy and facilitated the expansion of the activities in which Indonesia is competitive. Labor regulations are guided by the Basic Law of 1969, which covers among other matters: hiring and retrenchment of workers; protection and supervision of workers; and employment of expatriate workers. These regulations are enforced by the Department of Manpower (DEPNAKER) and labor inspections are carried out by 27 provincial and 170 district-level offices.

3.29 While seeking to protect workers' welfare, the Government has tried to implement these regulations flexibly. However, the business community's concern about the extended process of DEPNAKER approvals required for layoffs and dismissals has led companies to minimize the hiring of permanent labor and rely more on temporary workers. The Government has taken some steps to ease this problem by abolishing requirements for permits for dismissing workers on probation or on short-term contracts. Other initiatives to reform labor regulations include: abolishing the requirement for companies to obtain permits in employing workers from 40 to 54 hours a week; decentralizing to regional offices approvals for employing workers in excess of 54 hours a week; and allowing regional offices to approve night work for female workers. The

controls implied by these permits may be justified on safety and health grounds. However, labor regulations could be eased in the area of hiring expatriate labor, particularly in the financial sector.

Land Laws and Regulations

3.30 Private enterprises face particularly difficult problems in acquiring land. Currently, there are over 300 sets of laws, regulations, decrees, and instructions governing land acquisition. The mechanism to implement these regulations is equally complex, often involving several different committees and levels of government for granting location permits, release of rights, and for land investigations. This increases the administrative load and delays investments (delays average almost two years). Consideration might be given to simplifying regulations, and improving public access to them through improved cross-referencing and indexing of the regulations into a unified land development code. The land acquisition process could also be simplified by combining the functions of the various committees and reducing the number of steps involved in the approval process.

3.31 The problem of land acquisition by private enterprises is also made difficult by the lack of systematic land registration and titling. While the Basic Agrarian Law stated the Government policy of progressively registering all land holdings, it is estimated that fewer than 30% of land holdings have been registered in the legal cadastre so far. This complicates and adds further risks to land acquisition by private enterprise, since a protracted survey of land title is needed at the time of land acquisition, with the risk of paying the wrong party for the land. Systematic and accelerated land registration in the faster developing areas of the country should be carried out as a matter of urgency. For this the Land Agency (BPN) needs to be strengthened with improvements in procedures and training, supported by increased funding and technical assistance.

## D. The Legal Framework

3.32 Regulatory reforms to date have focused primarily on the core areas of trade and investment regulations. The Government has recognized, however, that other aspects of the regulatory framework -- including the legal framework and land laws -- have important effects on the pace and efficiency of private sector development. Reforms in these areas will be complex and time-consuming since they will require substantive revisions to laws, modifications of procedures and reorientation of institutions. However, the Government has taken some important initial steps to lay the groundwork for further reforms. For example it has set up a working group of the legal advisors in the economic ministries to identify priorities and approaches to the modernization of the corporate legal framework.

3.33 The principles of commercial law are that the legal system should provide certainty, predictability and confidence. The key economic objectives that the legal framework would aim to achieve are: to reduce transaction costs by providing standard contracts and increasing access to information; to reduce legal barriers to entry and mobility of private investment; to provide for sanctions for infringement of well-defined rules of market functioning;

and to provide mechanisms for dispute settlement. The following sections discuss the application of these principles to priority areas of commercial law reform.

Companies Law

3.34 A sound framework of company laws, accounting and audit requirements, and capital market regulations is essential for the development of an efficient corporate sector. Of critical importance is a modern company law providing for limited liability. A modern company law is important to guide economic conduct efficiently in a standard fashion and thereby lower transaction costs for suppliers of risk capital. Procedures for forming a limited liability company could be relatively simple and quickly followed. Ease of entry helps to ensure market competition, and will facilitate adaptation to changing market conditions by allowing the expansion of firms into new areas and products and withdrawal from others in a timely fashion. Under the existing law, formation of a limited company may take over a year and the procedures are complex and costly. Moreover, limited liability companies may be formed only for specific purposes and for defined time periods. This can cause great difficulty in adapting to market changes. The exit of firms from an activity should also be subject to clear and fair rules. The law should facilitate changes in the structure of a company as the market changes, and rules about merger and acquisition should be clear. Although the Bankruptcy Law of 1905 provides a framework for efficient exit, the perception is that implementation is difficult. The establishment of specialized courts or specially-trained judges might provide a better mechanism to handle these problems.

3.35 Proper accounting of transactions is also fundamental to the efficient operation of an economic system. Without proper accounting and auditing it is impossible to assess enterprise performance. The various participants in business (such as shareholders, investors and creditors) need accurate and adequate information on the operations of enterprises to enable them to take decisions on investing funds and assessing risks posed by the enterprise. Additionally, separate capital market regulations that are comprehensive, and efficiently implemented, will reduce the burdens on company law (for further details see Chapter 4). The basic company law framework can set out its main provisions in a simple standard form and use the capital market regulations and its regulatory agency to apply them to public companies.

3.36 The most modern company, credit and contact laws would be of little use without means of enforcing their provisions, or of efficiently and predictably resolving disputes about their meaning. Strengthening the court system would provide a reliable dispute settlement system. Some measures could be taken quickly, including better training and compensation to increase the technical competence of judges handling complex commercial cases and establishing specialized courts, or judges, to handle commercial disputes. On a pilot basis, these efforts could be focused on district courts with a high concentration of commercial activities so that measurable improvements can be realized in a relatively short time. Another method of resolving commercial disputes is through arbitration. Arbitration often avoids the confrontational aspects of a court trial and may encourage settlement by mediation and consensus. Indonesia has well-defined procedures for arbitration, and an

arbitration board for the private sector. However, the quality of arbitrators could be improved by including more people from technical and business fields. Additionally, the board could be more active in publicizing its rules and responsibilities.

Access to Legal Information

3.37 Widely available publication of laws, interpretations and decisions would help ensure the consistent application of laws. Inadequate legal information raises barriers to entry for private businesses (especially small businesses less able to pay for a costly private search for legal information) and leads to inefficient economic transactions. Even experienced lawyers spend costly hours trying to unravel or assimilate details of regulations. The lack of transparency also burdens the government officials who must spend time with the information-seekers. Better access to legal information would allow legislators, economic policy makers, and government officials to know and master the existing laws and rules, helping them avoid inconsistencies and contradictory policies.

3.38 Establishing official Indonesian translations of existing legal codes would help address some of these problems. At present, major components of the formal legal system remain in Dutch, without an official Indonesian language version. This is in itself a major impediment to a coherent economic law framework in Indonesia and results in problems of understanding and enforcement.3/ The distribution of existing publications (including open sale to allow for cost-recovery) could be improved, and consideration could be given to publishing court decisions in the commercial area. In many countries there are registries which allow public access to important legal information. Although Indonesia has a number of registries, the public is often given only limited access to the information.

Implementation

3.39 Legislative actions to implement law reforms usually take a long time. Most of the changes mentioned above, however, do not require legislative action. The working group of legal advisors could make an early start by developing a detailed action program, giving specific agencies the responsibility for producing schedules for change. The private sector should be closely involved.

## E. The Framework of Environmental Incentives

3.40 It is increasingly recognized that economic development not only can cause--but can also be constrained by--environmental degradation. The constraint arises in large part because of "externalities", which arise because individuals and firms do not always have to pay for damages they

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3/ Unofficial translations remain in circulation today and are relied on to understand the Dutch codes. Although often excellent, they are frequently descriptive rather than precise, and more importantly, have never been enacted as official Indonesian language versions of the Codes.

cause. The presence of externalities leads to economic behavior that is optimal for individual producers but which decreases welfare and growth in the economy as a whole. A sound environmental framework involving a complementary set of incentives and regulations is needed to make sure that individuals and firms bear all the costs of their behavior.

3.41 An environmental incentives framework for Indonesia needs to address at least three areas in which externalities are reducing overall welfare: (a) water resource management (including industrial pollution) and air pollution, especially on Java; (b) forestry management on the outer islands; and (c) land use management and planning nationwide. Addressing these issues will require a combination of different approaches, including: changes in policies and pricing; improved cross-sectoral coordination; and increased expenditure on pollution abatement. Greater use could be made of market-based incentives because they can often achieve environmental objectives at a lower cost than direct regulatory measures. Market-based incentives can also be easier for the Government to administer.

3.42 In July 1990, the Government established a national Environmental Impact Management Agency (BAPEDAL), which has a broad mandate to devise and enforce all types of pollution control measures. This Agency is not yet staffed, however, and discussions are still ongoing regarding its exact role and powers. One of the major tasks facing the BAPEDAL will be to coordinate and make more manageable the environmental impact assessment (AMDAL) regulations, which require environmental impact analyses prior to the commencement of all investment projects, both private and public. Because it is complex and requires substantial technical skills, the assessment process is fully operational only in the Ministries of Mines and Energy, Public Works, and Industry. For private sector investments, responsibilities for reviewing environmental impact statements and stipulating required follow-up measures are shared by a variety of central and regional agencies. However, shortages of technical skills have meant that the screening process for private sector investments is not yet effective.

3.43 Water and air pollution. Despite the formidable obstacles to implementing the environmental impact assessment process, the Government has taken steps to address some of the most severe pollution problems. The Clean River Program (PROKASIH), which got fully underway in 1990, aims at dramatically reducing waste flows of major industries in eleven provinces. So far over 300 factories in the Jakarta area alone have pledged to reduce pollution levels by 50% in the next year. To support this program, a recently issued regulation defines the limits of pollution levels more clearly for a wide range of industries. Under the regulation, these industries are required to install liquid industrial waste flow meters and to provide daily reports on waste flows. Waste samples are to be analyzed each month at a government-appointed laboratory. The new regulation is an improvement over a similar one issued three years earlier, because it specifies limits on total waste load rather than limits on waste concentration alone, which could be met simply by diluting the waste before discharge. While PROKASIH has succeeded in raising the consciousness of industry regarding the harm caused when waste is dumped untreated into rivers, it is important that such initiatives not be overly ambitious, either in geographical scope or in the degree of waste load reduction sought. Government pollution control programs risk being discredited unless they are both technically feasible and administratively

enforceable. Since the cost of pollution abatement can vary widely between different industries, Government should consider adopting over the longer term a system of market-based incentives. A well-designed effluent tax or charge would be an important first step. Untreated sewage from domestic sources is also a major source of water pollution, particularly in large cities. Regulations in this area need to be supplemented with effective, low-cost programs to provide safe disposal of sewage.

3.44 An emphasis on market-based incentives should also be coupled with a review of sectoral and macroeconomic policies that might affect the environment. An important example is the effect of current energy pricing policies on air pollution.4/ Fuel subsidies increase the use of the most polluting fuels, such as diesel and fuel-oil. Pricing fuels on the basis of efficiency prices would not only improve energy efficiency, but it would also promote use of the more environmentally benign fuels, such as low-sulfur fuel, natural gas, LPG, and LNG. Full economic pricing of fuels could eventually include a separate surcharge over efficiency prices to cover the cost of pollution damage caused by each fuel.

3.45 Water quality degradation can also be caused by inadequate supply and demand management. Public water companies are often unable to provide a reliable supply of clean water to many customers. In addition, the tariff structure provides for a substantial cross-subsidy of domestic consumers financed by high tariffs on industrial and commercial consumption. Many industrial and commercial users therefore rely primarily on groundwater, which is cheaper even though the firms have to invest in their own wells and pumps. However, overextraction of groundwater resources in many areas is leading to salinization and land subsidence, both of which cause major economic losses. To curb these losses, three initiatives need to be pursued simultaneously: (a) a concerted effort to improve the reliability and quality of water supplied through the public systems; (b) an adjustment of tariff and fee structures to make publicly supplied water more competitive with groundwater; and (c) much more vigorous collection of groundwater fees in congested areas.

3.46 Forestry and land management. Although Indonesia is well endowed with natural resources, their proper management is essential to ensure a sustained resource base for private sector development for the longer-term. For example, export-oriented industries such as wood products and fisheries, depend directly on natural resources. These resources can be exhausted if they are not properly managed. An appropriate incentive framework is essential to ensure that future development of the resource-based private industries is not endangered. Inappropriate forest and land resource pricing policies, in particular, have provided excessive stimulus for over-exploitation and degradation of the resource base.

3.47 In the forestry sector there are a number of incentive issues that require attention. Despite recent increases in fees and royalties, Government still recovers less than 30% of the rents from trees removed from the natural forest by private concessionaires, far lower than the 85-90% rent-recovery levels achieved in parts of Malaysia. This results in enormous private

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4/ See Indonesia: Energy Pricing Review, Report No. 8684-IND, World Bank, 1990.

profits and lowers the incentives for efficient utilization of the wood. In addition, these fees should be charged on the basis of trees felled in the forest rather than at export or processing points, so that stronger incentives are given for better utilization of the wood during logging, transportation and processing. Raising fees and basing them on the number of trees felled would be a more appropriate way of conserving resources and assuring a sustained supply of raw materials to private industries than the export bans and taxes now in place.

3.48 There is only a 20-year lease period on forest concessions. This short tenure gives concessionaires little incentive to ensure regeneration of the logged forest, a process that takes 35 years or more. To promote regeneration, one option might be to adopt a perpetual lease system, making the leases extendable every five years, contingent on satisfactory management. This would help keep the planning and investment horizon long enough to give an incentive for replanting. Allowing leases to be privately traded would also give concessionaires the incentive to maintain the value of the concession. To collect the information needed to evaluate concessionaire performance, monitoring and inspection needs to be strengthened, a process that the Ministry of Forestry has recently initiated.

3.49 The recently announced timber plantation scheme, which will be funded by reforestation fees, could potentially make a major contribution to the reforestation effort. However, it appears that the scheme as currently designed will provide large subsidies to firms establishing plantations, although little analysis has been done to show that these subsidies are needed. Special care should also be taken to ensure that firms do not cut down existing natural forest areas under the scheme. The scheme thus needs to be reviewed to ensure that the reforestation fund is not depleted on unproductive investments.

3.50 There are similar problems with pricing land use more generally. The Indonesian Constitution of 1945 vests control of all the land in Indonesia with the Government. In granting ownership or long-term lease rights to the private sector, the land is often undervalued and transferred at prices that are far below market price. This leads to rent-seeking behavior and extensive rather than intensive use of land, which in turn increases demand for land and accelerates environmental degradation. Consideration should be given to charging more appropriate market-related prices to encourage better utilization of land.

# CHAPTER 4

## THE STRATEGIC ROLE OF THE FINANCIAL SECTOR

### A. Introduction

4.01 Maintaining growth and development in the private sector and the economy at large requires a complementary financial system capable of providing indispensable financial services and resources to growing markets as efficiently as possible. As shown in Chapter 1, Indonesia has progressed far in its efforts to stimulate the domestic financial system. This chapter examines the connections between real and financial activity and the role of the private sector and highlights remaining challenges for the sound development of finance in Indonesia. The agenda stresses the need for better pricing and management of risk. To meet this goal requires strengthened supervision, revamped legal and accounting structures, improved accounting standards, increased disclosure of information, improved professional skills and a more diverse menu of financial instruments.

### B. The Role of the Financial System in Promoting Private Sector Development

4.02 An expanding role for the private sector will require development of a broad array of financial services and intermediaries: commercial banks providing working capital and long-term debt finance; venture capitalists and the stock exchange contributing equity; insurance and pension funds supplying long-term funds; and leasing companies and securities houses offering alternative financing options. Such a diversified financial system contributes to savings, investment and growth by mobilizing greater amounts of financial savings through offering instruments better suited to the needs of savers and transforming the maturity and size of savings to fit the needs of investment projects. The financial system can contribute to economic stability by more accurately assessing, pricing and dispersing risks throughout the economy. The information and expertise available in financial institutions improves risk assessment. The profit motive promotes accurate pricing and lending decisions. Diversified portfolios lessen the risk to the intermediaries and depositors of individual project failures.

4.03 For these favorable effects to flourish requires access to accurate, plentiful information and sound supervisory, legal and accounting frameworks. Indeed, one view of banking stresses that the key role of financial intermediaries comes from the comparative advantage they develop in collecting information on borrowers and their projects and enforcing financial discipline.1/ Enhancing the role of financial intermediaries then becomes synonymous with improving banks' ability to collect and process information and to enforce debt contracts. For this reason much of the discussion in the

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1/ See Eugene Fama, "What's different about banks?", American Economic Review, Vol. 74, December 1985, pp 29-40.

rest of this chapter focuses on the need to improve the risk-assessment and disciplinary role of financial institutions through improving the enabling environment of the financial system.

4.04 A favorable enabling environment will lead to less credit rationing. At present, because of a lack of information and legal difficulties, it is often in the bank's best interest to deny a potential borrower access to a loan at any price. Promoting a sounder basis for finance will therefore have the added benefit of promoting efforts to extend credit to new or traditionally underfinanced groups such as small and medium-sized borrowers.

4.05 As long as information and the legal environment are imperfect, banks will have an incentive to ration credit to some risky borrowers. Borrowers with a strong balance sheet--a relatively low debt-to-equity ratio--will be less likely to suffer from credit rationing since they will be better able to provide collateral or use retained earnings in financing a project. This will lower the borrower's cost of capital since it lowers the risk to potential lenders. In the aggregate, if firms have lower debt-to-equity ratios, investment will be promoted. This important link between financial capacity and real economic activity highlights the need for expansion of equity markets, as well as loan markets, in developing a sound financial system and in promoting macroeconomic stability.

## C. Banking Performance in Promoting Development

4.06 In sketching out the role of the financial system in promoting private sector development, three key areas are emphasized: (a) asset growth, (b) transforming the maturity of savings to match the needs of investment projects, and (c) allocating funds to high-return projects while appropriately managing risk. This section examines how the Indonesian financial system has progressed in these three areas. Special emphasis is given to changes in risks faced by the banking system.

### Asset Growth

4.07 As discussed in Chapter 1, there has already been substantial progress in increasing the amount of financial savings within the economy (see Table 1.10). The ratio of M2 to GDP has risen from 18% in 1982 to 42% in 1990. Lower spreads have allowed banks to attract more business into the financial system. Much of this growth has been concentrated in private banks, which have led the way in creating new products and in lowering costs (see paragraphs 1.37-38). Since 1988, the equity market has awakened, providing equity finance to complement greater amounts of debt finance (see Table 4.1). This has helped to promote a healthier balance between debt and equity for over 130 companies that have listed shares.

4.08 Despite this phenomenal growth, there is further room for expansion. Analysis of a flow of funds in Indonesia shows that until 1988, 56% of public and private enterprise investment was still financed out of retained earnings. In 1990, financial savings--currency, demand deposits, quasi-money, and

securities--equaled only 62% of gross domestic savings. The ratio of M2 to GDP, although growing quickly, is still below the levels of such neighboring countries as Malaysia (68% in 1989) and Thailand (67% in 1989).

Table 4.1: THE INDONESIAN STOCK AND BOND MARKET, 1986-90

| | Total Number of Issuers | Shares | | Share Price Index (1982=100) | Bonds | |
|---|---|---|---|---|---|---|
| | | Number of Companies | Value of Issues /a (Rp. bn) | | Number of Companies | Value of Issues/a (Rp. bn) |
| 1986 | 27 | 24 | 132.7 | 69.69 | 3 | 404.7 |
| 1987 | 27 | 24 | 132.8 | 82.58 | 3 | 535.7 |
| 1988 | 34 | 25 | 166.7 | 305.12 | 9 | 935.7 |
| 1989 | 89 | 67 | 3,998.7 | 399.69 | 22 | 1,555.2 |
| 1990 | 155 | 132 | 8,033.8 | 417.79 | 23 | 1,940.2 |

/a At offering price.

Source: BAPEPAM

4.09 The sheer pace of growth has created its own difficulties. In banking, the growing complexity due to new products, new banks and several thousand new branches has stretched the supervisory resources of Bank Indonesia. In the capital market, the flood of firms into the market has strained the supervisory agency, Bapepam. Burgeoning markets have stressed the legal and regulatory structures underpinning them. Talented professional staff--bank managers, financial analysts, public accountants, lawyers--have been in great demand as banks and other financial institutions try simultaneously to expand. This had led to a sharp acceleration in wages for experienced professionals. A key challenge today is to treat these growing pains so that the financial markets continue to thrive.

Maturity Structure

4.10 Accompanying the rapid expansion of bank balance sheets was a lengthening of deposit and credit maturities (see Table 4.2). On the credit side this has meant that loan maturities are somewhat better matched to the profiles of investment projects. The lengthening of credit maturities, however, has occurred only at the private banks. State commercial banks (SCBs) and development banks have shortened the maturity of their credits, chiefly because of the declining importance of subsidized, directed (liquidity) credits in their portfolios. On the liability side, maturities lengthened because of a fall in the importance of demand deposits relative to time deposits. This trend has been reversed, though, in recent years. The 1986 devaluation, combined with the 1988 deregulation of savings deposits, has lead to a shortening of the average deposit maturity from the 1986 peak of 8.6 months.

4.11 The modest lengthening in the maturity of credits, combined with shorter deposit maturities, implies an increasing maturity mismatch since 1986. This has increased exposure of banks to interest rate risk. Some of this risk is hedged by the use of variable rate loans (see para. 4.50). In order to lessen this risk for the banking system further, longer term sources of funding are needed. One possibility is to offer firms such as insurance and pension funds, which naturally have longer term liabilities, longer term bank deposits as assets.

Table 4.2: COMMERCIAL BANK MATURITY STRUCTURE
(Billions of rupiah; end of period)

| | 1983 | 1986 | 1988 | 1990 | Maturity Weight (months) |
|---|---|---|---|---|---|
| Bank Credits | | | | | |
| < 3 months | 1,829 | 1,991 | 2,354 | 3,495 | 1.5 |
| 3-6 months | 1,787 | 3,443 | 5,392 | 5,057 | 4.5 |
| 6 mths - 1 year | 4,438 | 11,237 | 18,866 | 43,753 | 9 |
| 1-3 years | 1,604 | 2,092 | 3,731 | 8,778 | 24 |
| > 3 years | 3,944 | 8,974 | 14,825 | 29,904 | 60 |
| unclassified | 105 | 56 | 105 | 191 | 1.5 |
| Total | 13,707 | 27,793 | 45,273 | 91,178 | |
| Average Maturity (mths) /a | 23.8 | 25.5 | 26.0 | 26.3 | |
| Bank Funds | | | | | |
| Demand Deposits | 6,031 | 8,157 | 10,350 | 19,254 | 1 |
| Savings Deposits | 584 | 1,387 | 2,174 | 9,662 | 1 |
| Total Rupiah Time Deposit | 4,441 | 10,525 | 19,732 | 38,985 | |
| < 3 months | 934 | 1,280 | 3,464 | 11,650 | 1.5 |
| 3-6 months | 605 | 1,448 | 4,133 | 6,197 | 2 |
| 6 mths - 1 year | 843 | 1,767 | 2,716 | 6,195 | 9 |
| 1-3 years | 1,948 | 5,898 | 8,955 | 13,913 | 24 |
| unclassified | 111 | 132 | 464 | 1,030 | 1.5 |
| Total All Deposits /b | 11,056 | 20,069 | 32,256 | 67,901 | |
| Average Maturity (mths) /a | 5.8 | 8.6 | 7.8 | 7.3 | |
| Ratio of Credit to Deposit Maturity | 4.1 | 3.0 | 3.3 | 3.6 | |

/a Calculated by weighting the share of each maturity in total credit (deposits) by the assumed maturity weight (the last column of the table).
/b This total does not include foreign exchange time deposits.

Source: Bank Indonesia and World Bank staff estimates.

## Credit Allocation and Risk

4.12 One of the central aims of financial deregulation was to improve the allocative efficiency of the banking system by eliminating ceilings on credit and interest rates and limiting directed credits. These moves were designed to allow resources to flow to high-return sectors of the economy, at prices that reflected the risk inherent in those sectors. To assess the effects of the reforms in this area, the section looks first at the sectoral allocation of credit, and follows this with an analysis of changes in the riskiness of bank lending.

4.13 The overall allocation of credit was not greatly affected by the reforms of 1983-88 (see Table 4.3), though the pattern roughly followed changes in GDP. In part this may have been due to the continued importance of liquidity credits during the period. Trade continued to receive about 30% of all credit between 1982 and 1988. Manufacturing's share of credit rose to almost one third at the expense of lending to mining. These changes mirrored movements in value added over the period. The figures on value added share compared to credit share also show the relative credit intensiveness of trade and manufactures compared to services and agriculture.

4.14 Since 1988 credit growth has accelerated most rapidly in services and "other", areas that have not seen a corresponding increase in value added.

Table 4.3: SECTORAL SHARES IN CREDIT AND GDP
(percent)

| | March | | | | | | | | | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1990 |
| Share in Total Bank Credit | | | | | | | | | | |
| Agriculture | 8.7 | 9.0 | 8.7 | 7.4 | 8.2 | 8.0 | 8.4 | 9.5 | 8.4 | 7.6 |
| Mining | 16.0 | 9.5 | 4.4 | 2.0 | 1.2 | 1.4 | 1.2 | 0.9 | 0.7 | 0.6 |
| Manufacturing | 24.9 | 30.5 | 33.6 | 34.8 | 33.9 | 34.2 | 33.3 | 34.4 | 31.4 | 30.2 |
| Trade | 31.4 | 30.7 | 32.6 | 32.9 | 32.2 | 30.7 | 30.8 | 32.2 | 31.9 | 31.5 |
| Services | 14.2 | 15.1 | 15.9 | 17.5 | 17.1 | 15.3 | 16.5 | 16.7 | 16.6 | 18.4 |
| Others | 4.8 | 5.1 | 4.9 | 5.3 | 7.4 | 10.3 | 9.3 | 6.4 | 11.1 | 11.7 |
| Share in GDP | | | | | | | | | | |
| Agriculture | 24.1 | 22.8 | 22.7 | 23.1 | 24.1 | 23.3 | 24.1 | 23.4 | 23.1 | |
| Mining | 19.5 | 20.7 | 18.9 | 14.0 | 10.8 | 13.9 | 11.6 | 13.1 | 12.0 | |
| Manufacturing | 12.0 | 12.7 | 14.6 | 16.0 | 16.8 | 17.0 | 18.5 | 18.4 | 19.4 | |
| Trade | 15.9 | 14.9 | 14.9 | 15.9 | 16.7 | 16.8 | 17.3 | 17.0 | 17.0 | |
| Services | 24.8 | 25.0 | 24.8 | 26.9 | 27.5 | 25.2 | 24.6 | 24.6 | 25.1 | |
| Others | 3.7 | 3.9 | 4.1 | 4.1 | 4.2 | 3.9 | 3.8 | 3.5 | 3.4 | |
| Memo items: (trillion of Rp) | | | | | | | | | | |
| Total Credit | 10.2 | 12.8 | 15.0 | 18.7 | 22.1 | 27.3 | 32.7 | 45.5 | 71.5 | 97.2 |
| Total GDP /a | 62.4 | 77.6 | 89.7 | 96.8 | 102.5 | 124.5 | 139.4 | 166.3 | 189.9 | |

/a 1990 GDP is a World Bank estimate.

Source: Bank Indonesia, Central Statistics Bureau.

This seems to be due to expanding home mortgages, car loans and other consumer finance. Part of the increase in 1990 was in response to the Government decree mandating that 20% of a bank's portfolio be lent to small borrowers. Most consumer loans satisfy the Government's criteria. There is also a widespread belief that the 1989/90 boom in property development was fueled by lending categorized as "other". Experience in other countries would support the view that lending for commercial real estate can be riskier than lending to other sectors. Consumer lending also requires higher interest rate spreads to cover the higher average losses in this line of business. For this reason the surge in lending to "other" could signal an increase in the riskiness of banks' portfolios that may require higher levels of provisions or equity to safeguard bank soundness.

4.15 Allocative efficiency, loan pricing and default risk. Looking at the sectoral allocation of credit gives only a partial picture of the allocative effects of the banking reform. Increased lending to sectors that have low returns, as measured by high loan default rates, is not an efficient allocation of credit. Efficient allocation requires that banks have an incentive to price their loans appropriately. However, until 1990, because of the predominance of liquidity credits with fixed interest rates and targeted markets, for many loans there was little scope or need for adequate loan pricing. Credit risks could be passed off to government insurance companies at subsidized premiums, further lessening the incentive for banks to price such loans adequately. This was particularly true of SCBs because of the importance of liquidity credits in their portfolios. The recent scaling back of liquidity credits, coupled with the strong growth in non-liquidity-credit loans, however, has allowed banks greater freedom in pricing their loans and in choosing borrowers. One of the first reforms undertaken in 1983 eliminated restrictions on deposit interest rates. By altering bank cost of funds and thereby bank profitability, this has had profound effects on banks loan pricing. Both these changes should lead, a priori, to an improvement in banks' management of default risk. Offsetting this, though, has been the pressure in the newly competitive market for banks to build market share by aggressively expanding their lending portfolios at the cost of underpricing loans. Some analysts have argued that the sheer speed of the growth in credit, 145% since 1988, has led to a weakening of credit quality which is not yet apparent.2/

4.16 Determining which effect has predominated on pricing and allocative efficiency is difficult. To answer this requires a judgement about changes in the level of risk in bank portfolios and the adequacy of measures to cover that risk. One approach to this question is to look at how loan loss reserves and actual losses have behaved over recent years (see Table 4.4). These figures show that loan loss reserves rose as a share of loans between 1982 and 1989, while since then they have declined. The declining loan loss reserves could be evidence that bankers expect lower losses in the future. Write-offs have decreased when measured as a share of the interest margin which would seem to imply that lower losses are being experienced now.3/ Both of these indicators are consistent with increased allocative efficiency. Some of the sharpest declines in both ratios are in private foreign exchange banks. Private foreign exchange banks, however, have been subject to greater pressures to show improving profitability as many issued stock in the last two years. This may be taken as a response, then, to competitive pressures, rather than only a response to lessened default risk.

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2/ See Center for Policy Studies, The Indonesian Economy, Vol. 10:9, September 1990.

3/ The interest margin has decreased as a share of assets so that write-offs as a percentage of loans have fallen as well. Some of this decline may reflect the interaction of rapid asset growth and the limit on the tax deductibility of provisions.

Table 4.4: LOAN LOSS RESERVES AND PROVISIONS
(percent)

| | 1982 | 1988 | 1989 | 1990 |
|---|---|---|---|---|
| Loan Loss Reserve/Total Loans | | | | |
| State Banks | 3.2 | 4.2 | 4.5 | 4.4 |
| Private FX Banks | 1.7 | 1.2 | 1.0 | 0.8 |
| Private Non-FX Banks | 0.7 | 0.7 | 0.5 | 0.6 |
| All Banks | 2.7 | 3.3 | 3.3 | 2.7 |
| Provision Expense/Interest Margin /a | | | | |
| State Banks | NA | 44.9 | 36.0 | 35.5 |
| Private FX Banks | NA | 20.7 | 16.3 | 18.1 |
| Private Non-FX Banks | NA | 17.1 | 16.7 | 13.4 |
| All Banks | NA | 29.2 | 28.2 | 22.3 |
| Loan to Deposit Ratio /b | | | | |
| State Banks | 1.34 | 1.40 | 1.32 | 1.28 |
| Private Banks | 0.91 | 0.95 | 0.94 | 1.04 |
| All Banks | 1.30 | 1.33 | 1.26 | 1.33 |

/a The interest margin is defined as the difference between interest income on loans and interest expense on deposits.
/b Includes both Rupiah and foreign exchange deposits and loans.

Source: Bank Indonesia and World Bank staff estimates.

4.17 There are several reasons to treat any conclusions from Table 4.4 cautiously. First, shortcomings in bank portfolio examinations and accounting standards weaken the link between loan provisions and credit quality. Tax laws limit loan loss reserve deductibility to 3% of loans for private banks and 6% for SCBs, restricting banks' interest in exceeding these levels. All of these factors combine to reduce the usefulness of loan loss reserves as a reflection of default risks. Finally, the fastest growth in credit has come in the last two years as the overall economy has grown strongly. Such strong growth would lower company loan defaults until economic growth slows, making it appear that current levels of reserves are adequate based on recent experience, but potentially inadequate in the future.

4.18 Capital is the traditional cushion for absorbing losses (after specific provisions). A higher equity base reduces the risk that mismanagement by the bank of credit or other risks will lead to losses by depositors. Higher amounts of capital also serve to dampen a bank's appetite for risky projects since more of the bank owners' money is subject to loss. As a share of total assets, capital has risen for banks overall, particularly after 1988 (see Table 4.5). This is a healthy sign, but must be treated cautiously since unrecognized losses in assets could wipe out some of the

general reserves now counted as part of capital. Some state commercial banks are under capitalized due to a combination of legal constraints on paid-in capital and division of profits and portfolio problems. However, for private foreign exchange banks, capital asset ratios are also below their 1982 levels, despite the increases due to floating new issues. Since these banks have the lowest levels of loan loss reserves and have most aggressively expanded lending, some further increase would be prudent.

Table 4.5: BANK CAPITAL ASSET RATIO
(Capital as a % of total assets)

| | 1982 | 1988 | 1989 | 1990 |
|---|---|---|---|---|
| State commercial banks | 3.3 | 2.8 | 2.9 | 2.4 |
| Private FX banks | 9.0 | 5.1 | 6.2 | 7.2 |
| Private non-FX banks | 14.2 | 7.6 | 9.4 | 11.7 |
| Foreign and joint venture banks | 3.2 | 3.3 | 11.7 | 12.8 |
| All banks | 5.5 | 4.9 | 5.6 | 6.0 |

Source: Bank Indonesia and World Bank staff estimates.

4.19 Risks from new operations. Besides managing credit or default risk, the opening up of other areas of financial intermediation to banks has added to the risks they face. The difficulties of dealing with new markets are exacerbated by inexperienced staff exposing the bank to excessive risks. Providing new products and services, however, is critical to the banking sectors role in supporting private sector growth. Managing the risks and opportunities of the new environment, both for banks and for regulators is a major challenge (see section D). One step announced in March 1991 was tighter restriction on margin trading in foreign exchange and the outlawing of bank lending for stock market transations.

4.20 Liquidity risk. A more traditional component of risk to banks is the likelihood of becoming temporarily illiquid. Illiquid banks jeopardize the role of the banking system in providing the means of payment for transactions in the economy and the gains of a smoothly functioning payments mechanism. To lessen this risk, a key element of the reforms has been aimed at strengthening the interbank money market to provide individual banks with liquidity to meet temporary shortfalls. Much progress has been made as the average weekly volume of lending has increased eight-fold since 1986. Maturities have lengthened to as long as one month, though the bulk of lending is still overnight. Despite the growth the market remains shallow with quite volatile rates. Since the tightening of monetary policy in mid-1990, rates have ranged between 7% and 60% p.a., up from 7% to 25% in 1989. The major suppliers of funds are still the five SCBs who act as de facto market makers. However, in periods where liquidity at SCBs is tight the interbank market can dry up.

4.21 The reduction of reserve requirements to 2% from 15% in October 1988 had important implications for commercial banks' liquidity policies. At 2% of third party liabilities, required reserves are lower than prudential liquidity management would warrant (6-8%). For this reason banks overall have held "excess" reserves since 1988, with the bulk of the excess accounted for by SCBs. The tight money policy implemented since May 1990 has decreased the excess reserves held by the banking system to less than 2%. The tighter monetary policy has also led some banks to access BI's discount windows to maintain needed liquidity when funds have become scarce in the interbank market. Besides evidence of the direct effect of tightening liquidity, this may also be evidence that some banks have been relying excessively on the interbank market to fund their lending activities, leading to heightened liquidity and interest rate risk.

4.22 Bank loan-to-deposit ratios also remain above the 70-80% level usually considered prudent (see Table 4.4). Their level is higher than in 1982 for most groups of banks. Such high levels make it difficult for banks to adjust to temporary illiquidity, in part because loans are not as marketable as other assets. Levels are particularly high for the state commercial banks because of their traditional funding through liquidity credit from Bank Indonesia (BI) rather than deposits. A reduction in the loan-to-deposit ratio would help to improve bank soundness.

## D. Ensuring a Sound Financial System

4.23 The comprehensive reforms undertaken by the Government have fostered strong growth in financial assets, improved loan maturities slightly, and allowed banks to allocate credit roughly in line with growth in value added. The reforms have also engendered two challenges. First, financial markets need to continue to grow to fulfill their role of supporting real investment and growth. Second, the stability of the financial system and the overall economy require that this growth be based on sound institutions operating competitively under a transparent legal, regulatory and supervisory system. The mushrooming of financial assets and institutions is straining the capacity of the authorities to supervise and regulate markets. There is also evidence that the growth is increasing risk at financial institutions. Meanwhile, the capacity of financial institutions to continue to grow is hampered by the scarcity of qualified staff and management. The imperatives of sound and stable growth leave four principal items on the agenda:

- strengthening the prudential regulation of financial markets;
- enacting updated laws governing financial institutions and commercial relations;
- bolstering managerial and technical expertise in financial institutions; and
- continuing to broaden the array of financial instruments available to the public.

Strengthening Prudential Supervision

4.24 The rapid expansion of banks, branches and assets in the past two years has greatly expanded the scope of work for BI's supervision department. The sheer pace of the growth has led to concerns about the quality of some banks' portfolios and the adequacy of their management. At the same time, the removal of interest rate and credit controls has heightened the importance of banking supervision as a means of ensuring the soundness of banks. Some difficulties have already surfaced with the failures of two small private non-foreign-exchange banks. Such events reflect the dynamism that is a normal part of the growth and consolidation of a financial system. The challenge for the supervisory authorities is to ensure that the process of failures and mergers strengthens the financial system, rather than undermining confidence.

4.25 Bank Indonesia has begun to respond to the new challenges. The latest development occurred in March 1991 when a new series of regulations on supervision were announced. Important elements of the package include: new guidelines for capital adequacy linked to the Bank for International Settlements (BIS) standards; new levels of mandatory provisioning based on asset quality; new public reporting requirements; a prohibition on lending for securities trading and limits on margin trading in the foreign exchange market; limits on a bank's net open position and its swaps with BI to 20% of equity; a tightening of lending limits to include on and off-balance sheet items; minimum experience requirements for bank directors; minimum soundness ratings before opening new domestic or foreign branches. BI, with the assistance of the World Bank, the IMF and other agencies, has begun a comprehensive program of staff training and systems improvement that will ensure that the new regulations strengthen the soundness of the financial system.

4.26 Examination procedures. BI's examinations are also being revamped. The information used in and method of quantifying bank soundness has been altered. BI is training its staff to carry out an improved examination covering five basic areas including 4/: (a) a greater emphasis on the quality of management and management systems rather than accounting values and compliance with regulations; (b) off-balance-sheet items; (c) an evaluation of liquidity based on an appraisal of asset and liability management rather than simply adherence to minimum reserve requirements; and (d) assessments of portfolio quality based on the financial condition of borrowers rather than simply the state of interest payments.

4.27 To cope with the burgeoning number of banks and branches, BI will concentrate more heavily on off-site examinations, and target detailed examinations to banks based on apparent riskiness. A prototype questionnaire for early detection of potentially unsound banks has been designed and tested on 10 banks. Further refinement and training are planned before it is used on a broad scale.

4.28 The type and timeliness of data required from banks for supervision has changed because of the new, deregulated marketplace. To meet the new needs, BI has revised its data collection and management system including more

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4/ The five areas are those used in the US under the C.A.M.E.L. system: capital, assets, management, earnings and liquidity.

information on off-shore branches. Improvements in this will prove essential in BI's efforts to adjust its procedures to the new banking environment. This is true not only for banking supervision, but also for the implementation of monetary policy. BI's new NBFI section is also preparing revised supervision guidelines.

4.29 Effective supervision will also require changes in the regulations governing the interventions BI can make in banks once problems have been discovered. At present, BI's legal recourse is limited, making it difficult to tailor its response to the severity of the problem. One improvement made in the last package is the issuance of a decree authorizing BI to issue "cease-and-desist" orders to bank management for specific actions deemed to endanger the bank's soundness. Further improvements are planned for inclusion in the revised Commercial Banking Law presented to Parliament in April 1991.

4.30 Promoting public oversight through greater disclosure. Just as important as expanding BI's capacity and authority in banking supervision, are efforts to devolve banking supervision onto the private sector itself. Given that BI must now supervise some 11,000 institutions (including rural banks), every effort must be made to tap depositors' concern for preserving their capital as a means of regulating bank behavior and enforcing market discipline. The most important means of bringing this potentially powerful influence to bear is to require greater disclosure of information on the financial status of banks and other financial intermediaries to the public. Only with such information can the public reasonably assess the soundness of these intermediaries and enforce market discipline. An effort in this direction has been made in the latest package of regulations that requires all bank and NBFIs to publish audited income and balance sheets. Extension of this requirement to all financial intermediaries, and its strengthening through requiring an auditor opinion, would serve as an excellent next step in improving the public's access to information. Not only would such information improve financial discipline, but, if extended to private liability companies more generally, it would also improve banks' credit allocation decisions and reduce the costs of such decisions. If banking is unique because of the information bankers develop on their clients, then publishing financial statements will also serve to increase competition among banks and between banks and other financial intermediaries. As Minister Radius recently stated:

> "To nurture and enhance this growth (of investment) we must move boldly and quickly to ensure honesty, accuracy and objectivity in the disclosure of information . . ."5/

4.31 Greater availability of accurate information on banks will not only serve to improve market discipline, it will also help to lessen the chances that the failure of one bank will provoke a general run on banks. In the present environment it is difficult for the public to assess the soundness of any individual bank. Therefore, the failure of one bank could be treated as an indication of general malaise that could cause deposit runs at other banks. But with accurate information readily available, depositors will be able to distinguish between the particular and systemic problems of a bank. Better

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5/ Speech by Minister Radius Prawiro to the South East Asia University Accounting Teachers Conference, January 21-23, 1991.

information on banks would also improve the usefulness of the interbank market as a means of tracking the soundness of banks on a daily basis.

4.32 For private sector market discipline to be enforced, depositors must feel that their capital, or at least the return on their deposits, is at risk. At present Indonesia has no deposit insurance, a fact that strengthens depositors' incentives to watch over their funds. Although BI's efforts to avert bank runs through the merger of banks can lessen depositors' wariness, as it did in the US, cases in which large depositors suffer losses serve to strengthen it. As mentioned above, perceptions of favoritism, or of being too big to let fail, can undermine market discipline. In increasing reliance on market discipline imposed by depositors, then, BI must make every effort to avoid actions that give implicit or open-ended guarantees to depositors.

4.33 Market confidence is also increased by having banks with a strong capital base. In this regard the announced move to the BIS standard is welcome. Consideration could be given to mandating capital requirements for other areas of risk beyond credit risk, such as positions taken in foreign exchange trading or risks due to maturity mismatch. Confidence would be further heightened by including off-balance sheet items in the calculation of capital adequacy. In the case of the SCBs, the weak capital footing requires prompt efforts to restore a stronger balance sheet. Recognizing this, BI has begun a portfolio audit of the SCBs as a first step in restoring the banks' capital footing.

