WORKING PAPER 41

Effects of Trade Liberalization on Agriculture in Indonesia: Institutional and Structural Aspects

Erwidodo

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The CGPRT Centre

The Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific (CGPRT Centre) was established in 1981 as a subsidiary body of UN/ESCAP.

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In co-operation with ESCAP member countries, the Centre will initiate and promote research, training and dissemination of information on socio-economic and related aspects of CGPRT crops in Asia and the Pacific. In its activities, the Centre aims to serve the needs of institutions concerned with planning, research, extension and development in relation to CGPRT crop production, marketing and use.

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Humid Tropics of Asia and the Pacific

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AFTA	:	ASEAN free Trade Area
AMDAL	:	Analisa Mengenai Dampak Lingkungan (Environmental Impact Assessment)
AMS	:	Aggregate Measurement Support
ASEAN	:	Association of South East Asian Nations
BI	:	Bank of Indonesia
BPR	:	Bank Perkreditan Rakyat
BRI	:	Bank Rakyat Indonesia
BIMAS	:	Bimbingan Masal (Mass Guidance)
BULOG	:	Badan Urusan Logistic (National Logistic Agency)
CEPT	:	Common Effective Preferential Tariffs
APEC	:	Asia and Pacific Economic Cooperation
CGPRT	:	Coarse Grains, Pulses, Roots, and Tuber Crops
CIF	:	Cost, Insurance and Freights
EPTE	:	Export Processing Entreports
ERP	:	Effective Rate of Protection
EU	:	European Union
EEC	:	European Economic Community
FDI	:	Foreign Direct Investment
FOB	:	Free on Board
GATT	:	General Agreement on Trade and Tariffs
GDP	:	Gross Domestic Products
HGU	:	Hak Guna Usaha (Utilization for Business Rights)
HGB	:	Hak Guna Bangunan (Building Rights)
ITPC	:	Indonesia Trade Promotion Center
KUPEDES	:	Kredit Umum Pedesaan (Rural General Credit Scheme)
KUK	:	Kredit Usaha Kecil (Credit Scheme for Small Scale Business)
MFA	:	Multi Fiber Agreement
NAFED	:	National Agency for Export Development
NRP	:	Nominal Rate of Protection
NTB	:	Non Tariff Barriers
SBI	:	Sertifikat Bank Indonesia (Bank Indonesia Certificate)
SBPU	:	Surat Berharga Pasar Uang (Money Market Security)
SITC	:	Standard International Trade Classification
VAT	:	Value Added Tax
UR	:	Uruguay Round
WTO	:	World Trade Organization

Foreword

Responding to the growing concern for the effects of trade liberalization on regional agriculture, the CGPRT Centre started a research project "Effects of Trade Liberalization on Agriculture in Selected Asian Countries with Special Focus on CGPRT Crops (TradeLib)" in March 1997, in collaboration with partners from ten countries: China, India, Indonesia, Japan, Malaysia, Pakistan, the Philippines, the Republic of Korea, Thailand and Vietnam. In all these countries, important issues regarding trade liberalization were investigated with an identical research framework by national experts.

The investigation covers major crops which might receive either favorable or unfavorable effects of trade liberalization both in export and import. I believe that readers of the reports can obtain broad and practical knowledge on institutional aspects of the effects of trade liberalization; moreover, the information will be useful for researchers and policy planners in other countries in the region. A volume, which includes more commodity and location-oriented study on the same subject, will follow. I would like to note that, since this project was conceived and started before the current currency and economic crisis began in the middle of 1997, the analysis handles basically the period before the crisis with possible current information.

I am pleased to publish **Effects of Trade Liberalization on Agriculture in Indonesia: Institutional and Structural Aspects** as one of the fruits of the project. I certainly hope this report will be fully utilized for the improvement of agricultural trade and the encouragement of regional agriculture.

I thank Dr. Erwidodo of Indonesia for his intensive research and the Center or Agro Socioeconomic Research Agency for Agricultural Research and Development for allowing him to work with us and for providing continuous support. Dr Boonjit Titapiwatanakun ably coordinated the various complex steps in the study. I would also like to express appreciation to the Government of Japan for funding the project.

Haruo Inagaki
Director
CGPRT Centre

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I am deeply grateful to Dr Haruo Inagaki, Director of the CGPRT Center for providing the opportunity, sponsoring and taking a keen interest in this study. I sincerely acknowledge Dr Boonjit Titapiwatanakun, Regional Adviser and Professor, Faculty of Economics and Business Administration, Kasetsat University, Thailand, for his guidance in the preparation of the study and his fruitful comments in finalizing this report. I would like to thank to Dr Michio Kanai, the Project Leader of the study, for his assistance and cooperation during the course of the study.

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Executive Summary

The completion of the Uruguay Round negotiation at the end of 1993 and the coming into effect of the World Trade Organization (WTO) in January 1995 has accelerated liberalization initiatives in all trading nations. The main elements of the UR agreement include commitments on enhancing market access, dismantling of quantitative restrictions and subsidies as well as non-tariff barriers by all members. In the Asia and Pacific Economic Cooperation (APEC) forum, members have committed to undertake trade liberalization further than the Uruguay Round commitments, except on agriculture for some member countries including Indonesia. Similarly, there have been strong needs among the ASEAN member to accelerate the realization of ASEAN Free Trade Area (AFTA). The agreement to realize AFTA is implemented through the scheme of Common Effective Preferential Tariff (CEPT).

Concern about the effects of trade liberalization on agricultural production has been growing. The project entitled: *Effects of Trade Liberalization on Agriculture in Selected Asian Countries with Special Focus on CGPRT Crops* is aimed at analyzing the overall impacts and benefits of global, regional as well as unilateral trade liberalization on the agriculture sector in Indonesia. This two-phase study is being undertaken in ten Asian Countries including China, India, Indonesia, Japan, Malaysia, Pakistan, Philippines, Thailand, the Republic of Korea and Vietnam.

Specifically, the objectives of this first-phase study are as follows: (a) to review economic development and trade related policies including monetary, fiscal, investment and other related policies, (b) to review infrastructure and institutional developments affecting trade, (c) to analyze the performance Indonesia's trade as well as trade in agricultural commodities, and to assess the overall impact of trade liberalization in Indonesia, and (d) to draw policy recommendations to minimize adverse impacts of trade liberalization.

The structure of the Indonesian economy

The Indonesian economy has undergone significant structural change in the last two decades precipitated by adverse changes in the external environment facing Indonesia. Since the beginning of last decade, the growth of the non-agricultural sector has been much faster then that of the agricultural sector in line with the long-term economic development toward industrialization. Although its share to Gross Domestic Product (GDP) has been declining, agriculture including forestry and fishery remains one of the largest sectors in the economy.

During the period of 1985-1996, the agricultural sector grew at average rate of 2.7% per annum, while non-agricultural sectors grew at a rate of 7.8%. The lower growth rate of the agricultural sector compared to other sectors reflects a structural shift in Indonesia's economy. Agriculture's share declined from 22% in 1985 to 18% in 1996. Over that period, the share of manufacturing industry increased from 14.6% to 30.5%.

The declining share of the agricultural sector on employment has been much slower than its declining share of GDP, from 55% in 1980 down to 54% in 1991 and estimated around 49% in 1995. Although its share has fallen, the absolute number of agricultural workers has been continuously increasing. This indicates that the sector is and will remain the major sector for employment generation. Meanwhile the employment share of the manufacturing sector rose only slightly, from 9.0% in 1980 to 11.6% in 1991. All this evidence suggests the critical importance of promoting labor intensive employment in both in rural and urban areas in order to minimize unemployment problems and avoid social unrest.

Macroeconomic and trade policies

A policy mix has been implemented to attain interrelated objectives through better coordination and a more appropriate balance of growth and equity. On the demand side, the efforts were aimed at striking a balance between domestic investment and consumption and export oriented activities, given constraints on the balance of payments. On the supply side, efforts were aimed at expanding production capacity through streamlining investment, import and export procedures as well as providing incentives for improving efficiency and productivity in targeted sectors. Cautious monetary and fiscal policies along with efforts for maintaining a realistic exchange rate have been implemented to control inflation and the current account deficit. A competitive exchange rate under a "floating managed" policy has accelerated growth rates of non-oil exports and reduced the current account deficit.

Prior to 1985, Indonesia was oriented mainly towards a protected domestic market, creating a high-cost economy, the benefits of which were mostly enjoyed by those favored by protection. Since then significant progress has been made in opening up the economy. Many sources of high costs have been exposed to competitive pressures of world competitors. In general trade related reform packages introduced since the early 1980s have focused on (i) simplifying ports and customs procedures including enactment of a new Custom Law, (ii) lowering tariffs and surcharges, (iii) reducing import licensing and other non-tariff barriers (NTBs), (iv) deregulating import and distribution systems, (v) deregulating the investment regime, and (vi) establishing bonded zones and export processing entreports (EPTE).

General performance of Indonesian trade

During the 1985-96 period, the total volume of Indonesia's trade expanded substantially at an average annual rate of 12%, growing from around US$29 billion in 1985 to US$93 billion in 1996. During that period, the total value of exports increased from US$18.5 billion to US$49.8 billion or grew at the rate of 10.8% per annum. Meanwhile, total import value grew at a higher annual rate of 13%, from around US$10 billion to US$42 billion. This higher growth rate of imports as compared to exports has deteriorated Indonesia's balance of trade. This was caused mainly by rapidly growing imports of raw material and capital goods that outpaced the significant improvement in non-oil as well as oil exports.

Direction of aggregate trade

Indonesia's external trade has been heavily biased towards three countries, namely Japan, the USA, and Singapore, with accounted for more than 49% of total exports and around 40% of imports in 1996. However, Indonesia's dependence on these three countries has been declining steadily. Despite the relative importance of the European Union as a group, its individual member countries play comparatively small roles in Indonesia's foreign trade, and their share of both imports and exports remained unchanged during the period 1985-96. Similarly, the share of the countries of Central and Eastern Europe has also been very small, although Indonesia has been attempting to develop these markets for its exports since 1984.

At the aggregate level, Japan, USA, Singapore continued to be the major export markets for Indonesian products. However, the total share of these three countries decreased from around 77% in 1985 to 49% in 1996. This indicates that Indonesia has been successful in diversifying its export markets. In 1985, Japan was the largest export market for Indonesian products accounting for 46% but its share then decreased to only 26% in 1996. Similarly, the share of USA decreased from 22% to 14% during the period. On the other hand, the European Union and ASEAN have become more important export markets for Indonesian products. The market shares of the European Union increased from only 6% in 1985 to more than 15% in 1996, and ASEAN's market increased from 11% to 15%.

Japan, USA, Singapore have been the main sources of Indonesia's imports. Together they accounted for between 38% to 51% of Indonesia's total imports for the last decade. The

relative importance of Japan and USA as the main sources of Indonesia's imports decreased slightly over the period 1985-1996, although they remain important in absolute terms. Over the period, the share of Japan decreased from 26% to 20%, in spite of its increased values from US$2,644 million to US$7,273 million. Similarly, the share of USA decreased from 17% to 12%. The shares of ASEAN and other Asian countries increased slightly from 9 to 11%, and 17 to 21%, respectively.

Performance of agricultural trade

Over the period 1985-96, Indonesia experienced surpluses in its agricultural trade. Agricultural exports grew at an average rate of 10% per annum, increasing from US$3.2 billion in 1985 to US$ 10.6 billion in 1996. Meanwhile, the total imports increased at a much faster rate of 15% per annum. As a result, the agricultural trade surplus has been declining over time.
Despite its rapid growth rate, agricultural trade remains small compared to both total GDP and agricultural GDP. The ratio of total agricultural exports and imports to GDP remains small and constant over the 1985-92 period, from 0.04 to 0.5 for exports/GDP, and from 0.02 to 0.03 for imports/GDP. In 1996, total agricultural trade accounted for more than 51% of the total agricultural GDP, increasing from 23% in 1985. The share of exports on Agricultural GDP increased from only 16% in 1985 to 29% in 1996. Similarly, the share of agricultural imports to agricultural GDP increased from 7% to 21% during that period. Again, this indicates that agricultural development in Indonesia has not really been "export led".

Natural rubber, palm oils, coffee, tea, and shrimps remain the major sources of foreign exchange earnings for Indonesian agriculture. Both export volume and value of some export commodities increased steadily over the period 1985-96. Cacao, palm oils, shrimps and lobster experienced the highest growth rates compared to other commodities. Meanwhile, the export value of coffee, tea, pepper, and rawhide shrank over the 1985-96 period.

Rice, wheat, cotton, sugar, stuffs feed for animals, sugar, dairy products and honey are the main agricultural import commodities. Import value of wheat grew steadily at 14.9% per annum, from US$ 259 million in 1985/86 to US$1.1 billion in 1996/97. Import demand for wheat was mainly driven by the rapid development of food processing industries, and it is expected to increase steadily in the future. Since 1994, Indonesia has turned back into the world's leading rice importer. Severe drought in 1994 and 1995 affecting parts of Java and many of the outer islands led to significant area abandonment and reduced yields in these producing regions. Consequently, in 1995 the rice import was around 2 million tons, the most ever taken in one year by a single country.

Direction of agricultural exports for selected commodities

At the aggregate level, USA, Japan, Netherlands, Singapore, Germany have been the five main countries of destination of Indonesia's agricultural exports. USA alone accounted for 19-27% of Indonesia's total agricultural exports for the period 1985-1996. In 1985, agricultural exports to USA accounted for 24%, increasing to 27% in 1988 but then fluctuating and dropping to 19% per cent in 1994 and increasing again to 24% in 1996. In terms of value, however, total agricultural exports to USA increased steadily from only US$ 544 million to US$ 1,100 million or at an average annual growth of 6.1% over the period 1985-1996.

The position of the USA as the main export market has gradually been replaced by Japan. The share of Japan increased from 14% in 1985 to 22% in 1996, while the export value to Japan increased from US$308 million to US$1,028 million. In contrast, the share of Singapore slightly declined in the past few years, that was from 11% in 1992 to 5% in 1996. This also the case for the Netherlands, as its share decreased from 11% to 7% during the 1985-1996 period.

The direction of agricultural exports exhibited no significant change over the past decade. The export markets of Indonesia's agricultural products are becoming more concentrated. In 1985, the share of the USA and Japan together accounted for 38% of the country's total agricultural exports, while in 1995 the share increased to 46%. Nevertheless, it is important to note that the direction of trade and the relative importance of each export destination vary from one commodity to another.