4.34 For the private sector to bolster BI's own supervisory efforts through increased information, the quality of, as well as access to, information must be improved. Efforts in this area necessarily involve improvements in accounting standards, and the quantity and quality of auditors (see fuller discussion below). Of critical importance for the banking system is the clarification of the rules governing accounting for accrued interest, interest past due, and reserves against loan losses. To overcome this obstacle, BI has initiated a joint effort with the Indonesian Accountants Association (IAI) to establish accounting standards for banks. The new standards are scheduled to be completed by the middle of 1992.

4.35 Supervisory regulation in the capital market. Stricter regulation of the capital markets is also critical to maintain the confidence of small investors and eliminate opportunities for manipulation. This imperative has been addressed in the last year by the issuance of new decrees governing the capital market. One of the fundamental elements of these decrees is to reconstitute Bapepam as a supervisory agency with management of the stock exchange given over to the private sector. The new decrees require more disclosure of information for issuing companies and intermediaries, strengthened minority rights, higher standards of professionalism for firms operating or connected to the stock market, and a more up-to-date transfer, payment and settlement system. To attract more investors to the market, regulations governing stock manipulation have been tightened and closed end mutual funds have been authorized. The challenges of the moment are to establish private management of the Jakarta exchange, and to ensure Bapepam's efficient operation in its newly strengthened supervisory role. General market discipline would also be bolstered if a credit rating company could be

established.6/ The creation of a company registry listing major shareholders would help BI enforce lending limits, as well as increase the information available to potential investors in the stock market.

Improving the Legal and Accounting Framework

4.36 An integrated legal framework spelling out the scope and activities of BI, MOF and BAPEPAM and various financial intermediaries is important for creating a stable financial system. As mentioned above, new decrees covering the capital markets have already been announced. Draft laws on commercial banks, insurance companies, pension funds were submitted to Parliament in April. These laws provide ground rules for the operation of these entities. It is also crucial that a draft law on BI be submitted as quickly as possible so that BI's authority and ability to set and carry out monetary policy be clearly delineated.

4.37 The supervisory umbrella for all financial institutions needs to be reviewed to ensure that risks are being properly monitored and that the different regulatory regimes are harmonized. The new capital market decree, for example, excludes banks and NBFIs from operating directly in the capital markets. Their subsidiaries, however, can do so. To ensure that certain financial corporations do not shift risks between subsidiaries, Bapepam, BI and MOF will need to coordinate their supervisory efforts. Clear lines of responsibility will avoid unnecessary conflicts between agencies while ensuring that intermediaries are adequately supervised.

4.38 Commercial and credit law. Another key element of legal reform is the commercial code. Modernizing commercial law is critical for advancing not only the stable growth of the financial system, but also the growth of the private sector overall. A comprehensive and enforceable commercial code can help companies avoid the costs and uncertainties associated with the present legal framework. Of paramount importance for the financial system are laws governing credit and security interests.7/

4.39 The credit laws and institutions in Indonesia suffer from a lack of : (a) effective enforcement procedures; (b) acceptable security or collateral and standard, modern loan terms and documentation recognized by the laws; (c) accessible registration/information systems for property, credit and security; and (d) a modernized bankruptcy law and collection procedure. To overcome these shortcomings requires:

(a) establishing an authoritative version of contract and credit laws in the Indonesian language to assist the courts in defining and applying the rules found in the Codes and to facilitate subsequent modification of the provisions; and

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6/ Efforts to establish such an agency are being supported by an Asian Development Bank loan.

7/ A security interest is the right to take ownership of some asset if certain conditions are met. It includes such things as mortgages and liens.

(b) establishing a simple, effective and readily accessible system of security registration. Such a system might cover collateral based on a personal filing system whereby rights, pledges, guarantees, fiduciary transfers of ownership and other securities would be registered and recorded under the name of the borrower. The ability to extend credit to small-scale and rural enterprises and to new enterprises in development areas with high growth potential will in large part depend on bringing increasingly more of the country's land under the land registration system. Much of the economic advantage currently enjoyed by urban groups can be traced to their longstanding access to credit based on the hypothecation of registered land.

4.40 Auditing and accounting. The earlier discussion of prudential regulation highlighted the importance of increasing the transparency and availability of information on the financial system. This requires three related improvements in accounting and auditing:

- grounding modern accounting and auditing standards in an updated commercial law;
- improving examination and training standards for accountants and auditors along with a body to enforce these standards; and
- increasing the number of qualified accountants.

Current law generally requires only that firms maintain "adequate records", though banks are required to provide BI with audited annual accounts. The Indonesian Institute of Accountants has developed some general accounting and auditing standards, but these are not mandatory. After passing the State Accountancy Examination, there are no further mandatory training requirements for accountants, nor separate standards for auditors.

4.41 The general thrust of accounting reform needs to put the onus on the generation of adequate financial statements on firms. To do this requires a revision of existing company law. This change will increase the demand for accounting services. Although establishing detailed accounting standards is time-consuming, the process can be accelerated by the initial adoption of the standards proposed by the International Accounting Standards Committee. These standards are less intricate and may be more relevant in Indonesia than those of developed countries.

4.42 With the development of mandatory accounting requirements and standards will come a need for a body to regulate the accounting profession and maintain accounting standard. A reconstituted IAI, given statutory authority for examinations, determining those eligible to give an audit opinion, and setting accounting standards, could fulfill this role.

Technical and Managerial Expertise in Financial Intermediaries

4.43 The rapid surge in the numbers of financial institutions has put severe pressure on the market for skilled employees. While the private sector can be expected to provide and finance training for staff, adequate oversight by BI, BAPEPAM and MOF will require that their staff training keep pace. Not only training, but also levels of staffing and salaries will need to be

increased to cope with the demands of the burgeoning financial sector. An excellent example is the accounting industry. The financial system is severely constrained by the lack of trained accountants operating in the private sector, only about 2000 for over 160,000 private sector firms. Strengthened accounting requirements will create a growing demand for accountants. This will lead to more training programs and larger numbers of students. To overcome the acute shortage of trained accountants in the private sector, however, regulations on hiring of foreign consultants could be relaxed.

4.44 Within private sector firms the need to improve skills has led to the creation of new training programs. The Indonesian bankers association, Perbanas, for example, has developed a program in banking. After the much publicized difficulties of prominent banks in new areas, such as international foreign exchange trading, other banks have scaled back expansion plans, waiting for competent personnel before embarking in new areas. Further training efforts may be spawned by the new BI regulation requiring that five percent of bank personnel expenditures be dedicated to training.

Improving the Depth and Diversity of Financial Instruments

4.45 Strengthening prudential supervision and solidifying the legal foundations of the financial system will go far in improving the system's soundness. These actions will also help to promote a further deepening and widening of the system. Improved laws on credit, securities interests and bankruptcy, coupled with improved accounting information, for example, will lessen banks costs and promote credit expansion based on the finances of a project rather than the influence of the borrower. The revised capital markets regulations offer the potential investor greater protection from stock manipulation and false claims. This should spark increasing activities by institutional and individual investors. A flourishing stock market will also promote venture capitalist by providing a liquid market for the sale of stocks of firms they have invested in.

4.46 Promoting leasing. Other improvements are possible to spur the development of new financial instruments or the expansion of existing ones. One such change already undertaken is a revision of the regulations governing the operations of leasing companies. In the past year, the government has exempted from VAT imported capital goods leased to export industries, allowing leasing companies to play a larger role in project finance. They have also changed the treatment of income derived from operating leases, decreasing the tax burden of leasing companies.8/ However, leasing companies still cannot raise money in the money market.

4.47 Further reduction in liquidity credits. Private sector expansion in the financial system would also benefit from the further reduction of liquidity credits. Despite last year's curtailment of the sectors eligible to receive these credits, the stock of liquidity credits is likely to rise in the coming year, though fall as a share of total credit. At present, such credits are sometimes defended on equity grounds or because private banks will

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8/ An operating lease is one in which the leasing company contracts to maintain the equipment that it leases.

not lend in support of the sectors receiving liquidity credits. However, the mere presence of subsidized liquidity credits--current rates of 17% for most categories are well below market rates--drives out private lending. Equity goals can be reached through direct subsidies that would not distort credit allocation. If, in the absence of liquidity credits, loans would not be forthcoming to particular sectors of the economy, government resources would be better spent addressing the factors constraining the provision of credit. In this fashion, once the difficulties are overcome, potentially far greater resources would be available from the private sector than through the Government. A case in point is the planned expansion during the coming year of liquidity credits to small-holders for estate crops through the PIR-Trans program. Repayment performance under similar previous credit programs was dismal. This is partly due to the long gestation period and fluctuating yields and prices of many estate crops, which often make it difficult for small-holders to service large debts.9/ An expansion of liquidity credits risks a similar fate. Besides these negative effects on private financial intermediation, the expansion of liquidity credits threatens to undermine the orderly control of monetary policy by BI by increasing the size of a non-discretionary component of base money.

4.48 Promoting small business lending. Another direct intervention on the part of BI is designed to promote lending to small businesses and cooperatives. This is the regulation requiring banks to place 20% of their lending with small businesses. This regulation has resulted in an increase in lending to this sector with related improvements in employment and exports. It has done so at a cost, however. Because each bank is subject to the requirement, rather than the system overall, banks that would overwise focus on wholesale and corporate business must restructure themselves to provide services to this sector. For all banks to do this simultaneously reduces the scope for efficiency gains through specialization. Some banks have attempted to meet the requirement through agreements with rural banks (BPRs). While successful for the commercial banks, the availability of funds from Jakarta has weakened the rural banks' incentives to mobilize savings locally. Since lending to small business is a priority of the Government, more targeted programs, combined with technical assistance to small businesses could achieve the same aims at a lower cost. One promising but currently small-scale program is the BI-sponsored pilot project linking small savings groups through financial institutions established by Community Self-Help Coordination Organizations (Lembaga Pembina Swadaya Masyarakyat, LPSM). Another positive development is the revival of inactive village banks.

4.49 Another alternative worth exploring is to allow the securitization of banks' small loan portfolios. At present, banks can sell their loans outright, but cannot create securities from them. Loan sales have been limited, however, both because of small banks' fears that they will lose good customers and large banks' fears that they will be sold poor loans. Loan securitization can avoid these problems. It entails pooling a group of small loans and selling securities backed by the pooled loans. Buyers of the securities are protected from the credit risk inherent in the pooled loans by a guarantee offered by another financial intermediary, often an insurance company or

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9/ Repayment performance has also been affected by a number of institutional, administrative and legal factors.

another bank. The guarantor evaluates the credit risk and charges the bank who originally made the loans for the guarantee. The premium will roughly equal the expected credit risk in the grouped small loans, otherwise the guarantor will stand to lose money. The small bank, then, benefits from not having to absorb the risk of large, unexpected losses since these will be be born by the guarantor. Securitized loans would allow the same overall amount of lending to small business with lower costs for the financial system overall, since the banks originating the loans could specialize. Smaller banks would not need to fear losing clients, while larger banks would get a solidly performing asset.

4.50 Deepening the money market. As noted above, the maturity mismatch of banks has increased since 1983 (see Table 4.2). This has not translated fully into interest rate risk because of the use by commercial banks of variable interest rate loans. However, variable rate loans tend to be set at six month intervals, while many time deposits have one to three month maturities. Part of the difficulty in adjusting variable rates more frequently is the lack of an adequate reference rate for determining loan rates. In many countries, commercial rates are pegged to the rate on some form of government paper. In Indonesia the central government's policy of avoiding domestic finance of its deficit means that no such paper is available. BI does issue the Sertifikat Bank Indonesia (SBI), a bill with one week, and one, three, six and twelve month maturities. This paper could provide a good basis for determining a reference rate. Unfortunately, the secondary market in SBIs remains thin.10/ Boosting sales of SBIs to the public would serve to increase the liquidity in this market and improve the SBI as a reference for pricing variable rate loans. Furthermore, an active and liquid market in SBIs would provide BI with the instrument it needs to affect the domestic component of base money. Given its positive benefits in reducing interest rate risk for banks and improving the conduct of monetary policy, full attention should be paid to overcoming the constraints to increasing the liquidity of the SBI secondary market.

4.51 Deepening the interbank market will also help banks manage their liquidity more easily. To this end the Government has recently authorized the establishment of market makers in the interbank market. Access to one of BI's discount windows has been changed so that it requires no more than any other transaction in the interbank market.

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10/ The primary market has been greatly expanded by the recent purchase of Rp.10 trillion in 1 year SBIs by 12 public enterprises. While this move allows BI greater flexibility in controlling base money, it does not help to create a secondary market in SBIs.

# CHAPTER 5

# PUBLIC SECTOR SUPPORT FOR PRIVATE SECTOR DEVELOPMENT

## A. Changing Role of the Public Sector

5.01 A greatly modernised and higher quality public sector is a central ingredient of Indonesia's development strategy based on a larger role for the private sector. Improving the quality of government embraces the broad agenda of elements constituting the enabling environment necessary for the private sector to function efficiently. Elements of this agenda are discussed throughout this report. Chapter 2 argued the need for government to maintain a stable macroeconomic environment through coordinated management of fiscal policy, monetary policy and the nominal exchange rate. Chapter 3 reviewed the role of government in designing an appropriate framework of incentives, laws and regulations which are essential for ensuring a stable and supportive business climate, both for domestic and foreign investors. Chapter 4 discussed public policy to strengthen the financial system as its importance in mobilizing and intermediating resources for the private sector expands rapidly. Chapter 6 will discuss the government's special role in influencing the distribution of income and reducing poverty. The public sector also has a major role to play in providing public goods and services that are essential inputs for sound private sector growth. These include the supply of physical infrastructure as well as social services that raise the quantity and quality of human resources. This Chapter focuses on the priority need for expanding provision of physical infrastructure since the rapid development of the private sector has already put strains on existing capacity. The Chapter concludes by assessing progress in strengthening the public sector through public enterprise and civil service reform.

5.02 Adequate infrastructure services are essential for sustained development of the private sector and economic growth. These services affect the cost of doing business and competitiveness in international markets. Power and water are essential inputs into production. Transport and telecommunications systems are critical in linking production points with domestic and foreign markets. Education and training services affect the productivity of labourers and managers. If these physical and human infrastructure services are limited in quantity, low in quality and high in cost, the growth of the private sector and the whole economy will suffer. The additional demand for infrastructure services emerging from Indonesia's pace and pattern of growth in the 1990s, combined with the backlog from past unmet demand, presents a substantial policy challenge for the Government in terms of developing an efficient strategy for infrastructure provision. Many infrastructure services are recognised to be primarily the responsibility of government because an unregulated private market would not be able to provide them as efficiently. However there can be a greater role for the private sector in providing some services that are traditionally public because of limitations on the effectiveness of government intervention. Section B reviews the framework for public and private sector provision of physical infrastructure services in Indonesia, including power, telecommunications, transport and water resources. Section C discusses the complementary need for appropriate pricing policies for publicly provided infrastructure services to

help overcome the constraints of finance and inefficiency which impede the public sector in providing adequate infrastructure. Section D then examines the implications for public expenditure priorities of the additional investment in infrastructure services needed to support private sector development.

5.03 Improved public institutions are essential for the public sector to adapt to Indonesia's changing development strategy. The moves towards increased deregulation, public enterprise reform and decentralisation have important implications for the size, functions and structure of the public sector and the civil service. For example, deregulation in trade, investment and finance has eliminated many of the controlling and licensing functions of a large number of civil servants. Similarly, moves towards decentralisation imply a shift in planning and implementation responsibilities to regional governments. Furthermore, public enterprise reform, involving privatization of some and enhanced autonomy for others remaining within the public sector, will reduce the need for operational control by supervising line ministries. These examples illustrate the new challenges for organization and management of the public sector implied by the major policy reforms now underway. A major long-term task, therefore, will be to reassess and realign both the role of institutions within the public sector and the skills and incentives needed for the civil service to perform these changing functions. Against this background, section E reviews recent developments in public enterprise and civil service reform.

## B. Public and Private Provision of Infrastructure

### Introduction

5.04 The relative role for public and private provision of infrastructure services differs from sector to sector. Public intervention is needed where markets fail to provide appropriate levels of service at least cost because private competition is hindered. In the case of natural monopolies such as power and telecommunications, efficient system expansion requires a few large investments rather than a series of small ones. Economies of scale in production can create a technological barrier to entry of competitive private providers and efficient production requires a publicly owned or regulated private monopoly. For public goods (such as urban roads) it may be impossible or undesirable to identify and charge individual users and the private market would under-supply services that benefit society at large. But the government need not spend scarce resources on activities (such as urban bus transport) that the private sector can do as well or better. Where competitive ownership is not feasible, there may be scope for private involvement in some stages of production. Although natural monopolies exist in power transmission and distribution, generation can be done efficiently by smaller producers who can sell power through or to the public utility. In other infrastructure sectors, free market entry to qualified private contractors can be encouraged by contracting out for construction (for example, of roads) or for operation and maintenance (such as publicly-owned water supply systems). Initiatives such as these require improvements in the regulatory framework and in institutional capability (see Box 5.1). One barrier to private investment is the risk that price controls or other government interventions will reduce returns. Another

Box 5.1: POLICY FRAMEWORK FOR PRIVATE SECTOR PARTICIPATION

To help avoid potential bottlenecks constraining rapid private sector growth, the Government is actively considering proposals for private investment in the provision of key infrastructure services. The potential benefits of private investment will depend critically on meeting the additionality test of either providing needed infrastructure capacity that would not otherwise be provided by the public sector, or providing infrastructure at lower investment and operating costs, given the likely constraints on public sector finance, management skills and access to technology. These benefits need to be weighed carefully against the potential costs of private investment:

- the higher cost of funds mobilized by private borrowing and equity investment;
- the financial risks of exposure to debt repayment, foreign exchange and profit guarantees likely to be sought by private investors;
- the supply risks of non-performance in project completion and operation by private contractors;
- the efficiency risks of inadequate coordination of the size, location and timing of private investments with the least-cost expansion plan for the sector.

Ensuring that private sector participation effectively serves the public interest will require the development of a sound policy framework that (a) provides for an appropriate balance between the benefits and costs of private investment, and (b) presents a transparent basis for negotiation between the public sector and private investors. Key elements of this policy framework will include:

- a high-level consensus on the general objectives and scope of private sector participation;
- specification of an acceptable security and technical packages covering the sharing of financial and implementation risks;
- definition of the criteria for setting prices governing the sale of private infrastructure services;
- specification of applicable laws and regulations, including environmental and health protection;
- specification of the investment approval process, including competitive (or prequalified) bid tendering and evaluation;
- preparation of detailed policy guidelines for private sector participation in each of the infrastructure sectors based on a well-defined long-term investment program;
- institutional procedures for designing, negotiating and supervising these arrangements that provide the Government with the financial, legal and technical skills to ensure that they serve the public interest.

may be the difficulty of designing and supervising contracts that ensure equitable risk sharing and efficient performance. Thus, these initiatives call for a shift in the role of government from being a producer to being a regulator.

Electric Power

5.05 During the 1970s and 1980s there was a rapid expansion in the availability of power. The installed capacity of the state-owned National Electricity Corporation (PLN) grew from 0.5 gigawatts (GW) in 1970 to 9.0 GW in 1990, while sales grew from 1.6 terawatt-hours (TWh) to 26.9 TWh over the same period. This expansion played a key role in accommodating the large increase in power demand from the fast-growing manufacturing sector, including many small enterprises. In the 1990s rapid growth in economic activity, especially manufacturing, implies a widening gap between the demand for power and PLN's capacity to supply it. As shown in Table 5.1, power demand in Java-Bali is forecast to grow by over 50% from 1990/91 to 1994/95. At the same time, the maximum feasible expansion in PLN's system would increase sales capacity by around 50%. Even with this augmented expansion program, the PLN power supply deficit would rise from 8.5 Twh to 12.8 Twh. The private sector will need to play an important complementary role in making up this capacity shortage to avoid the economic disruptions associated with load shedding.

Table 5.1: POWER DEMAND AND PLN SALES IN JAVA-BALI
(in Twh)

| | Demand | PLN Sales | Captive Generation |
|---|---|---|---|
| 1990/91 | 29.8 | 21.3 | 8.5 |
| 1991/92 | 33.5 | 24.0 | 9.5 |
| 1992/93 | 37.3 | 26.8 | 10.5 |
| 1993/94 | 41.2 | 29.6 | 11.6 |
| 1994/95 | 45.5 | 32.7 | 12.8 |

Source: World Bank staff estimates.

5.06 Private enterprise already plays an important role in the power sector in Indonesia. Private enterprises are actively involved in three areas: captive power generation in industrial plants, small-scale power generation and distribution in rural areas, and in contracting out of PLN services such as equipment installation and maintenance and customer administration. By far the most important is the provision of captive power in the industrial sector. Captive generation currently accounts for nearly half the total installed capacity in Indonesia. About two-thirds of industrial power requirements are supplied through these captive power plants. Much of this captive capacity was installed in the late 1970s when PLN suffered serious capacity shortages. Despite the rapid growth in PLN capacity since then, captive generation capacity has continued to grow.

This growth reflects the inadequate reliability of PLN's power supply and its inability to respond efficiently to new industrial load requirements.

5.07 A first option to strengthen private sector involvement is for PLN to coordinate its grid with existing captive generation capacity. Recent estimates indicate that there is more than 1.0 GW of large captive generators that could supply electricity to PLN's grid, improving PLN's reliability and capacity to meet emergency loads. To take advantage of this surplus energy supply, PLN needs to expedite preparation of a policy framework for negotiating power purchase agreements with the private sector. A key issue to resolve is pricing. Given that this capacity support would reduce PLN's capacity reserve requirements, it should be willing to pay the long-run marginal cost of the capacity it avoids having to install at the relevant location. At the same time, PLN should encourage existing customers to use their existing captive generation capacity instead of the grid supply. This can be done through tariff incentives, such as an exemption from the demand charge for customers who agree to reduce their load requirements from the PLN grid.

5.08 A second option is to encourage additional private investment in captive power plants. In some industries where cogeneration of electric power and steam is feasible, captive generation is more cost-effective than large-scale grid supply. PLN could induce private firms to undertake more cogeneration by offering to purchase the electricity generated at its long-run marginal cost. In addition, PLN needs to freeze new connections to industrial customers that are large enough to invest in efficient captive generation. To encourage firms to install generators to support their own operations, the government lifted import duties on large diesel generators in January 1991. More than 290 firms have since been licensed to import generators with capacity exceeding 375 KVA.

5.09 A third option is to create incentives for the private sector to finance, construct and operate dedicated power plants. So-called build-operate-transfer (BOT) schemes are being explored to encourage private contractors to own an equity interest in public sector projects. These offer several potential advantages: (a) additional resources to supplement constrained budgetary resources; (b) more efficient design, construction and operation of the plants; and (c) a useful private sector benchmark to assess the efficiency of similar public sector projects. Offsetting these advantages are the potential costs resulting from inequitable risk-sharing between the government and the private sponsors, and from excessively complicated and lengthy negotiations between the parties. The Government has invited private investors to establish new power stations and 44 companies have reportedly expressed interest in setting up plants with a total designed capacity of 8.0 GW, including two coal-fired steam power units each with a design capacity of 0.6 GW at Paiton (East Java). These proposals need to be evaluated carefully to ensure that they do offer real economic advantages compared to traditional public investments (see Box 5.1).

## Telecommunications

5.10 Telecommunications services are essential for a wide range of information processing activities that support the productivity and

competitiveness of business enterprises. Despite the expansion of Indonesia's telephone network, from 210,000 lines in 1976 to 900,000 in 1989, it has not kept pace with the growth in demand. As a result, excess demand for telecommunications services has emerged and the gap has widened over time from 39% of available telephone lines in 1982 to 68% in 1988. For the great majority of the population access to telecommunications is very limited. The current telephone density in Indonesia is only 0.5 lines/100 people which lags far behind other ASEAN countries such as Thailand with 1.8 lines/100 and Malaysia with 7.3 lines/100. This acute shortage of subscriber lines causes serious congestion of the existing network with the result that a large portion of call attempts fail. The low quality of service is compounded by poor traffic and facilities management resulting in a high number of faults per line and excessive time taken to correct defective lines. Major, well-designed investments will be required to accelerate network expansion and improve the quality of telecommunications services. These may not be feasible with the current organization and management of the telecommunications sector. With telecommunications restructuring initiatives now taking place in many countries, it will be important to examine whether similar policy reforms on competition, regulation, market structure and ownership could improve performance in Indonesia.

5.11 The government owns almost all telecommunications facilities and is the monopoly provider of basic services. Domestic telecommunications services are provided by the state-owned enterprise PERUMTEL, and all international telecommunications services are provided through state-owned PT. INDOSAT. Manufacturing of telecommunications equipment, is dominated by a third state-owned enterprise, (PT. Inti). However there is limited private sector participation in providing services through revenue-sharing agreements with PERUMTEL. These include cellular mobile radio telephone services, and satellite network telecommunications services. New telecommunications legislation passed in 1989 modified PERUMTEL's domestic monopoly to allow provision of nonbasic services by private entities. A detailed regulatory framework for private sector participation in these services is now under preparation.

5.12 Improving the performance of PERUMTEL will be the key to improving performance of the telecommunication sector as a whole. Until recently, Government management of the sector has not given sufficient incentive to PERUMTEL's management. Indeed, the Government's close relationship with PERUMTEL has tended to blur accountability, and bureaucratic procedures have contributed to delays in project approval and hindered long-term planning. An essential measure to improve PERUMTEL's performance will, therefore, be to increase its operational autonomy by changing its status to a corporation (along the lines of PT. INDOSAT) that would be allowed to retain earnings subject to the payment of dividends and taxes. This could constitute an initial step towards partial privatisation by selling equity in the enterprise to private investors. In the longer run, partial divestiture could mobilise additional private sector resources to overcome budgetary limitations in financing rapid system expansion and quality improvements. However, a prerequisite for successful divestiture would be implementation of extensive measures to strengthen PERUMTEL's organization and management in order to improve its efficiency and productivity.

5.13 PERUMTEL faces virtually no competition in the provision of network services and, therefore, has no compelling incentives to improve its performance. However, the Government has already recognised the merits of permitting competition in the provision of nonbasic services under the new telecommunications law. These include all services except telephone, telex, telegraph and leased lines. This approach will require development of a regulatory capability that monitors PERUMTEL's costs and tariffs to ensure that it does not cross-subsidise services that are subject to competition with private providers. It also calls for periodic review of the appropriate allocation of services between public sector monopolies and private sector competitors. For example, cellular mobile radio could be considered as a nonbasic service open for competitive provision by the private sector.

5.14 The Government is examining revenue-sharing arrangements (RSAs) as the major option for expanding private sector participation. During 1990 the Government awarded RSA contracts to six companies for adding 425,000 lines to the Jakarta network, under which the firms would receive the subscribers' installation charges and 70% of monthly service charges and telephone bills for periods up to nine years. To ensure that this option leads to efficient expansion of telecommunications services, it will be necessary for the Government to develop a policy framework that protects the public interest in key areas of tendering, bid evaluation, contract design, technical inputs and financial structure associated with these arrangements (see Box 5.1). The recent RSAs appear to impose a considerable managerial and financial burden on PERUMTEL. Future RSAs should be subject to stringent tests to ensure they provide genuine additionality which will relieve PERUMTEL of key financial and skills constraints, thus allowing it to focus its scarce resources on the substantial task of upgrading and accelerating development of basic telephone services.

5.15 Private sector participation can also be increased by contracting out. PERUMTEL has already made extensive use of local private consultants and contractors for outside plant construction, construction of ducts, installation of primary and secondary cables, wiring of subscriber premises and maintenance of buildings. If carefully managed, subcontracting can lower PERUMTEL's overhead costs and personnel requirements, especially for line installation in the distribution network. However, the potential for cost reductions depends critically on PERUMTEL's capacity to supervise these arrangements. Future joint-venture arrangements are expected to increase the efficiency of sub-contracting firms through transfer of know-how, thus allowing PERUMTEL to achieve greater cost savings through reliance on private sector suppliers. The range of contracting out could be further extended to include maintenance of all civil works relating to outside plant, special services such as telecom service shops, and the provision and maintenance of public call boxes.

Transport

5.16 During the 1980s the Central Government progressively transferred responsibility for the management of revenue earning facilities and services from line departments to state enterprises, giving them more autonomy and accountability to foster a more commercial orientation in providing services. More recently, the private sector has also been permitted to play a greatly expanded role, especially in operating transport services.

5.17 Transport infrastructure. Government continues to provide and manage public goods (such as the public road network) and those which serve the basic transport needs of communities (such as bus terminals, medium and small airports, small seaports and river terminals). Most other public sector infrastructure is now owned and managed by public enterprises, including seaports, airports, toll roads, and ferry terminals. In addition, government also provides regulatory services which have an important bearing on how efficiently infrastructure and services are used.

5.18 The private sector role in the provision of transport infrastructure has traditionally been limited to own-use facilities such as special industrial ports and private roads and airstrips, but this is now changing rapidly. Private consortia have demonstrated their capacity to participate in major infrastructure projects, notably through the construction and operation of toll roads and urban bus terminals under BOT arrangements. The first toll road involving private sector participation is now in operation while the first privately developed bus terminal is being constructed in Jakarta. Recently a private consortium confirmed its intention to construct a major bridge to link Surabaya with Madura. Following the recent deregulation of industrial estate development many private companies are proposing to construct inland container depots and cargo distribution centers which promise to support more efficient operation of the seaports. The Government is now considering increased private participation in the major seaports and airports by permitting the responsible public corporations to participate in joint ventures or joint operations with private partners. The objectives of these arrangements are to reduce demands on the budget, to speed development of new facilities and to manage existing assets more efficiently. An important concern is to avoid arrangements which would enable the private partner to make large guaranteed profits while leaving the public sector to shoulder the risks (see Box 5.1).

5.19 Transport services. Public enterprises remain a major provider of revenue-earning transport services. In land transport these include freight and passenger rail services and urban bus services. In maritime transport, there are three state-owned shipping lines which operate deep sea general cargo services, inter-island general cargo and passenger services, and bulk and other specialized services. In air transport, Garuda is the sole operator of long-haul scheduled international services and, together with its daughter company Merpati, is the dominant operator of scheduled domestic services.

5.20 The private sector has dominated provision of road transport services except for the principal urban bus services in major cities. Small and medium sized private companies, cooperatives and individuals provide all road freight services, most interurban bus services, and all secondary and tertiary urban road passenger services. In Jakarta, one large private company operates urban bus services while several private firms provide taxi services. The private sector is also the main provider of inland waterway transport services and shares the provision of inter-island ferry services. In future there will be opportunities for private sector participation in the railways, including commercial development of station areas and other inner city land assets, and investments in rolling stock. In maritime transport, the role of the private sector shipping lines has grown steadily during the 1980s, with the exception of the rapidly growing inter-island passenger market. Private companies have traditionally provided stevedoring services under the "landlord port" system,

while Inpres 4/85 has permitted the emergence of a freight forwarding industry which is also dominated by private companies. In air transport, private operators have until recently played only a minor role in the provision of domestic scheduled services but have long been important operators of secondary, tertiary and specialized air charter services. Recent decisions to admit an additional domestic scheduled carrier (Sempati) and to allow private airlines to use jet aircraft on the longer domestic routes have enabled the private airlines to compete more actively with state-owned Garuda and Merpati.

Water Resources

5.21 The development of Java's water resources has been a major factor supporting Indonesia's economic growth. Although most of Java is well endowed with rainfall, most of its rivers are less than 50 km long. Very shallow catchments combined with deforestation cause a rapid runoff of surface water resulting in downstream water shortages in coastal areas during the dry season. In addition, pollution in the downstream areas of almost all the north coast rivers has seriously reduced the availability of raw water of adequate quality for municipal and industrial purposes. Hence, continued development of several large cities is now dependent on their ability to find alternative sources of water. Under these circumstances, the allocation of surface water and groundwater for agricultural and industrial use is an issue of growing importance.

5.22 Java has total surface water flows of about 170 billion cubic meters ($Bm^3$) annually, but firm water resources (minimum flows in a dry year) are only about 78 $Bm^3$. Publicly-provided irrigation water for agriculture is by far the largest user of surface water, requiring about 60 $Bm^3$ annually or three-quarters of the firm water flows. Demand started to climb sharply in the mid-1970s when high-yielding varieties of rice were introduced on a large scale. Future water requirements in the year 2010 are projected at about 88 $Bm^3$, suggesting that shortages could rise to 10 $Bm^3$ in a dry year. Two-thirds of this water shortage could be eliminated by increasing the efficiency of water used for irrigation. Average efficiencies on larger schemes in Java barely exceed 30%, although these systems are designed for efficiencies of 50%. Part of the problem is due to underfunding of operation and maintenance (O&M). To improve efficiency, the Government has initiated an "efficient" O&M program, which involves special maintenance follwed by much higher O&M expenditures. By 1991, this program had been extended to 1.7 million ha out of a total of 4.4 million ha of publicly managed irrigated area. The Government has also turned over about 20,000 ha of small irrigation schemes to water users associations (WUAs), reflecting a long-term policy of turning over to WUAs all irrigation schemes under 500 ha. These measures should provide a powerful incentive for farmers to improve O&M and thus improve efficiency.

5.23 Water use by publicly-supplied municipal piped water systems (mainly from rivers and springs) is minor at about 2.25 $Bm^3$ or 3% of the water used for agriculture, but its importance is growing. Despite these low requirements, urban and industrial pollution are reducing the quality of raw water supply and competition for water in the dry season is already intense in urban areas like Bandung, Jakarta and Surabaya. Urban and industrial water use is expected to grow at high rates (between 7-9% p.a.), reflecting rapid urban population and industrial growth. Unaccounted-for-water (water lost

from piped systems or used without payment) accounts for around 40% of municipal water supply, and major efficiency improvements will be needed to meet this future demand.

5.24 Groundwater extraction, mainly by the private sector for its own use, is about 8.7 $Bm^3$ per year, or 10% of firm water flows. However, because groundwater is relatively safe and convenient, it is the major source of water in cities that have polluted surface waters. In Jakarta, private groundwater extraction provides about four times as much water as the municipal piped water supply. This massive withdrawal has caused saline intrusion into shallow aquifers, which presents a serious problem since shallow wells are an important source of water for domestic use by the poor. Most industries rely on groundwater. In West Java around 65% of industrial water is drawn from private wells and another 25% is private extractions from rivers and lakes. Only 10% of industrial water use comes from town or city water systems. However, with the worsening of water pollution in the river systems and the deterioration of groundwater quantity and quality in some areas, future industrial water supply needs will have to be met from expansion of municipal piped systems.

5.25 Efficient water resource use to meet growing future demands will require more effective management both of surface and groundwater resources through better coordination between and strengthening of the public sector agencies involved. Many different public institutions are responsible for providing and regulating irrigation, municipal piped water supply, and groundwater use. The Ministry of Public Works (MPW) is charged with overall planning, development and management of surface water resources. Within MPW, the Directorate General of Water Resources Development (DGWRD) plays the major role. Its Directorate of Irrigation works with staff from the Ministries of Agriculture and Home Affairs, the Provincial Irrigation Services and Irrigation Committees and the local farmers' Water Users Associations to develop, operate and maintain irrigation systems. The Directorate General of Public Works (DGCK) is in charge of nationwide planning and design of municipal piped water systems for household and industrial use. DGCK is responsible for constructing new public water systems (BPAMs) and supervising their operation before their transformation into semi-autonomous water enterprises (PDAMs) which are wholly owned by local governments. The Directorate of Environmental Geology in the Ministry of Mines and Energy is responsible for managing groundwater resources and issuing licenses for groundwater abstraction. However, many private users circumvent these licensing requirements, and aquifers are being overdrawn. This reflects jurisdictional problems in relation to municipalities, inadequate enforcement authority and limited staff. This complex institutional structure hampers effective planning and regulation of public and private provision of water resources.

## C. Efficient Demand Management for Infrastructure Services

### Introduction

5.26 While the rapid pace of private sector growth generates a demand for expanding infrastructure services, it is equally important to ensure that this demand is moderated by appropriate prices so that the available infrastructure is used efficiently. The role of the public sector in formulating appropriate pricing policies is critical to ensure efficient demand management of infrastructure services. This efficiency goal requires that the prices that guide the decisions of producers and consumers reflect the marginal costs of production. Unsatisfied demand at these efficiency prices indicates a need to expand production by making it clear that users are willing to pay for the expansion. In some infrastructure sectors, such as power and telecommunications, system expansion requires lumpy investments. Setting price to short-run marginal cost can result in unacceptable price instability and long-run marginal cost provides a smoother approximation. User charges are also a potentially important source of revenue. Raising user charges to levels closer to long-run marginal supply costs can help to finance expansion of services. Social objectives of poverty reduction and equitable distribution of income also influence public utility pricing but often result in subsidized services for the better-off. If public utility pricing is used to address distributional objectives, proper targeting of subsidies to reach the poor is a critical part of designing the pricing policy. This section reviews the current pricing policies for electric power, telecommunications, transport and water resources in Indonesia in light of these efficiency, revenue and equity objectives.

### Electric Power

5.27 Pricing policy plays a critical role in managing electricity demand to ensure that the available supply is efficiently allocated among users. Meeting this economic efficiency objective requires the power tariff to signal to consumers the economic cost of electricity supply. If demand remains unsatisfied at these efficiency prices, it is clear that system expansion is appropriate. The long-run marginal cost of supply (LRMC) varies significantly depending on the location, voltage level, time of day and consumption pattern of the user. These cost differentials need to be signalled to consumers through the level and structure of the power tariff. In Indonesia, power tariffs are regulated by the Government, but there is no automatic and regular linkage between tariff adjustments, marginal supply costs and demand growth. Power tariffs were last raised, by 25% on average, on April 1, 1989. Under the new tariff the average revenue generated per Kwh sold was estimated to be about 13% below LRMC in 1989/90.

5.28 This departure from the efficiency price benchmark resulted in a total economic subsidy of about Rp.600 billion in 1989/90. Most of the subsidy is channelled to residential consumers but only about one-twentieth of this actually benefits poor consumers, while the rest encourages excessive consumption by the better-off. The remaining tariff subsidy is channelled to small industrial customers, but this is unlikely to contribute to the creation of new enterprises or expansion of existing ones. The cost of electricity accounts for only a small proportion of production costs and hardly affects

investment decisions. The Government has already recognised the inefficiency of such subsidies by phasing out subsidised credits for promoting small-scale industry.

5.29 These considerations suggest the need for careful review of the level and structure of the power tariff. In the past, tariff adjustments have been implemented only after prolonged delays. This has reduced PLN's earnings and capacity to finance system expansion to serve the unmet demand, and it has prevented the effective use of pricing policy to manage the growth of demand. It will be important, therefore, to adjust the power tariff to reflect changes in PLN's costs (for example, fuel prices, inflation and the exchange rate, adjusted for efficiency improvements). A system of regular tariff adjustments using agreed criteria would result in frequent small changes and avoid the stress and risks of delay associated with a large tariff increase. Higher tariffs would also provide an important improvement in the incentives for the private sector to supply captive power to the PLN grid, since these prices are presently governed by the administered power tariff.

Telecommunications

5.30 The Government announced important changes in the level and structure of telephone tariffs on October 8, 1990 in order to strengthen the financial performance of PERUMTEL to fund system expansion in the face of growing unmet demand. First, telephone installation charges were raised substantially to moderate the excess demand for new services. For Jakarta the installation charge was doubled from Rp.500,000 to Rp.1 million. An additional measure that could be considered is to reserve a significant portion of new lines for customers willing to pay a higher installation fee in exchange for priority service within one month. Second, monthly subscription charges had been low compared with costs and with charges in other countries. These were raised to encourage subscribers with low utilisation to terminate telephone services so they can be reallocated to customers who value the service more highly. For Jakarta, the subscription fee was nearly tripled, from Rp.3,500 to Rp.10,000 per month. Third, the charge for local calls was raised from Rp.75 to Rp.100 per three minutes to bring it into line with marginal costs. Fourth, the charge for long-distance calls over 1,000 km was lowered from Rp.2,250 to Rp.2,000 per minute in view of the low marginal costs of accommodating the additional long-distance traffic. Given the congestion problems on the telephone network it would be appropriate in future to differentiate the tariff structure to reflect peak and off-peak use for local as well as for long-distance service.

5.31 These improvements in the level and structure of telecommunications charges are appropriate and an integral part of the telecommunications investment strategy to manage demand growth and finance a rapid expansion of the telephone network. It will be important to undertake a regular review and revision of telecommunications tariffs in order to avoid larger and more sensitive rate changes that would otherwise be required at longer intervals.

Transport

5.32 Transport pricing policy is most complex for road use. Facilities such as ports and airports have well-defined tariffs which users must pay directly to use their services but, except for toll roads, there is no direct pricing mechanism linked to road use. Because direct road user charges are not feasible, other indirect taxes are applied to reflect user costs. These

include the gasoline tax and provincial government fees for vehicle registration and ownership transfer. These taxes are imperfect substitutes for road user charges because tax incidence varies among users and may not reflect actual road user patterns and the economic costs they impose. Thus, annual lump sum charges overtax infrequent road users who cross-subsidize frequent road users. Fuel taxes are a closer approximation to an efficient road user charge because they vary with distance travelled which is one determinant of economic costs. However, they do not reflect other important determinants such as the type of vehicle used, the size and distribution of the load carried, and the route and timing of road use.

5.33 In Indonesia the publicly regulated prices of motor fuels and other road user taxes have not been based on the efficiency objective of signalling to users the road infrastructure costs imposed by operation of their vehicles. This distorts the pattern of demand for different transport modes. Most importantly, some traffic is attracted to road which could be transported more economically by other modes such as rail, and road transport operators are encouraged to purchase those type of vehicles (notably medium-sized two-axle trucks) which are most easily overloaded and hence cause heavy damage to road pavements. The Government will need to restructure the road user taxation system to promote efficient transport use. Such a system could reduce the cost of meeting rising transport demands, in particular by inducing truckers to take efficient investment and operating decisions. This will mean eliminating the present pricing distortion under which medium and heavy trucks impose around 40% of total road infrastructure costs but generate revenues that recover only about 4% of those costs. This will require actions to: (a) raise the subsidised price of diesel not only to cover its economic costs but also to include a road user tax component; and (b) to restructure the annual registration fee for commercial vehicles to reflect their road damaging potential and size rather than age and engine capacity as at present.

Water Resources

5.34 Although urban industrial and household use of water is still small compared to agriculture, these water requirements are growing and will impose increasing pressures on the traditional claims of irrigated agriculture. Within urban areas, the use of publicly supplied piped water versus privately extracted groundwater also poses important tradeoffs. Pricing policy will have to play an increasingly important role in resolving the choices among the uses of scarce water resources in Indonesia.

5.35 Agriculture. A large part of the future water shortage could be eliminated by improving the efficiency of water use in irrigation. The economic costs of capturing, delivering and distributing irrigation water, including the opportunity costs of diverting water from industrial use, are large. Farmers who do not appreciate these costs are likely to waste water, reducing productivity and economic growth. Publicly provided irrigation facilities cover over 80% of the irrigated area and this irrigated water is generally not priced. As a result, irrigation water is the most heavily subsidised agricultural input amounting to over Rp.1.0 trillion per year. The Government has initiated a program of imposing an irrigation service fee on 700,000 ha of publicly irrigated land over the next four years. This represents an important first step in establishing an appropriate pricing regime for irrigation water. However, these lump sum fees are not linked to

the volume of water used. Thus, while system efficiency will be improved through better maintenance, appropriate economic incentives for efficient water use still remain to be put in place. Over the medium term it may be feasible to charge for bulk sales of water to irrigation schemes, but this will require further development of the river basin allocation and management concept.