Potential impacts of Uruguay Round trade liberalization

The Uruguay Round liberalization will potentially expand access for Indonesia's exporters to major export markets, particularly to industrial countries. The tariff reduction among the major export outlets will provide enhanced market access for Indonesia's exporters. Global tariff barriers on industrial products of export interest to Indonesia will be reduced by around 42%. Tariffs in industrial countries will decline to an average of around 4%. The simple average tariffs for all products (except petroleum) will fall to 4.4% in Japan, 6.0% in the European Union, and 6.5% in the United States.

Many of Indonesia's most important export products will face larger than average tariff cuts in the major industrial export markets. The largest cuts apply to wood, pulp, paper and furniture items (69%), mineral products and precious metals (59%), oil seeds, fats and oils (40%), and coffee, tea, cocoa, and sugar (34%). Export earnings from the items in these groups comprise 21 to 50% of the total export earnings. Substantive tariff cuts will also apply to certain export items such as fruits and vegetables (36%), spices (35%), grains (39%), and other agricultural products (48%).

A substantial proportion of Indonesia's exports will enter duty free to its major markets following the Uruguay Round. More than three-quarters of Indonesia's export to Japan, and for nearly half of exports to the United States and European Union will be duty free. This is a substantial increase in duty-free access to major markets as compared with the situation prior to the Uruguay Round.

In addition to tariff reduction, the Uruguay Round has resulted in greater security of market access through an expanded number of tariff bindings. For developed counties, tariff bindings will cover 99 and 100% of trade in industrial and agricultural items, respectively. For developing countries, the corresponding percentages are 59 and 100%. The guarantee that tariff bindings provide for market access is important. Industrial countries have bound their tariffs at actually applied levels so that the bound tariff levels following the implementation of the Uruguay Round will be those actually in effect after the agreed tariff reduction is implemented.

Estimated impacts of Uruguay Round trade liberalization

Several studies indicate that most of the gains from trade liberalization arise as a consequence of a country's own liberalization. In particular, the efficiency gains which result from market opening are a benefit which accrues directly to the country undertaking trade liberalization. Liberalizing countries may also gain from greater exploitation of scale economies, from increases in the range of goods available to their producers and consumers, and from more rapid transfer of technology. There may be benefits to the country's trading partners if its import expansion is large enough to improve the exporter's terms of trade.

Unilateral trade liberalization can increase its real income in a number of ways: (a) by allowing consumers to purchase their needs from the most efficient source, (b) by scaling back production of goods which are not efficiently produced domestically and increasing production of goods which are most efficiently produced at home, and by (c) increasing the volume of trade on which remaining trade taxes are collected. Further gains may be achieved by greater exploitation of scale economies in production, and from improvements in the range and quality

of specialized products available to producers and consumers. In addition, countries may gain from liberalization by their trading partners, particularly if this increases the demand for their exports, and hence their terms of trade.

A particular concern raised by developing countries was the possibility of adverse terms of trade effects resulting from agricultural trade liberalization. Enormous agricultural protection provided by many developed countries was depressing world prices of many agricultural products both by protecting domestic markets from importing and by generating surpluses to be disposed of on the world markets with the help of export subsidies. Reductions in domestic supports and export subsidies in these countries will benefit countries which are net exporters of the products whose world prices rise but may harm net importers of the respective products.

Trade liberalization following the Uruguay Round is estimated to have a very strong and positive impact on the Indonesian economy, and Indonesia will stand to gain considerably in terms of stimulus to both its trade and income. The simulation results show that if Indonesia does not pursue trade deregulation along the lines of its trading partners, then not only will it suffer a loss of export competitiveness, but it will actually experience a decline in net social welfare. Trade reform, along with the effort for increasing technical efficiency, is necessary for Indonesia to enjoy the largest benefits from the Uruguay Round. The results also confirm the notion that the more Indonesia deregulates its domestic economy, the larger the gain it can capture from global trade liberalization.

The results show that Indonesia's export value (volume) could increase by 10.4 (12.38)% more than would otherwise occur, following complete implementation of the trade liberalization agreed in the Uruguay Round. The Uruguay Round liberalization is estimated to increase household and factor incomes by 2.0% and 4.2%, respectively. In terms of increased income, implementation of the Uruguay Round commitments is estimated to result in a net social benefit of around $ 782 million, which represents 0.75% of the GDP in 1992.

The simulation results show that Indonesia could become a potential rice exporter. China, European Union, North and Latin America are shown to be the main export markets for Indonesian rice. The results also show that Indonesia could expand exports of other agricultural products such as coffee, palm oil, rubber and other industrial crops to the European Union, Sub-Saharan Africa, Australia and New Zealand. Exports of livestock products are also estimated to increase, especially to the European Union. However, Indonesia's exports of forestry, fishery and agricultural-processed products are estimated to decline to all export destinations. A decline in the export of forest products to Japan could have a considerable impact on foreign exchange earnings, since Japan is currently the major export market.

Policy implications

In spite of increasing government commitment toward an export-oriented economy, there was no significant increase in the ratio of both exports and imports to GDP over the 1985-96 period. The ratio of the total exports to GDP increased slightly over the 1985-92 period, from 0.22 to 0.26, but then started to decline and went back to the level of 0.22 in 1996. These figures are well below those of other East Asia's export oriented economies, where the ratios are in excess of 40%. This indicates that Indonesian economy has not really been "export led" in the way it has in some East Asian export oriented economies. Accordingly, this may suggest the need for the government to further reform the economy and consistently implement existing deregulation packages.

The flattening of export growth in recent years highlights the need for Indonesia to maintain the pace of reform in order to improve economic efficiency and foster internationally competitive industries. The most recent trade reforms are encouraging but more is needed to overcome the anti-export bias of the trade regime and to stimulate domestic competition. Agricultural-based manufacturing industries could continue to prosper in the future if the government were to accelerate the pace of policy reform and in particular to reduce the

remaining disincentives against these sectors. This would involve not only further reducing manufacturing protection but also deregulating food processing and the export crop sector. The elimination of non-tariff barriers on agricultural raw materials would promote the food and beverage industry.

Indonesia can expect to do very well in a liberalized and freer world market, if it speeds up the opening of its own economy during and following the implementation period of the Uruguay Round agreement. Agricultural growth may slow marginally, however, unless additional growth-enhancing policies are adopted. But even if farm output growth is slowed slightly as a consequence of the round, income growth of rural households nonetheless is likely to accelerate as new job opportunities emerge with the expansion of labor intensive firms as more government investments in infrastructure are shifted outside urban areas.

The negative impacts arising from trade liberalization for various parts of the agricultural sector can be attenuated if the government could act to help enhance production efficiency by consolidating and expanding farm size, investing in infrastructure and in research and development. All of these measures fall within the "Green Box" under the Uruguay Round Agreement on Agriculture and can thus be pursued legitimately without violating any of Indonesia's multilateral trade obligations. These increases in production efficiency would be particularly effective if they were accompanied by investment in human resource development.

Introduction

1.1 Background

Prior to 1985, Indonesia's economy was oriented mainly towards a protected domestic market, creating a high-cost economy the benefits of which were mostly enjoyed by those favored by protection. Since then significant progress has been made in opening up the economy. Many of the sources of high costs have been exposed to the competitive pressure of world competitors, through reduction of non-tariff barriers and tariff surcharges, as well as lowering and simplifying tariffs. These measures will subject domestic producers to the discipline of international competition, reducing costs to consumers, raising efficiency and eliminating inequitable rents.

Recent development in both international and regional trade has accelerated the growth of the Asian economic region. In 1993, the Uruguay Round negotiation on General Agreement on Tariffs and Trade (GATT), with some sensitive issues on agricultural products, reached a final agreement based on comprehensive tariffication. The World Trade Organization (WTO) was then established. The movement toward trade liberalization is active in Asia and the Pacific region. In the Asia and Pacific Economic Cooperation (APEC) forum, members have committed to undertake trade liberalization further than Uruguay Round commitments, except on agriculture for some member countries including Indonesia. Similarly, there is a strong need among the ASEAN members to accelerate the realization of the ASEAN Free Trade Area (AFTA). The agreement to realize AFTA is implemented through the scheme of Common Effective Preferential Tariff (CEPT).

Widespread concern has emerged about the effects of trade liberalization on agricultural production. In order to proceed smoothly with the adjustment process towards a more liberalized economic environment, the effects of trade liberalization, especially those on agriculture in a developing country like Indonesia, need to be identified and analyzed. The project entitled *Effects of Trade Liberalization on Agriculture in Selected Asian Countries with Special Focus on CGPRT Crops* is aimed at identifying the changing international trade of agricultural products and characterizing the economic situation in rural communities in selected Asian countries in the process of trade liberalization. Furthermore, it will specify policy options for improving the welfare of farmers.

1.2 Objectives

In general, the study is aimed at analyzing the overall impacts and benefits of global, regional as well as unilateral trade liberalization on the agriculture sector in Indonesia. Specifically, the objectives of the study are as follows:

- to review economic development and trade related policies including monetary, fiscal, investment and other related policies,
- to review infrastructure and institutional developments affecting trade,
- to analyze the performance Indonesia's trade as well as trade in agricultural commodities, and to assess the overall impact of trade liberalization in Indonesia, and
- to draw policy recommendations to minimize adverse impacts of trade liberalization.

1.3 Organization of the report

This report is organized into six chapters. The first chapter presents the background, rationale, and objectives. The second chapter presents an overview of economic development and related policies in Indonesia. Reviews on infrastructure development affecting trade are presented in chapter three. In the fourth chapter, the performance of Indonesian trade, both on aggregate level and in agriculture, are analyzed. The fifth chapter analyzes the overall impacts of trade liberalization on Indonesia's economy and agriculture, particularly for selected CGPRT crops. Conclusions and policy implications are presented in the sixth chapter.

2. Economic Development and Related Policies

2.1 The structure of the Indonesian economy

The Indonesian economy has undergone significant structural change in the last two decades precipitated by adverse changes in the external environment facing Indonesia. Since the beginning of the last decade, the growth of the non-agricultural sector has been much faster than that of the agricultural sector in line with the long-term economic development toward industrialization. Although its share to gross domestic product (GDP) has been declining, agriculture including forestry and fishery remains one of the largest sectors in the economy. Appendix Table 1 presents Indonesia's GDP by sector of origin at constant market prices.

During the period of 1985-1996, the agricultural sector grew at an average rate of 2.7% per annum, while non-agricultural sectors grew at a rate of 7.8%. Among the non-agricultural sectors, manufacturing industry, construction, trade and commerce, transportation and communication, and finance grew at average annual rates of 10.3, 11.0, 7.5, 8.2, and 11.6%, respectively. The lower growth rate of the agricultural sector compared to other sectors reflects a structural shift in Indonesia's economy. As shown in Table 2.1, agriculture's share declined from 22% in 1985 to 18% in 1996. Over that period, the share of the manufacturing industry increased from 14.6% to 30.5%.

There has been variation in rate of growth within the agricultural sector. In the period of 1985-1996, the highest rate of growth in GDP was experienced by estate crops, livestock and fishery sub-sectors, which grew at 4.4%, 4.1% and 5.2% per annum, respectively, while the food crop sub-sector grew at an average annual rate of 1.8%. Due to their potential, as stated in the Fifth 5-Year Agricultural Development Plan, estate crops, livestock and fisheries are expected to be the main sources of growth of the agricultural sector.

The decline of share of the agricultural sector in employment has been much slower than its declining share in GDP, from 55% in 1980 down to 54% in 1991 and estimated around 49% in 1995. Although its share has fallen, the absolute number of agricultural workers has been continuously increasing. This indicates that the sector is and will remain the major sector for employment generation. Meanwhile the employment share of the manufacturing sector rose only slightly, from 9.0% in 1980 to 11.6% in 1991. All this evidence suggests the critical importance of promoting labor intensive employment in both rural and urban areas in order to minimize unemployment problems and avoid social unrest.

2.2 Economic development and economic policies

Indonesia is one developing country, which has experienced success in its development record. The development strategy was successful in stabilizing the economy, maintaining growth and transforming the structure of production. Consistent emphasis on maintaining economic stability, which was marked by the willingness to take hard decisions in times of both boom and bust, provided a solid foundation for sustained and robust growth. The development strategy emphasized channeling oil revenues into fostering the development of the agricultural sector and developing physical and social infrastructure. It is evident that putting emphasis on agriculture has supported broad-based growth of rural income.

Table 2.1 Sectoral share of gross domestic product at constant prices 1985-1996 (%).

	1983 base								1993 base				
Sector	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993	1994	1995	1996
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	100.0	100.0
Agriculture	22.7	22.0	21.4	21.2	20.4	19.4	18.4	18.5	17.6	17.9	16.7	16.1	15.2
a. Foodcrops	14.1	13.6	13.1	13.0	12.6	11.8	10.9	11.1	10.3	9.7	8.9	8.6	8.0
b. Estate crops	3.6	3.5	3.4	3.5	3.3	3.2	3.2	3.1	3.1	2.7	2.7	2.6	2.5
c. Livestock and products	2.4	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.7
d. Forestry	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.7	1.9	1.8	1.6	1.5
e. Fishery	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.5
Non-Agriculture	77.3	78.0	78.6	78.8	79.6	80.6	81.6	81.5	82.4	82.1	83.3	83.9	84.8
a. Mining and quarrying	18.2	18.1	17.3	15.9	15.5	15.2	15.7	14.5	13.9	9.6	9.4	9.3	9.2
b. Manufacturing industry	15.8	16.3	17.2	18.2	18.5	19.4	20.0	20.6	21.1	22.3	23.3	23.9	24.6
c. Electricity, gas and clean water	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	1.0	1.0	1.1	1.2
d. Construction	5.3	5.1	5.1	5.3	5.5	5.8	6.0	6.3	6.6	6.8	7.3	7.6	7.9
e. Trade, hotel and restaurant	14.6	14.9	15.2	15.7	16.1	16.1	15.9	16.0	16.4	16.8	16.8	16.7	16.7
f. Transportation and communications	5.3	5.2	5.2	5.2	5.4	5.5	5.6	5.8	5.9	7.0	7.1	7.2	7.2
g. Finance, leasing and business services	3.5	3.9	3.9	3.8	4.0	4.2	4.5	4.8	5.1	4.2	4.5	4.7	4.9
h. Other services	14.2	14.1	14.2	14.3	14.0	13.7	13.3	13.0	12.8	14.4	13.9	13.4	13.1

Indonesia faced a series of severe external shocks in the mid-1980s, including the collapse of oil prices, the rise in international interest rates and the depreciation of the US dollar. This situation sharply reduced exports and fiscal revenues, opening sizable external and domestic financial imbalances, and raised external debt service costs. The government responded promptly and effectively by embarking on a two-pronged adjustment program, namely (i) restoring macroeconomic stability through fiscal and monetary restraint, supported by improvement of external competitiveness through a responsive exchange rate policy (float-managed), and (ii) establishing more diversified productive activities through structural reforms that reduced the dependence on oil (World Bank 1993). Table 2.2 presents the changes of external environment and policy direction in the Indonesian economy. A detailed overview of structural change in the Indonesian economy can be found in Hill (1996) and Stephenson and Pangestu (1996), among others.