5.36 Industry. Private groundwater extraction is the major source of industrial water use. In principle, licenses are issued for groundwater extraction, the rate of extraction is metered, and charges on water use are levied by the municipality. In practice, groundwater use is not adequately regulated. Unlicensed wells are common and tariffs are both low and undercollected. This underpricing of groundwater leads to considerable waste by private industrial users. This is a serious problem in coastal areas where aquifers cannot adequately recharge, so current use lowers the water table and increases the future cost of groundwater extraction. Proper design and collection of groundwater charges is, therefore, a critical issue in pricing water resources.

5.37 The tariff structure for publicly supplied piped water is characterized by a high surcharge levied on industrial and commercial users and a subsidy for residential users. This tax on industrial and commercial consumers is appropriate to mobilise resources needed to expand piped water. However, there is a clear risk that these high rates reinforce the incentive towards inefficient private extraction of underpriced groundwater in areas where groundwater is scarce. In these areas it is critical, therefore, to complement the municipal tariff structure with strict enforcement of appropriate prices for private groundwater extraction. In addition, the residential subsidy fails to meet the intended equity objective because it is poorly targeted. It disproportionately benefits the better-off consumers who can afford to pay the high lump sum connection charge and who also consume water more heavily than low income users. These considerations indicate a clear need to redesign the piped water tariff structure. To serve the equity objective, the residential subsidy would be better targeted only at lifeline consumption levels of piped water, and the rest of the subsidy reallocated to expand provision of public standpipes serving the poor.

## D. Public Expenditure Priorities for Infrastructure Expansion

### Introduction

5.38 Private sector participation and improved pricing policies can play an important role in mobilising resources and managing the demand for infrastructure services. Nevertheless, the public sector will continue to have an important role in providing and financing expansion of infrastructure systems to sustain rapid private sector growth. This section examines selected issues in setting public expenditure priorities in the key infrastructure sectors of power, telecommunications, transport and water resources.

Electric Power

5.39 The rapid growth in private sector power demand calls for a substantial investment program to expand PLN's capacity. The large resource requirements raise important questions about the future financing strategy. As shown in Table 5.2, power investment is projected to rise to Rp.19 trillion in 1989/90-1993/94 and then to triple to Rp.66 trillion in 1994/95-1998/99. In the past, only a small proportion of PLN's investment program was self-financed by internal cash generation (about 14% during REPELITA IV), with the remainder funded through the budget. About half of these funds are government borrowings from multilateral and bilateral sources, onlent to PLN at subsidised interest rates with the government carrying the foreign exchange risk, and the rest contributed in the form of government equity.

Table 5.2: PLN INVESTMENT AND FINANCING PLAN
(at current prices)

| | 1989/90-1993/94 | | 1994/95-1998/99 | |
|---|---|---|---|---|
| | Rp.billion | Percent | Rp.billion | Percent |
| Investment | 18,799 | 100 | 65,768 | 100 |
| Financed by: | | | | |
| Internal cash generation | 5,023 | 27 | 19,123 | 29 |
| Borrowing | 9,593 | 51 | 42,545 | 65 |
| Equity | 4,183 | 22 | 4,100 | 6 |

Source: World Bank staff estimates.

5.40 Given the growing size of PLN's future investment requirements, this financing strategy will need to change in order to reduce PLN's dependence on constrained public resources while ensuring adequate expansion. Three major elements would underlie this change in strategy. First, the power tariff needs to be adjusted periodically to reflect the economic cost of supply. In 1989/90 the average revenue per Kwh was about 13% below LRMC. The financing plan in Table 5.2 assumes that tariffs are adjusted in line with changes in nominal LRMC so that the self-financing ratio rises to around 30%. A second step to reduce PLN's need for government subsidies would be to target subsidy payments on clearly defined social objectives such as financing the rural electrification program. Implicit subsidies channelled through subsidized on-lending of government borrowings are not appropriate and can be phased out. These measures could limit the Government's equity contribution to around Rp.4 trillion in both 1989/90-1993/94 and 1994/95-1998/99, and imply that PLN's borrowing requirements would rise to about Rp.10 trillion in 1989/90-1993/94 and about Rp.43 trillion in 1994/95-1998/99. As a third step, the Government will need to enable PLN to explore ways of borrowing the remainder from the domestic capital market through the sale of bonds to institutional investors or issuing capital stock.

Telecommunications

5.41 PERUMTEL has proposed a long-term investment plan that would achieve a ratio of 1.34 lines per 100 population by the end of REPELITA VI. The cost of this plan assumes a much lower average unit cost (Rp.3.7 million or US$2,050 per line added) that would be realized if PERUMTEL adopts: (a) cost-effective technology, (b) a competitive procurement and financing strategy, and (c) an integrated system approach in project implementation. Targets and costs are summarised in Table 5.3. Although implementation of the plan would not reduce the absolute size of the waiting list, there would be a substantial relative improvement in that about 49% of total demand would be met in 1994, compared with 34% in 1989. Most important, the quality of service and access to service would be vastly improved.

Table 5.3: PERUMTEL DEVELOPMENT PLAN

| | 1984/85-1988/89 | 1989/90-1993/94 | 1994/95-1998/99 |
|---|---|---|---|
| Added lines (million) | 0.25 | 0.90 | 1.10 |
| Density (lines/100)/a | 0.45 | 0.95 | 1.34 |
| Investment requirement (Rp. trillion at constant prices) | 1.30 | 3.20 | 3.90 |

/a At the end of each five-year period.

Source: PERUMTEL and World Bank staff estimates.

5.42 Table 5.4 shows the estimated investment requirements and outlines a possible sector financing plan. This assumes that: (a) the foreign costs of investments would average 40% of total costs, (b) PERUMTEL would self-finance a minimum of 40% of the total investment costs, (c) local bank borrowing would be maintained at current levels, and (d) subscriber bond financing would be introduced later in REPELITA V and would ultimately provide about 12% of local cost financing in REPELITA VI. This plan is based on the premise that foreign costs will continue to be met by government onlending of foreign loans and grants.

Table 5.4: PERUMTEL INVESTMENT AND FINANCING PLAN
(at constant 1989/90 prices)

| | 1984/85-1988/89 | | 1989/90-1993/94 | | 1994/95-1998/99 | |
|---|---|---|---|---|---|---|
| | Rp. trillion | % | Rp. trillion | % | Rp. trillion | % |
| Investment | 1.44 | 100 | 3.20 | 100 | 3.90 | 100 |
| Financed by: | | | | | | |
| Internal cash generation | 0.32 | 22 | 1.49 | 47 | 1.67 | 43 |
| External borrowing | 0.67 | 47 | 1.28 | 40 | 1.56 | 40 |
| Domestic borrowing | 0.45 | 31 | 0.43 | 13 | 0.67 | 17 |

Source: World Bank staff estimates.

Transport

5.43 There are no simple indicators to assess the adequacy of existing transport infrastructure capacity or to relate future development requirements to projected economic growth. A starting point in assessing future expenditure priorities is REPELITA V which reflects government's spending priorities for individual subsectors. The plan projects development budget expenditures on road, land, sea and air transport of Rp.23.7 trillion at current prices.

5.44 Interurban roads. The geometry and pavement of key interurban road links have been improved to a satisfactory condition and appropriate maintenance programs have been put in place. During the coming years, the main challenges will therefore increasingly shift to: (a) providing additional capacity in those corridors, principally on Java, where traffic volumes are now approaching capacity and where heavy freight traffic will necessitate further pavement strengthening; and (b) upgrading provincial and other national links that have not recently undergone betterment. There are several options for providing the additional road capacity needed in the densely trafficked trunk corridors, ranging from the widening of existing roads coupled with the construction of urban by-passes through to the construction of a strategic network of restricted access toll roads. In order to make private sector participation in toll roads more attractive to potential investors, the Government intends to maintain existing trunk roads in a satisfactory physical condition but to allow them to become congested.

5.45 District roads. The current level of spending on district roads is commensurate with the absorptive capacities of local governments and their contractors, and is providing improved access to rural communities at a reasonably rapid rate. In the medium term, there seems to be no need to increase the level of real expenditure, although progressively larger shares of the total will need to be allocated to maintaining those roads that have

recently been improved. Continued efforts will also be needed to develop further the capacities of district level agencies to plan and implement their road programs.

5.46 Urban transport. Expenditures on urban roads and other public transport infrastructure and services will need to increase rapidly in the coming years. Such spending needs to be combined with effective traffic restraint measures to slow the growth in demand for private transport to manageable levels. Such measures could also reduce air pollution, which is an increasingly important problem in big cities. Estimates for the Jabotabek region indicate an investment requirement of around US$3 billion at current prices over the next twenty years to provide a basic network of segregated busways and light rail lines to serve existing major corridors. In those with significant land development potential, there are opportunities to secure efficient private sector participation that should reduce demands on the budget. Additional investments will be needed in the Jabotabek region to provide more road capacity in some inner city corridors, to construct grade-separated intersections at heavily congested junctions, and to open up new peripheral areas for efficient development. In other major cities, increased road investments will also be needed to open up new areas on the peripheries.

5.47 During the 1980s, the government invested large sums in providing the public bus corporations with new buses needed to maintain and increase the size of their fleets. This investment has not been effective. Although initiatives to improve performance of these corporations are in progress, opportunities for improving services by allowing competition from private bus companies need to be considered. Many competent private companies have already expressed interest in operating city buses.

5.48 Railways. The public railway corporation (PJKA) has recently changed its status to a perum and will need to streamline its operations and improve its efficiency. A major priority is to reduce the backlog of deferred maintenance and asset replacement of its locomotive fleet, much of which is inoperable or operating below capacity and prone to in-service failure as a result of shortages of basic spare parts. In addition, minor investments in rollingstock are needed to serve high potential markets. Expenditures approaching US$400 million would be required in these areas over the coming five years. Other investments in railway system capacity expansion can be deferred until the operational performance and financial condition of the new perum has improved significantly.

5.49 Maritime transport. The rapid increase in non-oil exports has been reflected in very strong growth in throughputs at Java's main general cargo ports, and particularly in the movement of containers through Tanjung Priok, where the tonnage of international containerized cargos increased at an average rate of 24% pa from 1986 to 1989. This caused mounting congestion at the container terminal during 1990. Providing additional capacity at this and other large general cargo ports in Java and Sumatra will account for the major proportion of all port investments in the medium term. There will also be a need for continuing government funding of the development and rehabilitation of small ports in more remote areas, particularly eastern Indonesia, although the annual cost of such projects will be small. Before undertaking these

investments, improved approaches for the planning and design of small port projects need to be established. Required expansion of shipping services as well as shipbuilding and repair services can be left to the private sector.

5.50 Air transport. The second phase of Jakarta's new international airport is nearing completion and major capacity expansion projects are underway at Bali and Balikpapan. Once these projects are complete, there will be a need for continuing investments to add capacity at certain other major airports, although some of the proposals have been driven by very high projections of tourism development and require review. A government decision to permit private sector participation in the development and management of airport facilities would also serve to reduce demands on the budget.

Water Resources

5.51 Agriculture. The main choices in setting public expenditure priorities for irrigation are the balance between new system development and completion of existing schemes, and between new investment and O&M. REPELITA V targets include 500,000 hectares of new irrigation area, 334,000 hectares of irrigation rehabilitation and upgrading, and 444,000 hectares of swamp area rehabilitation. However, several studies have indicated that rice self-sufficiency could be maintained with a less ambitious expansion of the irrigation network than that foreseen for the REPELITA V period. Moreover, by placing priority on completion of existing command areas instead of construction of entirely new systems, the cost of expanding irrigated area can be reduced. A substantial amount of investment on rehabilitation and upgrading (R&U) is needed to restore the irrigation infrastructure to its designed state and to achieve the substantial improvements in efficiency of water use which are required. In general, however, R&U will not be effective unless followed by efficient operation and maintenance (O&M) activities, which are necessary to prevent the infrastructure from deteriorating once again. O&M of irrigation systems is under-funded in Indonesia. Total expenditures on O&M were only about Rp.69 billion in 1989/90, or 0.3% of the Rp.25 trillion value of the irrigation capital stock. Economic returns to incremental expenditures on O&M are very high, usually more than 50%. A nationwide program of efficient O&M would require annual expenditures of only Rp.175 billion, but increased expenditures should be phased in as the irrigation infrastructure is rehabilitated to its designed standards. Appropriate user charges levied on farmers based on the quantity of water used would finance O&M costs and encourage farmers to use scarce water more efficiently. Recently adopted measures indicate important progress towards this objective (see para. 5.22).

5.52 Non-agriculture. REPELITA V sets ambitious plans to expand and protect the public water supply. Physical targets include: (a) expansion of water production capacity from 51,000 to 65,000 liters/second; (b) piped-water distribution increased from 32% to 47% of the urban population; (c) access of the rural population to publicly supplied ground or surface water raised from 30% to 60%. These targets assume that a great deal of the existing private ground and surface water supply would be replaced with public piped systems. If these quantity targets are achieved at the expense of ensuring proper quality of project design, implementation and O&M, and without careful analysis of the effective demand for piped water, the resulting infrastructure will remain underutilized and deteriorate quickly. To prevent this, local

Governments will need to assume increasing responsibilities for project selection and management in accordance with local priorities. PDAMs will also need to generate sufficient funds to operate and maintain existing systems properly and to repay loans undertaken for system expansion. Appropriate design and enforcement of the municipal water tariff structure (including groundwater charges) will, therefore, be a critical complement to the public investment program. To improve the quality of the raw water and thus reduce treatment costs, larger expenditures and low-cost approaches are also needed for sanitation and sewerage programs.

## E. Recent Developments in Public Sector Management

### Introduction

5.53 The changing role of the public sector towards enabling greater reliance on private sector development calls for major improvements in the quality of government services. This Chapter illustrates the complex and interrelated policy agenda facing the Government in meeting the challenge of providing adequate infrastructure to sustain private sector growth, including: shaping a policy framework for private sector participation that protects the public interest, formulating efficient pricing policies for infrastructure services, and designing and implementing high quality public investment programs. The ability of the Government to address this agenda depends on the effectiveness of its constituent parts, the central and regional governments and public enterprises, and on the administrative capabilities of these government institutions. This section reviews recent developments in public sector management aimed at improving public enterprise efficiency and reform of the civil service.

### Public Enterprise Reform

5.54 The Government has been developing a policy framework for the longer-term reform of PEs based on Presidential Decree No.5 in October 1988. With the development of the economy and the recent deregulation measures, the number and range of enterprises that need to remain under government ownership have declined. Accordingly, the two major objectives of the longer-term reform program for PEs are to: (a) introduce organisational and managerial reforms in enterprises that will remain in the public sector to improve their efficiency and reduce their burden on scarce public resources; and (b) divest enterprises that need not remain under public ownership, in a phased and orderly manner.

5.55 In preparation for these reforms, two ministerial decrees issued in June 1989 set out the financial performance criteria for public enterprises and outlined a number of options to improve their efficiency and productivity. Using financial data from 1985-88, some 189 enterprises were classified into four categories; very sound, sound, less sound and unsound. Based on the type of good or service involved and these financial indicators, a set of corporate restructuring strategies has been jointly decided on by the Ministry of Finance (MOF), the line ministries and the various enterprises. These range from change in legal status of the firm, to sale of equity on the bourse, to liquidation. This initial design for restructuring was accompanied by

instructions to the PEs to prepare five-year corporate plans and annual work programs for use by the management of the PEs, the line ministries and the MOF. In addition, the roles for PE management, line ministries and the MOF have been defined more clearly. Thus, routine management for most PEs will be the responsibility of the Boards of Directors (BODs). The interventions of the technical ministries and the MOF will be done in the context of approving an annual work program and a five-year corporate plan.

5.56 The Government is now proceeding with a phased implementation of its reform strategy. As a first step, some of the options have been implemented selectively, including change in the legal status of six enterprises to facilitate commercial operation, the establishment of management contracts for four PEs, the merger of six PEs, joint ventures for two PEs, and the sale or liquidation of ten PEs. Furthermore, significant changes in the compensation package and accountability for PE directors have been introduced, aimed at enhancing performance through better incentives and instituting better accountability for poor performance. A merit pay system for employees has been tied to that of the directors. Efforts are also underway to improve staffing flexibility by separating PE employees from the civil service. Together, the new salary structure, the clarified roles of the PE management, MOF and line ministries, and the five year corporate plans and annual work programs, constitute the nucleus of an improved system of accountability and control of PEs. At the same time, deregulation measures should expose public enterprises to increasing competition by reducing barriers to imports and investment.

5.57 In parallel with steps to improve the performance of PEs that will remain in the public sector, the Government is pursuing a policy of gradual divestiture and privatization. There are two main elements in this strategy. First, the Government is actively seeking ways in which the private sector can invest in and operate a wider range of infrastructure services, including power, telecommunications and ports. The Government has recognized that in developing specific proposals in this area, it is important to take account of the public interest to ensure the arrangements are efficient and cost-effective. Consequently, the Coordinating Minister for Economic Affairs (EKUIN) is coordinating work to develop guidelines and review specific proposals. A second element of the Government's privatization strategy is to divest enterprises that need not remain under public ownership. This would be achieved through sale of shares in the stock market as well as through outright sale to the private sector. The Government has taken a cautious approach in implementing this policy in view of important practical difficulties that remain to be resolved. These include: (a) the transparent definition of rules for divestiture to ensure fairness in valuation and bidding; (b) minimizing the burden on government of compensation for retrenchment: and (c) improving the capacity of the stock market to handle effectively large sale of PE shares. However, 52 companies have been identified as potential candidates for issuing shares in the stock market, and preparations are underway to allow three cement companies and a sugar estate to float shares in the stock market in the near future.

Civil Service Reform

5.58 The reorientation of the public sector towards managing private sector growth requires different skills from the civil service and a changed set of incentives. Middle-level staff involved in routine controlling and licensing functions will need to be replaced with highly skilled professionals capable of working on policy analysis, monitoring and regulation in support of private sector activities. Recognizing this, the Government has embarked on a process of civil service reform led by the Ministry for the Utilisation of State Apparatus (MENPAN). The focus of this process is on clarification of tasks and responsibilities through a wide-ranging job analysis initiative. The generalized adoption of job analysis is expected to support a government-wide streamlining of organizational structures and size, together with an improvement in management and technical skills.

5.59 MENPAN expects job analysis to serve as a vehicle for reducing the size of the bureaucracy. First, careful specification of tasks and responsibilities should result in a better fit between workers and their assignments by drawing attention to public employees who are underemployed and eligible for reassignment. Secondly, job analysis implies a thorough mapping of the functions and activities of work units as well as agencies as a whole. This procedure should identify the extent to which staff who performed assorted regulatory tasks and other activities have been made redundant by deregulation.

5.60 Improving pay and incentives systems is required to attract skilled professionals to the civil service. Educational attainment and skill levels remain low on average. In 1989, only 11% of Indonesia's civil servants had at least a bachelor's degree, compared to 5% in 1975. Base salaries and allowances have remained low, while a complex system of supplementary payments has emerged. For example, those holding "structural" positions with mainly administrative duties, get regular allowances and have better access to other forms of supplementary income, including project-related honoraria, per diem payments, housing, training and other allowances. The proposed remedy is to create functional positions and career streams using job analysis. Functional positions would carry clearly specified allowances tied to skill and performance and consolidate the various supplementary payments and benefits. This approach would introduce more competitive promotion procedures and opportunities. Currently, promotion within grades is semi-automatic and largely a function of elapsed time. Compared to those working in provincial and district offices, employees of central government agencies have greater promotion opportunities since central service has four rather than three grades, four additional steps in the extra grade and many more structural positions. Limited scope for advancement is one of the factors that make recruitment of good staff outside Jakarta difficult. When the functional position structure is in place, individuals in different functional jobs will earn numerical credits for their work contribution, professionalism and performance. Promotion within an explicit career structure and receipt of larger functional allowances will follow once sufficient credits have been accumulated.

5.61 By tackling key civil service reform issues of size, skill and compensation the MENPAN job analysis initiative promises to help prepare the government for the management challenges of the 1990s. MENPAN has pursued its

administrative agenda vigorously. More than twenty ministries or independent agencies have assigned staff to be trained in job analysis and follow-up staff work. Most agencies have completed at least one round of job analysis, while the number of approved functional positions has been growing. Despite these determined efforts, Indonesia's current civil service reform is still in its initial phase. Only one-quarter of the newly defined positions have been recognized through budgetary allocations. Without the funding required to cover the salary increments and allowances tied to each position, the new job descriptions and task roles are likely to remain abstractions. Moreover, a huge number of civil servants (almost two million) remain to be included in MENPAN's planned blanket coverage of job analysis and functional classification. Although expectations should be realistic given the daunting size of the task, the potential benefits of this civil service reform effort are great.

# CHAPTER 6

# ENSURING WIDESPREAD PARTICIPATION IN THE BENEFITS OF ECONOMIC GROWTH

## A. Introduction

6.01. An important objective of the Government in developing private enterprise has been to widen opportunities for Indonesians to share in the benefits of economic growth. The evidence presented in Chapter 1 shows that the process of structural change in the economy has resulted in employment and real income growth in the poorest income groups and a dramatic decline in the incidence of poverty. Furthermore, trends in income distribution (available through 1987) also indicate that income growth in lower income groups has been more rapid than in upper income groups. Nevertheless, concerns have arisen about the distributional effects of rapid private sector growth in the industrial and modern sectors. One area of concern is the role of conglomerates, which accumulated a large amount of market power during the period when the economy was heavily regulated. These large corporate groups were better placed to take advantage of the opportunities afforded in the period following deregulation. A second area of concern is regional disparities in the growth process, as certain areas of the country have lower incomes and a higher incidence of poverty. These are legitimate concerns. However, appropriate measures can ensure that future growth continues to be widely shared throughout all segments of society. Two types of initiatives will be important: (i) a determined continuation of the Government's deregulation policies to create a level playing field, thereby exposing large firms to greater competition; and (ii) tax and expenditure measures that ensure that taxation policy is fair and that public expenditures enhance the productivity and quality of life of the poorest members of society.

6.02. Section B of this chapter reviews the evidence regarding recent trends in the distribution of the benefits of economic growth. Section C outlines recent Government efforts to promote a wider participation in economic development. Section D discusses initiatives that would help level the playing field through further trade and industrial deregulation, legal reform, more equal access to credit, and a transparent interaction between the Government and private sector. Section E considers fiscal policy initiatives that would improve the fairness of the Government's taxation policies and would ensure that public expenditures are directed into areas, such as upland agriculture and human resource development, that enhance the quality of life and the productivity of the poor.

## B. Trends in the Distribution of Growth

6.03. A key goal of the New Order Government has been to ensure an equitable pattern of economic growth. As noted by President Soeharto in the presentation of the 1991/92 Draft Budget:

> "From the very onset we realized that equitable distribution without growth will only mean sharing poverty. Growth without equitable distribution means sharing injustice."

Beginning with the first five-year development plan, the Government's programs and policies have been directed towards achieving broad-based economic growth. The primary focus of its strategy was to improve the productivity of the rural economy and in particular, to attain rice self-sufficiency. During the turbulent 1980s, the Government undertook prompt macroeconomic adjustment measures and comprehensive structural reforms that encouraged the growth of labor-intensive manufacturing while protecting agriculture and the rural sector. These development policies have done a remarkable job in ensuring that the benefits of economic development were widely shared. One aspect of this is the trend in the incidence of poverty. In 1976, 40% of the population, about 54 million people, were in poverty; by 1987, the incidence of poverty had been reduced to only 17%, about 30 million people.1/

6.04. Other indicators also show considerable progress. The share of consumption expenditures by the poorest quintile of the population has increased from 6.9% in 1970 to 9.2% in 1987 (see Table 6.1).2/ The share of consumption by the poorest quintile in Indonesia is also comparatively high: in the Philippines, the lowest quintile accounts for only 5.5% of consumption expenditures; in Malaysia, only 4.6%; in Sri Lanka, only 4.5%; and in India,

Table 6.1: EXPENDITURE DISTRIBUTION, 1970-1987
(% of total expenditure)

| Decile | 1970 | 1978 | 1980 | 1981 | 1984 | 1987 |
|---|---|---|---|---|---|---|
| Lowest | 2.83 | 2.81 | 3.28 | 3.53 | 3.43 | 3.72 |
| Second | 4.11 | 4.48 | 4.44 | 4.72 | 4.56 | 5.48 |
| Third | 5.46 | 4.59 | 5.40 | 5.90 | 5.58 | 5.67 |
| Fourth | 6.29 | 6.25 | 6.43 | 6.29 | 7.18 | 6.00 |
| Fifth | 7.34 | 6.71 | 7.63 | 7.48 | 7.64 | 7.82 |
| Sixth | 8.71 | 8.05 | 8.32 | 8.14 | 7.64 | 7.82 |
| Seventh | 10.07 | 9.63 | 9.91 | 10.92 | 10.26 | 10.88 |
| Eighth | 12.24 | 12.14 | 12.32 | 10.92 | 11.74 | 10.95 |
| Ninth | 15.47 | 14.86 | 14.44 | 14.55 | 14.91 | 14.61 |
| Tenth | 27.47 | 30.48 | 27.83 | 27.56 | 27.06 | 27.04 |
| Gini Coefficient | 0.35 /a | 0.38 | 0.34 | 0.33 | 0.33 | 0.32 |

Source: 1970: Early estimates by World Bank staff; 1978-1987: Statistik Indonesia, 1989, Central Bureau of Statistics.

/a Estimated from decile-level data.

1/ See Indonesia: Strategy For a Sustained Reduction in Poverty, op. cit..

2/ These expenditure data are drawn from The National Socioeconomic Survey (SUSENAS). There are concerns about the completeness and accuracy of the SUSENAS sample among higher income groups; as a result, income and expenditures in the higher income classes may be somewhat understated. See ibid., Annex 1.

only 8.1%.3/ Indonesia's low and declining level of inequality is also evident from the Gini coefficient, which has fallen from 0.38 in 1978 to 0.32 in 1987.4/ Finally, per capita income growth averaged 3.7% p.a. during 1984-87, the period of economic adjustment. Per capita incomes rose more rapidly in rural areas than in urban areas during this period. As indicated by these trends, Indonesia's growth path during the past two decades (and particularly during the 1980s), benefitted lower income groups and the relatively poorer rural areas. Thus, income inequality was reduced during the two decades since the beginning of the New Order Government.

6.05. Since 1987, it appears that poverty has continued to decline and that income growth has remained strong. Growth in the non-oil manufacturing sector has been robust during 1987-1990, averaging about 12% p.a.. Real wages for unskilled labor in the non-oil manufacturing sector have also increased slightly since 1987 (see Table 1.11), and employment has continued to expand. Similarly in the agriculture sector, real incomes for unskilled laborers have grown in Java. These trends suggest that real incomes in the poorest income groups has continued to expand in the late 1980s.

6.06. Despite these gains, two important areas of concern have begun to emerge about the potential effect upon income distribution of the rapid growth of the private sector. One area of concern has been conglomerates. A number of the large companies that benefitted from government-sanctioned monopolies on production and trade in the period before deregulation have experienced rapid growth in the late 1980s. Initially, these firms were better placed than other companies in terms of capital and personnel to take advantage of the opportunities presented by the newly deregulated environment. These companies had accumulated considerable market power from the inward-looking, import-substituting industrial strategy pursued by Indonesia during the late 1970s and early 1980s.

6.07. One measure of this market power, which was established before the period of deregulation, is the level of output concentration in the non-oil manufacturing sector, as measured by the share of output produced by the four largest firms (CR4). In 1985, about 30% of domestic output was produced by extremely concentrated industries (i.e., a CR4 above 70%), and another 30% was produced by highly concentrated industries (i.e., a CR4 above 40%).5/ These ratios indicate that concentration was high in the non-oil manufacturing sector. Moreover, the concentration ratios probably underestimate the concentration of market power since these data apply to plants rather than companies or ownership groups. This concentration of market power resulted in

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3/ See World Development Report 1990, The World Bank, Oxford University Press, 1990, Table 30, pp. 236-237.

4/ The Gini coefficient measures aggregate income inequality and can vary from 0 (perfect equality) to 1 (perfect inequality). A decline in the Gini coefficient, therefore, indicates a decline in income inequality.

5/ World Bank staff estimates. Note that these data include public enterprises. Since public enterprises tend to dominate the sectors in which they operate (e.g. steel, cement, fertilizer), these CR4 ratios may overstate somewhat the market power concentrated in the hands of the private sector.

supernormal profits in the period prior to deregulation and led to a concentration of assets. A second measure of the market power concentrated in the hands of the conglomerates is the turnover generated by these firms. In 1988, the turnover of the ten largest company groups in Indonesia was roughly equivalent to 15% of GNP.6/ However, it is important to note that this concentration is not necessarily high by international standards. The turnover of the ten largest company groups in Korea was equivalent to 67% of GNP in 1984,7/ and large corporate groups in Japan and Taiwan also account for a significant share of GNP.

6.08. A second area of concern is regional disparities. Income disparities still exist across different areas of Indonesia. In particular, the eastern areas of Indonesia have lower income levels and higher incidences of poverty than the rest of Indonesia, although in many eastern areas the rate of growth of incomes was above the national average during the 1980s. These income disparities are the result of regional variations in agricultural and industrial production and employment. Java is much more heavily industrialized than most of the Outer Islands (see Table 6.2). Even though Java accounts for only 60% of employment (and population), it contributes about three-quarters of industrial value-added and employment. With the exception of Kalimantan, the industrial output and employment shares of the Outer Island regions are much lower than their overall employment and population shares.

Table 6.2: Regional Distribution of Agriculture and Industry, 1988
(% share of total)

| | Value Added /a | | | Employment | | | Population |
|---|---|---|---|---|---|---|---|
| | Agri-culture | Industry /b | Total /c | Agri-culture | Industry /b | Total /d | |
| Sumatra | 25 | 16 | 19 | 23 | 14 | 19 | 20 |
| Java | 53 | 72 | 64 | 54 | 76 | 61 | 60 |
| Kalimantan | 7 | 9 | 6 | 5 | 6 | 5 | 5 |
| Other eastern areas | 15 | 3 | 11 | 18 | 4 | 15 | 15 |
| Total Indonesia | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

/a Current terms; excludes oil and gas.
/b Medium and large-scale only; excludes oil and gas.
/c All sectors, excluding oil and gas.
/d All sectors, including oil and gas.

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

6/ This measure exaggerates the conglomerates' share of economic activity, because it includes inputs purchased from other firms, but it does give an indication of the size and importance of these large company groups in the economy. See Hal Hill "Ownership in Indonesia: Who Owns What and Does It Matter", Indonesia Assessment 1990, Hal Hill and Terry Hull eds., Australian National University, Canberra, 1990.

7/ See Alice H. Amsden, Asia's Next Giant, Oxford University Press, New York, 1989, Chapter 5.

6.09. The limited industrial development of the eastern areas of Indonesia is especially evident. That region's share of national industrial value-added has been relatively constant and amounted to only 3% in 1988 despite the fact that the region accounts for 15% of Indonesia's total employment and population. The scale of activity is typically smaller than the national average and nearly all exports are resource-based. Also, foreign investors have shown little interest in the eastern areas of Indonesia. This pattern of regional concentration primarily reflects several factors: (i) the relatively small labor market with a low level of skills; (ii) distance from product markets for inputs and outputs; (iii) the better availability of infrastructure and supporting industries on Java and Sumatra, and (iv) the regulatory regime, which requires frequent contact with Central Government officials and therefore places a premium on easy access to major urban areas.

6.10. These are legitimate areas of concern. However, trends in the incidence of poverty and income distribution since the period of deregulation indicate that promoting efficient private sector development is a powerful way of achieving sustained income growth in the poorest income groups. This is evident from the growth of small and cottage industries over the past several years.8/ It is also evident from trends in real wages and employment among unskilled workers. As noted in Chapter 2, careful macroeconomic management combined with structural reforms would lead to 3-4% p.a. growth in GNP per capita during the 1990s, and this should be sufficient to generate substantial improvements in the living standards of the poor.

6.11. Such a result, however, is not guaranteed. Policies that promote private sector development and encourage the widest possible participation in the growth process are necessary to ensure a broad-based, labor-intensive pattern of growth. Therefore, appropriate actions need to be taken by the Government to ensure that Indonesia continues to achieve a pace and pattern of growth that results in sustained increases in the real incomes of lower income groups. Exposing the Indonesian corporate sector to greater domestic and international competition can reduce their market power and eliminate their supernormal profits. Removing constraints on regional development and labor mobility will also help to lower regional income disparities, although regional variations are likely to remain because of different resource endowments.

## C. Recent Government Efforts To Ensure Equitable Growth

6.12. The Government has responded to these concerns by taking initiatives in several areas to help promote the widest possible participation in economic growth. First, the Government has intensified its efforts in the past two years to reduce the incidence of poverty and promote development in the relatively disadvantaged regions of the country. Spending through the INPRES program has been increased, and some adjustment has been made to the allocation formula to improve the regional equity aspects of the system. There has also been increased spending in health and education, with additional outlays provided for rehabilitating primary schools, expanding the

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8/ See Pilot Study Agro Industry, Department of Agriculture, September 1990, Executive Report II.

rural health center network and providing more adequate levels of O&M for hospitals. A program for the development of integrated zones has been established to concentrate development funds and programs in poor, isolated and border areas. This has been supplemented by a poverty fund to finance projects for village infrastructure or income generating projects in poor villages.

6.13. In addition to these fiscal policy measures, the Government has also issued two directives intended to foster a more equitable distribution of the gains of development. First, the Government called on large business groups to sell 25% of their shares to employee and associated cooperatives. A follow-up set of guidelines states that companies are expected to help cooperatives finance the purchase of these shares. Second, the Government established a guideline that banks must place 20% of their lending with small businesses, as part of the reform of liquidity credits announced in January 1990.9/ A promising new initiative is the effort to revitalize 1,300 inactive village banks (BKDs) that have the potential to reach very small borrowers with little collateral in relatively remote areas.

6.14. These measures demonstrate the Government's recognition of the need to foster an equitable sharing of the benefits of deregulation and growth. Over the longer term, two types of initiatives are likely to be important:

- continued deregulation to provide the proper incentives for broad-based growth and other measures to ensure a level playing field; and

- fiscal measures to ensure the achievement of the equity objectives of the tax system and a more equitable pattern of public expenditures.

These are discussed in the two following sections.

## D. Level Playing Field Initiatives

6.15. Promoting equitable participation in economic growth requires, as a first step, an incentive framework that encourages continued labor-intensive and export-oriented growth. The features of such a framework are described in Chapters 2 and 3. In addition to the broad incentive framework, however, it is important to make sure that all actors in the economy are treated fairly, and that small or nascent entrepreneurs are not inadvertently handicapped by Government institutions or policies that favor larger firms or particular regions of the country. To address these concerns, level playing field initiatives need to be taken in four broad areas: (a) trade policy; (b) the legal and accounting framework; (c) credit; and (d) the interface between the Government and the private sector.

6.16. Trade and Investment Policy. One of the most powerful influences on the distribution of gains from growth is trade and investment policy. The

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9/ This does not apply to foreign banks. They are required to extend 50% of their lending for export-oriented projects.

Government's deregulation measures in these areas have widened opportunities and fostered wage and employment growth among unskilled laborers. The combination of lower tariffs, and fewer non-tariff barriers has also dramatically reduced the ability of protected industries and privileged traders to make supernormal profits. In doing so, it has lowered prices to domestic consumers and increased prices paid to many producers of export goods, especially small farmers. To facilitate investment in the Outer Islands, the Ministry of Industry and the Investment Coordinating Board have also recently simplified their licensing procedures by transferring part of their authority to regional offices.

6.17. A number of distortions in trade and investment policy still hinder equity goals, however. For example, a number of sectors are still closed to new investment, and in many of these sectors a small number of firms, sometimes public enterprises or large conglomerates, control a large part of the domestic market. Sectors closed to investment (e.g. food and beverages) also tend to be more highly protected from international competition by either non-tariff barriers or high tariffs. In the most extreme cases (e.g., the steel, automotive, and some electrical equipment industries), imports are banned altogether or can be undertaken only by those firms that also produce the goods domestically. In other cases, such as palm oil refining, investment restrictions have prevented the development of refinery capacity in the Outer Islands, where it would be more efficient.

6.18. Moreover, several recent policy measures run counter to the general thrust of the Government's deregulation program and may have adverse effects on equity and income distribution. The ban on exports of raw and semi-processed rattan in mid-1988 has reduced incomes of farmers in several Outer Island provinces (see Box 6.1). The prohibitive export tax on sawn timber, levied in late 1989, has driven a number of small saw mills out of business. The recent creation of a monopoly on domestic clove trading (see Box 3.1 in Chapter 3) is likely to hurt small farmers in the medium-to-long term. A number of other export restrictions (e.g. on palm oil and low-grade coffee and rubber) also may reduce the incomes of small farmers. These restrictions typically reduce the farmgate price of crops grown on the Outer Islands while lowering input costs to manufacturers on Java, thereby aggravating inter-regional disparities as well.

6.19. The development of the Outer Island economies is also impeded by a large number of local-level regulations and restrictions on economic activity, particularly inter- and intra-provincial trade. For example, both the Central Government as well as many provincial governments levy taxes on the movement of copra. "Customs" fees on rattan in West Kalimantan ports increase transport costs to Java by 200%. If buffalo are moved across kabupaten borders by truck in South Sulawesi, a large fee must be paid to the provincial government. Consequently, many traders move their buffalo by foot, causing long delays and significant weight loss. Cattle cannot be exported directly from East Timor, but must be trans-shipped through Java, which increases costs and also shifts value added to Java. Such impediments to trade add to the natural distance and infrastructure constraints in the Outer Islands, making it difficult for remote regions to exploit their comparative advantage.

6.20. Local governments technically are required to get the approval of the Central Government prior to imposing taxes on the movements of commodities. In some cases local governments can bypass this requirement by referring to

**Box 6.1: DISTRIBUTIONAL EFFECTS OF RATTAN TRADE POLICY**

To encourage the growth of the local rattan furniture industry, the Government has banned all exports of raw and semi-finished rattan products. By providing heavy protection to the rattan manufacturing industry, the bans have led to higher output and export of finished rattan products, but the bans have also had a regressive impact on income and regional distribution. The furniture manufacturers who benefit from the export restrictions are mostly based in Jakarta and Surabaya and are owned by large investors. By contrast, those hurt by the restrictions have primarily been low-income farmers and traders on the Outer Islands, particularly Sulawesi, Kalimantan, Sumatra, and Nusa Tenggara Barat.

Case studies carried out in 1990 in West and Central Kalimantan indicate that, following the 1988 ban on semi-finished rattan, the farmgate price of rattan fell by 24% to 68% in four villages, decreasing farmers' total income by about 35%. In one of the villages, an estimated 70%-90% of all farmers have ceased harvesting rattan due to the low prices. The fall in demand and farmgate prices has also hurt local traders and processors. Traders in two of the villages have gone out of business altogether, and those in the other villages are trading much lower volumes than before. Most local processors have also gone bankrupt or are running at far below capacity. One of the largest processors saw a decline of 50-80% in orders from Java and laid off over 1,000 (out of a total 1,200) workers, many of them women. The only processor operating at full capacity is one owned by a major rattan furniture manufacturer on Java.

the charges as administrative service "fees," which can be imposed on the authority of the provincial governor. In practice, however, many of these fees are set at levels much higher than the actual cost of services rendered, making them valuable sources of official and unofficial revenue. The Government is aware of this problem and has sent directives to provincial authorities instructing them to reduce certain local trade barriers. The revenue structure of local governments is also being reviewed, and draft legislation to reform the existing system is being prepared. From an equity standpoint, it will be important that reforms to the existing system eliminate taxes and fees that hinder inter- and intra-provincial trade while maintaining (and preferably increasing) resource mobilization by local governments.

6.21. Legal and Accounting Framework. There has been some discussion in Indonesia regarding a possible anti-trust law to prevent excessive concentration and "unfair" trade practices. Experience in other countries indicates that anti-trust laws are difficult to devise and administer, since what constitutes "excessive" concentration and "unfair" trade practices varies by industry and is hard to define precisely. Firms in some industries must be fairly large to achieve economies of scale. In any case, effective

administration of a complex anti-trust law requires a sophisticated and well-functioning court system. In the absence of such a court system, the law might actually prove counterproductive if its enforcement were unduly influenced by the more powerful economic actors or if it were used against new entrants only. In the short-to-medium term, further deregulation of trade and investment policy, as discussed above, is a much more promising approach to preventing excessive concentration and monopoly pricing. More basic reforms of the legal and accounting system would be essential prerequisites before attempting to design anti-monopoly legislation in Indonesia.

6.22. The discussion of the legal and accounting framework in Chapter 3 concludes that major reforms are needed to ensure the efficient development of the private sector. Such reforms would also promote equity. A strengthened legal system would promote a level playing field by improving the balance of economic power between small and large firms. For example, large firms often have the ability to enforce agreements through economic sanctions, something that smaller firms usually cannot do. Smaller firms' uncertainty over their ability to enforce contracts through the court system substantially increases transaction costs. These costs not only reduce profitability, but they make it difficult for smaller firms to expand rapidly, since the breach by a customer of a single large contract can lead to bankruptcy. To the extent that the lack of an enforceable contract law increases transactions costs for large firms as well, they have an incentive to avoid subcontracting to smaller firms.

6.23. Larger firms also have better access to information through their networks of business connections. Smaller firms and individuals are forced to rely on limited public information, and the accuracy of available information is often questionable. More comprehensive disclosure and standardized accounting rules would improve the quantity and quality of public information, thus reducing risk to smaller firms.

6.24. Devising and enforcing appropriate environmental standards can also have a positive impact on the welfare of the lower income classes, who are often disproportionately affected by pollution and other environmental degradation. For example, the poor depend heavily on untreated water sources for drinking, cooking, and bathing, and the current levels of water pollution in rivers--especially in urban areas--already threaten the health (and, consequently, labor productivity) of many poor families. Without enforcement of appropriate effluent standards, the situation will deteriorate further. In rural areas, the poorest families are often located in fragile upland areas or near forests. Soil erosion, caused by poorly defined property rights, and uncontrolled commercial forest exploitation can significantly affect the income and welfare of these families.

6.25. Credit. An improved legal framework would also help equalize access to the credit market in Indonesia, which is important because of the role of credit in accumulating assets and increasing future income. The range of instruments that can be used as collateral for loans in Indonesia is extremely limited, and neither land titling nor property registration is well developed. In the absence of enforceable credit agreements, banks reduce their risk to the extent possible by relying on personal and corporate guarantees and on the reputation and business links of borrowers. Larger, well-established firms thus enjoy easier access to credit than smaller firms and new entrants, which are either denied credit or face much higher interest charges.