Table 2.2 Changes in external conditions and policy direction.

Period	Changes in External Environment	Policy Direction		
		Macroeconomic Policy	Trade and Industrial Policy	Government Regulation
1974-81 Oil boom	Sharp increase in oil prices 1973; non oil commodity boom 1975-79; second oil price increase	Maintenance of macroeconomic stability, although some inflation from lack of sterilization of oil revenue	Growing inward orientation (increasing import substitution)	Increasing share of public investment and state owned enterprise (SOE)
1982-85 First external shock	Decline in oil prices; Decline in primary commodity prices	Macroeconomic stabilization; Fiscal austerity, devaluation and tight monetary policy	Strongly inward oriented: proliferation of non-tariff barriers	Continued reliance on SOE and regulation of market economy
1986-88 Second external shock	Sharp decline in oil prices and continued decline in primary commodity prices; shock on external debt due to yen appreciation	Continued macroeconomic stabilization: devaluation, tight monetary policy and balance budget	Shift to outward orientation	Deregulation of customs and imports, relaxation of investment regulations, reduced reliance on SOE and public investment
1988-92 Non oil led economic recovery	Stable oil prices, further decline in prices of primary commodities	Maintenance of macroeconomic stability	Further shift to outward oriented economy	Deregulation extended to investment, finance, and other areas; Initial steps towards SOE reform
1993-present Continued deregulation and some ambivalence	Stable oil prices, some increase in commodity prices, increased competition from other LDCs	Maintenance of macroeconomic stability; increased flexibility of exchange rate and other instrument to assist monetary policy	Continued emphasis on exports, but some deviations to import substitution (petrochem.) and local content (automotive)	Continued deregulation, improvement in financial sector supervision, substantive FDI deregulation

Source: Adopted from Stephenson and Pangestu (1996).

According to Hill (1996), the development path of the Indonesian economy since 1966, along with its problems and policy emphases, can be demarcated into four periods, as described below.

Rehabilitation and recovery: 1966-1970

Over this period, the government was mainly concerned with controlling inflation to reestablish ties with the international donor community, and to rehabilitate the physical infrastructure. The introduction of orthodox monetary and fiscal policies brought inflation down quickly. The government's clear commitment to economic orthodoxy and its close relationship with the international donor consortium resulted in a strong response from both domestic and foreign investors. The economy grew at an annual average rate of 6.6%.

Rapid growth: 1971 to 1981

This was a period of sustained economic growth. Real GDP increased at an annual average rate of 7.7% and in all years grew by at least 5%. It was also a period of extraordinary economic turbulence. Some of the difficulties were self-inflicted but many were exogenous (external) in nature. Poor rice harvests domestically and abroad resulted in serious shortages in late 1972 and doubling of rice prices. In the second half of 1973 international petroleum prices quadrupled, conferring massive windfall revenue gains on Indonesia. These two events, combined with the government's limited policy response, triggered significant inflationary pressures. Ironically, part of the increase in international reserves was wiped out by Pertamina's profligate expenditure programs, the bitter lessons from which dominated economic management in 1976. High international oil prices also resulted in the resurgence of a nationalist economic agenda. Over this period, official policy strongly favored pribumi business interests. Trade and foreign investment policy become more restrictive, and new plans for an expanded state enterprise sector were announced. Towards the end of the decade, policy-makers became increasingly concerned at the prospect of declining oil prices. Consequently, a large devaluation occurred in November 1978, not for the usual balance of payment reasons, but to restore the competitiveness of non-oil tradable sectors in preparation for an anticipated softening in world oil markets. In the event, this softening did not occur for another four years. In 1972, the Iran-Iraq war hastened another round of price increases, thus rendering the devaluation largely irrelevant.

Adjustment to lower oil prices: 1982-1986

Falling oil prices, rising external indebtedness and a sudden decline in economic growth in 1982 signaled an end to the decade of oil-financed growth and abundance. For the first time in the regime's history, seemingly automatic increments to revenue from oil and aid evaporated. Moreover, much of the debt from the past 15 years was now maturing, and a sharp increase in principal repayment lay ahead. Owing partly to a good agricultural performance, and partly to the one-off effect of huge oil-related investments, the economy continued to grow over this period, at a respectable annual average rate of 4%. Nevertheless, gross domestic income, adjusting for the falling terms of trade, grew much more slowly. The policy response was ambivalent during this phase. The macroeconomic adjustments were generally prompt and effective, as the government quickly cut back on expenditure, deferred, then cancelled, a number of large projects, and devalued the rupiah in April 1983. Tax, customs and banking reforms were also introduced. On the other side of the ledger, however, much of the strategy of industrial deepening, developed in the early 1980s in an era of abundance, continued to receive high priority. Non-tariff barriers proliferated. Appendix Table 2 provides a summary of the deregulation and reforms that have been undertaken in Indonesia since the mid 1980s.

Liberalization and recovery: 1987 to the present

Continued fiscal austerity, effective exchange rate management, and decisive microeconomic reform all together resulted in a strong recovery beginning in 1987.

Macroeconomic policy responses continued to be appropriate with a further devaluation in 1986 followed by a policy to float the rupiah and maintain the real effective exchange rate, continued fiscal policy reforms and conservative monetary policy. Trade and industrial policy became strongly export oriented with various deregulation packages aimed at rationalizing the tariff structure, converting non tariff barriers to tariffs, tariff reduction, and removing restrictions on foreign investment, especially export oriented ones. The financial sector has significantly opened up since 1988.

It is clear that a policy mix has been implemented to attain interrelated objectives through better coordination and a more appropriate balance of growth and equity. On the demand side, the efforts were aimed at striking a balance between domestic investment and consumption and export oriented activities, given constraints on the balance of payments. On the supply side, efforts were aimed at expanding production capacity through streamlining investment, import and export procedures as well as providing incentives for improving efficiency and productivity in targeted sectors. Cautious monetary and fiscal policies along with the effort to maintain a realistic exchange rate have been implemented to control inflation and the current account deficit. A competitive exchange rate under a "floating managed" policy has accelerated growth rates of non-oil export and reduced the current account deficit. Foreign borrowings were also managed to control the level of debt service payments so as not to exceed repayment capacity. In addition, several measures were introduced to improve efficiency in resource allocation among sectors to simultaneously strengthen the balance of payments.

Recent experiences could highlight the importance of expectations of exchange rate change. Changes in expectation of depreciation can quickly lead to capital inflows and outflows through Indonesia's open capital account. Policy inconsistency can raise such expectations. If the private sector perceives an inconsistency between the exchange rate policy and the goal of monetary policy, as occurred in 1990 and recently, confidence will erode and quickly lead to capital outflow.

With respect to management of foreign borrowing, the recent economic crisis indicates that the government failed to control the expansion of private sector foreign borrowing as the level of debt service payment exceeds the repayment capacity.

2.3 Monetary policy

Monetary policy has been implemented intensively by the Indonesian government. The objective of monetary policy was in general to support improvement in the balance of payments by controlling domestic demand pressures and controlling inflation. In 1983, the government undertook a financial sector reform by abolishing the credit ceiling for all banks and deregulating interest rates. In 1986, the rupiah was devaluated by 31% against the US dollar and in 1988 there was a deregulation allowing the establishment of new private banks and district branches. The introduction of the 1992 banking law resulted in a comprehensive restructuring of the banking system involving in particular a consolidation of the previously separate category of savings and development banks into more broadly defined commercial banks.

Hill (1996) identified five features in the conduct and outcome of monetary policy and financial development in Indonesia, as follows:

- An open international capital account since 1970. In consequence exogenous shocks such as the oil price fluctuations have been transmitted quickly to the domestic economy, posing particular challenges for short-run management of the money supply. In this respect, Indonesia has, superficially a least, enacted its policy reforms in reverse order to that suggested in the (primarily Latin American) sequencing literature, with little adverse effect.

- A fixed exchange rate (with the US dollar, rather than a bundle of currencies) for lengthy periods, including the first five years of the oil boom period. Thus the government was without one of the standard economic policy instruments, and adjustment to the large terms of trade increase over the period took other forms, principally rising inflation and blunted quantitative controls.
- The balanced budget principle. Introduced for commendable political reasons, in some respects it has hampered the government's fiscal flexibility. Nevertheless, in practice this constraint has been less serious since the authorities effectively ran "economic" deficits and (occasional) surpluses. In fiscal years 1991/92 and 1992/93 the government explicitly departed from this principle by establishing additional fiscal reserves.
- In the conduct of monetary and financial policy there has been continual tension: (a) between regulation and direct controls, which broadly characterized the system in the1970s, and indirect market-based interventions, which become increasingly important in the 1980s; and (b) over the extent to which social and equity objectives (such as small enterprise development) can be pursued alongside the usual macroeconomic objective of internal balance, principally the control of inflation.
- The transformation of monetary and financial institutions has been quite dramatic. Monetary "restocking" has occurred, initially in response to lower inflation and a renewed confidence in the currency, and later as the menu of financial assets widened. New financial institutions have evolved. However, fiscal and monetary instruments remain quite underdeveloped. There is no government bond market, and open market monetary operations are still evolving. In the absence of a private bond market, and therefore private borrowings by the government, budget deficits have to be financed directly or indirectly via the banking system. Hence, there is no sharp distinction between fiscal and monetary policy that is the case in countries with a better-developed bond market.

The reform process in the banking industry began in 1983 in order to facilitate the increased mobilization of domestic savings. Responding to this need, the government introduced a package of deregulatory banking reforms which resulted in the lifting of a number of direct central bank controls on the state-owned commercial banks, such as credit ceilings and interest rate controls, and initiated the gradual phasing out of subsidized refinancing facilities known as liquidity credits. The easing of these direct controls was followed by the establishment of an institutional framework for the Central Bank to exercise more indirect and market-oriented forms of monetary management. This involved the creation of discount instruments known as Bank Indonesia Certificates (SBI) and a new set of money-market securities (SBPU), followed by the introduction of a wide-ranging reform package in 1988 which removed most of the remaining restrictions on the banking system.

The liberalization of the banking industry had a dramatic impact on its growth. One result was a sharp deterioration of the banking system's asset quality. The rapid growth in bank credits threatened to undermine economic stability by stimulating a sharp increase in import demand and inflationary pressures. Responding to this threat, the government initiated an abrupt tightening of the monetary policy in 1990-92, and introduced a number of policy packages between February 1991 and May 1993 to raise the prudential standards of the banking industry.

Many believe that the recent monetary crisis has been a negative consequence of the liberalization and rapid expansion of the banking industry. The collapse in asset value and the extent of financial and corporate insolvency are much worse than initially expected. The crisis and its impact are not discussed in this report; they will be incorporated in the second phase of the study.

Bank Indonesia is the sole issuer of Indonesian currency, holds Indonesia's official international reserves, manages domestic money and credit expansion in line with government monetary policy, and supervises and regulates financial institutions with the exception of insurance companies. The Bank has also participated in the establishment of joint-venture financial institutions of various types, including private development of finance companies, an insurance company for small business loans, a venture-capital finance company, and a bank in the Netherlands. It also makes loans to certain government bodies and state enterprises. Bank Indonesia exercises its control over the banking industry predominantly by indirect means through the setting of prudential standards and guidelines.

Since 1986, the government has followed a policy of roughly maintaining the real effective exchange rate of the rupiah. Under the current system of exchange rate management, the rupiah is allowed to fluctuate within an intervention band whose mid point is set on a daily basis by the Central Bank. The upper and lower edges of the intervention band define the rates at which Bank Indonesia is prepared to intervene to sell and buy US dollars. Since 1992, the Central Bank has widened the intervention band in stepwise fashion to give more room for price fluctuations to absorb shocks. The current band is much wider than in the past.

2.4 Fiscal policy

Many believe that fiscal policy has been one of the most effective instruments for preventing excess demand pressures, and therefore preventing inflation and the current account deficit to accelerate. The government used the fiscal stance to keep public sectors at a level that prevented overheating and was consistent with the main macroeconomic targets. Inconsistency of policies, in contrast, might erode confidence. Maintenance of confidence in macroeconomic policy is essential to keep onshore interest rates aligned closely with offshore rates and to avoid destabilizing foreign capital inflows and outflows. The main reason for adopting this approach in the Indonesian economy are, among others, (i) the public sector in Indonesia is considered "huge" in its account and it covers significant off-budget transactions, and (ii) the public enterprises produce nearly one-fifth of GDP.

The new order government (Orde Baru) started in 1966, inheriting an economy in which fiscal discipline had broken down, with budget deficits amounting to as much as 50% of government expenditure and exacerbating the already latent inflationary pressures. The new government introduced the balanced budget principle, demanding that public expenditure should not exceed the government domestic budgetary revenue and foreign aid flows. This has been adhered to ever since and has helped to ensure a comparatively high degree of economic stability throughout the past three decades. The balanced budget rule has been further relaxed in recent years following a proposal that the government would be able to pursue a more effective counter-cyclical fiscal policy if it permitted budgetary surpluses or deficits to be recorded in individual years as long as a broad balance was maintained over a period of time.

There has been recognition in the last decade of the importance of strengthening public sector resource mobilization and increasing public savings through a conservative fiscal policy. However, while there has been a trend towards improvement in the public savings rate in recent years, there remains sizable scope for further improvement by raising tax and non-tax revenues and containing expenditure. A series of policy measures and efforts has been undertaken to increase non-tax revenues, including strengthening cost recovery from public services, and improving the financial performance of public enterprises. On the expenditure side, the government has implemented policy reforms aimed at reducing subsidies, containing general administrative spending, and rationalizing investment priorities.

A major reform of the tax system in 1980s created a modern tax system based on a value added tax (VAT), personal income tax, and corporate tax. Coupled with improved tax collection, the new system raised non-oil taxes in relation to non-oil GDP from 7.2% in 1981 to

an estimated 12.7% in 1992/93. Nevertheless, this ratio remains below that of most other countries in the region (e.g. 17% in Korea and Thailand). The primary focus of efforts to raise tax revenues, as suggested by the World Bank (1993), would be improving tax administration. The proportion of potential revenue and that are actually collected remains in the 50-60% range for several major taxes, much lower compared with the ratio of other countries of 80-85%.

Following the drop in oil prices in March 1983, the government resolved to proceed with the long-delayed tax reform. This resulted in the simplification of the income tax structure in January 1984, with a new unified income tax being introduced to replace four existing taxes on different forms of income, and the introduction of value-added tax (VAT) in April 1985, to replace the existing sales tax. In April 1986, the government concluded this first round of tax reforms with the introduction of measures to simplify the property tax regime and stamp duty regulations.

A second round of tax reforms was announced in October 1994, which amended the existing laws on general tax provisions and procedures, income tax, VAT, and property tax. These new regulations provided punishment for tax evasion as well as incentives for entrepreneurs to reinvest profits and channel investments into underdeveloped regions. Other measures include incentives to increase private investment in infrastructure projects under BOT schemes, to encourage venture-capital companies to support the growth of small and medium-size enterprises, and to stimulate the consolidation of the domestic banking industry through increased mergers between banks.

2.5 Investment policy

Since the New Order period (1966-present), the investment policy in Indonesia, particularly in relation with foreign investment, has undergone swings from liberalization to restriction and back again to liberalization. In the past, the role of foreign investment was supplemental to domestic investment and it was thought that transfer of ownership of the joint ventures to Indonesian majority would eventually mean that Indonesia would gain technological capabilities from foreign partners and become independent from foreign domination. This underlying principle led to (i) Indonesia's ambivalent attitude towards foreign investment, on the one hand welcoming and on the other hand requiring Indonesianization of a majority of those investments, and (ii) the swings in policy direction with regard to foreign investment from liberal to restrictive and then back to liberal again (Pangestu 1995). The propelling factors for growing restrictions varied from nationalist sentiments, such as in the early 1970s, to the availability of foreign exchange from oil revenues, such as in the mid to late 1970s. The factors underlying liberalization have been waning foreign investor interest such as in the wake of the Pertamina crisis and the falling oil revenues as in the mid 1980s.

A much clearer direction of continued progress on liberalization and improvement of foreign investment policy has taken place since 1986 (Stephenson and Pangestu 1996). The need to restructure the economy away from oil led to a change in perception by the government on the role of the private sector, including foreign investment. Foreign direct investment (FDI) was then seen as important to bring in capital, technology, managerial capability, and market access. The change in attitude was accentuated in the 1990s. After experiencing an investment and economic boom in the 1989-1991 period, investments slowed down in 1992 partly due to external factors such as the recession in Japan and the diversion of investment to China, and partly due to the perceived decline in Indonesia's investment climate relative to its competitors.

Since 1986, the maximum foreign ownership was raised to 95% for export oriented activities, investment in eastern Indonesia, high technology and large projects requiring capital above $10 million (Stephenson and Pangestu 1996). In 1987, the period to achieve divestment was increased to 15 years from the original 10 years. At the same time, foreign investors were able to receive national treatment (same incentives as domestic companies) if the project were at

least 75% Indonesian owned, 51% of its shares were sold in capital market, or 51% Indonesian owned and 20% sold in capital market. The condition for receiving national treatment was further relaxed in 1987 to 51% Indonesian owned or 45% Indonesian owned and 20% of the shares sold in the capital market.

In 1989, 100% foreign ownership was allowed for companies exporting 100% of their production and located on Batam Island. Foreign investors were required to divest 5% within 5 years. In 1992, 100% foreign ownership was allowed for certain types of investment, i.e. investment over $100 million, in eastern Indonesia, and 100% export oriented. The divestment requirements are also more favorable, 20% in 20 years for the first two types, and 5% in five years with no further divestment for the last type of investment. In 1993, there was further relaxation by allowing 100% foreign ownership for foreign investments with a minimum capital of $2 million and in supplier industries.

In June 1994, most of the restrictions were removed, and foreign companies can come in (a) as 100% foreign owned in all sectors except for the nine public interest sectors (ports, production and generation of electricity, telecommunications, shipping, air transport, drinking water, railways, automatic generation plant, and mass media) and be required to divest "some" amount in 15 years (the amount is not mandated by the government), and (b) as a joint venture with a maximum of 95% foreign ownership with no divestment requirement. In the bold June 1994 deregulation, the nine public interest sectors previously closed were also officially opened for joint ventures. There has been a reinterpretation of the meaning of controlled by the government to mean not ownership or managed, but being regulated to protect public interest. Only one sector remains closed to foreign investors, that is distribution and retail.

Table 2.3 shows that both domestic and foreign investments have increased significantly in the last decade. The largest expansion in private and foreign investment has been in the manufacturing industry, increasing from only $2.3 billion in 1985 to almost $75 billion in 1995, and its share to total investment increased from 50.3% to 67.8%. This investment expansion was mainly related to chemicals, paper, and petrochemical industries. Although increasing in absolute terms from $0.9 to $10 billion, the share of investment in agriculture decreased from 20% to only 9% over this period.

2.6 Indonesia's commitments on multilateral trade liberalization

2.6.1 Uruguay Round (GATT)

The Ministry of Trade of the Republic of Indonesia signed the Uruguay Round (UR) Final Act in Marrakech in April 1994. Legislation to enable the adoption of the UR agreement into domestic law was put before the Indonesian Parliament in September 1994 and ratified in October 1994. Indonesia is one of the founding members of the new World Trade Organization (WTO) and is committed to full participation in the new body.

The UR agreement on agriculture consists of three main portions, namely (i) the agreement on concessions and commitments on market access, domestic support and export subsidies (Appendix Table 3), (ii) the agreement on sanitary and phytosanitary measures, and (iii) the Ministerial agreement concerning Least-Developed and Net Food-Importing Developing Countries. The agricultural package also addresses many other issues of vital economic and political importance to many member countries, which are closely related to the issues on sustainability mentioned above. These include provisions that encourage the use of less trade-distorting domestic support policies to maintain agricultural and rural development, that allow actions to ease any adjustment burden, and also the introduction of tightly prescribed provisions that allow some flexibility in implementation of commitments.

Table 2.3 Approved domestic and foreign investment (million US$) by sector, 1985 and 1995.

	1985			1995		
Sector	Domestic	Foreign	Total	Domestic	Foreign	Total
Agriculture, fishery and livestock	899	20	919 (19.9)	8,621	1,384	10,005 (9.1)
Forestry	37	0	37 (0.8)	1,476	0	1,476 (1.3)
Mining and quarrying	38	0	38 (0.8)	205	0	205 (0.2)
Manufacturing	1,632	687	2,319 (50.3)	43,962	30,441	74,403 (67.8)
Construction	270	122	392 (8.5)	848	206	1,054 (1.0)
Trade and hotel	312	0	312 (6.8)	3,792	1,029	4,821 (4.4)
Real estate	267	29	296 (6.4)	4659	1314	5973 (5.4)
Others	296	0	296 (6.4)	6,290	5,539	11,829 (10.8)
Total	3750	859	4,609 (100)	69,853	39,915	109,768 (100)

Source: Investment Coordinating Board (in World Bank 1996: recalculated).

In the area of market access, non-tariff measures are replaced by tariffs that provide substantially the same level of protection. Tariffs resulting from this "tariffication" process, as well as other tariffs on agricultural products, are to be reduced by an average of 36% in the case of developed countries and 24% in the case of developing countries, with a minimum reduction for each tariff line being required. Reductions are to be undertaken over six years in the case of developed countries and ten years in the case of developing countries. Least-developed countries are not required to reduce their tariffs.

The tariffication package also provides for the maintenance of current access opportunities and the establishment of minimum access tariff quotas (at reduced tariff rates) where current access is less than 3% of domestic consumption. These minimum access tariff quotas are to be expanded to 5% over the implementation period. In the case of tariffied products, special safeguard provisions will allow additional duties to be applied in case of shipments at prices denominated in domestic currencies below a certain reference level or in case of a surge of imports.

Domestic support measures that have a minimal impact on trade (green box policies) are excluded from reduction commitments. Such policies include general government services, for example in the areas of research, disease control, infrastructure and food security. It also includes direct payments to producers, for example certain forms of "decoupled" income support, structural adjustment assistance, and direct payments under environment and regional assistance programs. In addition, other policies need not be included in the total aggregate measurement support (total AMS) reduction commitment. These policies include direct payments of production-limiting programs, agricultural and rural development assistance and other support which makes up only a low portion (5-10%) of the value of production of individual products or the value of total agricultural production.

Members are required to reduce the value of mainly direct export subsidies to a level 36% below the 1986-90 base period level over the six-year implementation period and the quantity of subsidized exports by 21% over the same period. In the case of developing countries, the reductions are two-thirds those of developed countries over a ten year period and subject to certain conditions; there are no commitments on subsidies to reduce the costs of marketing exports of agricultural products or internal transport and freight charges on export shipment.

Another agreement concerns the application of sanitary and phytosanitary measures. This agreement recognizes that governments have the right to take sanitary and phytosanitary measures but that they should be applied only to the extent necessary to protect human, animal or plant life or health and should not arbitrarily or unjustifiably discriminate between members where identical or similar conditions prevail. In order to harmonize these measures on a wide basis, members are encouraged to base their measures on international standards, guidelines and recommendations. The agreement contains requirements on transparency, including the publication of regulations, the establishment of national inquiry points and notification procedures.

The results of the UR Agreement represent a comprehensive attempt towards strengthening the rules and disciplines of the multilateral trading system, to which Indonesia attaches great value in its trading relations. The UR Agreement will govern trade relations among GATT trading parties and among members of the WTO. Global trade liberalization commitments under UR/WTO should bring substantial benefits for all participating countries and for the trading system as a whole.

Indonesia's commitments under UR for both goods and services are contained in revised Schedule XXI, as attached to the UR Final Act. They include the following (Table 2.4):

- The binding of a majority of tariffs across-the-board at a ceiling rate of 40%. These bindings cover 95% of all tariff lines (8,878 out of 9,382 lines on an HS 9-digit basis) and 92% of all imports. These tariff bindings will become effective as soon as Indonesia becomes a member of the WTO. Indonesia's commitment to bind nearly its entire tariff schedule demonstrates its willingness to accept the GATT rules and disciplines as set out in Article II and offers secure market access to its trading partners.
- The tariffication and binding of all agricultural items, with a reduction of tariff of at least 10% per line item (24% overall), to be carried out over 10 years. A guaranteed access threshold for rice imports of 70,000 tons annually (at a 90% tariff) will be immediately effective. Subsidization of rice exports is to be kept within a band of between US$ 27.6 million (1995) and US$ 21.5 million (2004), covering a volume of between 295 and 257 thousand tons, respectively.
- The removal of all non-tariff barriers (NTBs) on tariff items included in Indonesia's market access offer. These NTBs are to be removed within a 10-year period. At the time of Indonesia's signature of the UR Final Act (April 1994), this commitment affected 179 tariff lines (out of a total of 269 tariff lines with NTBs). The non-tariff barriers to be removed covered US$ 358 million or 6% of imports in 1992.
- The elimination of all import surcharges on items included in Indonesia's market access offer. Indonesia committed itself to carry out this elimination during a ten-year period. However, the government of Indonesia has accelerated trade liberalization in this area. At the time of Indonesia's signature of the UR Final Act (April 1994), surcharges were applied to 220 tariff items. As a result of the June 1994 deregulation package, surcharges were removed from 108 tariff lines and reduced on a further 13 lines. Most of the surcharges removed were on items included in Indonesia's market access offer.
- Commitments to liberalization or to the binding of existing market access opportunities for five sectors of services: telecommunications, industrial services, tourism, financial services, and banking.

Table 2.4 Summary of Indonesia' Uruguay round market access offer.

	Tariff Lines		Imports 1992	
	Number	%	US$ million	%
Tariff binding				
1. Total bound manufactures	7,537	80.3	22,529	82.6
Existing bindings	823	8.8	6,227	22.8
New binding	6,714	71.6	16,302	59.8
2. Total agriculture (all bound)	1,341	14.3	2,464	9.0
3. Exceptions	504	5.4	2,285	8.4
Total above	9,382	100.0	27,279	100.0
Agriculture				
1.Tariffication and binding of all items				
2.Duty reduction of 10% by tariff line over 10 years				
3.Elimination of local content requirement for milk products				
4.Agreed access of 70,000 tons of rice imports annually				
Removal of non-tariff barriers on bound tariff items				
NTBs on 98 industrial tariff lines affecting US$ 4,358 million of imports to be removed within 10 years				
Elimination of import surcharges on bound tariff items				
Surcharges varying between 5 and 25% on 159 tariff lines affecting US$ 838 million of imports to be removed within 10 years				

Source: Ministry of Trade (in Stephenson and Erwidodo 1995).

2.6.2 Uruguay Round (GATT)

In line with the GATT agreement, Indonesia also committed itself to regional trade agreements. In the APEC forum, the basic position taken by Indonesia is to make APEC an effective means of economic cooperation among its member countries. Such cooperation is effective in the sense that the developed countries should encourage and assist the less-developed ones in order to minimize the gap in the shortest possible time. Thus the economic strength among the APEC member countries in the Pacific region will be more balanced.

The APEC objectives are contained in the Bogor Declaration agreed at the meeting of APEC leaders in November 1994 which commits APEC members to achieve "free and open trade and investment" in the Asia-Pacific region no later than 2020. This goal is to be pursued promptly by further reducing barriers to trade and investment and by promoting the free flow of goods, services and capital. The declaration specifies that the pace of implementation of this objective would take into account the differing levels of economic development among APEC members, with industrialized economies achieving the target by the year 2010 and developing economies by 2020.

APEC members committed to undertake trade liberalization further than the Uruguay Round commitments, except on agriculture for some member countries including Indonesia. Agreements on planned tariff reductions are contained in 17 of the 18 APEC members' individual action plans (IAP), some of which are quite far-reaching and nine of which are "WTO plus", or go beyond Uruguay Round commitments. Only five out of 17 did not offer any further liberalization beyond the Osaka offer. The US, for example, did not offer tariff reduction beyond its present commitments since its average tariffs are already low.

The Osaka meeting laid out a set of nine clearly defined principles for APEC. They are (i) comprehensiveness, (ii) WTO-consistency, (iii) comparability, (iv) non-discrimination, (v) transparency, (vi) standstill, (vii) simultaneous start, continuous process and differentiated timetables, (viii) flexibility, and (ix) cooperation. These nine principles were then re-emphasized again in Manila with the Manila Action Plans for APEC (MAPA). Those initiatives and actions come from both individual and collective action plans in various areas, especially in customs, standards and conformance, competition policy and deregulation, intellectual property rights, dispute mediation, rules of origin, and mobility of business people.