6.26. Past attempts to target low-income borrowers with subsidized loans have failed in Indonesia as almost everywhere else in the world. Default rates have been high and many of the benefits have accrued to higher-income borrowers, who have been able to influence the allocation of the limited subsidized funds. Recognizing this, the Government has been phasing out subsidized credit programs in favor of schemes such as BRI's highly successful KUPEDES program, which provides small loans at market interest rates while keeping transaction costs to a minimum. While most subsidized credit programs have now been eliminated, several remain. These programs tend to impede the development of viable, market-based term-lending instruments for the activities involved. In addition, some programs in the estate crops and forestry sectors provide substantial credit subsidies to relatively large firms. These programs should be re-examined to see whether their objectives could be met at a lower cost.

6.27. The rapid increase in the number of bank branches following the 1988 banking reforms should help reduce transaction costs by bringing banks closer to potential customers. The added competition in the banking sector as a whole should also induce more lending to small-scale firms. Another way of encouraging more small-scale lending would be to allow banks that specialize in small loans to securitize and sell some of these loans to other banks. This would enable the banking sector as a whole to meet the Government's 20% small-loan guideline while maintaining the efficiency benefits of bank specialization. The new initiative to revitalize the village banks also has the potential to increase lending and deposit services to small borrowers. This initiative would be facilitated by an improved regulatory framework that clarified supervision responsibilities and set out specific guidelines for the revival of inactive banks and the eventual establishment of new ones. A key to the financial viability of the village banks will be providing them the ability to mobilize voluntary savings at positive real interest rates. The promotion of credit unions may also hold promise for extending financial services to small borrowers and depositors. There are almost 1,500 credit unions in Indonesia, and many of them have been successful in making loans for housing and education. Currently these credit unions are recognized only as foundations (yayasan), because they generally are too small to meet the minimum capital standards set for financial institutions. It may be worthwhile to consider flexible application of these standards to credit unions so that they can profit from better integration with the rest of the financial sector.

6.28. Government-private sector interface. Although the role of the public sector in the economy has been declining, it still accounts for about 40% of total fixed investment in the economy each year. The awarding of Government contracts can thus have a major effect on the distribution of income and assets and the perception of equity. The Government has taken steps to streamline and rationalize its procurement procedures, and written guidelines are quite strict regarding the minimum number of bidders, evaluation criteria, etc. Implementation of these guidelines has been uneven, however, with smaller firms sometimes complaining that larger companies are able to influence shortlists and evaluation procedures. In some cases, direct appointments of contractors have been made for large projects. Strong efforts are needed to ensure that the Government maintains an "arm's-length" relationship with the private sector to ensure an equal opportunity for all qualified bidders. The duty drawback scheme, administered by BAPEKSTA, is an

excellent example of how governments can maintain such a relationship with the private sector (see Box 6.2).

**Box 6.2: BAPEKSTA:**

**MAINTAINING AN "ARM'S LENGTH" RELATIONSHIP WITH THE PRIVATE SECTOR**

An important factor in Indonesia's export performance in the past five years has been the duty exemption and drawback scheme for exporters, which was redesigned by the Government in 1986, and is administered by BAPEKSTA. The current scheme demonstrates how government agencies, by insulating themselves from private sector pressure, can ensure that a program's objectives are met. The main administrative features of the scheme include: (a) no direct contact between BAPEKSTA staff and exporters; (b) minimal staff discretion in the evaluation process; and (c) a commitment to evaluate all applications within a fixed period. These procedures promote efficiency as well as fair treatment of all exporters.

Prior to the current scheme, the regulations on duty exemptions were complex and subject to lengthy negotiation with officials at three Government agencies. Under the current scheme, the regulations are relatively simple and well publicized, and all applications are handled expeditiously by a single agency. To apply for duty relief, an exporter submits an application form and a small number of documents either by mail or in person at a special window. Exporters are encouraged to submit the application on a computer diskette using a special software program provided free. The clerks who receive the documents only issue receipts; they are not involved in evaluating the applications, which are reviewed by staff members who never come into contact with the exporters. If exporters have questions, special staff not involved in the evaluation process come downstairs or speak to the exporter by phone.

Computers are used to check the application and to calculate the duty exemption. Staff members verify only the documents that cannot be computerized. If the application is incomplete or otherwise unacceptable, BAPEKSTA informs the exporter in writing (usually by telex or fax). Contact by phone can be made only as a last resort, by designated higher-level officials, in accordance with strict guidelines; contact in person is never allowed. When the application is in order, payment is transferred directly into the exporter's bank account.

6.29. A related issue concerns joint ventures between public enterprises (PE) and the private sector. Although such joint ventures have the potential to increase efficiency and may also provide an interim step toward privatization of some PEs, care should be taken to ensure that large

influential firms do not get special treatment. Vigorous competition needs to be encouraged through negotiation with several potential private partners, all of whom must be provided with full information about the proposed venture, including an accurate valuation of the PE assets involved. The regulatory environment applying to each joint venture should also be thoroughly reviewed to make sure that the private partner does not benefit unfairly from special privileges accorded to the PE. A procedural framework is needed to address these issues in an orderly and consistent manner for all joint venture and privatization activities.

6.30. Given the need to expand infrastructure and services to accommodate rapid growth, the Government is looking at ways to increase private provision of public goods. As discussed in Chapter 5, there are many areas where the Government can effectively subcontract certain infrastructure investment and services to the private sector. This type of subcontracting typically involves very large projects or complex, long-term service agreements, however, and thus special care needs to be taken to ensure that financial arrangements do not enable the chosen private firms to make supernormal profits at the expense of the Government and public (see Box 5.1).

6.31. One common theme that applies to all level playing field initiatives is transparency. The potential for an equitable distribution of benefits in any area is significantly enhanced when decisions on legal cases, trade licenses, franchises, tenders, joint ventures, etc. are made in a transparent fashion. Even when decisions are made on the basis of strict guidelines, failure to keep the public fully informed may lead to perceptions of unfairness. Maximum effort is needed to make decisions in accordance with clear criteria and then to publish the results of these decisions regularly. For example, one way to increase transparency in the allocation of trade licenses and quotas would be to use an auction system. This would reduce both administrative discretion and the supernormal profits that often accrue under the existing allocation schemes. It would also raise Government revenue.

## E. Fiscal Policy Measures

6.32. Fiscal policy is an important tool of the Government to help ensure a more equitable distribution of income and assets. Over time, fiscal policy measures can help move the distribution of income and assets gradually in the desired direction and can be used to help meet the needs of the poor. Two areas are especially important: (i) taxation policy, particularly the personal income tax and the property tax; and (ii) expenditure policies in human resources development, agriculture, and transfers to local governments.

6.33. Taxation policy. The Government undertook a comprehensive and far-reaching reform of the tax system during the mid-1980s. In addition to improving the efficiency of Indonesia's tax system, the tax reform of the mid-1980s was also designed to improve the equity of the system. Since the implementation of these tax reforms, the Government has concentrated on improving tax administration. However, further improvements in tax administration are needed to ensure that the equity goals of the tax reform are fully realized. First, while significant improvements in income tax compliance, both personal and corporate, have been achieved, compliance rates remain low. For the personal income tax, estimates for 1988/89 indicate that

only about half of potential tax revenues are collected. In particular, non-compliance for the personal income tax is relatively high in the group of self-employed with high incomes. Regarding the corporate income tax, a large proportion is paid by public enterprises. This suggests that a significant part of the private corporate sector remains outside the tax system. This is supported by the fact that only about half of the registered corporate taxpayers filed returns in 1989. Second, our analysis of the property tax indicates that compliance is also low in the relatively wealthier urban areas and for commercial properties. Therefore enforcing compliance with the existing tax system will ensure that the equity goals of the tax system are realized and will generate revenues that could be directed toward improving the welfare of lower income groups. In addition to improving compliance, the equity of the existing tax system could be enhanced further by raising luxury tax rates and the effective rate of property taxation, as well as reviewing the role of capital gains and inheritance taxes.

6.34. The role of tax incentives should be assessed carefully. The Government has recently taken several measures to promote investment in the eastern areas of Indonesia. Firms will be allowed to carry forward tax losses for eight years instead of the usual five. They will also be given a fifty percent rebate on the property tax for eight years and in East Timor, a temporary reduction on duties on imported goods. The benefits and costs of such tax incentives, including the potential loss of local government revenues, should be carefully reviewed. In the meantime, removing local restrictions and levies on trade is likely to have a greater effect on promoting development in the Outer Islands.

6.35. Expenditure policies. Expenditure priorities can be enhanced in three areas: (i) human resource development; (ii) the agricultural sector; and (iii) transfers to local governments. Human resource development improves the immediate well-being of the poorest members of society and increases their capacity to take advantage of the wider opportunities created by private sector development. It also enhances the growth prospects of the economy by providing a pool of skilled labor upon which private industry can draw. Progress in human resource development requires a long-term commitment to making education, health care, family planning and basic social services--water supply, sanitation, and other related infrastructure--accessible to all levels of society. In urban areas, increased funding for the Kampung Improvement Program (KIP) could be an important vehicle for improving delivery of these services to the poor.

6.36. The Government emphasized the importance of improving human resource development in REPELITA V. Improvements in this area would involve three basic thrusts. First, it would direct public expenditures towards these sectors and also slant the allocation of funds within these sectors towards the poor by emphasizing, for example, preventive over curative health care, basic education over higher education, and water supply and sanitation over large urban transit systems. Second, institutional changes may be needed to ensure that delivery systems are effective in reaching the poor. Third, community groups could be more actively involved in the planning and implementation of these social programs, in order to increase participation and to reach lower-income groups more effectively.

6.37. Agricultural development programs can also be a powerful tool for improving equity. The Government's rice intensification program was closely

correlated with the dramatic decline in poverty from 1976-84, and detailed analysis of the period 1984-87 reveals that 60-70% of the decline in poverty came from households primarily engaged in agriculture. About half of all remaining poor households are still in the agriculture sector, however. These households tend to have very small landholdings or be landless, to cultivate a variety of secondary food crops or be fishermen, and to be located in resource-poor or remote areas. A large proportion of these households have not been reached by Government extension efforts, since the focus of agricultural support services has been mostly on irrigated rice cultivation, which is not economically viable in most of the areas where the poorest farmers reside.

6.38. Given their meager resource base, these poor households need eventually to move out of the agricultural sector altogether. In the short-to-medium term, however, their incomes could be improved through enhanced Government efforts to target research and extension efforts to the particular circumstances of these households. The complexity and heterogeneity of upland and Outer Island farming systems presents a major challenge to the current structure of agricultural support services. The Government has already begun to establish a network of rural extension centers that would provide advice on different types of crops as well as livestock and fishing. However, the research system needs substantially more resources, as well as a fundamental reorientation of programming and administration, before it will be able to develop viable technical packages that can be extended to low-income farmers.

6.39. As part of the Government's overall strategy, measures will be needed to stimulate income-generating activities and employment, particularly in poorer areas. Central Government transfers to local governments, particularly the INPRES program, are an important vehicle to create employment opportunities in these depressed areas. These programs, which have been a major factor in the poverty reduction achieved in the past two decades, have created social and physical infrastructure and provided O&M funding, using local labor and materials in labor-intensive construction projects. Concentrating and augmenting Central Governments transfers, particularly the INPRES, in the relatively disadvantaged areas--a process which the Government initiated in the 1990/91 Budget--would contribute positively to income distribution in three ways. First, these programs will directly provide employment to unskilled and semiskilled workers at low wages in low income areas. Second, these programs will be an important factor in fostering economic growth in those areas where private sector activity is relatively small and the ability of local governments to generate their own resources is extremely limited. Finally and more importantly, physical and social infrastructure will be created in these areas. Further refinements to the allocation criteria, particularly for the INPRES programs, may be warranted given Indonesia's changed economic structure, in order to achieve Indonesia's equity and regional development objectives effectively. As a greater share of transfers are devoted to low income areas, the effectiveness of these resources can be enhanced by improving local administrative capacity and by granting local officials more flexibility in the use of these funds.

## RECENT ECONOMIC DEVELOPMENTS

### Economic Activity

1. Indonesia's gross domestic product grew by over 7% in 1990 for the second straight year (Table 1). Slower growth in the agriculture and mining sectors was offset by higher growth in manufacturing and continued strong performance in oil/LNG construction, and other services. The manufacturing sector, which constitutes only 15% of GDP, contributed more than 25% of the growth in the economy.

Table 1: GROWTH IN SECTORAL VALUE ADDED, 1975-1990 /a
(% p.a. at 1983 prices)

| | Average 1975-83 | Average 1983-86 | 1987 | 1988 | 1989 | 1990 | Sector Shares in 1990 (% of GDP) |
|---|---|---|---|---|---|---|---|
| Oil/LNG Sectors | 2.2 | 3.3 | 1.6 | -0.6 | 4.1 | 4.1 | 18.2 |
| Oil & gas | 0.3 | 0.3 | -0.1 | -3.5 | 4.8 | 2.7 | 13.8 |
| LNG & refined oil | 14.9 | 20.0 | 8.3 | 9.7 | 1.7 | 8.6 | 4.4 |
| Non-Oil Sectors | 7.0 | 5.6 | 5.8 | 7.4 | 8.2 | 7.8 | 81.8 |
| Agriculture | 3.5 | 3.7 | 2.1 | 4.7 | 4.3 | 2.5 | 19.7 |
| Mining | 6.8 | 2.2 | 7.0 | 4.8 | 11.0 | 4.1 | 1.2 |
| Manufacturing | 10.6 | 12.2 | 11.4 | 12.8 | 11.6 | 12.8 | 14.9 |
| Construction | 10.8 | 0.1 | 4.2 | 9.5 | 11.8 | 12.1 | 5.7 |
| Other services | 8.6 | 5.8 | 6.4 | 6.9 | 8.5 | 8.2 | 40.3 |
| Gross Domestic Product (GDP) | 6.5 | 5.1 | 4.9 | 5.7 | 7.4 | 7.1 | 100.0 |

/a In 1989, CBS released new GDP estimates for the years 1983-1988. The series prior to 1983 has not been revised, however, so the average growth rate for 1975-83 is derived using the 1983 production level from the old series, which is at constant 1973 prices.

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

2. The oil/LNG sector continued growing by about 4% in 1990. However, the composition of this growth changed. In 1989, growth was due primarily to increased production of crude oil and natural gas, with low growth in both the refinery and LNG subsectors. In 1990, oil fields were already running near capacity, so crude oil production could be increased only slowly, despite the lifting of OPEC quotas in August. However, production increased substantially in the first quarter of 1991. Natural gas production increased rapidly in the second half of the year as several pipelines came into operation. Refinery production increased by over 10% for the year, as throughput was increased to

meet growing domestic demand for fuels. The March 1990 inauguration of a fifth LNG train in Bontang, East Kalimantan made possible 6% growth in LNG output for the year.

3. Growth in the non-oil sector was sustained at about 8%, despite lower growth in agriculture. The surge in investment following deregulation continues to be reflected in the expansion of the manufacturing sector, which grew by nearly 13% in 1990. The footwear and textile industries grew rapidly and exported most of their additional output. Automobile production also increased sharply in response to high domestic demand. Production of basic chemicals rose substantially as well.

4. Growth in the construction sector remained high, reflecting the boom in commercial property development as well as continued investment in the road network. Growth in this sector may have been constrained, however, by a shortage of both expertise and raw materials, including cement. Other services also continued to expand rapidly. Growth in the banking sector was slower than in 1989, the year following the reforms, but it still exceeded 12%, as banks expanded credit rapidly in a bid to gain market share. Overall economic growth, combined with the expanding road network, led to 9% growth in both trade and transportation. Value added in hotels and restaurants was up 8% but would have been substantially higher if tourist arrivals had not been adversely affected by the Gulf Crisis.

5. Growth in agriculture, which makes up one-fifth of total GDP, fell from 4.3% in 1989 to 2.5% in 1990. The biggest factor in this slowdown was lower growth in rice production, which accounts for over one-quarter of agricultural GDP. Adverse weather conditions, pest attacks, and a December 1989 harvest that included some areas that would normally have been harvested in January 1990, combined to reduce rice output growth to 1%, compared to over 5% in 1989. Production of corn was up over 9%, and intensified extension efforts for soybeans, combined with the Government's policy of maintaining producer prices well above world levels, helped production grow by over 5%. By contrast, production of cassava fell by 9% after several years of rapid growth, as Indonesia's EC quota finally became binding. Sweet potato production also fell by over 12%.

6. Growth in many non-food crops was also slow, especially on smallholder farms. Production of tea was down 7%, and rubber output grew less than 5%, reflecting an aging tree stock, the continuing lack of an effective replanting scheme, and lower prices. By contrast, the maturing of private oil palm estates planted in the second half of the 1980s made possible growth of over 16%. Copra also performed well (10% growth), rebounding from the previous year's 3% production decline.

7. Fishery output continued to grow at 5%, the average for five years. This growth continues to come mostly in captive fisheries, as exploitation of marine and open inland fisheries have neared or exceeded sustainable levels in many areas. Shrimp production, in particular, continued to rise despite lower world prices. Growth in the livestock subsector accelerated from 5% in 1989 to 7% in 1990, with poultry production continuing to expand rapidly. Forestry production growth slowed from nearly 7% in 1989 to about 4.5% in 1990. A major factor in the decline was the imposition of a prohibitive export tax in late 1989 on sawn timber.

8. Income and Expenditure. Gross National Income (GNY) rose by about 8% in 1990, as GDP growth remained high and oil prices rose substantially due to the Gulf Crisis (Table 2). Consumption and investment were also higher in 1990. Government consumption rose by over 6.5% as higher world oil prices led to a much larger subsidy on domestic fuel prices. A 10% pay raise for Government employees also took effect in January 1990. Private consumption increased by about 8%, which was facilitated by rapid growth in domestic credit. Fixed investment growth was the fastest of the decade. Higher oil revenues allowed Government and public enterprises to increase capital spending by almost 10%, and the continuing effects of deregulation led to nearly 20% growth in private investment.

Table 2: INCOME AND EXPENDITURE, 1975-1990
(at 1983 prices)

| | Growth rates (% p.a.) | | | | | | 1990 |
|---|---|---|---|---|---|---|---|
| | Average 1975-83 /a | Average 1983-86 | 1987 | 1988 | 1989 | 1990 /c | Share in GDP (%) |
| Consumption | 8.9 | 4.1 | 3.9 | 4.3 | 5.9 | 7.9 | 69.7 |
| - Public | 8.5 | 3.6 | -3.7 | 2.6 | 6.6 | 6.6 | 8.8 |
| - Private | 11.9 | 4.2 | 5.1 | 4.6 | 5.8 | 8.1 | 60.9 |
| Fixed investment | 10.7 /b | -5.7 | 2.6 | 10.3 | 13.0 | 16.2 | 21.1 |
| - Public | 12.6 /b | -9.6 | -7.7 | 11.4 | 6.8 | 9.6 | 7.2 |
| - Private | 9.1 /b | -2.4 | 10.1 | 9.7 | 16.8 | 19.9 | 13.9 |
| GDP | 6.5 | 5.1 | 4.9 | 5.7 | 7.4 | 7.1 | 100.0 |
| GNP | 6.4 | 5.5 | 5.4 | 6.0 | 7.4 | 7.2 | 96.7 |
| GNY | 8.5 | 2.5 | 5.9 | 6.2 | 7.7 | 8.2 | 90.4 |

/a 1975-83 average is at 1973 prices.
/b 1978-82 only, and at 1983 prices.
/c Preliminary.

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

## The Balance of Payments

9. Since Indonesia's economy is very open, much of the domestic demand pressure translated into pressure on the balance of payments during 1990/91, when the non-oil trade deficit widened sharply. Non-oil export growth slowed markedly because of: a sharp downturn in commodity prices; diversion of exports into the local market; and some special factors, such as the emergence of capacity constraints in some manufacturing activities, production difficulties (e.g. aluminum), and the imposition of a prohibitive export tax on sawn timber. Non-oil imports rose rapidly. Capital goods imports showed the largest increase, reflecting the rapid rise in private investment. But

Table 3: BALANCE OF PAYMENTS, 1986/87-1990/91
(US$ billion at current prices)

| | Actual | | | | Estimated |
|---|---|---|---|---|---|
| | 1986/87 | 1987/88 | 1988/89 | 1989/90 | 1990/91 |
| Merchandise exports (fob) | 13.7 | 18.3 | 19.8 | 23.6 | 28.1 |
| Oil & LNG | 7.0 | 8.8 | 7.6 | 9.3 | 12.6 |
| Non-oil | 6.7 | 9.5 | 12.2 | 14.3 | 15.5 |
| Merchandise imports (cif) | -12.8 | -14.9 | -16.2 | -19.5 | -26.0 |
| Oil & LNG | -2.4 | -3.1 | -2.6 | -3.1 | -4.2 |
| Non-oil | -10.4 | -11.8 | -13.6 | -16.4 | -21.8 |
| Trade balance | 0.9 | 3.4 | 3.6 | 4.1 | 2.1 |
| Non-factor services (net) | -1.5 | -1.2 | -1.2 | -1.2 | -0.7 |
| Interest payments (MLT) | -2.5 | -2.7 | -3.0 | -3.1 | -3.1 |
| Other factor services and transfers (net) | -1.1 | -1.4 | -1.3 | -1.6 | -2.1 |
| Current account balance | -4.2 | -1.9 | -1.9 | -1.8 | -3.8 |
| Oil/LNG current account | 2.6 | 3.6 | 3.0 | 3.9 | 5.9 |
| Non-oil current account | -6.8 | -5.5 | -4.9 | -5.7 | -9.7 |
| Public MLT loans (net) | 2.4 | 1.8 | 3.2 | 1.5 | 0.5 |
| Disbursements | 5.2 | 6.0 | 7.3 | 6.1 | 4.9 |
| Principal repayments /a | -2.8 | -4.2 | -4.1 | -4.6 | -4.4 |
| Other capital (net) | -0.7 | 1.0 | -1.6 | 0.3 | 7.4 |
| Use of net foreign assets | 2.5 | -0.9 | 0.3 | 0.0 | -4.1 |
| Use of official reserves | 0.7 | -1.0 | 0.6 | -0.3 | -3.4 |
| Use of comm. bank reserves | 1.8 | 0.1 | -0.3 | 0.3 | -0.7 |
| Memo items: | | | | | |
| Net official reserves(US$ bln.)/b | 5.0 | 6.0 | 5.4 | 5.7 | 9.1 |
| - Months of imports /c | (4.1) | (4.4) | (3.3) | (2.6) | (3.9) |
| Total net foreign assets (US$ bln.) | 10.0 | 10.9 /d | 10.6 | 10.6 | 14.7 |
| Current account/GNP (%) | -5.9 | -2.6 | -2.3 | -2.0 | -3.8 |
| Non-interest current account balance (% of GDP) | -1.7 | 1.9 | 2.1 | 2.2 | 0.1 |
| MLT debt service/exports (%) /e | 39.7 | 34.8 | 34.4 | 31.6 | 27.3 |

/a Includes prepayments of US$626 million in 1987/88, US$341 million in 1988/89 and US$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 imports (oil/LNG and non-oil) of goods.
/d Excludes US$326 million of prepayments, committed during the year but not completed until June 1988.
/e 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.

consumer goods imports also continue to grow rapidly, albeit from a small base. Although the brisk pace of economic activity and private sector investment largely explain the surge in non-oil imports, monetary policy in late 1989 and early 1990 also accommodated these trends. The higher import bill was partly offset by higher earnings from oil/LNG due to higher oil prices and oil production as a result of the Gulf crisis. The oil/LNG current account surplus improved to US$5.9 billion in 1990/91, about US$2.0 billion higher than in 1989/90. Net non-oil service receipts remained at roughly the same level as 1989/90. The overall effect of these factors was that the current account deficit widened to US$3.8 billion (about 3.8% of GNP), roughly double the 1989/90 level.

10. There were important changes in the sources of financing of the current account deficit during 1990/91. Gross public disbursements declined to US$4.9 billion in 1990/91, substantially lower than in 1989/90. As a result, net disbursements were only slightly positive. This primarily reflected a fall in special assistance and a large decline in the use of commercial credits. A substantial increase in private capital inflows was the main source of balance of payments financing during 1990/91. Data on financial commitments between the private sector and offshore financial institutions indicate that disbursements of private debt were about US$6.0 billion, which implies a doubling of the level of private non-guaranteed debt during 1990.1/ This increase in private non-guaranteed debt and the rapid growth in capital imports reflected the strong investment demand discussed earlier. While the majority of the inflow was related to private investment, state and private national banks both borrowed substantially abroad in order to lend to domestic customers.2/ Much of the private foreign borrowing was swapped with Bank Indonesia (BI), leading to a sharp increase in swaps outstanding with BI. Higher private inflows and a reduction in the net foreign assets of commercial banks more than offset the decline in public debt flows and the current account balance. This allowed BI's net official reserves to increase to US$9.1 billion, 3.9 months of next years' expected imports. However, about half of these reserves are swaps, which are a contingent liability of BI.

11. Exports. Due to the Gulf Crisis, crude oil prices averaged about US$23/barrel in 1990/91, compared to US$18/barrel in 1989/90. Prior to the crisis, prices had fallen to under US$15, but the August invasion of Kuwait caused prices to double, with prices peaking at nearly US$35 in October. The cessation of hostilities in the Gulf in late February brought the price down below US$20. The lifting of OPEC quota restrictions in August allowed Indonesia to increase its oil exports (including refined products) by 6%, to about 369 million barrels in fiscal year 1990/91, with much of the growth coming in early 1991. The combination of higher prices and higher

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1/ These disbursements show up both in direct borrowing overseas by private firms (shown as other capital (net)) and direct borrowing overseas by banks which is shown under use of commercial bank reserves in the balance of payments.

2/ A portion of this lending, particularly from the private national banks, was for consumer loans and real estate transactions, particularly in the first half of the fiscal year.

quantities increased oil export revenues by 33%, to US$8.3 billion for the fiscal year. Export revenues from LNG and LPG rose by about 42%, reflecting both price and volume gains.

12. In 1990/91, non-oil export revenues grew in nominal terms by 8.5%, only about half as fast as the previous year and a third as fast as the average over the last two years. The poorest performance was in agricultural exports, where a prohibitive export tax on sawn timber caused sawn timber exports to fall by 95% in real terms and about US$500 million (87%) in nominal terms. Exports of other non-manufactured timber products were up slightly, but total export revenues from timber products were down about US$450 million for the year. The Gulf Crisis disrupted exports of tea, which fell over 20% in both real and nominal terms. Declining prices for rubber and oil palm caused export revenues to fall slightly, despite strong growth in export volumes. The only major commodity that showed increased export revenues was shrimp, which was up by 14%. Shrimps now contribute 15% of total agricultural export revenues, compared to less than 7% in 1982/83.

13. Total export volumes of minerals and metals changed little from the previous year, but lower prices caused a 15% drop in export earnings in nominal terms. A contractual dispute and production problems reduced export volumes of aluminum by 35%, which, together with lower prices, caused export revenues to fall by over 40%. Nickel prices fell by nearly 50%, which more than offset the 12% increase in export volumes.

14. The only category of exports that grew significantly in 1990/91 was manufactured goods, which now make up two-thirds of total non-oil exports (versus about one-fourth in 1983/84). Export revenues in 1990/91 were up nearly 25% (US$2.0 billion), but this growth rate was still well below the 36% average rate achieved over the previous two years. Higher unit values contributed much of the revenue increase in 1990/91, but volumes were also up 15%. Textile export revenues continued to grow rapidly (36%), as Indonesia successfully exploited a number of non-U.S. markets. Plywood exports grew by about US$400 million (17%).

15. Growth in exports of many "other" manufactured goods slowed dramatically or was even negative in 1990 (Table 5). The main reason for this slowdown was a diversion of production to the rapidly expanding domestic market, especially the construction sector. Exports of iron, steel, and metal products were down about 40%, while exports of cement fell 25% in response to a surge in demand in the domestic market, which caused shortages toward the end of the year. But there were several exceptions to the general trend. Large increases in capacity allowed footwear exports to more than double to nearly US$500 million. The heavily protected furniture sector also increased its exports by more than 50%. Exports by the emerging plastics sector were up 30%.

Table 4: NON-OIL MERCHANDISE EXPORTS, 1983/84-1990/91

| | Value at current prices (US$ million) | | | | Growth in volume terms (% p.a) | | |
|---|---|---|---|---|---|---|---|
| | Actual | | | Estimate | 1983/84- | 1987/88- | 1990/91 |
| | 1983/84 | 1987/88 | 1989/90 | 1990/91 | 1987/88 | 1989/90 | (est.) |
| Agricultural commodities | 3,095 | 3,852 | 4,497 | 3,964 | 4.0 | 7.1 | -3.7 |
| Timber products | 582 | 627 | 1,024 | 575 | -2.6 | -6.6 | -52.3 |
| Rubber | 984 | 1,055 | 952 | 942 | 1.1 | 0.8 | 5.0 |
| Coffee | 506 | 497 | 448 | 403 | -2.1 | 20.0 | -0.3 |
| Palm oil | 92 | 214 | 279 | 271 | 26.0 | 15.7 | 15.0 |
| Tea | 156 | 119 | 176 | 136 | 3.6 | 8.3 | -23.5 |
| Shrimp | 206 | 368 | 513 | 583 | 19.9 | 20.0 | 7.0 |
| Rattan | 87 | 162 | 0 | 0 | 13.0 | -100 | - |
| Others | 483 | 811 | 1,105 | 1,053 | 6.5 | 16.4 | -7.6 |
| Minerals & metals | 800 | 1,112 | 1,551 | 1,320 | 8.1 | 6.4 | 0.3 |
| Tin | 309 | 143 | 208 | 170 | -2.6 | 9.0 | 4.8 |
| Gold | - | 308 | 218 | 240 | - | -8.9 | 3.5 |
| Aluminum | 165 | 245 | 267 | 152 | 7.9 | 2.9 | -35.0 |
| Copper | 89 | 186 | 321 | 295 | 11.0 | 8.4 | 0.0 |
| Nickel | 170 | 146 | 373 | 252 | -12.9 | 9.5 | 11.7 |
| Others | 67 | 83 | 163 | 212 | -7.3 | 66.6 | 34.7 |
| Manufactured goods | 1,484 | 4,538 | 8,445 | 10,447 | 26.7 | 31.5 | 15.3 |
| Textiles | 365 | 1,195 | 2,421 | 3,282 | 28.8 | 36.9 | 27.5 |
| Plywood/ panel products | 579 | 1,834 | 2,430 | 2,845 | 24.2 | 15.0 | 8.0 |
| Others | 540 | 1,509 | 3,594 | 4,320 | 27.8 | 42.0 | 12.0 |
| Total non-oil exports | 5,379 | 9,502 | 14,493 | 15,732 | 12.2 | 18.6 | 6.7 |

Source: Bank Indonesia and World Bank staff estimates.

16. Imports. Non-oil imports grew by about 35% in current terms in 1990/91 (Table 6). The most rapid growth was in imports of capital goods, reflecting the continuing response of investors to deregulation. Capital goods imports increased almost 60% and contributed two-thirds of the total increase in imports. A large proportion of capital good imports was machinery, especially for textile and footwear exports. Imports of intermediate goods grew relatively slowly, partly as a result of the slowdown in non-oil exports.

Table 5: MAJOR ITEMS WITHIN "OTHER" MANUFACTURED EXPORTS, 1985-90
(US$ million at current prices)

| Products | Actual 1985 | 1986 | 1987 | 1988 | 1989 | Estimate 1990 | Avg. Annual Growth Rate 1985-90 (%) |
|---|---|---|---|---|---|---|---|
| Ceramics | 0.5 | 1.2 | 4.5 | 14.1 | 28.6 | 25.4 | 128.5 |
| Plastics | 1.5 | 12.5 | 24.7 | 56.1 | 77.6 | 102.4 | 119.6 |
| Sandal, Shoes | 8.2 | 8.8 | 23.5 | 82.6 | 220.4 | 488.8 | 93.3 |
| Furniture | 7.1 | 9.2 | 27.2 | 69.7 | 153.3 | 241.0 | 84.9 |
| Other articles of basic metal | 5.4 | 7.6 | 17.4 | 56.9 | 90.2 | 69.1 | 75.9 |
| Iron/steel | 34.2 | 69.5 | 196.0 | 296.2 | 452.8 | 271.3 | 67.6 |
| Glass & its product | 8.3 | 12.7 | 30.7 | 93.7 | 91.5 | 93.0 | 61.6 |
| Rubber products | 7.5 | 11.3 | 24.2 | 48.8 | 72.8 | 69.5 | 57.5 |
| Paper & its products | 20.9 | 31.8 | 95.8 | 138.2 | 168.3 | 137.3 | 51.7 |
| Cement | 21.5 | 39.8 | 56.1 | 75.6 | 128.4 | 96.4 | 43.0 |
| Processed food | 56.7 | 81.5 | 105.9 | 139.2 | 237.4 | 249.7 | 33.2 |
| Matting | 13.3 | 19.4 | 47.2 | 76.4 | 48.1 | 36.1 | 29.4 |
| Other | 93.8 | 122.7 | 91.9 | 240.7 | 311.7 | 382.0 | 27.2 |
| Leather & its product | 37.5 | 43.9 | 53.8 | 77.6 | 84.0 | 76.0 | 17.5 |
| Fertilizer | 80.0 | 127.3 | 86.0 | 134.1 | 165.4 | 171.7 | 15.6 |
| Animal feed | 90.8 | 97.8 | 113.2 | 147.5 | 128.7 | 132.1 | 7.2 |
| Pharmaceutical products | 6.5 | 7.0 | 9.4 | 15.4 | 8.0 | 8.9 | 4.4 |
| Total of major items | 493.5 | 703.9 | 1007.7 | 1762.6 | 2467.3 | 2650.5 | 38.0 |

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

Table 6: NON-OIL MERCHANDISE IMPORTS, 1983/84-1990/91 /a

| | Value at current prices (US$ million) Actual 1983/84 | 1987/88 | 1989/90 | Estimate 1990/91 | Growth in current prices (% p.a.) 1983/84-1987/88 | 1987/88-1989/90 | 1989/90-1990/91 (est.) |
|---|---|---|---|---|---|---|---|
| Manufacturing | 8,795 | 10,265 | 14,543 | 20,022 | 3.9 | 19.0 | 37.7 |
| Consumer goods | 1,225 | 1,062 | 1,599 | 2,182 | -3.5 | 22.7 | 36.5 |
| Intermediate goods | 3,305 | 4,343 | 6,573 | 7,717 | 7.1 | 23.0 | 17.4 |
| Capital goods | 4,264 | 4,860 | 6,371 | 10,123 | 3.3 | 14.5 | 58.9 |
| Agriculture | 697 | 754 | 1,128 | 1,231 | 2.0 | 22.3 | 9.1 |
| Mining | 98 | 211 | 294 | 338 | 21.1 | 18.0 | 15.0 |
| Total | 9,590 | 11,229 | 15,966 | 21,591 | 4.0 | 19.2 | 35.2 |

/a Import data from the Central Bureau of Statistics differ slightly from Bank Indonesia data, which are used in the balance of payments.

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

As much of the new investment has been in export-oriented industries, intermediate good imports can be expected to grow rapidly in the near future. Growth in consumer imports was over 35%, with especially large increases in automotive products. Nevertheless, consumer goods imports remained a small proportion of total imports and contributed only about a tenth of the total increase in imports for the year.

17. Capital flows and debt. In aggregate, public MLT disbursements declined by US$1.2 billion, resulting primarily from a substantial decline in the use of commercial credits (about US$1.1 billion), and lower disbursements of special assistance (about US$0.4 billion). Repayment of principal also declined, by about US$0.2 billion. Therefore, net disbursements of public MLT were only US$0.5 billion, a significant decline from previous years. An important change occurred in capital flows during 1990/91, as inflows of private capital, both private non-guaranteed debt and direct foreign investment, increased substantially. The total debt service ratio fell from 31.3% in 1989/90 to 27.3% in 1990/91, reflecting higher total export earnings, particularly higher oil prices.

18. Disbursements of project aid, primarily from the IGGI, increased by about US$0.2 billion to US$2.4 billion in 1990/91 and accounted for more than one half of public MLT disbursements. Given the need to maintain disbursements of official assistance in order to finance higher current account deficits in the near term, it will be important to ensure an appropriate pace of project disbursements. Identifying methods to speed the processing of disbursement applications could help in raising project disbursements. Such measures could also help ensure smooth project implementation.

19. The provision of special assistance, in the form of fast-disbursing program aid and local-cost financing, again made a significant contribution to financing the current account deficit. Out of a total of US$1.3 billion in special assistance pledged at the 1990 IGGI meeting, actual commitments amounted to US$1.1 billion. Total disbursements of special assistance during the 1990/91 fiscal year, however, were about US$1.3 billion, reflecting carry-overs from commitments made in previous years. This brings total disbursements of special assistance over the past four years to US$6.7 billion. Special assistance has continued to play a valuable role in helping the Government push ahead with its trade deregulation measures and in facilitating the recovery of private investment and economic activity. It has also enabled Indonesia to improve the term structure of its external debt, while maintaining confidence in financial markets about the viability of the Government's adjustment program.

20. There has been a decline in the use of import-related credits in recent years, with disbursements falling from a peak of US$2.1 billion in 1983/84 to an average of about US$600 million in the last two fiscal years. This trend reflects the Government's decision to reduce public investment in large capital-intensive projects and to place strict limits on the use of non-concessional financing under Presidential Instruction No.8 of 1984 (INPRES 8). Disbursements of untied commercial credits totalled less than US$0.1 billion in 1990/91, a substantial decline from the previous year, when disbursements totalled about US$1.2 billion. Undisbursed lines of commercial credits rose to about US$2.0 billion at the end of March 1991, reflecting changes in

exchange rates and the new commercial credit signed during the fiscal year, but not disbursed.

21. Other capital flows 3/ were significantly positive. Private capital inflows increased significantly during 1990/91. Direct foreign investment flows during 1990/91 are estimated at about US$0.9 billion, reflecting the surge in private investment activity particularly from foreign investors. Data on private non-guaranteed debt agreements between the Indonesian private sector and offshore financial institutions indicate that disbursements of private debt were at least US$6 billion. Roughly half of these transactions were with the Indonesian banking sector, including state banks.4/ The remaining private non-guaranteed borrowings were by Indonesian private sector companies and many of these transactions were related to investment activities. These large private capital inflows were in sharp contrast to previous years. The inflows of private capital more than offset the higher current account deficit. This resulted in a significant increase in net official reserves from US$5.7 billion in 1989/90 to an estimated US$9.1 billion in 1990/91. However, a significant portion of net official reserves are swaps, which are a contingent liability of BI.

22. Indonesia's stock of public and private MLT external debt outstanding rose significantly, from US$48.5 billion at end 1989 to an estimated US$56.9 billion at end 1990. Public debt rose 7% to US$46.7 billion, including US$28.9 billion of assistance from the IGGI. Private non-guaranteed debt outstanding rose to US$10.2 billion at end-1990. Total MLT debt payments were US$8.5 billion in 1990 roughly the same level as in 1989. Due to higher export earnings, the debt service ratio declined from 31.6% in 1989 to 27.3% in 1990. As discussed in Chapter 2, the debt service ratio and other debt indicators are also projected to decline over the medium term.

Budgetary Developments

23. The Central Government Budget for 1990/91 conservatively assumed an average oil price of US$16.50/barrel, lower than the average price for 1989/90 of US$17.90. To offset the loss of oil/LNG revenues, the Budget projected an 18% increase in non-oil taxes. As shown in Table 7, the stronger non-oil tax effort was budgeted to allow the Government to finance a higher level of total expenditure while maintaining a cautious fiscal stance by holding the budget deficit below 2.0% of GDP. The actual revenue outcome is estimated to be better than expected, primarily because of much higher oil revenues, but also because non-oil taxes were higher than budgeted. This additional revenue enabled the Government to undertake a sizeable expansion in total spending while running a budget surplus instead of a deficit. Thus, the overall budget balance is estimated to have run a surplus of 2.0% of GDP, while the primary budget balance (net of external interest payments) ran a surplus of 4.6%.

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3/ As defined in Table 3, other capital flows are a residual item, including direct foreign investment, oil/LNG export credits, all private capital flows, valuation adjustments, and errors and omissions.

4/ BI does not classify borrowing by state banks as public debt.

Table 7: CENTRAL GOVERNMENT BUDGET, 1989/90-1991/92
(Rp. trillion at current prices)

| | 1988/89 | 1989/90 | 1990/91 | | 1991/92 |
|---|---|---|---|---|---|
| | Actual | | Budget | Estimate | Budget |
| Revenues and grants | 23.9 | 30.0 | 31.6 | 42.6 | 40.2 |
| Oil/LNG | 9.9 | 11.8 | 10.8 | 18.9 | 15.0 |
| Non-oil taxes | 11.9 | 15.4 | 18.2 | 20.7 | 22.4 |
| Non-tax revenue /a | 1.6 | 2.1 | 2.6 | 2.3 | 2.8 |
| Grants | 0.5 | 0.7 | 0.0 | 0.8 | 0.0 |
| Current expenditures | 16.8 | 19.8 | 21.7 | 24.0 | 24.8 |
| External interest | 4.3 | 4.5 | 5.2 | 4.8 | 5.2 |
| Subsidies | 1.0 | 1.5 | 0.8 | 4.0 | 1.4 |
| Other | 11.5 | 13.8 | 15.7 | 15.2 | 18.2 |
| Government savings | 7.1 | 10.2 | 9.9 | 18.7 | 15.4 |
| Capital expenditures | 10.6 | 11.6 | 13.6 | 14.7 | 16.9 |
| Budget balance | -3.5 | -1.4 | -3.7 | 4.0 | -1.4 |
| Financed by: | | | | | |
| External loans (net) | 5.0 | 2.6 | 3.7 | 1.2 | 1.5 |
| Disbursements | 11.5 | 10.2 | 11.3 | 8.8 | 10.4 |
| - Project aid /b | (5.9) | (5.1) | (7.3) | (6.2) | (8.8) |
| - Other /c | (5.6) | (5.1) | (4.0) | (2.6) | (1.5) |
| Amortization | 6.5 | 7.6 | 7.6 | 8.2 | 8.9 |
| Asset drawdown | -1.5 | -1.2 | 0.0 | -5.2 /d | 0.0 |
| Memo items (as % of GDP) | | | | | |
| Revenues and grants | 16.2 | 17.5 | 16.1 | 21.2 | 18.0 |
| Non-oil taxes /e | 10.0 | 11.2 | 11.3 | 12.9 | 12.2 |
| Government savings | 4.8 | 5.9 | 5.0 | 9.5 | 6.9 |
| Budget balance | -2.4 | -0.8 | -1.9 | 2.0 | -0.7 |
| Total expenditure /f | 18.6 | 18.3 | 17.9 | 19.7 | 18.7 |
| Net domestic expenditure /g | 2.7 | 2.4 | 0.9 | 2.2 | 1.2 |
| Primary balance /h | 0.6 | 1.9 | 0.8 | 4.6 | 1.7 |
| GDP (Rp. trillion) | 147.4 | 172.1 | -- | 196.0 | 221.0 |

/a Includes domestic oil surplus in 1989/90 (Budget)
/b Includes import-related credits.
/c Includes program loans, rupiah support and commercial borrowing.
/d Includes Rp.2.0 trillion allocated to reserves in the development budget.
/e As % of non-oil GDP.
/f Current plus capital.
/g Domestic content of expenditure less non-oil revenues.
/h Budget balance net of external interest payments.

Source: Ministry of Finance and World Bank staff estimates.

This surplus offset the decline in financing from net external loans disbursements (which were Rp.2.5 trillion lower than budgeted), and allowed the Government to build up its assets by Rp.5.2 trillion.

24. Revenues. Oil/LNG revenues in 1990/91 are estimated to have exceeded the Budget target by 75% (Rp.8.1 trillion), largely because of the steep rise in world oil prices in the wake of the Gulf crisis, which averaged US$23/barrel. Non-oil taxes were also 14% higher than budgeted. Income tax receipts exceeded the Budget target (increasing by 45% over the previous year), while VAT and import duties were also significantly higher (by 28% and 51%, respectively, over the previous year) because of the rapid growth in non-oil imports. The property tax also exceeded the Budget target, but its yield remains well below potential.

25. Expenditures. Central Government current expenditures in 1990/91 are estimated to have grown by 21% (Rp.4.2 trillion) over the previous year, mainly because of higher subsidies. Despite the 18% average increase in domestic oil prices implemented on May 25, 1990, oil subsidy payments ballooned to Rp.3.4 trillion, compared to Rp.0.7 trillion last year. This reflected a combination of higher crude oil prices and rapid growth in domestic consumption, which raised the subsidy requirement in 1990/91 to Rp.2.6 trillion.5/ In addition, arrears amounting to Rp.0.8 trillion were paid to Pertamina for shortfalls in subsidy payments made in the previous two years. This was slightly offset by a small decrease in the fertilizer subsidy (from Rp.760 billion to Rp.660 billion) resulting from the retail price increase implemented in October 1990. The main additional factor underlying the rise in current expenditure compared to 1989/90 was the 10% pay increase for Government employees that became effective in January 1990. This resulted in an increase of Rp.1.4 trillion in payments for Central and Regional Government personnel.

26. The level of capital expenditure in 1990/91 is estimated to be Rp.14.7 trillion, higher than the Budget target of Rp.13.6 trillion. This was made possible by the Rp.8.8 trillion increase in government savings, which more than offset the large decline in net loans relative to the Budget target. As a result, real capital spending rose significantly. However, it remains lower than the level of real capital expenditure achieved in 1985/86.

27. The 1991/92 Budget. In presenting the new Budget, the President affirmed the Government's commitment to prudent macroeconomic management, noting the need to coordinate fiscal policy with monetary policy to improve the balance of payments and reduce inflationary pressures. The fiscal stance adopted in the Budget attempted to reflect these policy concerns by preserving flexibility in the face of uncertainties in the world oil market. At the time, the Budget assumption of an average oil price of US$19/barrel (around US$4 lower than the likely average for 1990/91 and slightly lower than the World Bank's projected price of US$19.4 for 1991/92) appeared conservative. In order to help offset the projected decline in oil/LNG revenue, the Government continued to emphasize the need for non-oil revenue mobilization. Together with a budgeted level of net foreign assistance of Rp.1.5 trillion,

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5/ Oil consumption volume is projected to total 33.6 million kiloliters, or 10% higher than the level of 30.5 assumed in the 1990/91 Budget.

these revenue targets would allow the Government to fina a higher level of capital spending in real terms to support its infrastruc e development and poverty alleviation objectives. Based on these assumpt s, the overall budget balance would switch back to a deficit of -0.7% GDP (from a surplus of 2.0% of GDP in 1990/91). Nevertheless, the overall fiscal stance of the Budget would tighten, with net domestic expenditure projected to fall to 1.2% of GDP (from 2.2% in 1990/91), and the primary balance would remain in surplus at 1.7% of GDP. However, continued strong private sector demand indicates a need to reduce expenditures and increase revenues further

28. The 1991/92 Budget projects a large drop in oil/LNG revenues compared to the 1990/91 outcome because of the lower oil price assumption. The non-oil tax targets proposed in the Budget anticipate an increase of 8% over the level realized in 1990/91. While this is much slower than the 34% increase in non-oil tax revenues that was achieved in 1990/91, it will need to be realized in a year of slower projected growth in imports and GDP.

29. Almost none of the budgeted increase in spending over the expected outcome in 1990/91 is for current expenditures. This reflects the Government's intention to preserve flexibility in the face of oil price uncertainties. Civil service pay scales have not been adjusted, but outlays on salaries are expected to rise because of structural increases and new hiring. This will be financed by reallocating current expenditure from subsidies, which are budgeted to fall because of the lower oil price. The Budget assumes no increase in the domestic sales price of petroleum products, resulting in an oil subsidy of Rp.1.2 trillion.

30. The Budget calls for an increase in capital spending of Rp.2.2 trillion over the level expected for 1990/91. The broad policy priorities outlined for development expenditure in the Budget are consistent with REPELITA V. The main features include: (a) strengthening infrastructure support for private sector development, reflected in rising sector shares for energy and roads (from 31.5% to 32.7%); (b) sustained support for human resource development for poverty alleviation (22.1%); and (c) a further shift of resources into regional development transfers (12.7%). However, the level of development expenditures needs to be carefully reviewed in order to avoid putting additional pressure on the balance of payments and prices.

Money and Prices

31. Monetary policy. As in past years, the goals of monetary policy were to maintain an adequate level of international reserves and to control domestic inflation. Rapid expansion in the monetary base in late 1989, which resulted from efforts to ease domestic interest rates, led to pressures on both international reserves and domestic prices during the first half of 1990. In response to these events, BI moved in May 1990 to tighten domestic monetary policy, by reducing liquidity credits and subsequently moving government accounts from commercial banks to BI. Interest rates responded quickly to the new policy, with the SBI rate increasing almost four percentage points between May and June. International reserves at BI also recovered quickly. Since May 1990, BI has persisted in its efforts to maintain a tight domestic monetary

stance. Reserve money growth has been slowed from an annualized rate of over 30% in April 1990 to less than 20% for the calendar year (Table 8).

Table 8: FACTORS AFFECTING MONEY SUPPLY AND LIQUIDITY, 1986-90
(Billions of Rupiah)

| Changes in | Change in Year End Stocks /b | | | | | % Change in Stocks /b | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1986 /a | 1987 /c | 1988 | 1989 | 1990 | 1987 /c | 1988 | 1989 | 1990 |
| Net foreign assets | 1,850 | 2,452 | -549 | 409 | -2,171 | 15.3 | -3.0 | 2.3 | -11.9 |
| Use of Government deposits | 470 | 1,529 | -248 | -1,176 | -3,877 | -2.2 | -3.3 | -16.4 | -46.4 |
| Credit to public enterprises | 227 | 729 | 659 | 1,444 | -921 | 12.2 | 9.8 | 19.6 | -10.4 |
| Credit to private sector | 4,547 | 6,245 | 11,069 | 22,132 | 35,809 | 28.1 | 38.9 | 56.0 | 58.1 |
| Net other assets | -2,586 | -4,731 | -3,314 | -6,102 | -2,915 | -62.5 | -27.0 | -39.1 | -13.4 |
| Broad money (M2) | 4,508 | 6,224 | 8,113 | 16,707 | 25,925 | 22.5 | 23.9 | 39.8 | 44.2 |
| Narrow money (M1) | 1,573 | 1,008 | 1,707 | 5,722 | 3,705 | 8.6 | 13.5 | 39.8 | 18.4 |
| - Currency | 898 | 444 | 464 | 1,180 | 1,668 | 8.3 | 8.0 | 18.9 | 22.5 |
| - Demand deposits | 675 | 564 | 1,243 | 4,542 | 2,037 | 8.9 | 18.0 | 55.8 | 16.1 |
| Time & saving deposits (QM) | 2,935 | 5,216 | 6,406 | 10,985 | 22,220 | 32.6 | 30.2 | 39.8 | 57.6 |
| Rupiah liquidity /d | 3,180 | 5,883 | 6,416 | 15,301 | 19,337 | 25.5 | 22.2 | 43.3 | 38.2 |
| Reserve money | 1,373 | 858 | -490 | 1,909 | 1,921 | 11.0 | -5.7 | 23.3 | 19.0 |
| Memo items: | | | | | | | | | |
| M2/GDP ratio | 28.3 | 29.6 | 31.8 | 34.9 | 42.6 | | | | |
| QM/GDP ratio | 16.4 | 18.5 | 20.9 | 22.8 | 30.4 | | | | |

/a Includes effect of exchange rate adjustment on September 12, 1986.
/b December vs. previous December.
/c Excludes recording adjustment on unused commercial loans amounting to Rp. 1,725 billion, which were previously shown as "net government deposits" but since September 1987 shown as Bank Indonesia assets and moved to "net other assets".
/d Excludes foreign currency deposits.

Source: Bank Indonesia.

32. The tightening of reserve money by BI was less effective in slowing credit growth and reducing aggregate demand. Domestic credit over the year grew at an annual rate of 50%, with credit to the private sector growing at almost 60% p.a. The pace of growth slowed somewhat toward the end of the year. Sectors with the fastest growing shares of credit were Services and "Other", which appears to reflect the increase in consumer finance and growth in real estate investment. Some of the growth in these sectors is the result of banks' attempts to comply with a guideline that 20% of their portfolio be in small loans.

33. The minimal impact of BI's actions on domestic credit can be attributed to Indonesia's open capital account. In response to tighter domestic liquidity, commercial banks expanded off-shore borrowing to fund

their operations, thus avoiding a sharp curtailment in credit. This was reflected in the decline in net foreign assets shown in Table 8. Official net foreign assets expanded sharply, but this effect was offset by the expansion of commercial bank borrowing.6/ Excess reserves were also drawn down, allowing further credit expansion.

34. The growth of credit was mirrored in expanding levels of M1 and M2, resulting in a higher money multiplier. M1 grew at 18% over the year, a decline from the 40% growth rate of the previous year. M2 growth, however, continued to accelerate, reaching 44% for the year.

35. SBIs (central bank notes) and SBPUs (commercial bank paper), designed to be the chief instruments of monetary control, until recently played only a minor role. SBIs contracted over calendar year 1990, while the stock of SBPUs at BI dried up in March 1990. In a bid to tighten the money supply and increase the importance of the SBI and the SBPU, GOI ordered 12 public enterprises (PEs) to move Rp.8 trillion from their deposits in commercial banks into SBIs in March 1991. PEs actually converted about Rp.10 trillion into SBIs. Banks that lost deposits were partially compensated through the sale of SBPUs to BI. These steps drove interest rates up sharply, which in turn generated strong capital inflows, followed by some easing of interest rates from their peak in March 1991 (Table 9). Since the SBPUs are of shorter maturity than the 12-month SBI, BI will be able to control the domestic component of base money through decisions on the timing of SBPU repurchases. While this development will facilitate monetary policy, further efforts are needed to expand the secondary market in SBIs so that such mandated transactions will not be necessary in the future.

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6/ In the monetary accounts, medium- and long-term borrowing by commercial banks by convention has been considered as a liability in calculating their net foreign asset position. For BI, medium- and long-term debt is excluded. In constructing the BOP accounts, BI has changed this convention so that MLT borrowing is excluded from commercial bank net foreign assets as well. This change is not reflected in the monetary accounts, however.

Table 9: INTEREST RATES OF COMMERCIAL BANKS, 1985-90 /a

| | December | | | | | Jun | Dec | Mar |
|---|---|---|---|---|---|---|---|---|
| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1990 | 1991 /h |
| Nominal deposit rates /b | | | | | | | | |
| State banks | 16.0 | 14.7 | 17.3 | 18.2 | 17.2 | 15.5 | 19.4 | 25.4 |
| Private banks | 17.8 | 16.2 | 19.3 | 20.3 | 18.8 | 17.5 | 21.3 | 26.0 |
| All Banks | 16.9 | 15.4 | 18.4 | 19.0 | 17.7 | 16.3 | 20.4 | 25.6 |
| Real deposit rates /c | | | | | | | | |
| State banks | 13.3 | 2.7 | 4.5 | 11.3 | 11.6 | 3.1 | 11.1 | 15.0 |
| Private banks | 15.0 | 4.0 | 6.2 | 13.3 | 13.1 | 4.9 | 12.8 | 15.6 |
| All banks | 14.1 | 3.3 | 5.5 | 12.0 | 12.1 | 3.8 | 12.0 | 15.2 |
| Nominal lending rates /d | | | | | | | | |
| State banks | 15.3 | 18.5 | 20.0 | 20.2 | 19.7 | 18.2 | 20.8 | n.a |
| Private FX banks | 24.2 | 23.0 | 23.6 | 23.8 | 21.7 | 20.0 | 22.9 | n.a |
| All banks | 22.1 | 21.1 | 22.1 | 22.3 | 21.0 | 19.8 | 23.0 | 28.2 |
| Real lending rates /c | | | | | | | | |
| State banks | 12.6 | 6.1 | 6.9 | 13.2 | 14.0 | 5.5 | 12.4 | n.a |
| Private FX banks | 21.3 | 10.1 | 10.1 | 16.6 | 15.9 | 7.1 | 14.4 | n.a |
| All banks | 19.2 | 8.4 | 8.7 | 15.1 | 15.2 | 7.0 | 14.5 | 17.6 |

| Memo items (Annual Avg.) | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| LIBOR /e | 8.6 | 6.9 | 7.3 | 8.1 | 9.3 | 8.4 |
| Domestic inflation /f | 4.7 | 5.8 | 9.5 | 9.3 | 6.3 | 7.9 |
| Inflation differential between Indonesia and USA /g | 5.2 | 8.7 | 6.5 | 5.3 | 1.4 | 4.3 |

/a For Rupiah transactions, excluding liquidity credit program. Rates shown include all outstanding loans or time deposits, not marginal rates.
/b Average rates on six-month time deposits.
/c Rate calculated using a moving average of annualized semester inflation as a proxy for expected inflation. Expected inflation in March 1991 assumed to be 9.0%.
/d Average nominal rates on working capital. Because of long credit maturities, the average shown responds slowly to current rates on offer and thus the lending rates cannot be compared directly to deposit rates.
/e London Interbank Offered Rate on 6 month US Dollar deposits.
/f CPI 27-cities.
/g US WPI inflation less Indonesian adjusted CPI-27 inflation.
/h Unweighted average rate currently on offer.

Source: Bank Indonesia and IMF International Financial Statistics, and World Bank staff estimates.

Domestic Inflation

36. As mentioned above, inflation as measured by the 27-city CPI 7/ rose from 6.3% in 1989 to 7.9% in 1990.8/ Inflation was particularly rapid in May through October. This rise in inflation was due to excess aggregate demand, which is reflected in the increase in nontraded goods inflation from 5.2% in 1989 to 12.6% in 1990.9/ Nontraded goods price inflation was running at over 20% p.a. in the first half of the year prior to the tightening of monetary policy, substantially increasing the relative profitability of production for the domestic market. This helps explain some of the slowdown in export growth experienced during the year.

37. Indicators of price inflation for the poor in Indonesia show a somewhat harsher impact of inflation relative to other groups in 1990. The index of 9 Essential Commodities for urban and rural areas, which rose more slowly than general inflation in 1989, both show an acceleration of inflation to levels higher than the general CPI in 1990. The same is true of the Farmer's Consumption Index, though to a much lesser extent. The impact on the poor, however, was mitigated by the fact that rice prices rose only 5.9%.

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7/ The introduction of a new CPI in 1990 substantially improved the available price information. Based on a larger market basket and extended to all regional capitals, the new 27-city CPI provides a more comprehensive measure of consumer price inflation. The introduction of the new index, however, does create some technical difficulties in presenting time series on inflation. In this report the two indices have been spliced by updating the CPI-17 index numbers with the CPI-27 inflation rates.

8/ Except where otherwise specified, this report calculates inflation rates by comparing period averages of the CPI index; this gives greater weight to the past than does a month-on month method. The 1990 inflation rate on December-to-December basis was 9.9% .

9/ Because of Indonesia's open capital and trade accounts, prices of nontraded goods are much more sensitive to domestic monetary policy than are prices of traded goods. Prices for traded goods are closely linked to international prices and movements in the rupiah exchange rate, whereas nontraded goods are by definition not subject to international competition, and thus increases in demand spill over into higher prices rather than greater imports.

Table 10: DOMESTIC INFLATION INDICATORS, 1985-90
(% change in yearly average)

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| General Indicators | | | | | | |
| CPI-27 cities /a | 4.7 | 5.8 | 9.5 | 9.3 | 6.3 | 7.9 |
| WPI /b | 5.4 | 8.5 | 18.9 | 10.0 /c | 7.4 | 6.4 |
| Non-oil GDP deflator | 6.6 | 7.1 | 12.1 | 7.9 | 8.0 | 6.2 |
| Specific Indicators | | | | | | |
| CPI-Jakarta /a | 4.7 | 5.5 | 9.6 | 8.0 | 6.5 | 7.0 |
| KFM-K3 /d | 4.2 | -2.0 | 10.6 | 3.9 | -1.9 | n.a |
| Nine essential commodities | | | | | | |
| - Urban /e | 2.4 | 5.4 | 6.7 | 13.4 | 5.0 | 8.9 |
| - Rural /f | -1.1 | 11.8 | 12.9 | 17.1 | 5.9 | 8.6 |
| Farmers household consumption /g | 0.6 | 9.2 | 12.3 | 12.0 | 7.5 | 8.1 |
| Proximate Indicators | | | | | | |
| Import goods prices /h | 5.3 | 8.4 | 22.7 | 11.5 /c | 8.5 | 7.4 |
| Non-oil export goods prices /h | 1.0 | 13.0 | 30.8 | 7.6 | 6.6 | 0.4 |
| Urban rice prices /i | 2.6 | -10.6 | 11.8 | 36.4 | 4.1 | 5.9 |
| Non-traded goods prices /j | 7.0 | 3.7 | 6.4 | 4.7 | 5.2 | 12.6 |

/a Revised estimates from 1987-89 reflecting adjusted rice prices for Jakarta. Spliced to the CPI-17 by updating the old index numbers with the inflation rates of the CPI-27. Splicing begins in April 1990.
/b Excluding exports of oil and gas.
/c Revised estimate reflecting adjusted import prices.
/d Physical Minimum Requirements index for 3-child family; weighted average for 26 province (excluding East Timor).
/e Component of CPI-27 cities index.
/f Unweighted average of Java and Madura and Outer Island.
/g Component of Farmers' Terms of Trade index rebased last year to 1983 = 100; weighted average for Yogyakarta and West, Central and East Java.
/h Component of WPI.
/i Weighted average of urban medium-quality rice prices in 14 provincial capitals.
/j Constructed from components of the CPI. 1990 based only on Jakarta. Spliced in the same fashion as the CPI-27.

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

NOTE ON THE RESULTS OF THE 1990 CENSUS

1. The 1990 Census showed that population growth in Indonesia was much slower than projected in the second half of the 1980s.1/ The Census put the total population at 179.3 million in October 1990, which implies that the population grew at slightly under 2.0% p.a. over the past decade. During the second half of the decade, however, growth was only 1.8% p.a., compared to a projected rate of 2.1% p.a. This compares with growth of 2.2% p.a. in the first half of the 1980s, 2.4% p.a. in the 1970s, and 2.1% p.a. in the 1960s. The slowing population growth in 1980s reflects not only declining fertility rates, but also a slower decline in mortality rates, which had fallen rapidly in the 1970s. Indonesia thus appears to be progressing steadily through the demographic transition. Population growth rates did increase in a number of provinces, but since detailed fertility data are not yet available, it is difficult to determine to what extent migration has been responsible for faster growth in those areas.

2. During the second half of the 1980s, population growth on Java (1.5% p.a.) was much slower than off-Java (2.2% p.a.). There was a wide variation among provinces in both groupings, however. Riau (5.5% p.a.) was the fastest growing province, and a number of other provinces in Sumatra and Kalimantan grew faster than 4% p.a. Growth in West Java was not only higher than the national average but actually increased, from 2.3% during 1981-85 to 2.8% during 1985-90. This high growth was due largely to migration induced by the accelerating industrial development of the BOTABEK cities of Bogor, Tanggerang, and Bekasi.2/ By contrast, the census shows that population growth in Jakarta fell from almost 4% p.a. to under 1% p.a. Although population growth undoubtedly did slow in the late 1980s as employment opportunities shifted toward the BOTABEK area, the magnitude of the decline may be overstated because of the many inhabitants of Jakarta who lack official residency permits. An even more dramatic decline in population growth was recorded for Lampung (0.3% p.a.), which had been a major transmigration destination and had grown by 5% p.a. for several decades. The decline was due to a combination of factors, including Government's decision to halt sponsored transmigration to the province, the opening of a new road to Bengkulu (which induced migration especially to urban areas of that province), and migration to the industrial centers of West Java.

3. In 1990, Indonesia remained largely a rural society, with nearly 70% of the population living outside urban areas. However rapid urbanization has taken place over the past decade (Statistical Annex Table 1.4). During the 1980s, Indonesia's urban population grew by 5.4% p.a., with rates of 9-13% in several provinces. Rural population grew by only 0.8% p.a., with the rural population of Java virtually unchanged over the decade. The rural population in the Outer Islands grew faster (1.7% p.a.), with growth exceeding 3% p.a. in

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1/ Statistical Annex Table 1.1 shows the 1990 population breakdown by province. The breakdowns by age group and employment are not yet available.

2/ If these cities are excluded, the growth rate for West Java is much closer to that for the rest of Java.

a number of provinces. Urban and rural population trends reflect a combination of factors, including fertility rates, migration, and reclassification of areas from rural to urban.3/ Assessing the contribution of these individual factors will be possible when the necessary data are made available within the next year.

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3/ Areas are classified as urban or rural based on a standardized evaluation process that takes into account population density, the percentage of households engaged in agriculture, and the availability of facilities such as schools, hospitals, paved roads, and electricity. The criteria and weights were the same for both the 1980 and 1990 censuses.

## The External Environment

1. A major objective of the Government's adjustment program has been to improve the economy's capacity to withstand external shocks. During the 1980's, the economy's dependence on oil was substantially reduced and the export base was expanded from a reliance on a small group of resource-based commodities to a broad range of agricultural, mining and manufacturing products. Even so, events during 1990 illustrate the continued vulnerability of the Indonesian economy to changes in the world economy, as the economic slowdown in industrialized countries depressed commodity prices and uncertainties surrounding the crisis in the Gulf led to wide fluctuations in oil prices and exchange rates, as well as a decline in tourism receipts. Table 1 summarizes the key external assumptions underlying Indonesia's medium-term prospects during the decade of the 1990s.

Table 1: SELECTED INDICATORS OF INTERNATIONAL ECONOMIC ACTIVITY: 1990-2000

| | Estimated | Projected /a | | | | Growth Rate (% p.a.) | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | 1991 | 1992 | 1995 | 2000 | 1990-1991 | 1991-1996 | 1996-2000 |
| **Economic activity** | | | | | | | | |
| G-5 growth (% p.a.) /b | 2.7 | 2.3 | 2.9 | 3.0 | 2.9 | 2.5 | 2.9 | 3.1 |
| **Price indices** (1985=100) | | | | | | | | |
| Commodity prices in constant dollars /c | 75.5 | 69.2 | 70.7 | 73.1 | 79.3 | -10.3 | 1.4 | 1.6 |
| Manufacturing unit values in current dollars | 147.2 | 160.5 | 162.3 | 170.4 | 204.9 | 7.6 | 2.0 | 3.7 |
| **Oil prices (US$/barrel)** | | | | | | | | |
| In 1983 dollars /d /e | 16.8 | 13.0 | 11.4 | 13.5 | 16.5 | 0.8 | 1.6 | 4.0 |
| In current dollars /e | 22.6 | 19.4 | 17.3 | 21.3 | 31.3 | 4.1 | 3.6 | 7.9 |
| **Interest rates (%)** | | | | | | | | |
| LIBOR /f | 8.5 | 8.5 | 8.0 | 7.0 | 6.4 | | | |
| Real interest rate /g | 4.6 | 2.8 | 5.5 | 4.0 | 3.2 | | | |

/a End of period.
/b Weighted average of real growth rates for USA, UK, Japan, France and Germany.
/c Nominal price index for 33 commodities (excluding energy) deflated by the World Bank's G-5 manufacturing unit value (MUV) index.
/d Deflated by MUV index.
/e Prices are for the Indonesian fiscal year (April 1 - March 31).
/f Six-month US$ London Interbank Offered Rate (LIBOR).
/g LIBOR deflated by the changes in the US GNP deflator.

Source: World Bank staff estimates.

2. During 1985-90, economic activity in the G-5 countries 1/ expanded by 3.4% p.a., leading to a rapid growth in world trade. In the near term, economic activity in the G-5 is expected to slow down considerably, averaging only 2.3% in 1991. This implies that the growth in world trade will slow to

1/ The G-5 countries are the five leading industrialized economies: France, Germany, Japan, the United States, and the United Kingdom.

less than 5% in 1991 from about 5.5% in 1990. Over the medium term, however, the industrial economies are expected to expand at around 3% p.a., after taking into account productivity improvements and a high investment rate since the mid-1980s which will lead to about a 6% p.a. increase in world trade. Real interest rates are expected to decline over the medium term to 4.0% in 1995 and 3.2% in 2000, substantially lower than the average (5.4%) for the previous decade. The rate of inflation, as measured by the manufactured unit value index (MUV),2/ is expected to average 3.4% p.a. for the 1990s, the same rate as the 1980s.

3. Crude oil prices rose dramatically during 1990/91, averaging US$22.6/barrel. The short term outlook for oil prices remains highly uncertain, due to uncertainty surrounding the resumption of Kuwait and Iraqi oil production and, consequently, a rationalization of production levels within OPEC. The World Bank's forecast for oil prices during 1991/92 assumes a crude oil price of US$19.4/barrel, slightly above the level projected by the Government in the 1991/92 Budget. This assumption is, however, subject to considerable downside risk, as international oil stocks and production levels are at historical highs, implying that oil prices could fall significantly in the near term. Over the medium term, however, the real oil price is expected to increase by 2.7% p.a. during the 1990s. Even so, the real oil price in 2000 is expected to be only about 50% of the 1980 level.

4. The short-term outlook for non-oil commodity prices remains pessimistic, although some recovery from the depressed levels of 1990 is expected in 1991. This trend combined with the large increase expected in the MUV index, about 9% in 1991, implies that the non-oil terms of trade will improve only slightly in 1991, remaining very low in historical terms. The medium-term outlook for non-oil export prices is better, but import prices are expected to keep pace. As a result, the non-oil terms of trade is projected to show an improvement of less than 1% p.a. during the 1990s (see Table 2). Even after including oil, Indonesia's terms of trade can be expected to improve by only 1.5% p.a.

5. Projected lower oil prices and the expected sluggish performance of the world economy in the near term imply that Indonesia will face a difficult external environment in 1991 and possibly, 1992. Furthermore, there is a significant risk of even lower oil prices in 1991, adding to the difficulty of macroeconomic management in the near term. Over the medium term, the external environment is expected to be more favorable, as economic growth in the industrialized countries is sustained at about 3% p.a. and real interest rates decline. This will help, Indonesia to sustain the higher levels of growth during the 1990s, which were achieved during the late 1980s.

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2/ The Unit Value Index of Manufactured Exports to developing country markets (MUV index) from the G-5 industrialized countries is expressed in US Dollars and is a measure of the US Dollar inflation faced by developing countries in the export and import of manufactured products to and from the industrialized countries.

**Table 2: INDONESIA'S TERMS OF TRADE, 1989/90-2000/01**
**(1983/84=100)**

| | 1989/90 | 1990/91 | 1991/92 | 1995/96 | 2000/01 | Rate of Growth (% p.a.) 1990/91-1995/96 | 1995/96-2000/01 | 1990/91-2000/01 |
|---|---|---|---|---|---|---|---|---|
| **Export price index** | | | | | | | | |
| Total exports | 90.7 | 101.7 | 102.3 | 122.2 | 164.7 | 3.7 | 6.2 | 4.9 |
| Non-oil exports | 120.7 | 122.7 | 133.9 | 142.9 | 183.7 | 4.1 | 4.1 | 4.1 |
| **Import price index** | | | | | | | | |
| Total imports | 126.6 | 134.2 | 146.0 | 154.8 | 187.4 | 2.9 | 3.9 | 3.4 |
| Non-oil imports | 125.8 | 133.4 | 145.0 | 153.9 | 186.7 | 2.9 | 3.9 | 3.4 |
| **Terms of trade index** | | | | | | | | |
| Total | 71.7 | 75.8 | 70.1 | 78.9 | 87.9 | 0.8 | 2.2 | 1.5 |
| Non-oil | 95.9 | 92.0 | 92.4 | 97.5 | 98.4 | 1.2 | 0.2 | 0.7 |

Source: World Bank staff estimates.

## DEFINITIONS OF VARIOUS MEASURES OF TRADE PROTECTION

### The Nominal Rate of Protection (NRP)

1. The NRP of a sector is defined as the average ad valorem tariff, in percent, on the output of the sector; or, in cases in which non-tariff barriers are important, the tariff which would have the same price raising effect as the non-tariff barrier. Where non-tariff barriers are important, NRPs are estimated from price comparisons as follows:

$$NRP = 100 \times (PD-PW)/PW,$$

where PD is the actual domestic wholesale price in rupiahs and PW is the "border price" in US dollars, converted to rupiahs at the current exchange rate. The border price is the c.i.f. price for import competing goods and the f.o.b. price for export-competing goods.

### The Effective Rate of Protection (ERP)

2. The ERP measures the percentage change in value-added due to Government trade and subsidy policies. It is defined as the excess of value-added (VAD) under existing policies over value-added under free trade.

$$ERP = 100 \times (VA_D - VA_W)/VA_W$$

### The Anti-Trade Bias of Government Policy

3. Protection to import-competing sectors tends to reduce trade both directly (by import substitution) and also indirectly (by drawing factors from export-competing sectors into import-competing sectors). In contrast, protection to export-competing sectors tends to increase trade both directly (by expanding exports) and also indirectly (by drawing resources out of import-competing sectors into export-competing sectors). Therefore policy can be said to be biased against trade if import-competing sectors are more heavily protected than export-competing sectors.

4. The anti-trade bias of Government policy can be clarified by an example: in 1990 the average ERP for all import-competing sectors was 32.9 percent, while that for all export-competing sectors was -3.7 percent. The negative number for export competing sectors means that they are taxed by the system of incentives and would receive an average ERP that is less than one. The anti-trade bias of policy was therefore 38 percent, since 1.329/(1 - .0377) = 1.38.

### Exchange Rate Adjustment and Real Effective Protection

5. In the economy such as Indonesia's, in which tariffs and non-tariff barriers on imports are much more important than export taxes, commercial policy raises the general level of all prices, corresponding to any given nominal exchange rate. The main defect of the ERP as a measure of protection is that it

includes this general price raising effect, which has no protective consequences at all, with the genuinely protective effects of changes in relative prices. A measure of protection which is free from this defect is the real effective rate of protection.

6. The RERP of a sector is defined as the average percentage excess of actual value added in the sector, deflated by the wage rate, over estimated free trade value added, deflated by the free trade wage rate. The estimates reported in this report are derived on the assumption that the wage in rupiahs is directly proportional to the consumer price deflator in rupiahs. This means that the RERPs measure the percentage increases in value added in the various sectors due to Government policy, relative to the policy-induced increase in the average level of prices, as measured by the consumer price deflator.

7. An example may help to clarify the concept of the RERP. It is estimated that Government policies raised value added (in rupiahs) in estate and other crops by 12 percent relative to what it would have been at the same nominal exchange rate under free trade; however, these policies also raised the rupiah wage corresponding to any given nominal exchange rate (and, by assumption, the consumer price deflator in rupiahs) by 11 percent. Therefore the real protection in 1990 received by the sector estate and other crops was only 1 percent, not 12 percent. In some cases the ERP for a sector may be positive, giving the impression that Government policies assist the sector, when their real effect is to disadvantage it. For example, in 1990 the ERP for tea was 2 percent, i.e. its value added in rupiahs was increased by 2 percent by Government policies (such as the fertilizer subsidy); but, since Government policies also increased the general level of prices by 11 percent their real effect was to disadvantage the tea sector. This is shown by the negative RERP for tea of -8 percent. Under certain strong simplifying assumptions, including the assumption that labor is the only mobile domestic factor, RERPs correctly predict the direction of resource movements, in the sense that sectors with positive (negative) RERPs are expanded (contracted) by Government policy, relative to free trade.

# INDONESIA

## COUNTRY ECONOMIC REPORT

## STATISTICAL ANNEX /a

### List of Tables



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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 and Annex 1 due to different Bank definitions and methodologies in construction the statistical series.

Monetary Statistics



Agricultural Statistics



Industrial Statistics



Prices



Investment Statistics

## 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 | 107,574 | 1.3 | 1.9 | 2.0 | 1.8 | 1.5 |
| DKI Jakarta | 811 | 2,973 | 4,579 | 6,503 | 7,885 | 8,254 | 4.3 | 4.4 | 4.0 | 3.9 | 0.9 |
| West Java | 10,586 | 17,615 | 21,624 | 27,454 | 30,830 | 35,381 | 1.7 | 2.1 | 2.7 | 2.3 | 2.8 |
| Central Java | 13,706 | 18,407 | 21,877 | 25,373 | 26,945 | 28,522 | 1.0 | 1.7 | 1.7 | 1.2 | 1.1 |
| DI Yogjakarta | 1,559 | 2,241 | 2,489 | 2,751 | 2,930 | 2,913 | 1.2 | 1.1 | 1.1 | 1.3 | -0.1 |
| East Java | 15,056 | 21,823 | 25,517 | 29,189 | 31,262 | 32,504 | 1.2 | 1.6 | 1.5 | 1.4 | 0.8 |
| Sumatra | 8,255 | 15,739 | 20,809 | 28,017 | 32,603 | 36,455 | 2.1 | 2.8 | 3.4 | 3.1 | 2.3 |
| 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 | 1,179 | 0.7 | 2.5 | 4.5 | 4.2 | 4.6 |
| South Sumatra | 1,378 | 2,773 | 3,441 | 4,630 | 5,370 | 6,277 | 2.3 | 2.2 | 3.4 | 3.0 | 3.2 |
| Riau | 493 | 1,235 | 1,642 | 2,169 | 2,548 | 3,306 | 3.0 | 2.9 | 3.1 | 3.3 | 5.3 |
| 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 | 3,999 | 0.6 | 1.9 | 2.2 | 1.7 | 1.6 |
| North Sumatra | 2,542 | 4,965 | 6,622 | 8,361 | 9,422 | 10,256 | 2.2 | 2.9 | 2.6 | 2.4 | 1.7 |
| Aceh | 1,003 | 1,629 | 2,009 | 2,611 | 2,972 | 3,416 | 1.6 | 2.1 | 3.0 | 2.6 | 2.8 |
| Kalimantan | 2,170 | 4,102 | 5,155 | 6,723 | 7,722 | 9,110 | 2.1 | 2.3 | 3.0 | 2.8 | 3.4 |
| West Kalimantan | 802 | 1,581 | 2,020 | 2,486 | 2,819 | 3,239 | 2.2 | 2.5 | 2.3 | 2.5 | 2.8 |
| Central Kalimantan | 203 | 497 | 702 | 954 | 1,118 | 1,396 | 2.9 | 3.5 | 3.5 | 3.2 | 4.5 |
| South Kalimantan | 836 | 1,473 | 1,699 | 2,065 | 2,273 | 2,598 | 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 | 12,521 | 1.7 | 1.9 | 2.2 | 2.1 | 1.6 |
| Central Sulawesi | 390 | 693 | 914 | 1,290 | 1,511 | 1,711 | 1.9 | 2.8 | 3.9 | 3.2 | 2.5 |
| North Sulawesi | 748 | 1,310 | 1,719 | 2,115 | 2,313 | 2,479 | 1.8 | 2.8 | 2.3 | 1.8 | 1.4 |
| South Sulawesi | 2,657 | 4,517 | 5,181 | 6,062 | 6,610 | 6,982 | 1.7 | 1.4 | 1.8 | 1.7 | 1.1 |
| Southeast Sulawesi | 436 | 559 | 714 | 942 | 1,120 | 1,350 | 0.8 | 2.5 | 3.1 | 3.5 | 3.8 |
| Other Islands | 4,219 | 7,106 | 8,630 | 11,071 | 12,316 | 13,661 | 1.7 | 2.0 | 2.8 | 2.2 | 2.1 |
| Bali | 1,101 | 1,783 | 2,120 | 2,470 | 2,649 | 2,778 | 1.6 | 1.7 | 1.7 | 1.4 | 1.0 |
| West Nusa Tenggara | 1,016 | 1,808 | 2,203 | 2,725 | 2,995 | 3,370 | 1.9 | 2.0 | 2.4 | 1.9 | 2.4 |
| East Nusa Tenggara | 1,344 | 1,967 | 2,295 | 2,737 | 3,061 | 3,269 | 1.2 | 1.6 | 2.0 | 2.3 | 1.3 |
| Maluku | 579 | 790 | 1,089 | 1,410 | 1,609 | 1,856 | 1.0 | 3.3 | 2.9 | 2.7 | 2.9 |
| Irian Jaya | 179 | 758 | 923 | 1,174 | 1,371 | 1,641 | 4.8 | 2.0 | 2.7 | 3.2 | 3.7 |
| East Timor | n.a | n.a | n.a | 555 | 631 | 748 | n.a | n.a | n.a | 2.6 | 3.5 |
| Total Indonesia | 60,593 | 97,085 | 119,208 | 147,490 | 164,047 | 179,322 | 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.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Distribution of Population by Age Group and Sex, 1961-1985 /a**
('000)

| Age Group | 1961 | | | 1971 | | | 1980 | | | 1985 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 35-44 | 5,765 | 5,406 | 11,171 | 7,062 | 7,119 | 14,181 | 7,876 | 8,172 | 16,048 | 8,538 | 8,485 | 17,023 |
| 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 |
| 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 |
| 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 |
| Unknown | 60 | 57 | 117 | 7 | 8 | 15 | 11 | 9 | 20 | 4 | 3 | 7 |
| Total | 47,871 | 49,214 | 97,085 | 58,753 | 60,455 | 119,208 | 73,332 | 74,158 | 147,490 | 81,645 | 82,402 | 164,047 |
| | | | | | | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| Unknown | 0.1 | 0.1 | 0.1 | 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 |

/a Data for 1990 are not available.

Source : Central Bureau of Statistics, Census Reports, 1961, 1971, 1980, and 1990; Intercensal Population Survey, 1985.

Statistical Annex
Table 1.3

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Employment by Main Industry, 1971-1985 /a /b**

| Main Industry | 1971 million | 1971 % | 1980 million | 1980 % | 1982 million | 1982 % | 1985 million | 1985 % |
|---|---|---|---|---|---|---|---|---|
| Agriculture, forestry, hunting & fishery | 26.5 | 64.2 | 28.0 | 54.8 | 31.6 | 54.7 | 34.1 | 54.6 |
| Mining and quarrying | 0.1 | 0.2 | 0.4 | 0.7 | 0.4 | 0.7 | 0.4 | 0.7 |
| Manufacturing | 2.7 | 6.5 | 4.4 | 8.5 | 6.0 | 10.4 | 5.8 | 9.3 |
| Electricity, gas & water | 0.0 | 0.1 | 0.1 | 0.2 | 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 |
| Wholesale and retail trade & restaurants | 4.3 | 10.3 | 6.6 | 12.9 | 8.6 | 14.8 | 9.4 | 15.0 |
| Transportation, storage & communications | 1.0 | 2.3 | 1.5 | 2.9 | 1.8 | 3.1 | 2.0 | 3.1 |
| Finance, insurance, real estate & business services | 0.1 | 0.2 | 0.2 | 0.4 | 0.1 | 0.2 | 0.3 | 0.4 |
| Public services | 4.1 | 10.0 | 7.7 | 15.1 | 7.1 | 12.3 | 8.3 | 13.3 |
| Others | 1.9 | 4.6 | 0.7 | 1.4 | 0.0 | 0.0 | 0.1 | 0.1 |
| Total | 41.3 | 100.0 | 51.2 | 100.0 | 57.8 | 100.0 | 62.5 | 100.0 |

/a Refers to population 10 years of age and above who worked during the week previous to the census.
/b Data for 1990 are not available.

Source: Central Bureau of Statistics, Statistical Yearbook of Indonesia, 1975, 1982, 1985.

# INDONESIA

## 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

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Gross Domestic Product by Industrial Origin at Current Market Prices, 1979-1989 /a
(Rp. billion)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 9,384 | 11,726 | 13,698 | 15,062 | 17,696 | 20,420 | 22,513 | 24,871 | 29,116 | 34,193 | 38,998 |
| Farm food crops | 4,774 | 6,103 | 7,826 | 9,162 | 11,057 | 12,692 | 13,860 | 15,085 | 17,540 | 21,124 | 24,187 |
| Farm non-food crops | 1,614 | 1,924 | 2,048 | 1,915 | 2,295 | 2,739 | 2,979 | 3,534 | 4,140 | 4,389 | 4,784 |
| Estate crops | 273 | 303 | 294 | 270 | 375 | 593 | 715 | 690 | 978 | 1,160 | 1,257 |
| Livestock products | 809 | 1,191 | 1,478 | 1,611 | 1,754 | 2,084 | 2,427 | 2,640 | 3,015 | 3,545 | 4,076 |
| Forestry | 1,292 | 1,412 | 1,077 | 990 | 994 | 939 | 938 | 1,001 | 1,247 | 1,448 | 1,733 |
| Fishery | 623 | 793 | 976 | 1,114 | 1,220 | 1,373 | 1,595 | 1,921 | 2,196 | 2,528 | 2,963 |
| Mining and quarrying | 6,866 | 11,238 | 13,218 | 12,153 | 16,107 | 16,938 | 13,571 | 11,503 | 17,267 | 17,162 | 21,730 |
| Oil & natural gas | 6,541 | 10,610 | 12,673 | 11,648 | 15,103 | 15,917 | 12,584 | 10,502 | 15,979 | 15,525 | 19,453 |
| Other | 324 | 628 | 544 | 505 | 1,004 | 1,021 | 987 | 1,001 | 1,287 | 1,637 | 2,277 |
| Manufacturing | 4,003 | 6,353 | 7,067 | 7,482 | 9,896 | 13,113 | 15,503 | 17,185 | 21,150 | 26,253 | 30,573 |
| Refinery oil | 97 | 94 | 180 | 155 | 359 | 1,013 | 1,864 | 1,915 | 1,820 | 2,026 | 2,148 |
| LNG | 582 | 1,198 | 1,282 | 1,615 | 1,871 | 2,707 | 2,424 | 1,969 | 2,097 | 2,949 | 3,281 |
| Other | 3,324 | 5,061 | 5,605 | 5,712 | 7,666 | 9,394 | 11,216 | 13,301 | 17,233 | 21,278 | 25,144 |
| Electricity, gas & water | 130 | 231 | 292 | 341 | 314 | 354 | 396 | 647 | 747 | 969 | 1,008 |
| Construction | 1,945 | 2,582 | 3,500 | 3,769 | 4,597 | 4,757 | 5,302 | 5,314 | 6,087 | 7,169 | 8,884 |
| Trade | 5,608 | 7,323 | 8,781 | 9,947 | 11,541 | 13,435 | 15,417 | 17,122 | 21,048 | 24,379 | 28,314 |
| Retail & wholesale trade | 4,800 | 6,314 | 7,586 | 8,567 | 9,933 | 11,371 | 12,962 | 14,235 | 17,561 | 20,389 | 23,957 |
| Hotels & restaurants | 809 | 1,009 | 1,194 | 1,380 | 1,608 | 2,063 | 2,455 | 2,887 | 3,487 | 3,991 | 4,357 |
| Transport & communications | 1,681 | 2,211 | 2,370 | 3,164 | 4,098 | 5,051 | 6,100 | 6,407 | 7,443 | 8,140 | 9,085 |
| Transport | 1,568 | 2,060 | 2,182 | 2,942 | 3,694 | 4,611 | 5,539 | 5,770 | 6,639 | 7,227 | 8,060 |
| Communications | 113 | 150 | 188 | 222 | 404 | 440 | 562 | 637 | 804 | 912 | 1,025 |
| Banking, etc. | 680 | 924 | 1,406 | 1,783 | 2,359 | 3,058 | 3,[illegible]8 | 4,037 | 4,795 | 5,322 | 6,551 |
| Ownership of dwellings | 960 | 1,228 | 1,494 | 1,731 | 2,356 | 2,573 | 2,775 | 2,976 | 3,349 | 3,736 | 4,155 |
| Public admin. & defence | 2,099 | 3,225 | 4,203 | 4,706 | 5,712 | 6,470 | 7,925 | 8,307 | 8,912 | 9,446 | 11,174 |
| Other services | 1,486 | 1,872 | 2,099 | 2,339 | 3,001 | 3,718 | 3,999 | 4,315 | 4,903 | 5,351 | 5,857 |
| Gross Domestic Product | 34,840 | 48,914 | 58,127 | 62,476 | 77,676 | 89,885 | 96,997 | 102,683 | 124,817 | 142,021 | 166,329 |

/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.