APEC members have been lowering tariffs and reducing the number of non-tariff barriers (NTB) based on their unilateral reform and deregulation initiatives since 1989. As a result, the average tariff levels (unweighted) between 1988 and 1996 have been lowered by almost half from 15 to 9%. Currently, 14 members have average tariff levels below 15% with the majority of those below 10%. The three other members are already close to 0%.

Unilateral reforms have also reduced the number of non-tariff barriers. For APEC as a whole, the non-tariff barriers have been cut by half, declining from 9% of import coverage to 5% during this period. In some economies such as Australia, Chile, Indonesia, New Zealand and Singapore, the decline in non-tariff barriers has been dramatic leading almost to elimination. The use of import licensing and restriction in Indonesia, Malaysia, the Philippines, and Thailand for example is not more than 2 to 3% of all tariff lines. Singapore has continuously followed a free trade regime.

APEC tariff reductions are well on track in terms of going towards the Bogor Declaration target, and the progress is even faster and deeper than the Uruguay Round commitments (PECC Report 1996). There are some champion countries in APEC, namely those which already have low tariffs and are at or near the indicative Bogor target (Hong Kong, Brunei, Singapore), and those who have committed to extensive tariff reduction so that their IAP is more progressive than the Bogor trend lines (Chile, China, Indonesia, and the Philippines). Because of the voluntary nature of APEC, keeping the liberalization process on track in terms of the Bogor target is very important. It means that tariff reduction will follow a downward trajectory, or at least not returning to higher bound tariff levels.

2.6.3 ASEAN Free Trade Area (AFTA)

There has been a strong need among ASEAN members for closer cooperation to further strengthen regional stability and foster economic growth in the region. The third Summit Meeting in Manila, December 1987, set the ASEAN Plan of Action in economic cooperation. It was at the fourth Summit in Singapore, January 1992, when the heads of ASEAN signed the Singapore Declaration and agreement for enhancing ASEAN economic cooperation. The major outcome of this summit was to set up the ASEAN Free Trade Area (AFTA). AFTA has been considered the most important subregional economic endeavor of ASEAN in recent years. AFTA has been conceptually recognized as a GATT-consistent regional trading arrangement. AFTA was also created to provide an integrated market that would be attractive to foreign investors and encourage them to build plants of efficient scale and promote the growth of intra-industry trade within ASEAN. This movement has become important for ASEAN countries considering the emergence of other destinations for investment such as China, India and Vietnam.

The agreement to realize AFTA is implemented through the scheme of Common Effective Preferential Tariffs (CEPT), which was introduced in January 1993 and expected to come into effect in January 1994. The core of the scheme is centered on the realization of a common, low and effective tariff of 0-5% for all intra-ASEAN trade. The time framework for realization of this objective was originally 15 years. Indonesia's timetable for tariff reduction under the CEPT scheme is presented in Appendix Table 4. However, various forces including the UR, progress in APEC and unilateral liberalization, have contributed to a process of acceleration and deepening of AFTA and ASEAN cooperation since the ASEAN Economic Ministerial Meeting in Chiangmai, Thailand in September 1994.

The timetable by which all products in the CEPT will have tariff rates of not more than 0-5% was accelerated from 15 to 10 years from the base year of 1993. The target date for realizing AFTA is now 2003. This means that by 2000 for about 90% of tariff lines, the tariff rates will be 0-5%. The new timetable means that both the normal and fast tracks are accelerated. More recently a number of products have also been accelerated to year 2000 and

88% of tariff lines in the CEPT scheme will be in the 0-5% tariff range by the year 2000. Table 2.5 presents average tariff reduction schedules under the CEPT scheme.

The product coverage of CEPT was broadened to include unprocessed agricultural products. This means that all goods are under the CEPT scheme, the only exception being what is classified under general exclusion. Unprocessed agricultural products are further categorized in the inclusion, temporary exclusion and sensitive lists. Items in the sensitive list will be liberalized under a separable schedule, but liberalization is intended to go beyond ASEAN's commitments in agriculture under the WTO. Approximately 70% will be on the inclusion list. The temporary exclusion list will also be phased into the inclusion list by 2003. There has been agreement that the sensitive list should be kept at a minimum and currently it comprises around 10% of the tariff lines in unprocessed agricultural products.

Table 2.5 Average tariff reduction schedules under CEPT-AFTA (%).

Country	Base 1993	1996	1997	1998	1999	2000	2001	2002	2003
Non Agriculture									
Indonesia	14.81	11.81	10.89	9.71	8.82	7.51	7.28	6.84	6.21
Malaysia	10.2	5.01	4.6	3.91	3.54	3.17	3.04	2.89	2.66
Philippines	13.89	12.01	11.19	10.01	9.33	8.26	7.92	7.69	7.01
Thailand	22.8	14.53	13.23	10.66	9.86	7.54	7.52	6.22	4.97
Singapore	0.41	0.01	0.01	0.01	0	0	0	0	0
Agriculture									
Indonesia	19.34	9.5	9.28	8.37	7.03	6.23	5.45	4.76	3.42
Malaysia	6.68	2.57	2.31	2.08	1.8	1.49	1.41	1.3	1.15
Philippines	23.24	7.4	6.9	5.14	4.36	3.68	3.04	2.73	2.08
Thailand	33.05	19.47	19.17	15.03	14.81	11.01	10.93	7.62	4.45
Singapore	0.17	0	0	0	0	0	0	0	0

Source: ASEAN Secretariat, 1996.

Despite this accelerated progress, there have been some difficulties in reaching agreement on agricultural items which are included in the temporary exclusion and sensitive lists, and the time by which all items are phased into the inclusion list. At the ASEAN summit in 1995, Indonesia reintroduced 15 agricultural products to its sensitive list, which had earlier been in the temporary exclusion list. The majority of these items are BULOG's commodities, including rice, sugar, wheat flour, and soybeans. At an AFTA council meeting in Singapore in April 1996, it was decided that the 15 sensitive agricultural commodities will be included into the CEPT scheme under the temporary exclusion list and will be liberalized starting in 2003 and ending in 2010.

Indonesia's decision to postpone the liberalization of these 15 food items dominated the 10th AFTA Council meeting in Jakarta, September 1996. Indonesia supported by the Philippines refused to accept the 2010 deadline for including rice and sugar into the CEPT scheme. In addition to the sensitive list, Indonesia proposed a new list called "highly sensitive list" and included two food items (rice and sugar) in the list. On the other side, Thailand insisted that all unprocessed agricultural commodities be phased into the scheme by January 1, 2003 and totally liberalized by 2010. By the end of the meeting, an agreement was reached and it was agreed that the liberalization of the sensitive agricultural commodities will begin in January 2003 and end in 2010, but Indonesia and Philippines were allowed some flexibility on the ending tariff rates and utilization of safeguards in 2010. With such flexibility, Indonesia can still maintain import tariffs on rice and sugar above 5% after 2010 and introduce safeguard measures to protect domestic producers.

Apart from the setback in agricultural liberalization, discipline was introduced in the use of temporary exclusion lists by requiring member countries to phase all goods which have been

temporarily excluded from tariff reductions into the CEPT by January 2001. Products in the temporary exclusion list will be transferred to the inclusion list in five equal installments of 20% beginning January 1, 1996. There are indications of further broadening, especially to include new issues that have been included in the WTO such as services, investment, and intellectual property rights. A framework agreement on services was agreed to at the fifth ASEAN Summit in December 1995 in Bangkok.

2.7 Review of trade policy implementation

Long before GATT, APEC and AFTA agreements came into being, the Indonesian government had undertaken a series of trade reforms and shifted from an inward looking to an outward looking development strategy. Prior to 1985, Indonesia's industrial sector was oriented mainly towards a protected domestic market, creating a high-cost economy the benefits of which were mostly enjoyed by those favored by protection. Since then significant progress has been made in opening up the economy. Many of the sources of high costs have been exposed to the competitive pressure of world competitors, through reductions of non-tariff barriers and tariff surcharges, as well as lowering and simplifying tariffs. These measures will subject domestic producers to the discipline of international competition as they force prices into line with world market levels, reducing costs to consumers, raising efficiency and eliminating inequitable rents.

In general trade related reform packages introduced since the early 1980s have focused on (i) simplifying ports and customs procedures including enactment of a new customs law, (ii) lowering tariffs and surcharges, (iii) reducing import licensing and other non-tariff barriers (NTBs), (iv) deregulating import and distribution systems, (v) deregulating the investment regime, and (vi) establishing bonded zones and export processing entreports. Tariffication of non-tariff barriers has also been extended. The most recent deregulation packages of January 1996 and June 1996 were expected to make further progress both in increasing transparency, reducing non-tariff barriers and accelerating tariff cuts. A brief description of trade reform packages during the period 1985-1996 is presented below (see Appendix Table 2):

1 April 1985

The government issued Presidential Instruction Number 4 of 1985 concerning the re-organization of customs and port matters and the implications for shipping, both international and inter-island. The main objective of this policy was to expedite the flow of goods and documents for exports, imports and inter-island trading.

6 May 1986

The government policy issued on 6 May 1986 was aimed at increasing the competitiveness of Indonesia's non-oil export commodities by increasing access by exporters to imported materials. The policy was applied by eliminating non-tariff measures. In addition, it also contained various amendments to the previsions relating to foreign investment aimed at attracting foreign capital.

25 October 1986

This policy was aimed at eliminating and "tariffying" several non-tariff measures.

15 January 1987

This policy contained amendments to, or elimination of, non-tariff measures and reduction in tariff rates.

24 December 1987
This policy contained, among other things, the elimination of a number of tariffs from the provision on procedures. In addition, the export procedures were also simplified by eliminating the provision that exporters were required to have an Export Identification Number.

28 May 1990
This policy contained tariff reductions and decreased non-tariff barriers, simplified procedures for obtaining a license for fishery activities, chicken raising, manufacturing industry, and liberalized domestic marketing for a number of industrial products.

3 June 1991
This policy contained, among other things, simplified import procedures and the implementation of imports for specific products to meet domestic demands.

25 July 1991
The policy drawn up in Presidential Instruction Number 3 dated 25 July 1991 improved Presidential Instruction Number 4 of 1981 in order to expedite the flow of goods to support economic activities. In this policy, the authority to inspect Indonesia's exports and imports is in the hands of the Directorate General of Customs and Excise. To expedite exports, no inspection is conducted, except for goods under the provision of export procedures, those liable to Export Tax/Additional Export Tax, and goods which are granted exemption from, or restitution facilities for, import duty and other import levies on raw material imports. The inspection of such goods is conducted by a surveyor who issues the Report on the Surveyor's Inspection-Exports (LPS-E). Imported goods may be imported into the Indonesian customs only if accompanied by a Report on the Surveyor's Inspection-Imports (LPS-I), which is issued by a government-appointed surveyor. The LPS-I concerned is based on inspection by the surveyor in the exporting country.

6 July 1992
This policy was aimed at increasing the efficiency of the national economy by eliminating trade barriers, reducing and/or eliminating import duty and surcharges on specific imported goods, and simplifying import procedures. In addition, this policy also aimed at increasing capital investment by simplifying the negative list of investments, permitting the utilization of business rights (Hak Guna Usaha) and building rights (Hak Guna Bangunan) by joint venture operations in the framework of foreign investment, (specifically in the field of agriculture/estate crops), simplified capital investment procedures, and simplified procedures to obtain a building permit (IMB) and hindrance ordinance for companies which are located inside, as well as outside, industrial estates.

10 June 199
This policy contained amendments and improvements to the provisions related to bonded zones, entrepots, businesses closed to capital investment, changes to import duties and surcharges, provisions on import of motor vehicles, and the elimination of procedures on some imported goods.

23 October 1993

This policy contained deregulation and debureaucratization measures such as (i) exports and imports, especially in regard to customs facilities, taxation, import procedures for the mobility of goods/materials between EPTE and bonded zones and other customs areas; (ii) the reduction of import duty and surcharges, as well as relaxing import procedures to increase the efficiency of the economy and non-oil exports; (iii) capital investment, i.e. improving requirements on the possession of shares in foreign investment companies to encourage foreign investors; (iv) simplification of licenses, especially the procedures for land reservation and location permits, the procedures to obtain building, and hindrance ordinance permits; (v) to grant a number of facilities in the pharmacy sector; and (vi) the simplification of environmental impact assessment procedures and obligations.

27 June 1994

The policy covered tariffs, surcharges, and normal prices, import procedures, bonded zones and production entrepots for export purposes, crediting of revenue tax, and facilities to extend capital investments. The main objectives of this policy were to increase investment, efficiency and productivity to encourage the growth of the economy, to increase and extend non-oil exports, business and employment opportunities, and to expedite and increase the implementation of development in other sectors.

May 1995

This deregulation package contained, among others tariff reduction on around 6000 items, schedule of reduction to 2003, some removal of NTBs, removal of the negative list for automotive parts, and improvement in EPTE.

January 1996

This policy was to take further reduction of tariffs on a number of items and improvement of EPTE especially for electronics.

June 1996

This package contains filling in the 1996-2003 schedule of tariff reductions, removal of NTB of sugar for processing industries, introduction of antidumping regulations, streamlining for some export sectors, relaxation of importation of complementary products by foreign companies producing in Indonesia.

Non-tariff barriers

The reform packages have reduced the number of tariff lines subject to restrictive licensing arrangements by more than half. They switched registered importer (IT), producer importer (PI) and sole agent (AT) licenses to general importer (IU) categories. As shown in Table 2.6, the coverage of domestic production affected by licensing arrangements has fallen from over 28% in 1989 to about 22% in 1993 (GATT 1995). One-third of manufacturing output remains affected by import licensing arrangements. As the import licensing reforms have focused on the manufacturing sector, nearly 36% of agricultural production in Indonesia still receives special protection from import licensing systems. It is worth noting that almost three-quarters of the economy's production covered by the remaining import licenses relate to agribusiness-related products. The June 1994 and May 1995 reforms relaxed import licenses on a few agricultural products, processed foodstuffs, chemicals and fertilizers.

The Ministerial Decree of June 1996 listed 206 nine-digit HS tariff codes that are still subject to some form of NTB (World Bank 1997). These regulations distort prices and business

opportunities, thereby increasing costs and causing inefficiency. For example, BULOG's monopolies over imports of rice, sugar, soybeans, wheat (and associated restrictions of flour imports and related domestic activities) raise average prices and therefore tax consumers. They also raise costs to agro-processors, making them less competitive in export markets.