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Gross Domestic Product by Industrial Origin at Constant 1983 Market Prices, 1979-1989 /a
(Rp. billion)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 15,249 | 16,303 | 17,270 | 17,407 | 17,696 | 18,513 | 19,300 | 19,799 | 20,224 | 21,168 | 22,086 |
| Farm food crops | 8,838 | 9,661 | 10,639 | 10,736 | 11,057 | 11,680 | 11,986 | 12,287 | 12,415 | 12,974 | 13,446 |
| Farm non-food crops | 1,866 | 2,050 | 2,219 | 2,274 | 2,295 | 2,349 | 2,576 | 2,581 | 2,693 | 2,835 | 2,999 |
| Estate crops | 290 | 317 | 343 | 363 | 375 | 446 | 511 | 562 | 565 | 578 | 607 |
| Livestock products | 1,414 | 1,538 | 1,634 | 1,703 | 1,754 | 1,890 | 2,037 | 2,064 | 2,111 | 2,212 | 2,324 |
| Forestry | 1,796 | 1,620 | 1,296 | 1,165 | 994 | 894 | 851 | 889 | 968 | 1,013 | 1,083 |
| Fishery | 1,046 | 1,116 | 1,139 | 1,167 | 1,220 | 1,253 | 1,341 | 1,418 | 1,472 | 1,557 | 1,626 |
| Mining & quarrying | 16,093 | 16,078 | 16,340 | 13,876 | 16,107 | 17,120 | 15,480 | 16,309 | 16,366 | 15,893 | 16,727 |
| Oil & natural gas | 15,590 | 15,525 | 15,767 | 13,249 | 15,103 | 16,187 | 14,513 | 15,237 | 15,219 | 14,691 | 15,393 |
| Other | 502 | 553 | 573 | 627 | 1,004 | 933 | 968 | 1,072 | 1,146 | 1,201 | 1,334 |
| Manufacturing | 5,952 | 7,304 | 7,878 | 7,973 | 9,896 | 12,079 | 13,431 | 14,678 | 16,235 | 18,182 | 19,836 |
| Refinery oil | 173 | 186 | 170 | 142 | 359 | 626 | 767 | 927 | 938 | 981 | 990 |
| LNG | 1,230 | 1,672 | 1,712 | 1,782 | 1,871 | 2,790 | 2,919 | 2,923 | 3,233 | 3,595 | 3,665 |
| Other | 4,549 | 5,447 | 5,997 | 6,049 | 7,666 | 8,663 | 9,746 | 10,828 | 12,064 | 13,607 | 15,181 |
| Electricity, gas and water | 265 | 312 | 361 | 422 | 314 | 324 | 361 | 430 | 495 | 549 | 616 |
| Construction | 3,266 | 3,850 | 4,368 | 4,409 | 4,597 | 4,394 | 4,506 | 4,609 | 4,803 | 5,259 | 5,878 |
| Trade | 8,906 | 10,303 | 10,968 | 11,603 | 11,541 | 11,811 | 12,399 | 13,399 | 14,356 | 15,657 | 17,230 |
| Retail & wholesale trade | 7,520 | 8,819 | 9,436 | 10,057 | 9,933 | 10,028 | 10,412 | 11,238 | 12,005 | 13,035 | 14,407 |
| Hotels & restaurants | 1,387 | 1,484 | 1,532 | 1,546 | 1,608 | 1,783 | 1,987 | 2,161 | 2,351 | 2,621 | 2,824 |
| Transport & communications | 2,670 | 2,911 | 3,309 | 3,540 | 4,098 | 4,443 | 4,487 | 4,669 | 4,939 | 5,212 | 5,637 |
| Transport | 2,513 | 2,722 | 3,083 | 3,276 | 3,694 | 4,008 | 4,032 | 4,178 | 4,394 | 4,626 | 5,007 |
| Communications | 157 | 188 | 226 | 263 | 404 | 435 | 455 | 490 | 545 | 586 | 630 |
| Banking, etc. | 1,159 | 1,263 | 1,762 | 2,073 | 2,359 | 2,629 | 3,020 | 3,483 | 3,659 | 3,752 | 4,288 |
| Ownership of dwellings | 1,573 | 1,683 | 1,823 | 1,879 | 2,356 | 2,412 | 2,461 | 2,545 | 2,654 | 2,762 | 2,880 |
| Public admin. & defence | 3,787 | 4,053 | 4,682 | 5,329 | 5,712 | 5,997 | 6,455 | 6,862 | 7,366 | 7,932 | 8,397 |
| Other services | 2,581 | 2,663 | 2,792 | 2,851 | 3,001 | 3,117 | 3,180 | 3,299 | 3,422 | 3,570 | 3,716 |
| Gross Domestic Product | 61,500 | 66,723 | 71,553 | 71,361 | 77,676 | 83,037 | 85,082 | 90,081 | 94,516 | 99,936 | 107,321 |

/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.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Expenditure on GDP at Current Market Prices, 1979-1989 /a**
**(Rp. billion)**

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Private consumption | 19,516 | 25,595 | 32,294 | 37,924 | 47,063 | 54,067 | 57,201 | 63,355 | 71,989 | 81,045 | 88,752 |
| Government consumption | 3,277 | 5,148 | 6,452 | 7,229 | 8,077 | 9,122 | 10,893 | 11,529 | 11,764 | 12,756 | 15,698 |
| Gross fixed investment | 7,668 | 10,550 | 14,135 | 15,822 | 19,468 | 20,136 | 22,367 | 24,782 | 30,980 | 36,803 | 45,650 |
| Changes in stock /c | 2,166 | 1,345 | 3,189 | 1,584 | 2,847 | 3,406 | 4,837 | 4,243 | 8,166 | 7,922 | 12,122 |
| Exports of goods and nonfactor services | 10,003 | 16,162 | 16,177 | 15,103 | 19,846 | 22,999 | 21,534 | 20,010 | 29,874 | 34,666 | 42,503 |
| Less: Imports of goods and nonfactor services | 7,791 | 9,886 | 14,119 | 15,186 | 19,625 | 19,845 | 19,835 | 21,036 | 27,956 | 31,171 | 38,395 |
| **Gross Domestic Product** | **34,840** | **48,914** | **58,127** | **62,476** | **77,676** | **89,885** | **96,997** | **102,683** | **124,817** | **142,020** | **166,330** |

/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.

Statistical Annex
Table 2.4

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Expenditure on GDP at Constant 1983 Market Prices, 1979 - 1989 /a**
(Rp. billion)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Private consumption | 32,491 | 36,037 | 39,699 | 42,172 | 47,063 | 48,942 | 49,448 | 50,530 | 52,200 | 54,225 | 56,476 |
| Government consumption | 5,767 | 6,801 | 7,567 | 8,291 | 8,077 | 8,353 | 8,991 | 9,241 | 9,226 | 9,924 | 10,965 |
| Gross fixed investment | 12,382 | 15,646 | 17,659 | 18,740 | 19,468 | 18,297 | 19,616 | 21,422 | 22,597 | 25,201 | 28,568 |
| Changes in stock /c | 27 | (3,077) | 5,475 | 3,239 | 2,847 | 4,452 | 6,641 | 6,333 | 5,049 | 1,075 | 1,230 |
| Exports of goods and nonfactor services | 24,458 | 26,182 | 21,163 | 19,242 | 19,846 | 21,145 | 19,495 | 22,460 | 25,745 | 26,016 | 27,851 |
| Less: Imports of goods and nonfactor services | 13,625 | 14,866 | 20,010 | 20,323 | 19,625 | 18,151 | 19,109 | 19,906 | 20,299 | 16,504 | 17,768 |
| **Gross Domestic Product** | **61,500** | **66,723** | **71,553** | **71,361** | **77,676** | **83,037** | **85,082** | **90,081** | **94,518** | **99,936** | **107,321** |

/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**

**Distribution of GDP at Current Market Prices, 1979-1989 /a**
(%)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Economic sectors | | | | | | | | | | | |
| Agriculture, forestry, fishery and livestock | 26.9 | 24.0 | 23.6 | 24.1 | 22.8 | 22.7 | 23.2 | 24.2 | 23.3 | 23.4 | 24.1 |
| Mining & quarrying | 19.7 | 23.0 | 22.7 | 19.5 | 20.7 | 18.8 | 14.0 | 11.2 | 13.8 | 13.1 | 11.6 |
| Manufacturing | 11.5 | 13.0 | 12.2 | 12.0 | 12.7 | 14.6 | 16.0 | 16.7 | 16.9 | 18.4 | 18.5 |
| Electricity, gas and water | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.6 |
| Construction | 5.6 | 5.3 | 6.0 | 6.0 | 5.9 | 5.3 | 5.5 | 5.2 | 4.9 | 5.3 | 5.0 |
| Transport & communications | 4.8 | 4.5 | 4.1 | 5.1 | 5.3 | 5.6 | 6.3 | 6.2 | 6.0 | 5.5 | 5.8 |
| Other services | 31.1 | 29.8 | 30.9 | 32.8 | 32.1 | 32.5 | 34.7 | 35.8 | 34.5 | 33.7 | 34.4 |
| 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 | 56.0 | 52.3 | 55.6 | 60.7 | 60.6 | 60.2 | 59.0 | 61.7 | 57.7 | 57.1 | 53.4 |
| Government consumption | 9.4 | 10.5 | 11.1 | 11.6 | 10.4 | 10.1 | 11.2 | 11.0 | 9.4 | 9.0 | 9.4 |
| Gross domestic investment | 28.2 | 24.3 | 29.8 | 27.9 | 28.7 | 26.2 | 28.0 | 28.3 | 31.4 | 31.5 | 34.7 |
| Net exports | 6.4 | 12.8 | 3.5 | -0.1 | 0.3 | 3.5 | 1.8 | -1.0 | 1.5 | 2.5 | 2.5 |
| 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 1983-1988 series.
/b Preliminary figures.

Source: Tables 2.1 and 2.3.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Distribution of GDP at Constant 1983 Market Prices, 1979 - 1989 /a**
(%)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Economic Sectors** | | | | | | | | | | | |
| Agriculture, forestry, fishery and livestock | 24.8 | 24.4 | 24.1 | 24.4 | 22.8 | 22.3 | 22.7 | 22.0 | 21.4 | 21.2 | 20.6 |
| Mining & quarrying | 26.2 | 24.1 | 22.8 | 19.4 | 20.7 | 20.6 | 18.2 | 18.1 | 17.3 | 15.9 | 15.6 |
| Manufacturing | 9.7 | 10.9 | 11.0 | 11.2 | 12.7 | 14.5 | 15.8 | 16.3 | 17.2 | 18.2 | 18.5 |
| Electricity, gas and water | 0.4 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 |
| Construction | 5.3 | 5.8 | 6.1 | 6.2 | 5.9 | 5.3 | 5.3 | 5.1 | 5.1 | 5.3 | 5.5 |
| Transport & communications | 4.3 | 4.4 | 4.6 | 5.0 | 5.3 | 5.4 | 5.3 | 5.2 | 5.2 | 5.2 | 5.3 |
| Other services | 29.3 | 29.9 | 30.8 | 33.3 | 32.1 | 31.5 | 32.3 | 32.8 | 33.3 | 33.7 | 34.0 |
| 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 | 52.8 | 54.0 | 55.5 | 59.1 | 60.6 | 58.9 | 58.1 | 56.1 | 55.2 | 54.3 | 52.6 |
| Government consumption | 9.4 | 10.2 | 10.6 | 11.6 | 10.4 | 10.1 | 10.6 | 10.3 | 9.8 | 9.9 | 10.2 |
| Gross domestic investment | 20.2 | 18.8 | 32.3 | 30.8 | 28.7 | 27.4 | 30.9 | 30.8 | 29.2 | 26.3 | 27.8 |
| Net exports | 17.6 | 17.0 | 1.6 | -1.5 | 0.3 | 3.6 | 0.5 | 2.8 | 5.8 | 9.5 | 9.4 |
| 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 |

/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 : Tables 2.2 and 2.4.

Statistical Annex
Table 3.1

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Balance of Payments, 1978/79 - 1990/91
(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 /c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Net oil exports /a | 3,785 | 6,308 | 9,345 | 8,379 | 5,788 | 6,016 | 5,845 | 4,004 | 1,426 | 2,334 | 1,535 | 2,3[illegible]1 | 2,972 |
| 2. Net LNG exports /a | 225 | 667 | 1,256 | 1,382 | 1,378 | 1,355 | 1,971 | 2,119 | 1,158 | 1,426 | 1,525 | 1,600 | 2,931 |
| 3. Non-oil exports (net) | -5165 | -4777 | -8470 | -12551 | -14205 | -11522 | -9784 | -7955 | -6635 | -5467 | -4919 | -5510 | -9430 |
| Exports, fob | 3,979 | 6,171 | 5,587 | 4,170 | 3,928 | 5,367 | 5,907 | 6,175 | 6,731 | 9,502 | 12,184 | 14,493 | 15,364 |
| Imports, cif | -7543 | -9028 | -11837 | -14561 | -15824 | -14346 | -12921 | -11186 | -10385 | -11763 | -13586 | -16478 | -21276 |
| Services (nonfreight) | -1601 | -1920 | -2220 | -2160 | -2309 | -2543 | -2770 | -2944 | -2981 | -3208 | -3517 | -3525 | -3518 |
| 4. Current account (1+2+3) | -1155 | 2,198 | 2,131 | -2790 | -7039 | -4151 | -1968 | -1832 | -4051 | -1707 | -1859 | -1599 | -3527 |
| 5. Official capital disbursements | 2,101 | 2,690 | 2,684 | 3,521 | 5,011 | 5,793 | 3,519 | 3,432 | 5,472 | 4,575 | 6,588 | 5,516 | 5,137 |
| IGGI | 1,567 | 2,237 | 2,406 | 2,415 | 2,905 | 4,255 | 3,189 | 2,751 | 3,978 | 4,368 | 5,468 | 4,698 | 5,060 |
| Program aid | 94 | 239 | 118 | 50 | 21 | 84 | 52 | 38 | 48 | 30 | 23 | 6 | 0 |
| Project aid | 1,473 | 1,998 | 2,288 | 2,365 | 2,884 | 4,171 | 3,137 | 2,713 | 3,930 | 4,338 | 5,445 | 4,692 | 5,060 |
| ODA | 814 | 1,106 | 1,299 | 996 | 1,356 | 1,902 | 1,442 | 1,332 | 1,932 | 2,807 | 3,973 | 4,107 | 4,444 |
| Non-ODA | 659 | 892 | 989 | 1,369 | 1,528 | 2,269 | 1,695 | 1,381 | 1,998 | 1,531 | 1,472 | 585 | 616 |
| Non-IGGI | 534 | 453 | 278 | 1,106 | 2,106 | 1,538 | 330 | 681 | 1,494 | 207 | 1,120 | 818 | 77 |
| Cash loan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Amortization | -632 | -692 | -615 | -809 | -926 | -1010 | -1292 | -1644 | -2129 | -3049 | -3763 | -3686 | -4225 |
| 7. Other capital (net) | 542 | -1312 | -361 | 1,140 | 1,795 | 1,191 | 499 | 572 | 1,232 | 1,709 | -211 | 575 | 5,058 |
| Direct investment | 271 | 217 | 140 | 142 | 311 | 193 | 245 | 299 | 252 | 544 | 565 | 722 | 1059 |
| Oil sector | 75 | -1237 | -685 | 791 | 1,322 | 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 | 3,999 |
| 8. Total (4 through 8) | 856 | 2,884 | 3,839 | 1,062 | (1,159) | 1,823 | 758 | 528 | 524 | 1,528 | 755 | 806 | 2,443 |
| 9. Errors and omissions | -62 | -1256 | -1165 | -2050 | -2121 | 247 | -91 | -498 | -1262 | 57 | -1432 | -558 | 341 |
| 10. Monetary movements /b | -794 | -1628 | -2674 | 988 | 3,280 | -2070 | -667 | -30 | 738 | -1585 | 677 | (249) | -2784 |

/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.

# INDONESIA

## COUNTRY ECONOMIC REPORT

## Non - oil Exports, 1984/85 - 1989/90

| | Value (US $ million) | | | | | | Volume ('000 tons) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984/85 | 1985/86 | 1986/87 | 1987/88 | 1988/89 | 1989/90 | 1984/85 | 1985/86 | 1986/87 | 1987/88 | 1988/89 | 1989/90 |
| **Agricultural** | 3,663 | 3,635 | 4,493 | 5,764 | 6,927 | 6,972 | | | | | | |
| Timber | 1,167 | 1,217 | 1,586 | 2,461 | 2,864 | 3,454 | 5,201 | 4,670 | 5,309 | 6,578 | 7,368 | 7,524 |
| a. Log | 135 | 2 | 0 | 0 | 0 | 0 | 1,223 | 79 | 0 | 0 | 0 | 0 |
| b. Plywood | 697 | 848 | 1,160 | 1,851 | 2,095 | 2,430 | 2,105 | 2,495 | 2,959 | 3,849 | 4,381 | 5,051 |
| c. Sawn timber | 320 | 349 | 321 | 483 | 592 | 599 | 1,789 | 2,017 | 1,600 | 1,872 | 2,093 | 1,737 |
| d. Other | 16 | 18 | 105 | 127 | 197 | 425 | 84 | 79 | 750 | 857 | 894 | 736 |
| Rubber | 856 | 714 | 749 | 1,037 | 1,229 | 952 | 1,042 | 1,082 | 1,062 | 1,187 | 1,220 | 1,217 |
| Palm oil | 95 | 170 | 114 | 214 | 313 | 279 | 175 | 504 | 569 | 703 | 808 | 943 |
| Coffee | 568 | 659 | 753 | 499 | 577 | 448 | 308 | 294 | 309 | 275 | 323 | 395 |
| Tea | 211 | 134 | 106 | 119 | 137 | 176 | 91 | 102 | 93 | 98 | 110 | 115 |
| Tobacco | 44 | 55 | 72 | 47 | 43 | 44 | 23 | 21 | 24 | 20 | 20 | 17 |
| Pepper | 66 | 82 | 152 | 158 | 144 | 94 | 34 | 25 | 33 | 36 | 53 | 44 |
| Copra cake | 18 | 35 | 34 | 41 | 43 | 51 | 213 | 433 | 348 | 384 | 355 | 460 |
| Tapioca | 31 | 42 | 52 | 93 | 154 | 97 | 418 | 534 | 439 | 833 | 1,368 | 1,297 |
| Rattan | 96 | 80 | 99 | 162 | 37 | 0 | 101 | 92 | 116 | 135 | 30 | 0 |
| Hides | 40 | 37 | 45 | 59 | 68 | 69 | 2 | 8 | 10 | 6 | 4 | 4 |
| Other foodstuff | 98 | 122 | 122 | 153 | 202 | 245 | 748 | 884 | 1,338 | 2,122 | 1,224 | 1,121 |
| Animal products | 219 | 274 | 390 | 482 | 839 | 774 | 87 | 109 | 132 | 194 | 245 | 306 |
| of which shrimps | 183 | 228 | 297 | 352 | 541 | 513 | 44 | 52 | 53 | 86 | 91 | 131 |
| Others | 155 | 14 | 221 | 234 | 258 | 290 | n.a | 3 | n.a | n.a | n.a | n.a |
| **Mineral** | 775 | 799 | 719 | 1,112 | 1,556 | 1,551 | | | | | | |
| Tin | 252 | 248 | 156 | 143 | 165 | 213 | 22 | 23 | 24 | 22 | 24 | 26 |
| Copper | 132 | 133 | 144 | 186 | 238 | 321 | 242 | 279 | 271 | 290 | 318 | 341 |
| Nickel | 121 | 139 | 112 | 152 | 438 | 373 | 955 | 943 | 1,288 | 1,456 | 1,592 | 1,958 |
| Aluminum | 208 | 223 | 201 | 245 | 301 | 267 | 153 | 219 | 177 | 151 | 124 | 164 |
| Granite | 9 | 8 | 8 | 6 | 6 | 8 | 1,300 | 1,194 | 1,272 | 858 | 860 | 971 |
| Others | 53 | 49 | 98 | 379 | 407 | 369 | n.a | 65,546 | n.a | n.a | n.a | n.a |
| **Manufactured** | 1,469 | 1,739 | 1,519 | 2,626 | 3,701 | 5,971 | | | | | | |
| Textiles | 418 | 577 | 713 | 1,128 | 1,571 | 2,171 | n.a | 111 | n.a | n.a | n.a | n.a |
| Handicraft | 116 | 30 | 30 | 67 | 184 | 250 | n.a | 26 | n.a | n.a | n.a | n.a |
| Electrical app. | 134 | 109 | 46 | 55 | 105 | 173 | n.a | 7 | n.a | n.a | n.a | n.a |
| Cement | 14 | 23 | 47 | 54 | 85 | 128 | 516 | 955 | 2,012 | 2,316 | 3,316 | 4 003 |
| Fertilizer | 31 | 109 | 97 | 117 | 136 | 165 | 208 | 1,047 | 1,212 | 1,266 | 1,011 | 1,701 |
| Others | 757 | 892 | 585 | 1,205 | 1,619 | 3,084 | n.a | 2,494 | n.a | n.a | n.a | n.a |
| **Unclassified** | 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 | | | | | | |

Source: Bank Indonesia (based on PEB Export Declaration Form).

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Value of Exports by Principal Country of Destination, 1978-1990
(US$ million)

| Countries | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 /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 | 1,985 |
| Malaysia | 21 | 66 | 67 | 75 | 59 | 58 | 98 | 77 | 82 | 94 | 184 | 220 | 193 |
| Thailand | 18 | 38 | 35 | 35 | 26 | 49 | 98 | 81 | 83 | 87 | 151 | 234 | 157 |
| Philippines | 198 | 165 | 181 | 411 | 293 | 242 | 166 | 199 | 108 | 71 | 87 | 149 | 119 |
| 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 | 1,508 |
| Brunei | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 8 | 8 |
| Hongkong | 43 | 99 | 152 | 135 | 145 | 182 | 261 | 348 | 345 | 420 | 554 | 549 | 524 |
| 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 | 8,587 |
| Other Asia | 631 | 807 | 802 | 805 | 970 | 801 | 1,254 | 1,475 | 1,170 | 1,869 | 2,415 | 2,934 | 3,116 |
| Africa | 37 | 32 | 56 | 37 | 57 | 79 | 140 | 160 | 179 | 150 | 272 | 217 | 160 |
| 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 | 2,798 |
| Canada | 30 | 28 | 28 | 22 | 19 | 28 | 49 | 46 | 60 | 94 | 101 | 108 | 118 |
| Other America | 766 | 431 | 956 | 1,960 | 929 | 1,015 | 1,031 | 326 | 182 | 48 | 47 | 50 | 76 |
| Australia | 107 | 190 | 339 | 447 | 674 | 208 | 275 | 149 | 159 | 310 | 293 | 387 | 324 |
| Other Oceania | 7 | 51 | 169 | 211 | 278 | 264 | 236 | 81 | 83 | 43 | 31 | 59 | 68 |
| EEC | 874 | 1,173 | 1,388 | 1,063 | 894 | 953 | 1,036 | 1,113 | 1,340 | 1,541 | 2,152 | 2,338 | 2,372 |
| United Kingdom | 54 | 89 | 142 | 131 | 126 | 199 | 168 | 191 | 197 | 212 | 349 | 384 | 400 |
| Netherlands | 355 | 399 | 415 | 347 | 265 | 289 | 332 | 392 | 453 | 493 | 646 | 681 | 559 |
| West Germany | 226 | 338 | 389 | 239 | 253 | 252 | 246 | 255 | 334 | 361 | 456 | 493 | 599 |
| Belgium & Luxemburg | 18 | 18 | 25 | 18 | 20 | 33 | 63 | 45 | 91 | 109 | 177 | 173 | 175 |
| France | 54 | 77 | 122 | 52 | 77 | 53 | 49 | 71 | 93 | 102 | 164 | 209 | 226 |
| Denmark | 40 | 43 | 40 | 15 | 10 | 4 | 6 | 3 | 6 | 13 | 20 | 36 | 41 |
| Ireland | 1 | 0 | 1 | 0 | 0 | 1 | 4 | 2 | 2 | 7 | 17 | 22 | 25 |
| Italy | 126 | 210 | 254 | 168 | 142 | 120 | 167 | 152 | 152 | 175 | 221 | 234 | 219 |
| Greece | 0 | 0 | 0 | 93 | 1 | 1 | 1 | 3 | 6 | 3 | 2 | 4 | 8 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 10 | 22 | 24 | 13 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 78 | 80 | 107 |
| Soviet Union | 52 | 55 | 73 | 80 | 22 | 50 | 59 | 78 | 52 | 82 | 38 | 100 | 71 |
| Others in Europe | 91 | 130 | 152 | 187 | 102 | 145 | 206 | 194 | 174 | 133 | 144 | 171 | 145 |
| Total | 11,643 | 15,590 | 23,950 | 25,165 | 22,328 | 21,146 | 21,888 | 18,567 | 14,605 | 17,136 | 19,219 | 22,159 | 20,344 |

/a January-October 1990.

Source: Central Bureau of Statistics.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Value of Imports by Principal Country of Origin, 1978-1990
(US$ million)

| Countries | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 /a | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Asean | 652 | 839 | 1,350 | 1,702 | 3,302 | 3,915 | 1,948 | 962 | 1,121 | 1,244 | 1,305 | 1,765 | 1,184 |
| Malaysia | 22 | 35 | 36 | 60 | 56 | 60 | 86 | 52 | 50 | 139 | 276 | 369 | 223 |
| Thailand | 101 | 219 | 288 | 146 | 199 | 209 | 55 | 48 | 72 | 75 | 96 | 210 | 147 |
| Philippines | 76 | 49 | 90 | 253 | 228 | 162 | 15 | 23 | 8 | 82 | 36 | 63 | 53 |
| Singapore | 453 | 536 | 936 | 1,243 | 2,819 | 3,463 | 1,791 | 839 | 969 | 947 | 896 | 1,122 | 761 |
| Brunei | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 |
| Hongkong | 142 | 102 | 139 | 68 | 87 | 65 | 86 | 53 | 94 | 104 | 133 | 179 | 231 |
| 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 | 4,195 |
| 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 | 3,622 |
| Africa | 69 | 132 | 130 | 252 | 202 | 135 | 171 | 160 | 103 | 153 | 201 | 202 | 158 |
| USA | 832 | 1,028 | 1,409 | 1,795 | 2,417 | 2,534 | 2,560 | 1,721 | 1,483 | 1,415 | 1,736 | 2,218 | 2,007 |
| Canada | 83 | 73 | 97 | 102 | 138 | 186 | 319 | 198 | 214 | 303 | 274 | 311 | 345 |
| Other America | 77 | 56 | 111 | 266 | 166 | 129 | 139 | 191 | 174 | 211 | 224 | 455 | 454 |
| Australia | 218 | 223 | 378 | 362 | 365 | 402 | 372 | 461 | 413 | 463 | 578 | 925 | 935 |
| Other Oceania | 38 | 43 | 76 | 98 | 96 | 72 | 78 | 69 | 71 | 80 | 96 | 98 | 99 |
| 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 | 3,189 |
| United Kingdom | 208 | 198 | 261 | 547 | 445 | 364 | 297 | 300 | 342 | 325 | 340 | 360 | 362 |
| Netherlands | 146 | 119 | 116 | 205 | 185 | 257 | 266 | 215 | 189 | 316 | 258 | 248 | 472 |
| West Germany | 594 | 462 | 685 | 905 | 1,193 | 741 | 820 | 677 | 719 | 836 | 887 | 920 | 1,171 |
| Belgium & Luxemburg | 33 | 63 | 56 | 86 | 97 | 124 | 102 | 101 | 89 | 142 | 159 | 167 | 179 |
| France | 166 | 143 | 236 | 344 | 571 | 591 | 432 | 284 | 281 | 392 | 465 | 406 | 547 |
| Denmark | 60 | 19 | 12 | 14 | 54 | 21 | 20 | 18 | 26 | 26 | 22 | 31 | 53 |
| Ireland | 2 | 2 | 3 | 4 | 4 | 8 | 8 | 9 | 4 | 6 | 6 | 8 | 11 |
| Italy | 59 | 67 | 76 | 96 | 104 | 125 | 113 | 101 | 144 | 237 | 248 | 348 | 263 |
| Greece | 0 | 0 | 0 | 0 | 3 | 3 | 4 | 0 | 0 | 2 | 3 | 3 | 5 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 3 | 2 | 5 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 120 | 82 | 123 |
| Soviet Union | 15 | 14 | 20 | 41 | 39 | 25 | 12 | 3 | 5 | 16 | 45 | 51 | 44 |
| Others in Europe | 287 | 269 | 274 | 412 | 663 | 641 | 490 | 365 | 435 | 510 | 494 | 611 | 636 |
| 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 | 17,098 |

/a Since 1984, excludes the value of processing deals in the oil sector.
/b January-October 1990.

Source: Central Bureau of Statistics.

Statistical Annex
Table 4.1

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Summary of External Debt Data, 1980-90 /a**

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| External debt data | | | | | | (US$ million) | | | | | |
| Disbursed and outstanding debt (DOD) /b | 13,377 | 15,908 | 18,318 | 21,494 | 22,240 | 26,768 | 32,628 | 40,899 | 41,247 | 41,203 | 44,275 |
| Bilateral/multilateral | 8,608 | 10,096 | 10,913 | 11,818 | 12,177 | 15,053 | 18,559 | 24,782 | 26,545 | 28,256 | 32,452 |
| Other /c | 4,769 | 5,813 | 7,405 | 9,676 | 10,063 | 11,714 | 14,069 | 16,117 | 14,702 | 12,947 | 11,823 |
| Total debt outstanding, including undisbursed (TDO) | 21,302 | 26,953 | 32,008 | 35,288 | 36,342 | 42,761 | 50,063 | 60,421 | 60,093 | 59,707 | 64,285 |
| Bilateral/multilateral | 14,300 | 17,705 | 19,326 | 20,546 | 21,486 | 25,336 | 29,454 | 37,310 | 38,957 | 41,305 | 46,275 |
| Other /c | 7,002 | 9,248 | 12,682 | 14,741 | 14,856 | 17,425 | 20,609 | 23,111 | 21,136 | 18,402 | 18,010 |
| Commitments | 4,101 | 4,951 | 7,070 | 5,677 | 4,816 | 4,627 | 4,103 | 5,987 | 6,057 | 7,045 | 5,870 |
| Bilateral/multilateral | 2,251 | 2,157 | 2,593 | 2,284 | 2,745 | 2,427 | 2,004 | 4,785 | 4,782 | 5,632 | 4,851 |
| Other /c | 1,850 | 2,795 | 4,477 | 3,393 | 2,071 | 2,206 | 2,099 | 1,202 | 1,275 | 1,413 | 1,019 |
| Gross disbursements | 1,888 | 2,672 | 3,951 | 4,979 | 3,864 | 3,569 | 4,244 | 5,458 | 6,439 | 6,485 | 4,611 |
| Bilateral/multilateral | 826 | 1,362 | 1,595 | 1,737 | 1,911 | 1,641 | 1,904 | 3,692 | 4,287 | 4,274 | 4,005 |
| Other /c | 1,062 | 1,310 | 2,356 | 3,242 | 1,953 | 1,928 | 2,340 | 1,766 | 2,152 | 2,211 | 606 |
| Net disbursements | 554 | 1,618 | 2,847 | 3,689 | 2,264 | 1,239 | 1,622 | 2,052 | 2,000 | 2,142 | 506 |
| Bilateral/multilateral | 555 | 985 | 1,126 | 1,186 | 1,342 | 1,026 | 1,011 | 2,541 | 2,951 | 2,899 | 2,402 |
| Other /c | -1 | 633 | 1,721 | 2,503 | 922 | 213 | 611 | -489 | -950 | -757 | -1896 |
| Net resource transfers | -216 | 628 | 1,715 | 2,456 | 635 | -403 | -449 | -221 | -526 | -360 | -2034 |
| Bilateral/multilateral | 259 | 654 | 732 | 733 | 776 | 330 | 85 | 1,460 | 1,642 | 1,504 | 800 |
| Other /c | -475 | -26 | 983 | 1723 | -141 | -733 | -535 | -1680 | -2167 | -1864 | -2834 |
| Public debt service | 2,103 | 2,045 | 2,236 | 2,523 | 3,228 | 3,972 | 4,694 | 5,679 | 6,965 | 6,845 | 6,645 |
| Amortization | 1,329 | 1,054 | 1,104 | 1,290 | 1,600 | 2,330 | 2,622 | 3,406 | 4,439 | 4,343 | 4,105 |
| Interest | 774 | 991 | 1,132 | 1,233 | 1,629 | 1,643 | 2,072 | 2,273 | 2,526 | 2,501 | 2,540 |
| Public debt service | 2,103 | 2,045 | 2,236 | 2,523 | 3,228 | 3,972 | 4,694 | 5,679 | 6,965 | 6,845 | 6,645 |
| Bilateral/multilateral | 567 | 708 | 863 | 1,004 | 1,135 | 1,311 | 1,819 | 2,232 | 2,645 | 2,770 | 3,204 |
| Other /c | 1,536 | 1,336 | 1,373 | 1,519 | 2,093 | 2,661 | 2,875 | 3,447 | 4,320 | 4,075 | 3,440 |
| Disbursement indicators | | | | | | (%) | | | | | |
| Undisbursed debt/TDO /b | 37 | 41 | 43 | 39 | 39 | 37 | 35 | 32 | 31 | 31 | 31 |
| Bilateral/multilateral | 40 | 43 | 44 | 42 | 43 | 41 | 37 | 34 | 32 | 32 | 30 |
| Other /c | 32 | 37 | 42 | 34 | 32 | 33 | 32 | 30 | 30 | 30 | 34 |
| Gross disbursements/commit. | 46 | 54 | 56 | 88 | 80 | 77 | 103 | 91 | 106 | 92 | 79 |
| Bilateral/multilateral | 37 | 63 | 62 | 76 | 70 | 68 | 95 | 77 | 90 | 76 | 83 |
| Other /c | 57 | 47 | 53 | 96 | 94 | 87 | 111 | 147 | 169 | 156 | 59 |
| Gross disbursements/undisbursed debt and commitments /d | 19 | 21 | 24 | 38 | 28 | 24 | 27 | 22 | 28 | 32 | 8 |
| Bilateral/multilateral | 12 | 14 | 14 | 16 | 16 | 13 | 15 | 21 | 25 | 23 | 21 |
| Other /c | 32 | 21 | 24 | 38 | 28 | 24 | 27 | 22 | 28 | 32 | 8 |
| Net disbursemnts/gross disbs. | 29 | 61 | 72 | 74 | 59 | 35 | 38 | 38 | 31 | 33 | 11 |
| Bilateral/multilateral | 67 | 72 | 71 | 68 | 70 | 63 | 53 | 69 | 69 | 68 | 60 |
| Other /c | 0 | 48 | 73 | 77 | 47 | 11 | 26 | -28 | -44 | -34 | -313 |
| Net resource transfers/gross disbs. | -11 | 23 | 43 | 49 | 16 | -11 | -11 | -4 | -8 | -6 | -44 |
| Bilateral/multilateral | 31 | 48 | 46 | 42 | 41 | 20 | 4 | 40 | 38 | 35 | 20 |
| Other /c | -45 | -2 | 42 | 53 | -7 | -38 | -23 | -95 | -101 | -84 | -468 |

/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.

## INDONESIA

## COUNTRY ECONOMIC REPORT

### External Public Debt Outstanding as of December 31, 1990
(US$ '000)

| Type of creditor/ creditor country | Debt outstanding Disbursed | Undisbursed | Total | Major reported new commitments Jan 1-Dec 31 1990 |
|---|---|---|---|---|
| **Suppliers' Credits** | | | | |
| Finland | 10,808 | 3,051 | 13,859 | 0 |
| France | 38 | - | 38 | 0 |
| Japan | 2,661,129 | 2,214,227 | 4,875,356 | 202,933 |
| Korea, Republic of | 9,795 | - | 9,795 | 0 |
| Pakistan | 5,073 | - | 5,073 | 0 |
| Switzerland | 1,258 | - | 1,258 | 0 |
| Yugoslavia | 1,383 | - | 1,383 | 0 |
| Total suppliers' credits | 2,689,484 | 2,217,278 | 4,906,762 | 202,933 |
| **Financial Institutions** | | | | |
| France | 129,319 | 10,355 | 139,674 | 0 |
| Germany, Fed. Rep. of | 5,239 | - | 5,239 | 0 |
| Hong Kong | 954,370 | 1,220,417 | 2,174,787 | 400,000 |
| Italy | 2,685 | - | 2,685 | 0 |
| Japan | 3,199,385 | 758,729 | 3,958,114 | 0 |
| Multiple Lenders | 281,250 | - | 281,250 | 0 |
| Netherlands | 2,869 | - | 2,869 | 0 |
| Singapore | 114,202 | - | 114,202 | 0 |
| United Kingdom | 270,710 | 192,800 | 463,510 | 0 |
| United States | 505,439 | 270,000 | 775,439 | 0 |
| Total financial institutions | 5,465,470 | 2,452,301 | 7,917,769 | 400,000 |
| **Bonds** | | | | |
| Germany, Fed. Rep. of | 200,803 | - | 200,803 | 0 |
| Kuwait | 6,864 | - | 6,864 | 0 |
| Netherlands | 17,751 | - | 17,751 | 0 |
| Switzerland | 82,500 | - | 82,500 | 0 |
| United Kingdom | 88,100 | - | 88,100 | 0 |
| United States | 300,000 | - | 300,000 | 0 |
| Total bonds | 696,019 | 0 | 696,019 | 0 |
| **Nationalization** | | | | |
| Netherlands | 133,491 | - | 133,491 | 0 |
| Total nationalization | 133,491 | 0 | 133,491 | 0 |
| **Multilateral Loans** | | | | |
| Asian Dev. Bank | 3,138,614 | 2,397,904 | 5,536,518 | 895,185 |
| EEC | 4,297 | - | 4,297 | 0 |
| IBRD | 9,542,263 | 4,367,008 | 13,909,271 | 1,565,200 |
| IDA | 842,438 | - | 842,438 | 0 |
| Intl. Fund Agr. Dev. (IFAD) | 44,176 | 75,117 | 119.293 | 0 |
| Islamic Dev. Bank | 691 | - | 691 | 0 |
| Nordic Invest. Bank | 26,000 | 49,300 | 75,300 | 10,800 |
| Total multilateral loans | 13,598,480 | 6,889,329 | 20,487,808 | 2,471,185 |

## INDONESIA

## COUNTRY ECONOMIC REPORT

### External Public Debt Outstanding as of December 31, 1990
(US$ '000)

| Type of creditor/ creditor country | Debt outstanding Disbursed | Undisbursed | Total | Major reported new commitments Jan 1-Dec 31 1990 |
|---|---|---|---|---|
| Bilateral Loans | | | | |
| Australia | 273,683 | 223,242 | 496,925 | 188,892 |
| Austria | 57,138 | 28,121 | 85,259 | 0 |
| Belgium | 100,283 | 1,378 | 101,661 | 0 |
| Brunei | 100,000 | - | 100,000 | 0 |
| Bulgaria | 995 | - | 995 | 0 |
| Canada | 339,260 | 76,525 | 415,785 | 8,627 |
| China | 26,901 | - | 26,901 | 0 |
| Czechoslovakia | 33,173 | - | 33,173 | 0 |
| Denmark | 30,710 | - | 30,710 | 0 |
| Egypt, Arab Republic of | 1,433 | - | 1,433 | 0 |
| France | 708,888 | 336,330 | 1,045,218 | 45,750 |
| German Dem. Rep. | 27,281 | - | 27,281 | 0 |
| Germany, Fed.Rep.of | 1,947,364 | 883,476 | 2,830,840 | 276,038 |
| Hungary | 8,275 | - | 8,275 | 0 |
| India | 18,651 | 4,521 | 23,172 | 0 |
| Italy | 53,616 | 36,346 | 89,962 | 0 |
| Japan | 10,821,334 | 4,398,056 | 15,219,390 | 1,640,682 |
| Korea, Republic of | 0 | 12,480 | 12,480 | 0 |
| Kuwait | 73,582 | 58,956 | 132,538 | 0 |
| Netherlands | 1,155,608 | 161,273 | 1,316,881 | 95,790 |
| New Zealand | 1,046 | - | 1,046 | 0 |
| Other | 20,000 | - | 20,000 | 0 |
| Pakistan | 3,483 | - | 3,483 | 0 |
| Poland | 46,595 | - | 46,595 | 0 |
| Romania | 6,680 | - | 6,680 | 0 |
| Saudi Arabia | 76,109 | 73,019 | 149,128 | 0 |
| Spain | 128 | 33,574 | 33,702 | 10,600 |
| Switzerland | 286 | 39,081 | 39,367 | 0 |
| United Arab Emirates | 5,015 | 1,713 | 6,728 | 0 |
| United Kingdom | 49,480 | 69,680 | 119,160 | 0 |
| United States | 2,365,039 | 495,459 | 2,860,498 | 113,769 |
| USSR | 445,655 | - | 445,655 | 0 |
| Yugoslavia | 55,849 | - | 55,849 | 0 |
| Total bilateral loans | 18,853,541 | 6,933,230 | 25,786,769 | 2,380,147 |
| Export Credits | | | | |
| Austria | 139,337 | 48,090 | 187,427 | 35,252 |
| Belgium | 118,998 | 127,088 | 246,086 | 5,655 |
| France | 854,279 | 725,285 | 1,579,564 | 107,259 |
| Germany, Fed.Rep.of | 226,692 | 49,576 | 276,268 | 30,553 |
| Japan | 191,353 | 73,488 | 264,841 | 58,154 |
| Netherlands | 275,279 | 145,548 | 420,827 | 7,232 |
| Norway | 4,297 | - | 4,297 | 0 |
| Singapore | 6,143 | - | 6,143 | 0 |
| Sweden | 179,649 | - | 179,649 | 0 |
| Switzerland | 70,121 | 30,315 | 100,436 | 0 |
| United Kingdom | 772,514 | 318,096 | 1,090,610 | 171,889 |
| Total export credits | 2,838,663 | 1,517,486 | 4,356,147 | 415,995 |
| Total external public debt | 44,275,147 | 20,009,624 | 64,284,765 | 5,870,260 |

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 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Service Payments | | | | |
| | Disbursed only | Including Undisbursed | Commit-ments | Disburse-ments | Principal | Interest | Total | Cancel-lations | Adjust-ment /a |
| **Actual** | | | | | | | | | |
| 1980 | 15,021,487 | 24,502,044 | 4,277,373 | 2,550,505 | 939,185 | 823,138 | 1,762,323 | 118,261 | -19,644 |
| 1981 | 15,908,458 | 26,953,145 | 4,951,129 | 2,672,429 | 1,054,106 | 990,708 | 2,044,814 | 163,286 | -1,669,042 |
| 1982 | 18,317,545 | 32,007,959 | 7,069,817 | 3,951,336 | 1,104,100 | 1,132,291 | 2,236,391 | 7,043 | -903,858 |
| 1983 | 21,493,904 | 35,287,509 | 5,676,879 | 4,979,024 | 1,289,872 | 1,233,096 | 2,522,968 | 197,669 | -909,788 |
| 1984 | 22,239,783 | 36,342,169 | 4,816,038 | 3,863,539 | 1,599,633 | 1,628,812 | 3,228,445 | 25,234 | -2,136,511 |
| 1985 | 26,767,503 | 42,761,302 | 4,626,913 | 3,568,931 | 2,329,754 | 1,642,524 | 3,972,278 | 514,889 | 4,636,864 |
| 1986 | 32,628,322 | 50,062,964 | 4,103,343 | 4,244,394 | 2,621,963 | 2,071,669 | 4,693,632 | 183,468 | 6,003,750 |
| 1987 | 40,899,085 | 60,421,449 | 5,986,887 | 5,458,030 | 3,405,766 | 2,272,912 | 5,678,678 | 638,080 | 8,415,444 |
| 1988 | 41,247,150 | 60,092,914 | 6,056,892 | 6,439,036 | 4,438,606 | 2,526,007 | 6,964,613 | 508,737 | -1,438,083 |
| 1989 | 41,202,745 | 59,706,875 | 7,044,817 | 6,485,156 | 4,343,281 | 2,501,407 | 6,844,688 | 291,576 | -2,795,998 |
| 1990 | 44,275,147 | 64,284,765 | 5,870,260 | 4,611,108 | 4,105,296 | 2,539,615 | 6,644,912 | 636,998 | 3,449,925 |
| **Projected** | | | | | | | | | |
| 1991 | 45,003,650 | 55,922,461 | - | 5,12[illegible],782 | 4,398,989 | 2,797,251 | 7,196,240 | - 3962,025 | -1,289 |
| 1992 | 44,619,521 | 51,501,227 | - | 4,037,106 | 4,421,236 | 2,749,030 | 7,170,267 | - | 3 |
| 1993 | 42,696,476 | 46,840,933 | - | 2,737,269 | 4,660,315 | 2,605,926 | 7,266,241 | - | 20 |
| 1994 | 40,477,197 | 42,896,418 | - | 1,725,240 | 3,944,520 | 2,384,670 | 6,329,190 | - | 4 |
| 1995 | 37,869,152 | 39,183,223 | - | 1,105,161 | 3,713,205 | 2,199,223 | 5,912,428 | - | 10 |
| 1996 | 35,304,454 | 35,853,681 | - | 764,873 | 3,329,571 | 2,011,626 | 5,341,197 | - | 29 |
| 1997 | 32,503,491 | 32,672,315 | - | 380,476 | 3,181,439 | 1,833,793 | 5,015,232 | - | 73 |

/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.