Table 2.6 Coverage of restrictive import licensing (NTBs), 1989-1993 (%).

Product	1989	1990	1991	1992	1993
Agriculture	44.7	44.7	35.5	35.5	35.5
Food crops	64.7	64.6	55.7	55.7	55.7
Estates and other crops	25.7	25.7	14.5	14.5	14.5
Livestock	7.3	7.3	0.1	0.1	0.1
Forestry and Fishery	12.5	6.3	0.0	0.0	0.0
Mining and Quarrying	0.2	0.2	0.2	0.2	0.2
Manufacturing	38.1	32.8	31.6	31.1	31.2
Food, beverages, tobacco	62.9	61.3	59.8	58.7	60.7
Textiles and clothing	8.0	6.5	6.5	5.4	5.2
Wood products	0.0	0.0	0.0	0.0	0.0
Chemical	5.5	2.6	2.6	2.6	0.2
Engineering	49.2	36.3	33.9	33.9	31.6
Total	27.9	25.4	22.3	22.1	22.1

Source: GATT 1995.

Import tariffs

As NTBs are reduced, tariffs become more important for determining the structure of protection. Although tariffs remain moderately high on average, the Indonesian government has reduced tariff levels considerably over last decade (Table 2.7). During 1985-1994, the average unweighted tariff rate, including import surcharges, fell from 27 to 20%, or from 13 to 8% on an import-weighted basis (World Bank 1993; GATT 1995). The average tariff level weighted by domestic production also declined over this period, from 19 to 10%. The dispersion index (as measured by the coefficient of variation) has fallen from 108 to 104 during the period. However, while the disparities in tariff rates have been reduced, they remain high and above the levels existing prior to the 1985 reform.

After this series of deregulations, most applicable tariffs (i.e. 99%) vary from 0 to 40% (Table 8). In 1989, the tariff rates of 0-40% represented 77.4% of the existing tariff items. The tariff rates of 0-5% in 1989 covered 30.7% of the total tariff items, while in 1994 these tariff rates represented 34.5% of the total tariff items. Prior to the deregulation package of June 1994, 220 tariff items were subject to surcharges, but following the deregulation these items declined to 112 tariff items or 1.3% of the total existing tariff items.

Table 2.7 Average tariff rates and index of dispersion in Indonesia, 1985-1994.

	Pre-1985	1985	1988	1989	1990	1991	1992	1993	1994
Average rate (%)									
Unweighted	37	27	24	27	22	20	20	20	20
Weighted									
By dom. production	29	19	18	19	17	15	13	11	10
By import value	22	13	15	12	11	10	9	9	8
Index of dispersion (%)	62	108	90	93	89	83	83	96	104

Source: Adopted from World Bank (1993) and GATT (1995).

Table 2.8 Tariff structure in Indonesia, 1989-1994.

	Percentage of Total Tariff Items (%)	
Tariff (%)	1989	1994
0	7.8	10.3
5	22.9	23.8
10	8.3	8.6
15	4.4	6.2
20	9.8	9.6
25	-	4.3
30	17.9	23.5
35	6.3	1.5
40	6.3	11.2
Above 40	22.6	1.0
Total	100	100

Source: GATT 1995.

The tariff reform package announced in 1995 basically established a three-tier structure of tariffs by 2003 (0%, 5%, and 10%) to implement CEPT-AFTA commitments. Exemptions were limited to selected agricultural products (rice and sugar), alcoholic beverages, motor vehicles, chemicals, and metal products. The June 1996 package announced (i) the schedule for implementing tariff reductions over the next seven years to 2003, (ii) a reduction by 5 percentage points of tariff for over 1000 items (9-digit HS codes), (iii) further reductions for selected capital goods including machinery for use in paddy fields, and (iv) the merger of import surcharges with customs duties. If the program of tariff reduction is implemented on schedule, it will keep Indonesia's tariffs among the lowest for large developing countries, as presented in Table 2.9 (World Bank 1997).

Table 2.9 Average (unwighted) tariff of pre and post-Uruguay Round

Country	1991-1993 Tariff (%)	Post-Uruguay Tariff (%)
China	30.6	16.6
India	42.6	30.9
Indonesia	19.9	6.3
Rep. of Korea	10.0	7.7
Malaysia	11.2	6.4
Pakistan	56.2	na
Thailand	36.9	26.1

Source: Adopted from World Bank 1997.

Export restrictions

In contrast to the relaxation of licensing arrangements on imports, Indonesian exports have been subjected to regulations and controls (export bans, regulated exports, supervised exports, and export taxes). Regulated exports are exports that require government approval, for instance soybeans and soybean flour, rice and rice flour, wheat and wheat flour, sugar, live cattle, selected fish and fish products, urea, gold, silver, petroleum and natural gas, lead, and tin. Supervised exports are restricted to approved exporters for instance textiles and textile products to quota countries, rattan, wood and wood products, products of sandalwood, coffee, and manioc for export to Europe. In 1989, for example, export restriction covered over 27% of Indonesia's production of tradable goods (GATT 1991). Some three-quarters of Indonesia's mining output, including oil and gas, are covered by export controls. For agriculture and manufacturing products, the proportion is 18 and 13%, respectively. Around three-quarters of Indonesia's merchandise exports are regulated in some way (GATT 1991; GATT 1995). Up

until 1996, according to the World Bank (1997), export restrictions still affected nearly 2000 items, mostly forest products and agricultural commodities.

The increased use of export restrictions is mainly aimed at (i) promoting the conservation of scarce resources, (ii) encouraging greater domestic processing industries for increasing value added and employment, and (iii) preserving the environment. As such, export controls apply mostly to unprocessed or semi-processed agricultural and forestry products. Export bans on logs and rattan, for instance, have encouraged domestic processing by providing their major inputs at lower than world market prices.

The export of a wide range of products requires a license issued by the Ministry of Trade. There are two broad groups of products under licensing arrangement. First, a group of products which can only be exported by registered or approved exporters includes, among others textiles, clothing, petroleum, tapioca, cassia vera, spices such as pepper, plywood as well as sawn and processed wood. Second, export products are supervised by the government to ensure that domestic requirements are met, including certain agricultural and fertilizer products. For example, rice, wheat flour and soybeans can only be exported by BULOG. Other exports supervised by the Ministry of Trade include fertilizer, live cattle, palm oils, palm kernel and coconut oils.

In 1996, no progress was made in reducing export controls (World Bank 1997). Instead, Indonesia focused efforts on improving export facilities, including customs, rebates of VAT, taxation, and lower credit costs for selected producers of selected products. Such an initiative, however, does not address the fundamental problems posed by export constraints and it excludes many potential exporters.

Structure of protection

Trade policies alter resource allocation by changing the structure of protection in various sectors of the economy. A standard way of measuring the structure of incentives and the extent of the distortions is to calculate the *nominal* and *effective* rates of protection (NRP and ERP) for various industries. NRP = (Pd-Pb)/Pb*100 of which Pd is domestic price and Pb is border price, while ERP = (Vd-Vb)/Vb*100 of which Vd is value added at domestic prices while Vb is value added at border prices. Table 2.10 presents the NRPs and ERPs for various groups of products or industries during the period of 1987-1994 (Condon and Fane 1995). In general, until 1994, the effective rates of protection for manufacturing (ERP=20) are much higher than for agriculture (ERP=9). The ERPs for agro-processed products, textiles and garments, paper products, and non-metal products were 22, 26, 22, and 30% in 1994, respectively. Among the primary agricultural products, fish and livestock enjoyed much higher protection than estate and food crops, with ERPs of 32 and 30, respectively. Primary forest products, in contrast, were substantially taxed (ERP=-39%).

As a direct result of trade reforms, there have been significant reductions in the levels of protection for all tradable industries during the 1987-1994 period, and more specifically, for manufacturing and agriculture. The average effective rates of protection for all tradables declined from 16% in 1987 to 11% in 1994. In general, the decline in protection has been larger for the manufacturing sector than for agriculture. The ERP of agro-processed products declined substantially from 122 to 22% during the period. This was also the case for textiles and garments and engineering products.

Table 2.10 Protection in broadly defined groups of commodities, 1987-1994.

	NRP (%)				ERP (%)			
Commodity Group	1987	1990	1992	1994	1987	1990	1992	1994
Food crops	9	11	11	10	18	20	20	17
Estate and other crops	6	5	5	1	14	12	13	7
Livestock	22	21	18	18	33	31	29	30
Forestry	-17	-38	-38	-35	-20	-43	-43	-39
Fishing	12	12	12	26	15	16	16	32
Oil and LNG	0	0	0	1	-1	-1	-1	1
Mining and quarry (ex .oil)	1	3	2	5	0	1	1	5
Food, bev. and tobacco	14	13	12	7	122	126	120	22
Textile, garment, footwear	32	12	12	10	102	35	35	9
Wood products	2	-5	-5	-17	25	33	33	-5
Paper products	22	13	12	16	31	20	20	26
Chemicals	6	5	4	13	14	13	12	22
Oil refining	0	0	0	2	-1	-1	-1	3
Non-metal products	17	14	13	11	57	49	44	30
Basic metals	7	6	6	5	13	10	10	6
Engineering	40	38	28	27	152	139	82	84
Other manufacturing	40	26	26	13	124	79	80	21
Agriculture	9	8	8	5	16	15	14	9
Mining and quarry (incl. oil)	0	0	0	2	-1	-1	-1	1
Manuf. (incl. oil ref.)	13	10	9	9	39	34	29	20
All tradables	9	8	7	6	16	14	13	11
Import-competing	17	15	13	11	39	35	22	22
Export-competing	-1	-1	-1	-5	-2	-1	-3	-6
Manuf. (excl. oil refining)	17	13	12	12	68	59	52	19
Anti-trade bias policy (%)					41	36	34	31

Source: Adopted from Condon and Fane (1995).

The decline in nominal protection rates has been accompanied by a reduction in the anti-export bias of the trade regime. In 1987 the anti-export bias was 41%, which declined to 31% in 1994 because of trade deregulation and opening of the economy. The change in economic structure is seen in the fact that 16 sectors that previously were classified as importable were transformed into exportable sectors between 1985 and 1990. The growth of non-oil exports since 1987 has driven nominal protection rates down but the structure of protection has not changed much. Despite deregulation efforts, Indonesia's trade policy in general continues to be biased against exports. In addition, wide disparities of protection between industries remain; relative prices (and hence the disparities between rate of protection for industries) matter for the allocation of resources within an economy. This policy bias certainly hinders non-oil export growth and results in a loss of economic efficiency as resources are drawn to less efficient import-competing activities than would be the case in freer trade. One of the sectors where protection is high enough is the food and beverage sector. Trade reform in the food processing sector, however, is complicated by the fact that a number of agricultural products are subject to trade and investment barriers. The elimination of NTBs on agricultural products such as wheat, soybeans and sugar would promote the food and beverage industry by allowing international competition to bid down prices of these inputs to international levels. With the industry no longer facing artificially expensive inputs, the government could reduce the high protection which the industry has received in compensation.

3. Infrastructure Development Affecting Trade

3.1 Introduction

The importance of infrastructure and institutional development as critical components of economic development is well acknowledged. Adequate infrastructure will ensure that economic activities can take place more efficiently. Similarly, flows and transactions of goods and services can be improved with better infrastructure and credible institutions. This chapter presents the development of infrastructure and institutions in Indonesia affecting trade performance. The second section presents a review on infrastructure development policies, followed by a third section on physical infrastructure development including roads, transportation facilities, seaports, airports, and telecommunication. Institutional settings related to trade liberalization including banking, customs arrangement and those related to trade promotion are described briefly in the last section.

3.2 Policies on infrastructure development

Rapid industrial growth and associated urbanization are beginning to overload Indonesia's infrastructure. Although capacity has increased substantially since 1970, further improvements in infrastructure are needed to sustain rising demands. Prudent macroeconomic policy, however, limits the rise of public investment. Indonesia needs more efficiency in infrastructure investment and operation to reduce costs while improving service.

Until the late 1980s, Indonesia followed the prevailing public sector approach to infrastructure. The development of physical infrastructure was mainly financed from oil revenues and donor assistance. Despite its initial successes, the public sector model has generated growing dissatisfaction. Unsatisfied demands and poor quality services have become bottlenecks to growth. Infrastructure has been expensive and inefficient such as high cost contracts, excess capacity, and inadequate maintenance. Users are forced to substitute high cost alternatives. Natural monopoly arguments have lost intellectual acceptance and applicability in the context of poor public services and alternatives arising from technical change (World Bank 1995).

In response to dissatisfaction and changed circumstances, government has shifted its infrastructure development policy from a public sector approach to more of a private sector approach. Since the 1990s the government has begun to rely more on the private sector in some infrastructure areas that formerly were reserved for the public sector. The government has put greater emphasis on its role as a manager of infrastructure to maximize efficiency. In this role, the government at all levels began to manage the infrastructure program, concentrating on five key elements: (i) rationalization of the overall and sectoral investment program, with the public sector focusing on areas where there is low private interest, (ii) setting up a clear competitive framework for private finance and ownership, (iii) pricing and improving public services, and (iv) unbundling to permit greater competition and private participation.

In 1995-1998, as reported by the World Bank (1995), the proposed investments in infrastructure amounted to $56 billion in power, transport, telecommunications, water and irrigation. Investments were concentrated in power (43%) and transport (33%). Indonesia needs large transport investment to serve the archipelago and encourage industrial decentralization to reduce the concentration in Java that is generating diseconomies. Private infrastructure

investment was expected to account for over $18 billion (33%) of the total proposed investment, concentrated mainly in power generation, telecommunication, toll roads and water.

3.3 Physical infrastructure development

Adequate transport and communications infrastructure is of vital importance, not only for national integration but also for economic development. Recognizing the extent of the required improvements, the government has increasingly opened the sector to private investment since the mid-1980s, and in June 1984 removed most remaining restrictions on foreign direct investment in the sector. This policy has prompted a sharp increase in foreign investment in a variety of transport and communications projects, especially for the expansion of the telecommunications system and construction of roads and airports.

The road transport network is the critical factor in developing an efficient city system that will maintain Indonesia's international competitiveness. An efficient network will allow industry to be decentralized away from Jakarta and Surabaya into other smaller cities with lower land and wage costs. Substantial capacity expansion is still needed, particularly in the congested key transport corridors of North Java. The growth of export-oriented manufacturing and rising standards of living place an increasing premium on the reliability of transport services and efficient integration of transport modes.

In 1996 Indonesia had a total road length of 336,377 km, of which 108,614 km (53.7%) were asphalted, 144,549 km (43.0%) were classified as being in good condition, 83,311 km (24.8%) in moderate condition, and 108,517 km (32.2%) were classified as damaged or severely damaged (Table 3.1). Special efforts have been made since the mid-1980s to construct new roads and rehabilitate existing ones. Much of these efforts were concentrated on Java, Bali, and Sumatra, where most of the major population centers are now being connected to good main or secondary roads. With much of the rehabilitation completed in these regions, the government has recently started seeking private investment to expand road construction to other regions, particularly in eastern Indonesia.

Table 3.1 Road transportation facilities in Indonesia.

	1990	1996	Growth (%/yr)
Road Length (km)	283,516	336,377	2.9
Asphalted	125,051	180,614	6.9
Good condition	93,472	144,549	7.5
Moderate condition	80,515	83,311	0.6
Damaged/badly damaged	109,529	108,517	-0.2
Registered Motor Vehicles ('000)	8,889	14,530	8.5
Passenger cars	1,313	2,409	10.6
Buses and trucks	1,493	2,030	5.3
Motorcycles	6,083	10,091	8.8

Source: Central Bureau of Statistics 1992 and 1997.

Rail transportation in Indonesia exists only in Java and Sumatra. Indonesia's railways are state-owned and comprise a network of approximately 5,000 km in Java and three unconnected small networks with a total track length of approximately 1,300 km in Sumatra. These systems were deteriorated very badly until the early 1970s, resulting in a steady decline in both passenger and freight traffic. Some improvements and new investment have taken place since the early 1980s. In mid-1994 the state-owned railway company (Perumka) also initiated a partial privatization of some of its services by inviting private firms to operate joint services on a profit-sharing basis.

Table 3.2 presents rail transport during the 1992-1996 period. The data show that railway transport in Java provided much more service for passengers than for cargo. This is due

to relatively well-established alternative cargo service in Java. The opposite was the case for railway transport in Sumatra. During the period total passengers in Java grew at 20.8% per annum, increasing from 71 million in 1992 to 151 million in 1996. Total train passengers in Sumatra grew at a much smaller rate of 7.1%, from 2.1 million in 1992 to 2.7 million in 1996. In contrast, railway freight in Sumatra grew at a higher rate (6.1%) than that in Java (3.8%) during this period.

Given the high population density and rapid growth on Java, rail transport has a promising future in selected corridors and for freight commodities. Interest in private participation has been increasing, including development of urban tracts, some passenger and cargo services, and building and maintenance of locomotives. While private participation holds the promise of improved efficiency and lower costs to consumers, realizing that framework would involve a substantial improvement in the regulatory framework for private participation. If privatization arrangements are not clear, the country runs the risk of turning over valuable assets at low cost with no benefit to consumers.

As an archipelagic country, sea transport is of extreme importance for the integration of Indonesia's economy. Its improvement and expansion has therefore been accorded high priority throughout the past three decades, and considerable financial resources have been invested in the development and modernization of port facilities, management of the shipping industry, and expansion of the merchant fleet. The sector has also received a high degree of foreign assistance, especially since the early 1980s.

Table 3.2 Rail transportation 1992-1996.

	1992	1996	Growth (%)
Java			
Passenger (million)	71.0	151.0	20.8
Passenger-km (million)	9,994	14,601	9.9
Cargo (million tons)	5.45	6.32	3.8
Cargo-km (million)	1,162	1,439	5.5
Sumatra			
Passenger (million)	2.06	2.71	7.1
Passenger-km (million)	478	622	6.8
Cargo (million tons)	9.54	12.10	6.1
Cargo-km (million)	2,616	3,261	5.7

Source: Central Bureau of Statistics 1992 and 1997.

The country's two most important international seaports are Tanjung Priok in Jakarta and Tanjung Perak in Surabaya, both of which have highly diversified handling facilities, including international container terminals, for a variety of cargo. Table 3.3 shows that approximately 29% of the total value of Indonesia's exports and 59% of import value flowed through Tanjung Priok in 1994, with Tanjung Perak accounting for a further 7.5% of exports and 9.9% of imports.

Most of Indonesia's other major ports are geared to the export of the country's agricultural and mineral raw materials, especially from the islands of Sumatra and Kalimantan. In Sumatra the two most important ports are Belawan near Medan, which is equipped to handle containers and accounts for some 90% of the non-oil/gas exports of the important cash crop producing region of North Sumatra, and the island port of Pakanbaru in the province of Riau, which serves the nearby Dumai petroleum refinery.

Table 3.3 The relative importance (share) of major ports in Indonesia, 1994.

Ports	Export (%)		Import (%)	
	Value	Volume	Value	Volume
Tanjung Priok, Jakarta	28.7	5.0	59.2	35.5
Tanjung Perak, Surabaya	7.5	1.4	9.9	12.4
Pakanbaru/Dumai	7.2	10.9	3.3	0.8
Belawan, Medan	5.5	1.7	2.7	3.2
Bontang	5.0	7.2	2.6	13.8

Source: Central Bureau of Statistics 1994.

In1996 the ocean-going fleet consisted of 24 vessels with total capacity of 314,000 dwt, as a result of which Indonesia is heavily dependent on foreign transport services for international trade. The inter-island and local fleets comprised 579 and 292 vessels with total capacities of 1.02 million dwt and 107,000 dwt respectively. The fleet was supplemented by a large traditional fleet comprising 4,307 locally built sailing vessels with a total capacity of 211,000, which continues to carry a significant proportion of domestic trade. The pioneer fleet consists of a smaller number of comparatively small ships serving remote areas.

Various important measures to liberalize the shipping industry and increase its efficiency have been initiated in recent years. In November 1988 licensing procedures and conditions of entry were simplified, including opening up to foreign joint-venture enterprises. This was followed in January 1989 by the establishment of a market for the provision of information about maritime cargo and the availability of cargo space at the Indonesian Commodity Exchange in Jakarta. These measures stimulated growth of the shipping industry, which was given a further boost in June 1994 when the government eased a number of remaining constraints on investment in the industry by raising the maximum permissible foreign equity holding in shipping enterprises from 80% to 95%. A further incentive was given to the shipping industry in May 1996, when most of its activities were exempted from value added tax (VAT).

In 1996 Indonesia had well-developed air transport services, with a total of 73 registered owners, six of which offer scheduled passenger services, while the remainder operate charter flights, cargo services and general aviation services (Table 3.4). Total number of the scheduled and unscheduled aircraft in 1996 was 293 and 128, respectively. The industry is dominated by the state-owned flag carrier, Garuda Indonesia, which mainly operates international services. Garuda's subsidiary, Merpati Nusantara, is the second largest Indonesian airline and is engaged in both commercial services and pioneer services to isolated areas. It operates some regional flights as well as an extensive range of domestic routes. The three other carriers, Sempati, Bouraq, and Mandala Airlines, are privately owned. Sempati serves a number of regional and domestic routes, while the other two operate only domestic services.

Table 3.4 Number of owner and aircraft by classification of operation.

Classification	1990		1996	
	Number of Owners	Number of Aircraft	Number of Owners	Number of Aircraft
Scheduled operation	4	193	6	293
Non-scheduled operation	11	133	10	128
Air taxi	3	56	3	64
Aerial work	3	8	6	18
General aviation	42	399	48	430
Total	63	789	73	933

Source: Central Bureau of Statistics 1994.

Table 3.5 and Table 3.6 present the performance of airline services and cargo handled during the 1990-1996 period, respectively. During the period the number of passengers carried

of both state-owned and private airlines increased remarkably at rates of 5.4 and 43.5% per annum, respectively. The total available seats also grew at high rates of 7.8% per annum for state-owned carriers and 39.1% per annum for private carriers. In general, the performance of private airlines appeared to be more efficient than that of the state-owned. This is reflected by the fact that both passenger-load and weight-load factors of the private airliners are much higher than those of state-owned ones. Looking at the load factors, it can be concluded that airline services in Indonesia were not optimally performed, and the level efficiencies were even declining during the 1990-1996 period as indicated by declining load-factors for both passengers and freight.

Table 3.5 Airline services for domestic and international flights.

	1990	1996	Growth (%/yr)
Government Airlines			
Pax carried (number)	8,435,042	11,570,793	5.4
Pax (km)	13,934,333	20,550,975	6.7
Available seats (km)	23,632,281	37,143,069	7.8
Pax load factor (%)	59.0	55.3	
Freight (ton)	141,296	208,093	6.7
Performed ('000 ton – km)	1,709,740	2,552,234	6.9
Available ('000 ton – km)	3,241,809	5,093,567	7.8
Weight load factor (%)	52.7	50.1	
Private Airlines			
Pax carried (number)	588,789	5,150,889	43.5
Pax (km)	512,492	3,967,855	40.7
Available seats (km)	800,805	5,798,977	39.1
Pax load factor (%)	64.0	68.4	
Freight (ton)	6,611	50,703	40.4
Performed ('000 ton – km)	44,860	392,269	43.5
Available ('000 ton – km)	71,554	709,038	46.6
Weight load factor (%)	62.7	55.3	

Source: Central Bureau of Statistics 1992 and 1997.

Indonesia has a total of 179 commercial airports, of which 59 are classified as large and six can handle wide-bodied jets. Considerable emphasis has been given to the development of the country's airport facilities in recent years, with a new airport having been built at Jakarta and several other airports having been modernized and expanded. The Sukarno-Hatta International Airport at Cengkareng near Jakarta has an annual capacity of more than 18 million passengers. Other airports were completed in recent years or are currently under construction, upgrading and expansion. Following the introduction of a package of investment reforms in June 1994, private domestic and foreign investors are also being invited to participate in airport development on a build-operate-transfer (BOT) basis.

The government-owned telephone system covers almost the entire country and has been greatly extended and made more effective since the inauguration of three telecommunication satellites in 1976, 1977, and 1992. These satellites have made it possible to establish an integrated telephone system covering the entire archipelago. This system is connected to the international direct dialing network through a number of satellite and terrestrial links, including several submarine cables laid in the 1980s. Mobile communication systems covering most of Java, Bali, and other major economic areas have also been established. The domestic and international telephone systems are operated mainly by two predominantly state-owned enterprises, PT Indosat and PT Telkom, which were partly privatized in October 1994 and November 1995, respectively, and by the privately owned firm PT Satelindo.

Table 3.6 National airlines cargo for domestic and international flights.

	1990	1996	Growth (%)
Government	1,709,740	2,552,234	6.9
Pax + baggage	1,243,690	1,858,207	6.9
Freight	448,619	679,420	7.2
Mail	17,431	14,607	-2.9
Private	44,861	439,527	46.3
Pax + baggage	38,925	384,857	46.5
Freight	5,437	51,734	45.6
Mail	499	3,136	35.8
Total	1,754,601	2,991,761	9.3
Pax + baggage	1,282,615	2,243,064	9.8
Freight	454,056	731,154	8.3
Mail	17,930	17,743	-0.2

Source: Central Bureau of Statistics 1992 and 1997.

As shown in Table 3.7, telephone subscribers grew significantly at an annual rate of 25.7% during the 1990-1996 period. Total subscribers increased from 1.04 million in 1990 to more than 4.1 million in 1996. The telephone services, however, are not well distributed among regions, reflected by the fact that almost 3 million or more than 72% of the total subscribers were located in Java and Madura. Subscribers in Java and Madura also grew at a higher rate (26.5%) compared with other regions.

Table 3.7 Number of telephone subscribers and production in 1990 and 1996.

	1990	1996	Growth (%)
Total Subscribers	1,043,719	4,112,533	25.7
Sumatra	161,857	587,834	24.0
Java and Madura	729,635	2,992,354	26.5
Bali and Nusatenggara	39,919	137,799	22.9
Kalimantan	50,274	170,412	22.6
Sulawesi	50,952	160,382	21.1
Maluku & Irian Jaya	11,082	63,752	33.9
Telephone usage			
Local ('000 pulsa)	10,299,917	27,918,348	18.1
Long distance (minutes)	76,949,704	26,168,457	-16.5
International (minutes)	5,921,326	240,448,265	85.4

Source: Central Bureau of Statistics 1992 and 1997.

3.4 Institutions related to trade liberalization

3.4.1 Banking and financial institutions

The Indonesian banking system has been transformed since the early 1980s through a process of gradual but steady reform, which culminated in the enactment of a new banking law in 1992. In addition to Bank Indonesia as the Central Bank, the 1967 banking regulation categorized financial and banking institutions in Indonesia into (i) commercial banks, (ii) development banks, (iii) saving banks, (iv) secondary banks, non-bank financial institutions (NBFIs) of several kinds, and (v) security firms. In contrast, the 1992 law recognizes only commercial banks and small-scale credit banks and has abolished the NBFIs as separate institutions, although existing NBFIs have been permitted to reconstitute themselves as commercial banks or security companies. Other financial institutions can be classified into finance companies, insurance companies, pension funds, and pawnshops.

The reform process in the banking industry began in 1983 aimed at facilitating the increased mobilization of domestic savings. Responding to this need, the government introduced a banking reform package which resulted in the lifting of a number of direct Central Bank controls on the state-owned commercial banks, such as credit ceilings and interest rate

controls, and initiated the gradual phasing out of subsidized refinancing facilities known as liquidity credits. The easing of these direct controls was followed by the establishment of an institutional framework for the Central Bank to exercise more indirect and market oriented forms of monetary management. This involved the introduction of Bank Indonesia Certificates (SBI) and a new set of money market securities (SPBU), which could be traded within the banking system. These measures were followed by a wide-ranging deregulation package in 1988 which removed most of the remaining restrictions on the banking system.

The liberal lending decisions taken in the late 1980s and recessionary pressures triggered the government's tight monetary policy in the early 1990s, which resulted in severe deterioration in the banking sector's asset portfolio. According to various estimates, bad debts accounted for 3-5% of the banking sector's total outstanding credits, with doubtful loans accounting for 8-15% (The Economist Intelligence Unit 1996). In response, the government has sought to promote the consolidation of the banking industry through a number of new measures. The introduction of the 1992 banking law resulted in a comprehensive restructuring of the banking system involving in particular a consolidation of the previously separate category of savings and development banks into more broadly defined commercial banks. Under the 1992 law, the commercial banking sector is categorized into five headings: state-owned banks, foreign banks, joint-venture banks, regional development banks, and private national banks.