Statistical Annex
Table 4.4

INDONESIA

COUNTRY ECONOMIC REPORT

DEVELOPMENT ASSISTANCE FLOWS, 1985-1989 /a
(US$ million)

| COUNTRIES | 1985 | | | 1986 | | | 1987 | | | 1988 | | | 1989 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| IGGI members : | | | | | | | | | | | | | | | |
| AUSTRALIA | 56.6 | 46.8 | 46.8 | 42.1 | 42.0 | 42.0 | 32.2 | 48.2 | 48.2 | 84.0 | 71.7 | 71.7 | 106.2 | 83.1 | 83.1 |
| AUSTRIA | 0.6 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 17.6 | 0.6 | 0.6 | 19.2 | 10.5 | 6.9 | 20.7 | 15.7 | 4.4 |
| BELGIUM | 2.3 | 4.7 | 3.4 | 5.6 | 13.4 | 11.3 | 7.1 | 6.6 | 5.8 | 11.9 | 13.3 | 6.3 | 10.7 | 10.7 | 10.7 |
| CANADA | 12.3 | 35.9 | 34.1 | 54.2 | 54.2 | 52.1 | 37.6 | 45.4 | 43.0 | 88.9 | 43.3 | 40.1 | 81.7 | 38.4 | 33.4 |
| FRANCE | 26.0 | 27.7 | 20.6 | 8.3 | 46.9 | 39.2 | 46.7 | 43.5 | 37.3 | 137.2 | 67.6 | 57.1 | 288.9 | 116.3 | 108.9 |
| GERMANY | 136.7 | 120.6 | 86.9 | 44.8 | 183.0 | 126.1 | 139.0 | 140.4 | 61.8 | 151.4 | 190.2 | 97.6 | 179.4 | 138.9 | 52.4 |
| ITALY | 19.0 | 1.4 | 1.2 | 15.7 | 12.1 | 11.8 | 3.9 | 18.8 | 19.4 | 8.1 | 2.8 | 1.3 | 48.4 | 21.2 | 17.5 |
| JAPAN | 698.8 | 282.8 | 161.3 | 165.6 | 337.1 | 160.8 | 1,336.3 | 941.1 | 707.3 | 1,701.0 | 1,264.7 | 984.9 | 1,455.2 | [illegible] | 1,145.3 |
| NETHERLANDS | 43.2 | 70.8 | 56.6 | 102.3 | 108.8 | 90.6 | 113.7 | 165.0 | 140.3 | 254.6 | 186.5 | 156.2 | 222.2 | 191.0 | 161.5 |
| NEW ZEALAND | 1.4 | 1.5 | 1.5 | 1.2 | 2.1 | 2.4 | [illegible] | 2.1 | 2.1 | 2.4 | 2.3 | 2.3 | - | 2.2 | 2.2 |
| SPAIN | - | - | - | - | - | - | - | - | - | - | - | - | 23.0 | - | - |
| SWITZERLAND | 5.5 | 6.0 | 6.0 | 20.0 | 9.7 | 9.7 | 16.8 | 7.4 | 7.4 | 8.3 | 28.4 | 28.4 | 7.0 | 21.4 | 21.4 |
| UNITED KINGDOM | 25.6 | 41.2 | 38.0 | 9.4 | 10.9 | 7.3 | 33.3 | 14.5 | 10.4 | 35.6 | 21.7 | 17.2 | 45.2 | 18.2 | 14.5 |
| UNITED STATES | 108.2 | 101.0 | 43.0 | 109.7 | 104.0 | 46.0 | 124.2 | 96.0 | 36.0 | 79.6 | 86.0 | 22.0 | 64.4 | 97.0 | 31.0 |
| Other DAC countries : | | | | | | | | | | | | | | | |
| DENMARK | 11.3 | 0.0 | (0.2) | 0.1 | 0.2 | (0.2) | - | 0.8 | 0.3 | - | 1.1 | 0.5 | 3.4 | 11.6 | 11.1 |
| FINLAND | 4.5 | 1.4 | 1.4 | 5.3 | 1.4 | 1.4 | 1.7 | 1.8 | 1.8 | 8.9 | 3.3 | 3.3 | 0.6 | 5.8 | 5.8 |
| IRELAND | - | - | - | - | - | - | 0.1 | 0.1 | 0.1 | - | - | - | - | - | - |
| NORWAY | 1.6 | 1.7 | 1.6 | 4.6 | 4.2 | 4.2 | 3.1 | 0.8 | 0.6 | - | 2.2 | 2.0 | - | 1.2 | 0.5 |
| SWEDEN | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ARAB COUNTRIES | 35.2 | 13.5 | 1.2 | 24.7 | 33.5 | 20.4 | 42.4 | 24.4 | 11.2 | 19.7 | 27.9 | 9.1 | - | 20.5 | 1.9 |
| SUBTOTAL | 1,188.8 | 757.5 | 503.9 | 613.8 | 963.7 | 625.3 | 1,957.8 | 1,557.5 | 1,133.6 | 2,610.8 | 2,023.5 | 1,506.9 | 2,557.0 | 2,200.3 | 1,705.6 |
| MULTILATERAL | | | | | | | | | | | | | | | |
| AS.D.B. | 263.1 | 166.2 | 139.6 | 457.3 | 205.3 | 170.0 | 579.8 | 353.1 | 309.0 | 564.4 | 529.9 | 469.6 | 597.5 | 701.2 | 631.7 |
| E.E.C. | 0.3 | 8.6 | 8.6 | 24.0 | 7.3 | 7.3 | 37.2 | 6.3 | 6.3 | 2.9 | 8.3 | 8.3 | 1.3 | 14.9 | 14.8 |
| IBRD | 1,068.1 | 738.6 | 611.3 | 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 |
| IDA | - | 38.4 | 32.7 | - | 18.1 | 12.4 | - | 14.4 | 8.7 | - | 1.3 | (4.8) | - | 1.1 | (7.0) |
| IFAD | 12.8 | 13.3 | 12.1 | 0.2 | 17.6 | 13.2 | 13.7 | 18.9 | 15.6 | 0.3 | 12.2 | 10.8 | - | 12.6 | 10.1 |
| U.N. AGENCIES | 39.9 | 34.1 | 34.1 | 43.9 | 40.0 | 40.0 | 50.2 | 41.9 | 44.9 | 47.2 | 40.6 | 40.6 | 53.6 | 45.3 | 45.3 |
| UNDP | - | 14.3 | 14.3 | - | 15.6 | 15.6 | - | 21.2 | 21.2 | - | 20.6 | 20.6 | - | 19.1 | 19.1 |
| UNTA | - | 4.6 | 4.6 | - | 3.6 | 3.6 | - | 5.1 | 5.1 | - | 3.7 | 3.7 | - | 5.2 | 5.2 |
| UNICEF | - | 7.6 | 7.6 | - | 9.3 | 9.3 | - | 10.5 | 10.5 | - | 11.9 | 11.9 | - | 11.3 | 11.3 |
| UNRWA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WFP | - | 4.4 | 4.4 | - | 9.0 | 9.0 | - | 5.2 | 5.2 | - | 2.7 | 2.7 | - | 7.7 | 7.7 |
| UNHCR | - | 3.2 | 3.2 | - | 2.5 | 2.5 | - | 2.9 | 2.9 | - | 1.7 | 1.7 | - | 2.0 | 2.0 |
| OTHER MULTILATERAL | - | 5.9 | 5.9 | - | 4.0 | 4.0 | - | 5.3 | 5.3 | - | 6.7 | 6.7 | - | 8.3 | 8.3 |
| ARAB AGENCIES | 7.4 | 0.3 | 0.0 | - | 5.3 | 4.3 | - | 0.2 | (1.0) | - | 0.3 | (1.4) | - | - | (1.0) |
| SUBTOTAL | 1,391.6 | 1,005.5 | 844.4 | 1,507.5 | 1,107.6 | 830.8 | 2,098.9 | 1,801.0 | 1,393.0 | 1,681.7 | 2,247.2 | 1,749.0 | 2,659.8 | 2,039.8 | 1,485.6 |
| TOTAL | 2,580.4 | 1,763.0 | 1,348.3 | 2,121.3 | 2,071.3 | 1,456.1 | 4,056.7 | 3,358.5 | 2,526.6 | 4,292.5 | 4,270.7 | 3,255.9 | 5,216.8 | 4,240.1 | 3,191.2 |

/a Calendar year.
/b Commitments.
/c Disbursements.

Source : OECD : "Geographical Distribution of Financial Flows to Developing Countries"; World Bank, Debtor Reporting System.

Statistical Annex
Table 5.1

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Central Government Budget Summary, 1978/79-1991/92**
**(Rp. billion)**

| | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| 1. Domestic revenues | 4,266 | 6,697 | 10,227 | 12,213 | 12,418 | 14,433 | 15,906 | 19,253 | 16,141 | 20,803 | 23,004 | 28,740 | 31,584 | 40,184 |
| 2. Routine expenditures /a | 2,744 | 4,062 | 5,800 | 6,978 | 6,996 | 8,412 | 9,429 | 11,952 | 13,559 | 17,482 | 20,739 | 24,331 | 26,648 | 30,558 |
| 3. Government saving (1-2) | 1,522 | 2,635 | 4,427 | 5,235 | 5,422 | 6,021 | 6,477 | 7,301 | 2,581 | 3,322 | 2,265 | 4,409 | 4,936 | 9,626 |
| 4. Development expenditures | 2,556 | 4,014 | 5,916 | 6,940 | 7,360 | 9,899 | 9,952 | 10,873 | 8,332 | 9,477 | 12,251 | 13,834 | 16,225 | 19,998 |
| 5. Balance (3- .) | (1,033) | (1,379) | (1,489) | (1,705) | (1,938) | (3,878) | (3,475) | (3,572) | (5,751) | (6,156) | (9,985) | (9,426) | (11,290) | (10,372) |
| Financed by: | | | | | | | | | | | | | | |
| 6. Program aid | 48 | 65 | 64 | 45 | 15 | 15 | 69 | 69 | 1,958 | 728 | 2,041 | 1,007 | 2,885 | 1,538 |
| 7. Project aid | 987 | 1,316 | 1,430 | 1,664 | ,925 | 3,868 | 3,409 | 3,503 | 3,795 | 5,430 | 7,950 | 8,422 | 8,404 | 8,834 |
| 8. Change in balances (- = increase) | (2) | (2) | (5) | (4) | (2) | (4) | (3) | (1) | (2) | (2) | (5) | (4) | (0) | 0 |

/a Includes debt service payments.

Source: Ministry of Finance.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Central Government Receipts, 1978/79 - 1991/92
(Rp. billion)

| | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| Taxes on income | 2,996 | 5,129 | 8,230 | 10,100 | 10,010 | 11,605 | 12,847 | 13,625 | 8,798 | 12,986 | 13,901 | 17,330 | 17,919 | 23,869 |
| Income tax | 122 | 148 | 164 | 207 | 289 | 399 | 451 | 675 | 2,271 | 2,663 | 3,949 | 5,488 | 6,516 | 8,021 |
| Corporate tax /a | 227 | 297 | 448 | 559 | 675 | 757 | 1,670 | 1,638 | | | | | | |
| Corporate tax on oil /b | 2,309 | 4,260 | 7,020 | 8,628 | 8,170 | 9,520 | 10,430 | 11,144 | 6,338 | 10,047 | 9,527 | 11,252 | 10,783 | 15,009 |
| Witholding tax /b | 233 | 291 | 434 | 513 | 642 | 628 | | | | | | | | |
| IPEDA/property tax /c | 63 | 71 | 87 | 95 | 105 | 132 | 157 | 168 | 190 | 275 | 424 | 590 | 620 | 839 |
| Others /d | 43 | 62 | 78 | 99 | 129 | 168 | 138 | | | | | | | |
| Taxes on domestic consumption | 491 | 537 | 733 | 888 | 1,137 | 1,392 | 1,510 | 3,479 | 5,156 | 4,719 | 6,187 | 7,589 | 9,025 | 10,790 |
| Sales/value added tax | 221 | 192 | 266 | 311 | 477 | 575 | 637 | 2,327 | 2,900 | 3,390 | 4,505 | 5,837 | 6,825 | 8,224 |
| Excises | 253 | 328 | 438 | 544 | 620 | 773 | 873 | 944 | 1,056 | 1,106 | 1,390 | 1,477 | 1,911 | 2,215 |
| Other oil revenues /e | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,010 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous levies | 17 | 19 | 29 | 33 | 41 | 44 | 0 | 208 | 190 | 223 | 292 | 276 | 289 | 351 |
| Taxes on international trade | 587 | 843 | 948 | 888 | 835 | 916 | 862 | 658 | 1,039 | 1,122 | 1,348 | 1,759 | 2,080 | 2,695 |
| Import duties | 295 | 317 | 448 | 536 | 522 | 557 | 530 | 607 | 960 | 938 | 1,192 | 1,587 | 1,972 | 2,574 |
| Sales tax on imports /f | 126 | 137 | 195 | 223 | 231 | 255 | 241 | | | | | | | |
| Export tax | 166 | 389 | 305 | 128 | 83 | 104 | 91 | 51 | 79 | 184 | 156 | 172 | 108 | 121 |
| Nontax receipts | 191 | 187 | 316 | 336 | 436 | 520 | 687 | 1,492 | 1,147 | 1,977 | 1,569 | 2,062 | 2,560 | 2,831 |
| Domestic revenue | 4,266 | 6,697 | 10,227 | 12,213 | 12,418 | 14,433 | 15,906 | 19,253 | 16,141 | 20,803 | 23,004 | 28,740 | 31,584 | 40,184 |
| Development funds | 1,036 | 1,381 | 1,494 | 1,709 | 1,940 | 3,882 | 3,478 | 3,573 | 5,752 | 6,158 | 9,991 | 9,429 | 11,290 | 10,372 |
| Program aid | 48 | 65 | 64 | 45 | 15 | 15 | 69 | 69 | 1,958 | 728 | 2,041 | 1,007 | 2,885 | 1,538 |
| Project aid /g | 987 | 1,316 | 1,430 | 1,664 | 1,925 | 3,868 | 3,409 | 3,503 | 3,795 | 5,430 | 7,950 | 8,422 | 8,404 | 8,834 |
| Total revenues | 5,302 | 8,078 | 11,721 | 13,922 | 14,358 | 18,315 | 19,384 | 22,825 | 21,893 | 26,961 | 32,995 | 38,169 | 42,873 | 50,556 |

/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, 1978/79 - 1991/92**
**(Rp. billion)**

| | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| Personnel expenditures | 1,002 | 1,420 | 2,023 | 2,278 | 2,418 | 2,757 | 3,047 | 4,018 | 4,311 | 4,617 | 4,998 | 6,202 | 6,909 | 7,753 |
| Wages and salaries | 760 | 1,054 | 1,483 | 1,660 | 1,749 | 1,996 | 2,207 | 3,073 | 3,330 | 3,561 | 3,833 | 4,826 | 5,487 | 6,068 |
| Rice allowance | 133 | 180 | 252 | 253 | 290 | 346 | 407 | 402 | 406 | 451 | 518 | 588 | 636 | 769 |
| Food allowance | 51 | 110 | 193 | 241 | 255 | 261 | 271 | 300 | 288 | 299 | 327 | 373 | 381 | 436 |
| Other | 34 | 47 | 61 | 80 | 79 | 88 | 90 | 161 | 177 | 176 | 185 | 243 | 216 | 267 |
| External | 24 | 29 | 34 | 43 | 46 | 66 | 72 | 82 | 110 | 130 | 135 | 171 | 190 | 215 |
| Material expenditures | 420 | 569 | 671 | 922 | 1,041 | 1,057 | 1,183 | 1,367 | 1,366 | 1,329 | 1,492 | 1,702 | 1,721 | 2,201 |
| Domestic | 398 | 540 | 638 | 891 | 1,007 | 1,007 | 1,134 | 1,310 | 1,294 | 1,239 | 1,378 | 1,569 | 1,568 | 2,038 |
| External | 21 | 29 | 33 | 32 | 34 | 50 | 49 | 58 | 73 | 90 | 114 | 133 | 153 | 162 |
| Subsidies to region /a | 522 | 670 | 976 | 1,209 | 1,315 | 1,547 | 1,883 | 2,489 | 2,650 | 2,816 | 3,038 | 3,566 | 4,227 | 4,660 |
| Irian Jaya | 22 | 25 | 34 | 42 | 43 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other region | 500 | 645 | 942 | 1,167 | 1,272 | 1,505 | 1,883 | 2,489 | 2,650 | 2,816 | 3,038 | 3,566 | 4,227 | 4,660 |
| Debt service payments | 535 | 684 | 785 | 931 | 1,225 | 2,103 | 2,777 | 3,323 | 5,058 | 8,205 | 10,940 | 11,939 | 12,984 | 14,381 |
| Internal | 9 | 37 | 31 | 16 | 20 | 30 | 39 | 20 | 0 | 39 | 78 | 149 | 245 | 251 |
| External | 526 | 648 | 754 | 915 | 1,205 | 2,073 | 2,737 | 3,303 | 5,058 | 8,166 | 10,863 | 11,790 | 12,739 | 14,130 |
| Other expenditures | 266 | 719 | 1,345 | 1,637 | 997 | 948 | 540 | 754 | 174 | 515 | 271 | 923 | 807 | 1,563 |
| Food subsidy | 44 | 125 | 282 | 224 | 1 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 |
| Oil subsidy | 197 | 535 | 1,022 | 1,316 | 962 | 928 | 507 | 374 | 0 | 0 | 0 | 0 | 627 | 1,187 |
| Others /b | 25 | 59 | 42 | 97 | 34 | 20 | 33 | 380 | 145 | 515 | 271 | 923 | 180 | 376 |
| Routine expenditures | 2,744 | 4,062 | 5,800 | 6,978 | 6,996 | 8,412 | 9,429 | 11,952 | 13,559 | 17,482 | 20,739 | 24,331 | 26,648 | 30,558 |
| Development expenditures /c | 2,556 | 4,014 | 5,916 | 6,940 | 7,360 | 9,899 | 9,952 | 10,873 | 8,332 | 9,477 | 12,251 | 13,834 | 16,225 | 19,998 |
| Total expenditures | 5,299 | 8,076 | 11,716 | 13,918 | 14,356 | 18,311 | 19,381 | 22,825 | 21,891 | 26,959 | 32,990 | 38,165 | 42,873 | 50,556 |

/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.

Source: Ministry of Finance.

Statistical Annex
Table 5.4

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Development Expenditures, 1978/79 - 1991/92**
(Rp. billion)

| | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| 1. Departments | 851 | 1,480 | 2,533 | 2,725 | 3,261 | 3,220 | 3,474 | 4,467 | 2,004 | 2,113 | 1,861 | 2,509 | 4,316 | 6,447 |
| 2. General INPRES programs | 182 | 219 | 337 | 448 | 535 | 539 | 540 | 575 | 568 | 656 | 714 | 706 | 1,058 | 1,435 |
| Subsidies to provinces | 87 | 101 | 167 | 215 | 253 | 253 | 253 | 287 | 293 | 290 | 334 | 324 | 486 | 594 |
| Subsidies to kabupatens | 71 | 87 | 119 | 163 | 194 | 194 | 195 | 189 | 188 | 263 | 267 | 270 | 392 | 591 |
| Subsidies to villages | 24 | 31 | 51 | 71 | 88 | 92 | 93 | 99 | 86 | 102 | 112 | 112 | 181 | 250 |
| 3. Sectoral INPRES programs | 176 | 252 | 377 | 585 | 444 | 771 | 824 | 754 | 721 | 451 | 429 | 466 | 1,274 | 1,843 |
| Primary schools | 112 | 156 | 250 | 375 | 267 | 549 | 572 | 526 | 496 | 193 | 131 | 100 | 370 | 522 |
| Health | 27 | 30 | 50 | 79 | 80 | 87 | 65 | 111 | 108 | 74 | 99 | 122 | 189 | 269 |
| Markets | 1 | 12 | 3 | 6 | 5 | 11 | 26 | 4 | 12 | 3 | 3 | 3 | 3 | 3 |
| Replanting/reforestration | 36 | 41 | 49 | 70 | 50 | 59 | 61 | 43 | 31 | 16 | 17 | 16 | 33 | 75 |
| Roads | 0 | 13 | 26 | 55 | 42 | 65 | 101 | 70 | 75 | 164 | 180 | 225 | 679 | 975 |
| 4. PBB /b | 63 | 71 | 87 | 95 | 105 | 132 | 157 | 168 | 171 | 223 | 344 | 478 | 503 | 679 |
| 5. Irian Jaya and East Timor | 10 | 7 | 6 | 7 | 6 | 5 | 4 | 7 | 7 | 5 | 0 | 0 | 0 | 0 |
| Total (2-5) : Transfer to local governments | 431 | 549 | 808 | 1,134 | 1,090 | 1,448 | 1,526 | 1,503 | 1,467 | 1,334 | 1,486 | 1,651 | 2,835 | 3,957 |
| 6. Fertilizer subsidy | 83 | 125 | 284 | 371 | 420 | 324 | 732 | 477 | 467 | 756 | 200 | 278 | 155 | 175 |
| 7. Government capital participation (PMP) | 129 | 253 | 477 | 481 | 337 | 592 | 336 | 412 | 86 | 336 | 125 | 141 | 75 | 95 |
| 8. Others | 75 | 291 | 386 | 565 | 327 | 449 | 475 | 511 | 514 | 515 | 629 | 765 | 440 | 489 |
| Total (1 - 8) | 1,568 | 2,698 | 4,486 | 5,276 | 5,435 | 6,032 | 6,543 | 7,370 | 4,537 | 5,054 | 4,301 | 5,343 | 7,821 | 11,164 |
| 9. Project aid /a | 987 | 1,316 | 1,430 | 1,664 | 1,925 | 3,868 | 3,409 | 3,503 | 3,795 | 4,423 | 7,950 | 8,422 | 8,404 | 8,834 |
| Total (1 - 9) | 2,556 | 4,014 | 5,916 | 6,940 | 7,360 | 9,899 | 9,952 | 10,873 | 8,332 | 9,477 | 12,251 | 13,765 | 16,225 | 19,998 |

/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, 1978/79 - 1991/92
(Rp. billion)

| Sector | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| Agriculture and irrigation | 450 | 508 | 929 | 954 | 931 | 913 | 1,699 | 1,138 | 890 | 1,937 | 1,614 | 2,049 | 2,392 | 2,816 |
| (of which fertilizer subsidy) | (83) | (125) | (284) | (371) | (420) | (324) | (732) | (417) | (467) | (756) | (200) | (278) | (155) | (175) |
| Industry and mining | 205 | 403 | 491 | 827 | 913 | 2,153 | 839 | 1,189 | 681 | 335 | 565 | 420 | 661 | 728 |
| Electric power | 272 | 330 | 451 | 530 | 758 | 660 | 911 | 1,447 | 960 | 1,085 | 1,955 | 1,397 | 1,759 | 2,210 |
| Transportation and tourism | 413 | 466 | 781 | 807 | 876 | 1,528 | 1,428 | 1,484 | 1,131 | 1,598 | 2,011 | 3,006 | 3,042 | 3,968 |
| Manpower and transmigration | 95 | 162 | 326 | 417 | 436 | 456 | 422 | 665 | 292 | 200 | 266 | 281 | 556 | 745 |
| Regional development | 275 | 336 | 482 | 616 | 711 | 749 | 791 | 850 | 939 | 930 | 1,137 | 1,369 | 1,873 | 2,409 |
| Education | 251 | 361 | 575 | 726 | 703 | 1,032 | 1,231 | 1,413 | 1,184 | 1,181 | 1,606 | 1,507 | 2,065 | 2,503 |
| Population & Health | 79 | 142 | 218 | 296 | 259 | 279 | 320 | 398 | 326 | 225 | 339 | 470 | 592 | 783 |
| Housing and water supply | 56 | 117 | 191 | 166 | 151 | 221 | 224 | 335 | 337 | 432 | 481 | 495 | 729 | 833 |
| General public services /a | 225 | 473 | 699 | 800 | 786 | 899 | 927 | 977 | 769 | 652 | 733 | 909 | 1,166 | 1,376 |
| Government capital participation | 162 | 466 | 389 | 389 | 281 | 234 | 292 | 221 | 211 | 219 | 238 | 625 | 339 | 378 |
| Others /b | 73 | 250 | 404 | 423 | 555 | 776 | 1,599 | 1,235 | 1,078 | 684 | 1,305 | 1,306 | 1,051 | 1,250 |
| Total development expenditures | 2,556 | 4,014 | 5,916 | 6,940 | 7,360 | 9,899 | 9,952 | 10,873 | 8,332 | 9,477 | 12,251 | 13,834 | 16,225 | 19,998 |
| Total ( excluding fertilizer subsidy) | 2,473 | 3,889 | 5,633 | 6,569 | 6,940 | 9,575 | 9,220 | 10,396 | 7,865 | 8,721 | 12,051 | 13,556 | 16,070 | 19,823 |

/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, 1978/79 - 1991/92
(Rp. billion)

| | Actual | | | | | | | | | | | | Budget | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| Agriculture and irrigation | 135 | 155 | 223 | 136 | 101 | 155 | 472 | 180 | 237 | 576 | 1,087 | 1,675 | 1,756 | 1,924 |
| Industry and mining | 199 | 307 | 226 | 581 | 734 | 1,051 | 671 | 668 | 632 | 267 | 327 | 492 | 564 | 597 |
| Electric power | 208 | 257 | 265 | 308 | 506 | 1,182 | 653 | 1,172 | 791 | 769 | 1,783 | 1,400 | 1,384 | 1,692 |
| Transportation and tourism | 250 | 192 | 308 | 264 | 332 | 889 | 601 | 688 | 729 | 845 | 1,424 | 2,003 | 1,376 | 1,419 |
| Manpower and transmigration | 12 | 23 | 31 | 31 | 15 | 45 | 76 | 36 | 123 | 62 | 98 | 174 | 63 | 67 |
| Regional development | 8 | 18 | 24 | 17 | 3 | 7 | 1 | 8 | 25 | 4 | 45 | 308 | 245 | 171 |
| Education | 35 | 43 | 50 | 37 | 24 | 211 | 180 | 59 | 346 | 718 | 1,236 | 1,303 | 992 | 934 |
| Population & Health | 22 | 34 | 36 | 34 | 24 | 37 | 78 | 56 | 100 | 38 | 99 | 143 | 61 | 56 |
| Housing and water supply | 18 | 28 | 33 | 22 | 21 | 51 | 84 | 77 | 139 | 273 | 400 | 560 | 512 | 514 |
| General public services | 54 | 175 | 154 | 180 | 83 | 152 | 255 | 186 | 257 | 350 | 382 | 641 | 734 | 727 |
| Government capital participation | 33 | 34 | 36 | 28 | 47 | 45 | 160 | 203 | 185 | 168 | 213 | 280 | 128 | 144 |
| Others /a | 14 | 50 | 45 | 29 | 35 | 42 | 179 | 171 | 231 | 355 | 855 | 549 | 589 | 590 |
| Total project aid /b | 987 | 1,316 | 1,430 | 1,664 | 1,925 | 3,867 | 3,409 | 3,503 | 3,795 | 4,423 | 7,950 | 9,526 | 8,404 | 8,834 |

/a Since 1979/80 includes natural resources development and environment.
/b Includes commercial credits for development programs/projects.

Source: Ministry of Finance.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Money Supply, 1974 - 1990
(Rp. billion)

| End of | Total | Currency | | Demand deposits | | Change over period | |
|---|---|---|---|---|---|---|---|
| | | Amount | (%) | Amount | (%) | Amount | (%) |
| 1974 | 937 | 494 | 53 | 443 | 47 | 268 | 40 |
| 1975 | 1,250 | 625 | 50 | 625 | 50 | 313 | 33 |
| 1976 | 1,603 | 781 | 49 | 822 | 51 | 353 | 28 |
| 1977 | 2,006 | 979 | 49 | 1,027 | 51 | 403 | 25 |
| 1978 | 2,488 | 1,240 | 50 | 1,248 | 50 | 482 | 24 |
| 1979 | 3,385 | 1,552 | 46 | 1,833 | 54 | 897 | 36 |
| 1980 | 4,995 | 2,153 | 43 | 2,842 | 57 | 1,610 | 48 |
| 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 |

Source: Bank Indonesia.

Statistical Annex
Table 6.2

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Changes in Factors Affecting Reserve Money Supply, 1974-1990
(Rp. billion)

| End of period | Net foreign assets | Public Sector: Net claims on Central Government | Public Sector: Claims on official entities & public enterprises | Public Sector: Blocked account /a | Claims on business & individuals | Net other items | Total change in Money Supply: Amount | Total change in Money Supply: Percentage (%) |
|---|---|---|---|---|---|---|---|---|
| 1974 | 364 | -132 | 294 | - | 147 | -209 | 268 | 40 |
| 1975 | -588 | 162 | 926 | -415 | 298 | 143 | 313 | 33 |
| 1976 | 345 | -333 | 449 | -51 | 356 | -113 | 353 | 28 |
| 1977 | 568 | -275 | 35 | 67 | 284 | -180 | 403 | 25 |
| 1978 /b | 50 | -311 | 349 | 88 | 546 | -128 | 482 | 24 |
| 1979 | 1,788 | 1,779 | 371 | 85 | 557 | -436 | 697 | 36 |
| 1980 | 3,040 | -1,868 | 489 | -5 | 1,178 | -365 | 1,610 | 48 |
| 1981 | 149 | -591 | 593 | 36 | 1,756 | 83 | 1,491 | 30 |
| 1982 | -1,237 | 129 | 689 | 109 | 2,260 | -591 | 635 | 10 |
| 1983 /c | 1,180 | -1,286 | -42 | 118 | 2,183 | 815 | 448 | 6 |
| 1984 | 3,531 | -3,359 | 190 | 124 | 3,646 | 882 | 1,012 | 13 |
| 1985 | 1,750 | -214 | 511 | 64 | 3,333 | -115 | 1,523 | 18 |
| 1986 /d | 1,870 | 469 | 252 | -29 | 4,547 | -2496 | 1,573 | 16 |
| 1987 | 2,444 | 1,538 | 729 | -3 | 6,245 | -4710 | 1,008 | 9 |
| 1988 | -549 | 247 | 659 | 18 | 11,169 | -3053 | 1,707 | 13 |
| 1989 | 409 | -1273 | 1,444 | 26 | 22,132 | -5347 | 5,722 | 40 |
| 1990 | -2171 | -3893 | 511 | 16 | 35,809 | -2915 | 3,705 | 15 |

/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, 1980-1990
(Rp. billion)

| End of period | 1980 | 1981 | 1982 | 1983 /a | 1984 | 1985 | 1986 /b | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Net foreign assets | 6,419 | 6,811 | 5,565 | 8,837 | 12,368 | 14,119 | 15,989 | 18,433 | 17,884 | 18,293 | 16,122 |
| Domestic credit | 3,979 | 5,651 | 8,846 | 9,744 | 10,345 | 14,325 | 19,323 | 26,729 | 39,802 | 62,131 | 93,142 |
| Claims on public sector | | | | | | | | | | | |
| Central government | -3,619 | -4,330 | -4,193 | -5,739 | -9,098 | -9319 | -8798 | -8366 | -7036 | -8309 | -12202 |
| Claims on official entities and public enterprises | 3,655 | 4,247 | 4,979 | 5,040 | 5,230 | 6,034 | 5,993 | 6,725 | 7,381 | 8,825 | 7,904 |
| Government-blocked account | -396 | -360 | -252 | -240 | -116 | -52 | -81 | -84 | -66 | -40 | -24 |
| Claims on private enterprises and individuals | 4,339 | 6,094 | 8,312 | 10,683 | 14,329 | 17,662 | 22,209 | 28,454 | 39,523 | 61,655 | 97,464 |
| Loans | 4,107 | 5,844 | 7,995 | 10,184 | 13,550 | 16,392 | 20,409 | 26,072 | 36,502 | 55 933 | 90,109 |
| Other claims | 232 | 250 | 317 | 499 | 779 | 1,270 | 1,800 | 2,382 | 3,021 | 5,722 | 7,355 |
| Assets = liabilities | 10,398 | 12,462 | 14,411 | 18,581 | 22,713 | 28,444 | 35,312 | 45,162 | 57,686 | 80,424 | 109,264 |
| Import deposits | 365 | 298 | 300 | 242 | 218 | 268 | 402 | 424 | 684 | 632 | 1,048 |
| Net other items | 2,342 | 2,448 | 3,036 | 3,676 | 4,558 | 5,291 | 7,651 | 11,277 | 15,688 | 21,087 | 23,586 |
| Money and quasi money | 7,691 | 9,716 | 11,075 | 14,663 | 17,937 | 23,153 | 27,661 | 33,885 | 41,998 | 58,705 | 84,630 |
| Money | 4,995 | 6,485 | 7,121 | 7,569 | 8,581 | 10,104 | 11,677 | 12,685 | 14,392 | 20,114 | 23,819 |
| Currency | 2,153 | 2,557 | 2,934 | 3,333 | 3,712 | 4,440 | 5,338 | 5,782 | 6,246 | 7,426 | 9,094 |
| Demand deposits | 2,842 | 3,928 | 4,187 | 4,236 | 4,869 | 5,664 | 6,339 | 6,903 | 8,146 | 12,688 | 14,725 |
| Quasi money | 2,696 | 3,231 | 3,954 | 7,094 | 9,356 | 13,049 | 15,984 | 21,200 | 27,606 | 38,591 | 60,811 |

/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, 1980-1990 /a
### (Rp. billion)

| Sectors | 1980 | 1981 | 1982 | 1983/f | 1984 | 1985 | 1986/g | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 539 | 813 | 1,025 | 1,226 | 1,318 | 1,656 | 2,097 | 2,656 | 3,610 | 5,283 | 7,176 |
| In rupiah | 539 | 813 | 1,025 | 1,226 | 1,318 | 1,656 | 2,097 | 2,630 | 3,572 | 5,214 | 6,884 |
| In foreign exchange | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 38 | 69 | 292 |
| Mining /b | 1,867 | 1,693 | 1,472 | 806 | 384 | 258 | 394 | 385 | 444 | 591 | 615 |
| In rupiah | 1,867 | 1,693 | 1,472 | 806 | 384 | 258 | 394 | 372 | 424 | 456 | 570 |
| In foreign exchange | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 20 | 135 | 45 |
| Manufacturing industry /c | 2,213 | 2,762 | 3,923 | 5,207 | 6,667 | 7,592 | 9,005 | 10,917 | 14,956 | 20,333 | 30,502 |
| In rupiah | 1,826 | 2,376 | 3,429 | 4,595 | 6,205 | 7,069 | 8,839 | 10,508 | 13,994 | 17,654 | 25,002 |
| In foreign exchange | 387 | 386 | 494 | 612 | 462 | 523 | 166 | 409 | 962 | 2,679 | 5,500 |
| Trade /d | 1,976 | 3,062 | 4,129 | 5,132 | 6,344 | 7,255 | 8,399 | 10,247 | 13,888 | 20,109 | 29,737 |
| In rupiah | 1,970 | 3,046 | 4,009 | 4,781 | 6,299 | 7,214 | 8,329 | 10,065 | 13,682 | 19,342 | 27,267 |
| In foreign exchange | 6 | 16 | 120 | 351 | 45 | 41 | 70 | 182 | 206 | 767 | 2,470 |
| Service rendering industry /e | 946 | 1,385 | 1,867 | 2,277 | 3,169 | 4,183 | 4,345 | 5,460 | 7,382 | 10,424 | 17,897 |
| In rupiah | 939 | 1,382 | 1,860 | 2,253 | 3,088 | 4,047 | 4,130 | 5,151 | 6,917 | 9,600 | 14,943 |
| In foreign exchange | 7 | 3 | 7 | 24 | 81 | 136 | 215 | 309 | 465 | 824 | 2,954 |
| Others | 333 | 444 | 606 | 651 | 931 | 1,213 | 2,162 | 3,187 | 3,721 | 6,866 | 11,769 |
| In rupiah | 331 | 444 | 606 | 651 | 929 | 1,210 | 2,156 | 3,143 | 3,667 | 6,709 | 11,197 |
| In foreign exchange | 2 | 0 | 0 | 0 | 2 | 3 | 6 | 44 | 54 | 157 | 572 |
| Total | 7,874 | 10,159 | 13,022 | 15,299 | 18,813 | 22,157 | 26,402 | 32,852 | 44,001 | 63,606 | 97,696 |
| In rupiah | 7,472 | 9,754 | 12,401 | 14,312 | 18,223 | 21,454 | 25,945 | 31,869 | 42,256 | 58,975 | 85,863 |
| In foreign exchange | 402 | 405 | 621 | 987 | 590 | 703 | 457 | 983 | 1,745 | 4,631 | 11,833 |

/a Credits outstanding end of period. Includes investment credits, KIK and KMKP. Excludes interbank credits, credits to central government and to non-residents, 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, 1980-1990 /a
(Rp. billion)

| | 1980 | 1981 | 1982 | 1983 /b | 1984 | 1985 | 1986 /c | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bank Indonesia | | | | | | | | | | | |
| direct credits /d | 2,454 | 2,649 | 2,771 | 2,356 | 870 | 964 | 1,144 | 1,347 | 1,547 | 696 | 718 |
| In rupiah | 2,454 | 2,649 | 2,771 | 2,356 | 870 | 964 | 1,144 | 1,347 | 1,547 | 696 | 718 |
| In foreign exchange | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| State commercial banks /e | 4,295 | 5,881 | 8,031 | 9,787 | 13,345 | 15,374 | 17,782 | 21,676 | 28,631 | 39,579 | 55,826 |
| In rupiah | 3,954 | 5,523 | 7,474 | 8,910 | 12,959 | 14,925 | 17,711 | 21,225 | 27,614 | 37,151 | 50,648 |
| In foreign exchange | 341 | 358 | 557 | 877 | 386 | 449 | 71 | 451 | 1,017 | 2,428 | 5,178 |
| National Private Banks /f | 711 | 1,081 | 1,554 | 2,294 | 3,552 | 4,746 | 6,272 | 8,423 | 11,910 | 20,216 | 34,975 |
| In rupiah | 705 | 1,069 | 1,534 | 2,279 | 3,480 | 4,631 | 6,061 | 8,175 | 11,536 | 18,955 | 31,458 |
| In foreign exchange | 6 | 12 | 20 | 15 | 72 | 115 | 211 | 248 | 374 | 1,261 | 3,517 |
| Foreign Banks | 414 | 548 | 666 | 862 | 1,046 | 1,073 | 1,204 | 1,406 | 1,913 | 3,115 | 6,177 |
| In rupiah | 359 | 513 | 622 | 767 | 914 | 934 | 1,029 | 1,122 | 1,559 | 2,173 | 3,039 |
| In foreign exchange | 55 | 35 | 44 | 95 | 132 | 139 | 175 | 284 | 354 | 942 | 3,138 |
| Total | 7,874 | 10,159 | 13,022 | 15,299 | 18,813 | 22,157 | 26,402 | 32,852 | 44,001 | 63,606 | 97,696 |
| In rupiah | 7,472 | 9,754 | 12,401 | 14,312 | 18,223 | 21,454 | 25,945 | 31,869 | 42,256 | 58,975 | 85,863 |
| In foreign exchange | 402 | 405 | 621 | 987 | 590 | 703 | 457 | 983 | 1,745 | 4,631 | 11,833 |

/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, 1980-1990 /a
(Rp. billion)

| End of period | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Credits approved /b | 1,675 | 1,906 | 2,679 | 3,900 | 4,509 | 5,898 | 7,966 | 9,814 | 13,500 | 18,263 | 26,450 |
| Agriculture | 277 | 340 | 467 | 734 | 809 | 1,402 | 2,274 | 2,584 | 3,393 | 5,009 | 6,811 |
| Mining | 5 | 40 | 54 | 57 | 179 | 229 | 363 | 382 | 495 | 481 | 502 |
| Manufacturing industry | 911 | 911 | 1,369 | 1,983 | 2,374 | 2,765 | 3,253 | 3,540 | 5,182 | 7,615 | 10,742 |
| Trade | 53 | 87 | 134 | 129 | 237 | 277 | 369 | 355 | 536 | 1,012 | 2,298 |
| Service rendering industry | 422 | 516 | 641 | 986 | 866 | 1,173 | 1,638 | 2,900 | 3,788 | 4,021 | 4,914 |
| Others | 7 | 12 | 14 | 11 | 44 | 52 | 69 | 53 | 106 | 125 | 1,183 |
| Credits outstanding /b | 1,296 | 1,436 | 2,099 | 2,861 | 3,802 | 5,471 | 6,486 | 7,635 | 10,422 | 14,292 | 20,734 |
| Agriculture | 137 | 202 | 322 | 477 | 555 | 948 | 1,292 | 1,690 | 2,284 | 3,357 | 4,520 |
| Mining | 2 | 26 | 34 | 49 | 178 | 224 | 367 | 342 | 372 | 358 | 373 |
| Manufacturing industry | 820 | 741 | 1,095 | 1,635 | 2,102 | 2,781 | 3,098 | 3,567 | 4,817 | 6,424 | 8,920 |
| Trade | 41 | 73 | 120 | 115 | 168 | 396 | 443 | 435 | 632 | 1,022 | 2,157 |
| Service rendering industry | 289 | 390 | 519 | 576 | 770 | 1,098 | 1,215 | 1,560 | 2,249 | 3,010 | 4,307 |
| Others | 7 | 4 | 9 | 9 | 29 | 24 | 71 | 41 | 68 | 121 | 457 |

/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, 1982-1990
(Rp. billion)

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| **Deposits** | | | | | | | | | |
| State Banks | 6,169 | 8,381 | 10,035 | 12,916 | 15,193 | 18,111 | 22,527 | 29,731 | 40,638 |
| Private Banks | 1,284 | 2,119 | 3,020 | 4,550 | 5,435 | 8,040 | 11,167 | 19,655 | 33,951 |
| Regional Development Banks | 411 | 498 | 700 | 825 | 797 | 954 | 1,300 | 1,674 | 2,550 |
| Foreign Banks | 1,004 | 1,398 | 1,743 | 1,883 | 2,086 | 2,226 | 2,515 | 3,315 | 6,016 |
| Total | 8,868 | 12,396 | 15,498 | 20,174 | 23,511 | 29,331 | 37,510 | 54,375 | 83,155 |
| **Share in Total Deposits** | | | | | | | | | |
| State Banks | 69.6 | 67.6 | 64.8 | 64.0 | 64.6 | 61.7 | 60.1 | 54.7 | 48.9 |
| Private Banks | 14.5 | 17.1 | 19.5 | 22.6 | 23.1 | 27.4 | 29.8 | 36.1 | 40.8 |
| Regional Development Banks | 4.6 | 4.0 | 4.5 | 4.1 | 3.4 | 3.3 | 3.5 | 3.1 | 3.1 |
| Foreign Banks | 11.3 | 11.3 | 11.2 | 9.3 | 8.9 | 7.6 | 6.7 | 6.1 | 7.2 |
| Total | 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 | 15.5 |
| Private Banks | 40.0 | 50.1 | 35.4 | 41.0 | 17.8 | 39.2 | 32.9 | 56.5 | 36.6 |
| Regional Development Banks | 16.1 | 19.2 | 34.0 | 16.4 | -3.4 | 18.0 | 30.9 | 25.3 | 23.1 |
| Foreign Banks | 27.2 | 33.1 | 22.1 | 7.7 | 6.5 | 6.5 | 12.2 | 27.6 | 35.5 |
| Total | 10.2 | 33.5 | 22.3 | 26.4 | 22.1 | 22.1 | 24.6 | 37.1 | 25.1 |

/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, 1978-1990 /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 /g | 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 |
| 1979 | 1.8-3 | 6-15 | 9.0 | 9.8 | 10.6 | 5.1 | 6.0 | 9.0 | 12-15 | 16.2 | 16.7 | 18.3 | 19.6 | 19.6 |
| 1980 | 1.8-3 | 6-15 | 9.0 | 10.2 | 7.2 | 8.2 | 6.0 | 9.0 | 12-15 | 14.2 | 16.1 | 17.8 | 20.1 | 19.3 |
| 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 /h | 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 |

/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 Effective January 1978: 15% for Rp. 2.5 million or less; 12% for more than Rp.2.5 million for 24 months State Bank time deposit.
/h 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.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Principal Agricultural Products by Subsectors, 1978-1989**
('000 tons)

| Product | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Food crops | | | | | | | | | | | | |
| Rice /b | 17,525 | 17,872 | 20,163 | 22,286 | 22,837 | 35,302 | 38,134 | 39,033 | 39,726 | 40,078 | 41,676 | 44,726 |
| Corn | 4,029 | 3,606 | 3,991 | 4,509 | 3,235 | 5,087 | 5,288 | 4,330 | 5,920 | 5,155 | 6,652 | 6,213 |
| Cassava | 12,902 | 13,751 | 13,726 | 13,301 | 12,988 | 12,103 | 14,167 | 14,037 | 13,312 | 14,356 | 15,471 | 17,091 |
| Sweet potato | 2,083 | 2,194 | 2,079 | 2,094 | 1,676 | 2,213 | 2,156 | 2,161 | 2,091 | 2,013 | 2,159 | 2,126 |
| Soya beans (shelled) | 617 | 680 | 653 | 704 | 521 | 536 | 769 | 870 | 1,227 | 1,161 | 1,270 | 1,301 |
| Groundnuts (shelled) | 446 | 424 | 470 | 475 | 437 | 460 | 535 | 528 | 642 | 533 | 589 | 615 |
| Fisheries | | | | | | | | | | | | |
| Saltwater fish | 1,227 | 1,318 | 1,395 | 1,408 | 1,490 | 1,682 | 1,713 | 1,822 | 1,923 | 2,017 | 2,170 | 2,272 |
| Freshwater fish | 420 | 430 | 455 | 506 | 524 | 533 | 548 | 573 | 607 | 653 | 711 | 754 |
| Meat and dairy | | | | | | | | | | | | |
| Meat | 475 | 486 | 571 | 596 | 629 | 650 | 742 | 808 | 860 | 895 | 937 | 1,008 |
| Eggs | 151 | 164 | 259 | 275 | 297 | 319 | 355 | 370 | 432 | 452 | 443 | 464 |
| Milk /c | 62 | 72 | 78 | 86 | 117 | 143 | 179 | 192 | 220 | 235 | 265 | 326 |
| Cash crops | | | | | | | | | | | | |
| Rubber | 884 | 898 | 1,020 | 963 | 900 | 1,007 | 1,033 | 1,055 | 1,109 | 1,130 | 1,176 | 1,256 |
| Palm oil | 532 | 642 | 701 | 748 | 884 | 979 | 1,147 | 1,243 | 1,350 | 1,506 | 1,800 | 1,879 |
| Coconut/copra | 1,575 | 1,582 | 1,759 | 1,812 | 1,718 | 1,604 | 1,750 | 1,920 | 2,114 | 2,075 | 2,139 | 2,085 |
| Coffee | 223 | 228 | 285 | 295 | 281 | 305 | 315 | 311 | 339 | 380 | 386 | 423 |
| Tea | 91 | 125 | 106 | 110 | 94 | 110 | 126 | 127 | 136 | 126 | 137 | 153 |
| Cloves | 22 | 35 | 39 | 40 | 32 | 41 | 49 | 42 | 55 | 58 | 61 | 72 |
| Pepper | 46 | 47 | 37 | 39 | 34 | 46 | 46 | 41 | 40 | 49 | 56 | 60 |
| Tobacco | 81 | 87 | 116 | 118 | 106 | 109 | 108 | 161 | 164 | 113 | 116 | 106 |
| Cane sugar | 1,516 | 1,601 | 1,831 | 1,700 | 1,627 | 1,628 | 1,810 | 1,899 | 1,894 | 2,176 | 1,918 | 2,047 |
| Cotton /d | 1 | 1 | 6 | 10 | 13 | 14 | 12 | 45 | 53 | 48 | 39,731 | 38,374 |
| Forestry /e | | | | | | | | | | | | |
| Teakwood | 475 | 495 | 613 | 578 | 692 | 718 | 758 | 777 | 798 | 689 | 725 | 725 |
| Other timber | 26,256 | 25,520 | 21,702 | 14,024 | 13,236 | 24,180 | 27,716 | 24,277 | 27,403 | 28,255 | 28,485 | 19,789 |

/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 16, 1990.

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Production of Major Crops by Type of Estate, 1979-1989
('000 tons)

| Product | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 /a |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Smallholders** | | | | | | | | | | | |
| Rubber | 616 | 705 | 740 | 586 | 673 | 704 | 720 | 763 | 795 | 839 | 901 |
| Coconut/copra | 1,561 | 1,737 | 1,789 | 1,707 | 1,590 | 1,737 | 1,905 | 2,098 | 2,055 | 2,117 | 2,058 |
| Coffee | 209 | 266 | 276 | 262 | 287 | 291 | 288 | 316 | 359 | 362 | 394 |
| Cloves | 35 | 39 | 40 | 32 | 40 | 48 | 41 | 53 | 57 | 59 | 70 |
| Tea | 17 | 21 | 22 | 17 | 23 | 24 | 30 | 31 | 25 | 26 | 44 |
| Sugar | 498 | 749 | 1,364 | 1,373 | 1,249 | 1,397 | 1,450 | 1,417 | 1,744 | 1,499 | 1,625 |
| Tobacco | 73 | 101 | 103 | 97 | 100 | 104 | 156 | 159 | 110 | 113 | 103 |
| Pepper | 47 | 37 | 39 | 34 | 46 | 46 | 41 | 40 | 49 | 56 | 60 |
| Cotton | 1 | 6 | 10 | 13 | 14 | 12 | 45 | 53 | 48 | 40 | 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 | 112 | 111 | 114 | 125 | 133 | 121 | 124 | 150 | 135 | 143 | 149 |
| Coconut/copra | 21 | 22 | 23 | 11 | 14 | 13 | 15 | 16 | 20 | 22 | 27 |
| Coffee | 8 | 6 | 6 | 6 | 8 | 9 | 10 | 10 | 8 | 10 | 12 |
| Cloves | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 2 | 2 |
| Tea | 16 | 17 | 18 | 16 | 17 | 18 | 17 | 18 | 21 | 23 | 25 |
| Sugar | 73 | 114 | 116 | 72 | 88 | 83 | 106 | 106 | 109 | 103 | 102 |
| 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 | 168 | 202 | 206 | 285 | 269 | 329 | 339 | 385 | 352 | 435 | 471 |
| Palm kernel | 23 | 36 | 37 | 47 | 68 | 69 | 71 | 73 | 76 | 87 | 94 |
| **Government estates** | | | | | | | | | | | |
| Rubber | 170 | 186 | 192 | 189 | 201 | 208 | 211 | 196 | 200 | 194 | 206 |
| Coconut/copra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coffee | 11 | 13 | 13 | 13 | 10 | 15 | 13 | 13 | 13 | 14 | 17 |
| Cloves | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tea | 92 | 68 | 70 | 61 | 70 | 84 | 80 | 87 | 80 | 88 | 84 |
| Sugar | 1,030 | 968 | 220 | 182 | 291 | 330 | 343 | 371 | 323 | 316 | 320 |
| Tobacco | 14 | 15 | 15 | 9 | 9 | 4 | 5 | 5 | 3 | 3 | 3 |
| 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 | 474 | 499 | 542 | 599 | 713 | 818 | 904 | 965 | 1,154 | 1,365 | 1,408 |
| Palm kernel | 85 | 90 | 98 | 110 | 98 | 178 | 187 | 193 | 243 | 273 | 282 |
| **Total** | | | | | | | | | | | |
| Rubber | 898 | 1,002 | 1,046 | 900 | 1,007 | 1,033 | 1,055 | 1,109 | 1,130 | 1,176 | 1,256 |
| Coconut/copra | 1,582 | 1,759 | 1,812 | 1,718 | 1,604 | 1,750 | 1,920 | 2,114 | 2,075 | 2,139 | 2,085 |
| Coffee | 228 | 285 | 295 | 281 | 305 | 315 | 311 | 339 | 380 | 386 | 423 |
| Cloves | 35 | 39 | 40 | 32 | 41 | 49 | 42 | 55 | 58 | 61 | 72 |
| Tea | 125 | 106 | 110 | 94 | 110 | 126 | 127 | 136 | 126 | 137 | 153 |
| Sugar | 1,601 | 1,831 | 1,700 | 1,627 | 1,628 | 1,810 | 1,899 | 1,894 | 2,176 | 1,918 | 2,047 |
| Tobacco | 87 | 116 | 118 | 106 | 109 | 108 | 161 | 164 | 113 | 116 | 106 |
| Pepper | 47 | 37 | 39 | 34 | 46 | 46 | 41 | 40 | 49 | 56 | 60 |
| Cotton | 1 | 6 | 10 | 13 | 14 | 12 | 45 | 53 | 48 | 40 | 39 |
| Palm oil | 642 | 701 | 748 | 884 | 982 | 1,147 | 1,243 | 1,350 | 1,506 | 1,800 | 1,879 |
| Palm kernel | 108 | 126 | 135 | 157 | 166 | 247 | 258 | 266 | 319 | 360 | 376 |

/a Preliminary figures.

Source: Supplement to President's Report to Parliament, August 16, 1990.

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Rice - Area Harvested, Production and Yield, 1974-1989

| Year | Area harvested ('000 ha) | Average yield (tons/ha) | Paddy output ('000 tons) | Rice output /a ('000 tons) |
|---|---|---|---|---|
| 1974 | 8,509 | 2.64 | 22,464 | 15,276 |
| 1975 | 8,495 | 2.63 | 22,331 | 15,185 |
| 1976 | 8,368 | 2.78 | 23,301 | 15,845 |
| 1977 | 8,360 | 2.79 | 23,347 | 15,876 |
| 1978 | 8,929 | 2.89 | 25,772 | 17,525 |
| 1979 | 8,850 | 2.97 | 26,283 | 17,872 |
| 1980 | 9,005 | 3.29 | 29,652 | 20,163 |
| 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 | 10,090 | 4.13 | 41,676 | 28,340 |
| 1989 | 10,531 | 4.25 | 44,726 | 29,072 |

/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, 1978/79 - 1990/91**
('000 tons)

| | 1978/79 | 1979/80 | 1980/81 | 1981/82 | 1982/83 | 1983/84 | 1984/85 | 1985/86 | 1986/87 | 1987/88 | 1988/89 | 1989/90 /c | 1990/91 /g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Beginning stock | 459 | 708 | 886 | 1,242 | 1,623 | 1,045 | 1,455 | 2,432 | 2,172 | 1,867 | 755 | 1,086 | 1,576 |
| Domestic procurement | 881 | 431 | 1,635 | 1,952 | 1,933 | 1,195 | 2,382 | 1,953 | 1,647 | 1,215 | 1,801 | 2,243 | 2,000 |
| Import: | 1,268 | 2,580 | 1,213 | 437 | 506 | 1,115 | 187 | 0 | 41 | 79 | 315 | 150 | 0 |
| PL-480 | 304 | 353 | 101 | 46 | 0 | 65 | 54 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other food /e | 15 | 327 | 198 | 48 | 0 | 140 | 0 | 0 | 41 | 79 | 315 | 150 | 0 |
| Commercial | 949 | 1,900 | 914 | 343 | 506 | 910 | 133 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total availability | 2,608 | 3,719 | 3,734 | 3,631 | 4,062 | 3,355 | 4,024 | 4,385 | 3,860 | 3,161 | 2,871 | 3,479 | 3,576 |
| Distribution /a | 1,852 | 2,834 | 2,480 | 2,014 | 2,972 | 1,872 | 1,612 | 2,186 | 1,967 | 2,372 | 1,768 | 1,875 | 1,898 |
| Government | 608 | 666 | 649 | 806 | 1,320 | 1,373 | 1,368 | 1,414 | 1,498 | 1,525 | 1,512 | 1,542 | 1,560 |
| State enterprises | 106 | 90 | 89 | 95 | 105 | 89 | 59 | 77 | 94 | 97 | 106 | 100 | 114 |
| Market operations /f | 1,032 | 2,036 | 1,628 | 1,033 | 1,518 | 399 | 69 | 277 | 175 | 640 | 142 | 60 | 200 |
| Other /d | 106 | 42 | 114 | 80 | 29 | 11 | 116 | 418 | 200 | 110 | 8 | 173 | 24 |
| Losses | 46 | 8 | 12 | 26 | 45 | 28 | 22 | 27 | 26 | 34 | 17 | 28 | 28 |
| End stock | 708 | 806 | 1,242 | 1,591 | 1,045 | 1,455 | 2,432 | 2,172 | 1,867 | 755 | 1,086 | 1,576 | 1,650 |
| Memorandum item: | | | | | | | | | | | | | |
| Rice production /b | 17,325 | 17,872 | 20,163 | 22,286 | 22,837 | 24,006 | 25,933 | 26,542 | 27,014 | 27,253 | 28,340 | 29,196 | 28,902 |

/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 Estimates.

Source: BULOG (Badan Urusan Logistic/State Logistic Board).

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Area Covered Under Rice Intensification Programs, 1974-1989
('000 ha)

| Year | BIMAS /a | INMAS /b | Total | Of which INSUS /c |
|---|---|---|---|---|
| 1974 | 2,676 | 1,048 | 3,724 | 0 |
| 1975 | 2,683 | 1,957 | 3,640 | 0 |
| 1976 | 2,424 | 1,189 | 3,613 | 0 |
| 1977 | 2,059 | 2,181 | 4,240 | 0 |
| 1978 | 1,960 | 2,888 | 4,848 | 0 |
| 1979 | 1,571 | 3,452 | 5,023 | 0 |
| 1980 | 1,374 | 4,142 | 5,516 | 1,060 |
| 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 | 8,713 | 6,413 |

/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 16, 1990.

INDONESIA

COUNTRY ECONOMIC REPORT

Index of Manufacturing Production by Selected Industry Group, 1986-1990 /a
(1983 = 100)

| Code of Industry Group | Description /b | 1986 | 1987 | 1988 | 1989 | 1990 /c |
|---|---|---|---|---|---|---|
| 31121 | Condensed and dried milk, creamery and processed butter, fresh and preserved cream (6) | 87.5 | 94.0 | 123.3 | 122.5 | 141.7 |
| 31330 | Malt liquor and malt (5) | 94.4 | 113.2 | 116.4 | 117.2 | 131.3 |
| 31420 | Clove cigarettes (80) | 147.4 | 166.5 | 177.7 | 196.2 | 227.7 |
| 31430 | Other cigarettes (13) | 78.8 | 81.4 | 79.2 | 78.2 | 81.2 |
| 32111 | Yarn and thread (53) | 129.9 | 130.5 | 169.0 | 196.2 | 263.4 |
| 32112 | Weaving mills (except jute weaving products (409) | 130.7 | 144.3 | 172.9 | 188.0 | 224.8 |
| 32114 | Batik (65) | 95.8 | 81.8 | 83.9 | 111.1 | 141.6 |
| 32130 | Knitting mills (73) | 219.2 | 233.3 | 239.8 | 312.8 | 378.1 |
| 32400 | Footwear (32) | 113.1 | 91.5 | 111.2 | 184.9 | 208.2 |
| 33113 | Plywood (40) | 139.3 | 192.7 | 242.1 | 266.2 | 244.6 |
| 34111 | Paper manufacture (all kinds) (23) | 159.2 | 159.7 | 242.0 | 251.5 | 292.1 |
| 35110 | Basic chemicals (except fertilizer) (50) | 119.0 | 156.4 | 139.0 | 152.9 | 172.3 |
| 35120 | Fertilizer (10) | 166.0 | 121.8 | 129.7 | 144.0 | 155.3 |
| 35210 | Paint, varnish, and lacquers (25) | 135.6 | 126.5 | 91.2 | 129.9 | 161.3 |
| 35232 | Matches (8) | 108.7 | 142.3 | 175.5 | 154.4 | 163.5 |
| 35510 | Tyres and tubes (22) | 109.5 | 79.2 | 109.7 | 141.2 | 175.6 |
| 36210 | Glass and glass products (21) | 178.0 | 149.3 | 124.6 | 145.2 | 170.9 |
| 36310 | Cement (7) | 144.4 | 150.9 | 149.8 | 198.1 | 192.4 |
| 37100 | Basic iron and steel industries (16) | 154.9 | 147.1 | 167.4 | 199.0 | 287.8 |
| 38130 | Structural metal products (59) | 110.2 | 118.7 | 125.7 | 180.6 | 199.0 |
| 38312 | Drycell batteries (7) | 123.9 | 115.5 | 158.6 | 156.3 | 169.2 |
| 38320 | Radio, TVs, cassettes, other communication equipment and apparatus (23) | 90.6 | 86.9 | 118.1 | 153.9 | 182.9 |
| 38430 | Motor vehicles assembly and manufacture (23) | 114.7 | 126.8 | 115.8 | 132.5 | 188.3 |
| 38440 | Motor cycles and three wheel motor vehicles, assembly and manufacture (11) | 98.0 | 81.3 | 76.8 | 106.0 | 96.7 |
| | General index | 128.4 | 143.5 | 164.2 | 184.1 | 211.9 |

/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.
/c Average of three quarters; very preliminary.

Source: Central Bureau of statistics.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Production of Minerals, 1974-1990**

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | 502.0 | 25.7 | 212.6 | 878.9 | 1,290.1 | 156.2 | 365.2 | 265.3 | 6,464.6 | 202.2 |
| 1975 | 477.0 | 25.3 | 201.3 | 801.1 | 992.6 | 206.4 | 353.0 | 330.7 | 4,754.7 | 222.2 |
| 1976 | 550.0 | 23.4 | 223.3 | 1,102.0 | 940.3 | 182.9 | 292.3 | 355.2 | 3,397.5 | 312.1 |
| 1977 | 615.0 | 25.9 | 189.1 | 1,302.5 | 1,301.4 | 230.6 | 311.5 | 255.9 | 2,831.9 | 542.8 |
| 1978 | 597.0 | 27.4 | 180.9 | 1,256.5 | 1,007.7 | 264.2 | 233.3 | 253.9 | 2,506.4 | 820.1 |
| 1979 | 580.0 | 29.4 | 188.8 | 1,551.9 | 1,051.9 | 278.6 | 79.9 | 170.0 | 1,644.6 | 998.4 |
| 1980 | 577.0 | 32.5 | 186.1 | 1,537.4 | 1,249.1 | 338.0 | 62.9 | 247.[illegible] | 2,196.0 | 1,045.7 |
| 1981 | 584.8 | 35.4 | 188.5 | 1,543.2 | 1,203.4 | 392.8 | 86.6 | 1[illegible] | [illegible]00.2 | 1,123.8 |
| 1982 | 488.2 | 33.8 | 223.7 | 1,640.9 | 700.2 | 588.0 | 144.5 | 222[illegible] | [illegible]7.9 | 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 /b | 128.2 | 7.0 | 84.8 | 459.5 | 284.0 | 1,817.6 | 37.3 | 2,050.1 | 17,142.8 | 527.3 |

/a Since 1983, production of gold and silver including private enterprises.
/b First quarter 1990.

Source: Central Bureau of Statistics.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Crude Oil Production by Company, 1980-1990
('000 bbls)

| | PERTAMINA | LEMIGAS | Contract of work | | | Subtotal | Production sharing contract | Total | Average daily output |
|---|---|---|---|---|---|---|---|---|---|
| | | | Caltex | C & T | Stanvac | | | | |
| 1980 | 29,891 | 205 | 258,325 | 2,046 | 11,578 | 271,949 | 274,971 | 577,016 | 1,577 |
| 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 | 25567 | /b | - | 2,044 | 13,233 | 15,277 | 473,341 | 514,185 | 1,409 |
| 1990 | 24,695 | /b | - | 3,211 | 10,564 | 13,775 | 415,943 | 454,413 | 1,245 /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.

Statistical Annex
Table 8.4

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Petroleum Product Supply and Demand, 1980 - 1990
(million bbls)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Production of crude | 577.0 | 584.8 | 488.2 | 518.0 | 550.8 | 489.9 | 514.9 | 512.4 | 491.5 | 514.2 | 553.5 |
| 2. Crude imports | 32.9 | 37.0 | 22.0 | 25.7 | 34.2 | 32.1 | 27.7 | 30.2 | 31.2 | 28.1 | 45.7 |
| 3. Subtotal (1+2) | 609.9 | 621.8 | 510.2 | 543.7 | 585.0 | 522.0 | 542.6 | 542.6 | 522.7 | 542.3 | 599.2 |
| 4. Crude exports | 378.8 | 383.4 | 320.9 | 336.2 | 354.6 | 295.1 | 327.4 | 291.9 | 276.6 | 291.5 | 288.7 |
| 5. Crude available for refineries (3-4) | 231.1 | 238.4 | 183.3 | 207.5 | 230.4 | 226.9 | 215.2 | 250.7 | 246.1 | 250.8 | 310.5 |
| 6. Changes in crude stocks (decrease = -) | 38.2 | 44.7 | 6.7 | 23.5 | 39.7 | 27.1 | -2.3 | 16.9 | 0.3 | 3.2 | 36.0 |
| 7. Refinery input (including swaps) (5-6) | 192.9 | 193.7 | 182.6 | 184.0 | 190.7 | 199.8 | 217.5 | 233.8 | 245.8 | 247.6 | 274.5 |
| 8. Refinery consumption | 13.5 | 6.5 | 6.5 | 7.2 | 9.2 | 13.1 | 13.3 | 13.0 | 13.0 | 13.9 | 14.3 |
| 9. Refinery output (7-8) | 179.4 | 187.2 | 176.1 | 176.8 | 181.5 | 186.7 | 204.2 | 220.8 | 232.8 | 233.7 | 260.2 |
| 10. Exports of refined products (11+12) | 53.4 | 49.9 | 39.0 | 43.3 | 66.0 | 47.3 | 55.2 | 62.4 | 63.7 | 55.4 | 57.8 |
| 11. Waxy residues | 51.0 | 47.9 | 33.7 | 40.5 | 49.9 | 32.1 | 34.9 | 42 | 45.3 | 40.6 | 42.0 |
| 12. Bunker fuel, AVTUR, etc. | 2.4 | 2.0 | 5.3 | 2.8 | 16.1 | 15.2 | 20.3 | 20.4 | 18.4 | 14.8 | 15.8 |
| 13. Available for domestic consumption (9-10) | 126.0 | 137.3 | 137.1 | 133.5 | 115.5 | 139.4 | 149.0 | 158.4 | 169.1 | 178.3 | 202.4 |
| 14. Product imports | 22.0 | 42.6 | 28.0 | 23.5 | 5.0 | 2.7 | 5.4 | 10.3 | 13.3 | 21.3 | 23.9 |
| 15. Total supply (13+14) | 148.0 | 179.9 | 165.1 | 157.0 | 120.5 | 142.1 | 154.4 | 168.7 | 182.4 | 199.6 | 226.3 |
| 16. Domestic consumption | 141.8 | 156.0 | 161.1 | 155.5 | 157.6 | 155.3 | 152.8 | 162.9 | 171.3 | 183.6 | 211.4 |
| 17. Changes in refined stocks (15-16) | 6.2 | 23.9 | 4.0 | 1.5 | -37.1 | -13.2 | 1.6 | 5.8 | 11.1 | 16.0 | 14.9 |

Source: Ministry of Mines and Energy, Directorate General Oil & Gas.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Domestic Sales of Petroleum Products, 1980-1990 /a**
**('000 bbls)**

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 /b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aviation gas | 130 | 110 | 103 | 83 | 73 | 66 | 63 | 56 | 60 | 60 | 60 |
| Aviation turbo | 4,355 | 4,869 | 4,899 | 3,686 | 4,374 | 4,442 | 3,806 | 4,199 | 4,445 | 4,286 | 4,576 |
| Premium gasoline | 466 | 392 | 238 | 247 | 523 | 738 | 1,024 | 1,431 | 1,838 | 2,451 | 1,045 |
| Regular gasoline | 23,321 | 25,648 | 25,709 | 24,380 | 24,909 | 25,206 | 27,083 | 29,048 | 30,855 | 33,199 | 38,950 |
| Kerosene | 48,975 | 52,497 | 51,778 | 48,224 | 45,213 | 43,954 | 43,618 | 43,352 | 44,664 | 43,601 | 49,607 |
| Motor diesel | 40,116 | 44,737 | 48,918 | 49,790 | 48,567 | 47,682 | 47,421 | 54,075 | 59,143 | 64,508 | 73,257 |
| Industrial diesel | 7,829 | 9,391 | 9,311 | 9,978 | 10,285 | 10,329 | 8,855 | 8,319 | 8,809 | 9,515 | 10,793 |
| Fuel oil | 15,739 | 17,587 | 19,341 | 21,149 | 23,625 | 22,863 | 18,004 | 19,054 | 18,097 | 18,329 | 25,020 |
| Total | 140,931 | 155,231 | 160,297 | 157,537 | 157,569 | 155,280 | 149,874 | 159,534 | 167,911 | 178,949 | 203,308 |

/a Excluding lubricating oil and similar products.
/b Provisional.

Source: Ministry of Mines and Energy, Directorate General Oil and Gas.

## INDONESIA

## COUNTRY ECONOMIC REPORT

### Consumer Price Index, 1979 - 1990 /a
(April 1977 - March 1978 = 100)

| End of | Foodstuff | Housing | Clothing | Others | Total | Change (%) |
|---|---|---|---|---|---|---|
| 1979 | 141.1 | 140.9 | 168.2 | 137.7 | 143.1 | 21.8 /b |
| 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 | 9.3 |
| 1988 | 320.1 | 335.4 | 280.0 | 307.4 | 317.6 | 5.6 |
| 1989 /c | 104.1 | 109.6 | 108.1 | 105.7 | 106.4 | 6.1 |
| 1990 /c | 111.5 | 123.9 | 113.4 | 118.6 | 117.0 | 9.9 |

/a The consumer price index for Indonesia has been used commencing March 1979 to replace the Jakarta cost of living index.

/b 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.

/c Using new base period (April 1988-March 1989 = 100).

Source: Central Bureau of Statistics.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Indonesia Wholesale Price Index, 1983-1990 /a
(1983 = 100)

| Sectors /b | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|
| Agriculture (44) | 100 | 113 | 118 | 128 | 145 | 163 | 177 | 191 |
| Mining & quarrying (6) | 100 | 109 | 117 | 125 | 132 | 143 | 156 | 169 |
| Manufacturing (140) | 100 | 103 | 115 | 123 | 143 | 156 | 166 | 176 |
| Imports (53) | 100 | 113 | 119 | 129 | 158 | 164 | 178 | 191 |
| Exports (38) | 100 | 111 | 112 | 85 | 118 | 118 | 131 | 159 |
| Excluding petroleum (34) | 100 | 114 | 115 | 130 | 170 | 183 | 195 | 195 |
| Petroleum (4) | 100 | 112 | 113 | 73 | 103 | 99 | 112 | 148 |
| General index (281) | 100 | 111 | 116 | 116 | 142 | 149 | 162 | 178 |
| General index excluding exports (243) | 100 | 111 | 117 | 127 | 149 | 160 | 173 | 185 |
| General index excluding exports of petroleum (224) | 100 | 110 | 116 | 125 | 146 | 161 | 172 | 182 |

/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.

Source: Central Bureau of statistics.

# INDONESIA

## COUNTRY ECONOMIC REPORT

### Domestic Prices of Petroleum Products, 1980-1990
(Rp./liter)

| | 1980 /a | 1981 | 1982 /b | 1983 /c | 1984 /d | 1985 /e | 1986 | 1987 | 1988 | 1989 | 1990 /f |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aviation gas | 150 | 150 | 240 | 300 | 300 | 330 | 250 | 250 | 250 | 250 | 330 |
| Aviation turbo | 150 | 150 | 240 | 300 | 300 | 330 | 250 | 250 | 250 | 250 | 330 |
| Premium gasoline | 220 | 220 | 360 | 400 | 400 | 440 | 440 | 440 | 440 | 440 | /g |
| Regular gasoline | 150 | 150 | 240 | 320 | 350 | 385 | 385 | 385 | 385 | 385 | 450 |
| Kerosene | 38 | 38 | 60 | 100 | 150 | 165 | 165 | 165 | 165 | 165 | 190 |
| Motor diesel | 53 | 53 | 85 | 145 | 220 | 242 | 200 | 200 | 200 | 200 | 245 |
| Industrial diesel | 45 | 45 | 75 | 125 | 200 | 220 | 200 | 200 | 200 | 200 | 235 |
| Fuel oil | 45 | 45 | /5 | 125 | 200 | 220 | 200 | 200 | 200 | 200 | 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 Discontinued.

Source: Ministry of Mines and Energy, Directorate General Oil and Gas.

**INDONESIA**

**COUNTRY ECONOMIC REPORT**

**Approved Foreign Investment by Sector, 1977-1990 /a**
**(US$ million)**

| Sector | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 21 | 3 | 16 | 56 | 25 | 9 | 10 | 0 | 9 | 126 | 117 | 8 | 122 | 117 |
| Forestry | 29 | 39 | 12 | 8 | 115 | 32 | 7 | 0 | 0 | 0 | 5 | 26 | 4 | 20 |
| Fishery | 3 | 23 | 21 | 3 | 22 | 3 | 21 | 0 | 11 | 4 | 12 | 46 | 47 | 20 |
| Mining & quarrying | 201 | 38 | 66 | 3 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| Manufacturing | 327 | 276 | 1,158 | 771 | 834 | 1,120 | 2,615 | 1,002 | 687 | 537 | 852 | 3,828 | 4,246 | 5,822 |
| Food | 8 | 6 | 61 | 14 | 41 | 6 | 83 | 77 | 6 | 34 | 54 | 231 | 223 | 99 |
| Textiles & leather | 71 | 115 | 34 | 76 | 139 | 26 | 12 | 1 | 7 | 9 | 118 | 213 | 581 | 1,094 |
| Wood & wood products | 0 | 1 | 6 | 11 | 124 | 5 | 13 | 0 | 0 | 32 | 45 | 104 | 106 | 218 |
| Paper & paper products | 10 | 0 | 11 | 2 | 49 | 0 | 722 | 0 | 25 | 47 | 109 | 1,506 | 211 | 730 |
| Chemicals & rubber | 49 | 26 | 364 | 282 | 236 | 317 | 183 | 96 | 338 | 294 | 209 | 1,544 | 2,512 | 1,991 |
| Nonmetallic minerals | 98 | 20 | 77 | 222 | 20 | 57 | 50 | 0 | 3 | 0 | 251 | 30 | 184 | 125 |
| Basic metals | 18 | 10 | 561 | 0 | 85 | 3 | 836 | 609 | 65 | 39 | 7 | 61 | 106 | 825 |
| Metal products | 73 | 92 | 45 | 163 | 141 | 706 | 716 | 210 | 244 | 82 | 57 | 129 | 292 | 460 |
| Others | 0 | 7 | 0 | 1 | 0 | 0 | 1 | 9 | 0 | 0 | 3 | 10 | 30 | 281 |
| Construction | 1 | 5 | 1 | 8 | 49 | 11 | 44 | 17 | 122 | 65 | 42 | 2 | 16 | 77 |
| Trade & hotels | 7 | 10 | 3 | 39 | 0 | 17 | 78 | 84 | 0 | 0 | 196 | 405 | 98 | 874 |
| Wholesale trade | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotels | 7 | 10 | 3 | 39 | 0 | 17 | 78 | 84 | 0 | 0 | 196 | 405 | 98 | 874 |
| Transport & communications | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 4 | 0 | 70 | 213 | 3 | 5 | 803 |
| Real estate and business services | 20 | 4 | 44 | 0 | 18 | 204 | 108 | 0 | 29 | 25 | 20 | 117 | 181 | 902 |
| Total | 609 | 397 | 1,320 | 912 | 1,091 | 1,397 | 2,882 | 1,107 | 859 | 826 | 1,457 | 4,435 | 4,719 | 8,750 |

/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, 1977-1990 /a
(Rp billion)

| Sector | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture, fisheries and livestock | 49 | 100 | 39 | 30 | 60 | 62 | 681 | 277 | 899 | 1,879 | 2,885 | 2,698 | 3,418 | 6,435 |
| Forestry | 64 | 59 | 80 | 115 | 175 | 93 | 149 | 19 | 37 | 21 | 640 | 487 | 252 | 593 |
| Mining | 0 | 18 | 33 | 55 | 13 | 52 | 578 | 8 | 38 | 89 | 290 | 111 | 94 | 147 |
| Manufacturing | 401 | 531 | 580 | 1,093 | 1,306 | 1,419 | 3,792 | 1,332 | 1,632 | 1,842 | 5,518 | 9,747 | 12,931 | 43,240 |
| Textiles | 75 | 168 | 61 | 162 | 195 | 110 | 104 | 127 | 97 | 263 | 1,289 | 2,309 | 3,563 | 12,612 |
| Chemicals | 99 | 103 | 141 | 57 | 193 | 205 | 766 | 272 | 928 | 773 | 2,047 | 3,039 | 4,062 | 12,643 |
| Electrical goods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other manufacturing | 228 | 261 | 378 | 874 | 918 | 1,104 | 2,922 | 933 | 607 | 806 | 2,183 | 4,399 | 5,307 | 17,985 |
| Construction | 0 | 3 | 5 | 4 | 8 | 16 | 195 | 67 | 270 | 74 | 50 | 31 | 146 | 87 |
| Hotels | 4 | 12 | 13 | 10 | 54 | 76 | 255 | 214 | 312 | 17 | 139 | 537 | 1,265 | 4,974 |
| Real estate | 35 | 15 | 6 | 16 | 5 | 74 | 204 | 31 | 267 | 169 | 174 | 846 | 936 | 1,790 |
| Others /b | 20 | 24 | 18 | 35 | 70 | 157 | 1,151 | 1 | 296 | 325 | 569 | 460 | 551 | 2,614 |
| Total | 574 | 762 | 774 | 1,358 | 1,691 | 1,949 | 7,005 | 1,949 | 3,750 | 4,417 | 10,265 | 14,916 | 19,594 | 59,878 |

/a Figures refer to intended capital investments, and represent original approvals plus approved expansion minus cancellations.
/b Includes transportation sector.

Source: Investment Coordinating Board.

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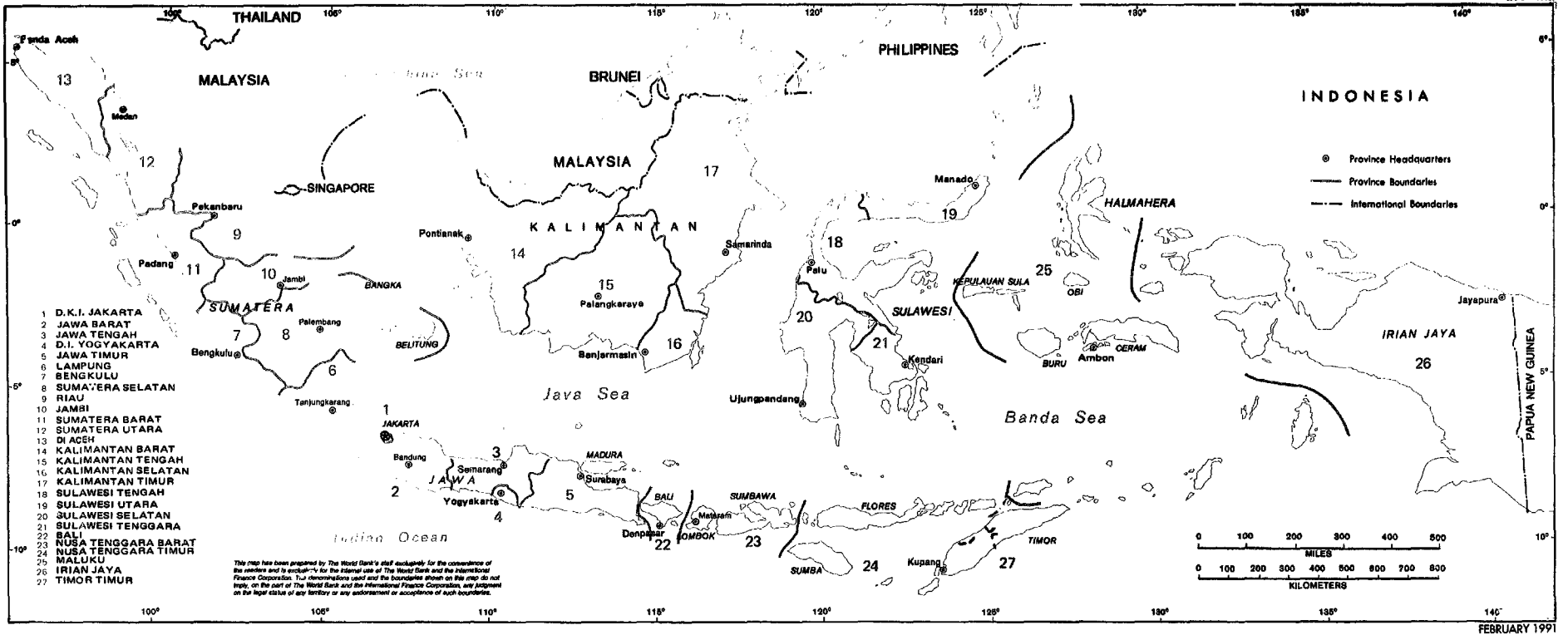


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