Indonesia has a regional development bank operating in each of its 27 provinces. The banks are owned and operated by provincial authorities, or jointly between these authorities and private parties. In addition, the country has small single-branch banks organized primarily to meet the needs of market retailers and farmers. These institutions, people's credit banks (Bank Perkreditan Rakyat), comprise market banks, village banks, employees' banks, cooperative banks, and other similar bodies. They differ from the commercial banks in that they do not offer cheque accounts or participate in the payments clearing system. The following is a brief review of the banking reform packages over the 1991-95 period:

- February 1991: Various measures introduced to improve banking prudential standards and bank supervision, including the establishment of timetables for banks to strengthen their capital base to meet the capital adequacy ratio (CAR).
- March 1992: Promulgation of a new banking law simplifying the structure of the banking system.
- May 1993: Modification of prevailing prudential standards to stimulate lending in the short term, establishment of phased deadlines for banks to meet prescribed lending limits.
- June 1995: Introduction of new tax regulations providing incentives for interbank mergers in an attempt to stimulate consolidation of the banking industry.
- August 1995: Bank Indonesia announces plans to establish a deposit protection scheme to compensate depositors whose banks become insolvent or are shut down by the monetary authorities.
- September 1995: The minimum paid up capital requirement for banks seeking a foreign exchange license is raised from Rp 50 to Rp 150 billion in order to encourage inter-bank mergers and strengthen the capital base of commercial banks. Changes also announced in the legal limits for loans to conglomerates with a view toward increasing transparency of the banking industry.

Despite the large advances in the range and quality of financial services in Indonesia, the high cost of local credit continues to be a chronic complaint among Indonesian businessmen. In addition, high borrowing rates, limited access to long term finance, lack of liquidity of many listed stocks, and other structural aspects are still major business impediments.

3.4.2 Financial institutions in agriculture

Finance for agriculture comes from both formal and informal sources. Informal finance, which includes relatives and village moneylenders, plays a very important role in agricultural production. Glassburner (1985) estimated that informal finance accounted for some four-fifths of the total capital needs of the agricultural sector.

Early formal finance to the agricultural sector centered on the BIMAS scheme for rice, secondary crops (palawija), and livestock. At the time of the 1983 banking reforms, BIMAS credit was terminated after it became evident that repayment rates had dropped significantly. In early 1984, a new rural general credit scheme (KUPEDES) was launched. The existing village units of Bank Rakyat Indonesia (BRI) used to administer BIMAS were retained and expanded. Loans were no longer tied to specific agricultural programs, but were available to various small enterprises for investment as well as working capital, and interest rates were structured to encourage rapid repayment (Dick 1985; Piggot et al. 1993). By 1988, credit under KUPEDES had quadrupled to Rp 462 million.

Government also implements a number of targeted credit schemes. One of the early targeted credit schemes was that for small-scale enterprises (Kredit Usaha Kecil-KUK). In 1992/93 KUK increased substantially, accounting for more than 20% of the total lending. Efforts in boosting the extension of KUK were carried out through cooperation among commercial banks themselves and between commercial banks and BPRs. This cooperation was executed in the form of KUK extension from commercial banks to BPRs, mutual financing, factoring, and channeling (Bank Indonesia 1994). To support banks in continuing the expansion of KUK, Bank Indonesia continued to provide technical assistance through the small-scale enterprise development project (Proyek Pengembangan Usaha Kecil-PPUK).

In efforts to promote the business of small-scale cooperatives and their members and to increase farmers' incomes and food supplies, Bank Indonesia continued the provision of credits for farmers (Kredit Usahatani-KUT), credit for cooperatives and for food procurement. In addition, government has also promoted several credit programs to foster the production of cash crops, such as credit for intensification of small-scale sugarcane farms (Tebu Rakyat Intensifikasi-TRI) and credit for cash crop development and rehabilitation.

3.4.3 The National Agency for Export Development (NAFED)

In 1971 the government, through Presidential Decree No 26, declared a new export development agency, which since 1974 has been known as the National Agency for Export Development (NAFED), aimed at enhancing and promoting Indonesia's export potential to the global market. NAFED was originally a body under the Ministry of Trade, but now it is under the Ministry of Industry and Trade. In 1973, NAFED initiated the establishment of the first three Indonesian Trade Promotion Centres (ITPC) in New York, London, and Hamburg. In the following years NAFED added offices in Jedah, Osaka, Sydney, the Hague, Dubai, Los Angeles, Dallas, Mexico City, and Budapest.

ITPC is an institution whose main function is to promote Indonesian export products to the global market. To achieve its goal, ITPC engages actively in trade promotion activities such as participating in trade fairs, organizing trade missions to potential markets, facilitating business contacts and providing valuable trade information. ITPC is continuously involved in collecting and disseminating information required by both Indonesian exporters as well as overseas buyers to encourage and enhance trade relations. The information services available from ITPC include information about market potential, market opportunities, market trends and Indonesian export potential. By performing these tasks ITPC plays a strategic role in enhancing the relations between Indonesian manufacturers and exporters and international buyers.

In countries where they are located, ITPCs are attached either to the Indonesian Embassy or Indonesian Consulate in order to achieve the synergy needed to provide effective services. The presence of ITPCs in these cities is intended to promote Indonesia's export products to

those countries and to explore opportunities in surrounding countries. ITPC functions as a spearhead of the Ministry of Industry and Trade and is not limited only to encouraging overseas importers in build economic and trade ties with Indonesian manufacturers and exporters, but also to promoting the image of Indonesia as a newly emerging and reliable source of high quality export products in the world market.

ITPC helps trade contacts between Indonesian manufacturers/exporters and their overseas counterparts by organizing and preparing participation in overseas trade fairs, selling missions, buying missions to Indonesia, trade inquires, and market intelligence.

For Indonesian manufacturers and exporters, ITPC among others provides (i) direct assistance to reliable Indonesian manufacturers/exporters and helps them to negotiate business deals, (ii) assistance in seeking access to new international markets, (iii) assistance in organizing meetings with overseas buyers, and (iv) help promoting Indonesian products through trade exhibitions, trade missions, promotions, publications, and business visits. For overseas importers and buyers, ITPC provides, among others (i) information on the capacity of product supply by sector and by company, (ii) advice and information on current government trade regulations and procedures, (iii) assistance in arranging trade visits to Indonesia to meet reliable Indonesian manufacturers and exporters, and (iv) information about Indonesian companies participating in overseas trade exhibitions and selling missions.

3.4.4 Industrial estates, bonded zones, and export processing entreports

Industrial estates are available in Jakarta and other cities in West Java, Central Java, South Sulawesi, and North Sumatra. There are now several industrial estates in full operation. The large industrial estates are found in Jakarta, Bekasi, Karawang, Cilegon, Surabaya and Medan. Water, electricity, drainage, telecommunication, and other important facilities are adequately available in the industrial estates.

In order to facilitate and expedite foreign trade, especially by supplying facilities for the development of non-oil exports, and to create a more attractive investment climate, a bonded zone has been established. This is an area with specific boundaries in the Indonesian customs area in which special customs provisions are applied, i.e. on goods which are brought in from beyond the customs area or from other locations in the Indonesian customs area with no previous customs charges and excise levies and/or levies by other countries until such goods are removed for import, export or re-export purpose. Seven bonded zones have been established, one in Jakarta and others in Batam Island (twelve miles south of Singapore), Ujung Pandang (South Sulawesi), Pasuruan (East Java), Semarang (Central Java), Bekasi, and Bogor (West Java).

In order to create a more conducive investment climate and increase non-oil exports, export processing entreports (EPTEs) have also been established. EPTEs are locations or buildings of industrial companies used for storage of goods and/or materials imported or purchased from industrial companies within bonded zones, processed for export or inter-EPTE delivery with no customs duties and other import levies. Only minimum customs inspection procedures are exercised. An EPTE status can be granted to industrial companies located inside or outside an industrial estate, provided that it is operational at the time of request. The request for EPTE status should be submitted to the Ministry of Finance through the Directorate General of Customs and Excise.

The industrial estates located in the bonded areas having EPTE status are provided with a number of incentives as follows:

- Exemption from import duty, import surcharges, excise income tax of article 22, value added tax and sales tax on luxury goods on the importation of capital goods and equipment including raw materials for export oriented production processes.

- Allowed to divert their products amounting to 25% of their export (in terms of value) to the Indonesian customs area, through normal import procedures including payment of customs duties.
- Allowed to sell scrap or waste to an Indonesian customs area as long as it contains no more than 5% of the amount of the material used in the production process.
- Allowed to lend their owned machinery and equipment to their sub contractors located outside bonded zones or having no EPTE status, for no longer than 2 years in order to further process their own products.
- Exemption of value added tax and sales tax on luxury goods on the delivery of products for further processing from bonded zones and EPTE companies or the other way round as well as among companies in the areas.

3.4.5 Land rights and concession

The Agrarian Law recognizes types of rights on land separated into a number of titles. To investors, both domestic and foreign, the following three main rights are used (i) the land cultivation right (Hak Guna Usaha-HGU), (ii) the right of building on land (Hak Guna Bangunan-HGB), and (iii) the right of use on land (Hak Pakai-HP). All these rights authorize the use of land in some ways, and their differences are mainly in the duration, the nature of utilization, and the opportunity to mortgage (use as a collateral asset).

- HGU is the right to use a state-owned land for agro-business purposes such as plantations, fishing, or cattle raising. By law, the title is granted for maximum period of 35 years, but may be extended to 60 years if the land is properly managed. This title of right is given to individual(s) or legal entities domiciled in Indonesia including foreign companies. It can be used as collateral or transferred to a third party with government approval.
- HGB is the right to construct and own buildings on a piece of land that one has purchased. The title is granted for a maximum period of 30 years, which can be extended for a maximum period of 20 years. The HGB title is granted to Indonesian individual(s) and/or legal entities domiciled in Indonesia, including foreign companies, and can also be used as collateral or transferred to a third party.
- HP is the right to use land for any purpose for a certain period. It has no collateral value to the owners and is not transferable.

Foreign investors who obtain mining contracts from the Ministry of Mines and Energy or forest exploitation rights from the Ministry of Forestry could automatically use the land within their concession boundaries for purposes directly related to their business license. In case investors want to use the land for different purposes, special applications should be submitted to the corresponding ministry. These rights have no collateral value to the owner.

3.4.6 Legal aspect of and incentives for foreign investment

Foreign direct investment (FDI) is governed primarily by the Foreign Capital Investment Law No.1 of 1967, as amended by Law No. 11 of 1970. Until today, this law is considered compatible with current needs. As a legal basis, the law is suitable to accommodate various deregulatory policies that have been and will be implemented by the government. In addition to the Law, the FDIs are subject to industrial or sectoral policies applied by related ministries.

A FDI company is in general a joint venture between foreign and Indonesian partners. The partnership may involve legal entities (corporations) or individual(s). A joint venture entity shall take the form of a limited liability company, which is subject to Indonesian Corporate Law, and denoted as PT (perseroan terbatas). There is no requirement on the minimum amount of investment. A foreign company may be established as a direct investment, namely with 100% foreign ownership. It is required that not later than 15 years after commercial operation,

the company start to divest by selling some of its shares to Indonesian individual(s) and business entities through direct placement and or through the stock exchange.

FDI have been significantly boosted by the deregulation package of June 1994. The main elements of the package are as follows:

- Permits 100% foreign ownership of projects throughout Indonesia
- Reduces the minimum equity holding for the Indonesian partner in a joint venture from 20 to 5%.
- Abolishes the previous compulsory requirement that foreign investors gradually divest 51% of equity to Indonesian partners.
- Allows foreign and Indonesian partners to determine changes in the composition of share ownership.
- Abolishes the previous minimum paid in capital requirement and permits investors to determine capital outlay based on commercial viability of projects.
- Sets the validity of foreign investment licenses at 30 years with provision for extension for a further 30 years.
- Opens up to foreign participation a number of strategic sectors previously closed to foreign investors including seaports, telecommunications, civil aviation, railways, and nuclear power.

4. Performance of Indonesian Trade

4.1 Introduction

This chapter presents the performance of Indonesia's international trade. This includes an analysis of major trade indicators such as total imports, exports, trade balance, agricultural imports and exports, agricultural trade balance as well as analysis of trends of specific indicators to assess industry performance and competitiveness.

4.2 General trends in trade

The structure of Indonesia's trade has undergone substantial transformation since the mid 1980s. The decline in oil prices led to a substantial change of the structure of exports from oil to non-oil. Prior to the rapid decline in oil prices, the share of oil exports was more than 82%. The subsequent fall in oil prices caused a negative growth in oil exports of 7% per annum during the 1981-1985 period. During this period manufactured export growth was 12% per annum and this was mostly led by textile and garment exports as well as plywood. By 1985, manufactured exports accounted for 23% of total exports or almost double the share in 1981.

The most rapid growth in non-oil exports occurred in the 1985-90 and 1990-92 periods. According to Stephenson and Pangestu (1996), the initial period reflected the low base and excess capacity which was channeled into exports, weak domestic demand as well as a more conducive climate for exporting. It was driven less by new investment, except for investment in the textile industry to upgrade machinery and increase technological capability. They further argued that the spurt of higher non-oil export growth in 1990-92 was mainly driven by the boom in approved export oriented investments occurring in the 1989-91 period. It was also driven by high plywood export prices and high demand in the early1990s. As a result manufactured exports grew at 26% in that period, and the share of non-oil exports reached almost 70%, while the share of manufactured exports reached 57% of the total exports in 1992.

This rapid export growth rate, however, did not persist. In 1993-95, non-oil export growth slowed down at an average rate of 9.2%. There have been some arguments that this slowdown was attributed to a slowdown in growth of investments, increased competition in world markets, and declining plywood prices. Given the boom in approved investments in the 1994-95 period, part of which was going to export oriented investments, there were expectations that the growth of non-oil and manufactured exports would pick up in 1996 and 1997.

During the 1985-1996 period, despite increasing trade surpluses as shown in Appendix Table 6, the current account deficit climbed up from US$ 1.8 billion in 1985/86 to US$ 8.1 billion in 1996/97, or grew at 11.3% per annum. The higher deficit resulted from an increasing deficit in the balance of service, from $7.9 billion to $14.4 billion during the period. Rising non-oil/gas imports also put additional pressure on the service balance, due to higher costs of insurance and freight paid for these imports. Another important factor responsible for the increase in the service deficit was rising interest payments on foreign debt. The most recent report indicates a declining trade surplus, eroded by rapidly growing import of raw materials and capital goods that outpaced the significant improvement in non-oil as well as oil exports.

Non-oil exports have been the driving force of Indonesia's export growth. The non-oil export value has grown steadily from US$ 6 billion in 1985 to US$ 40 billion in 1996, or at an annual growth rate of 15% during the 1985-96 period. Similarly, non-oil imports increased

significantly from US$ 10 billion in 1985/86 to $ 41.5 billion or at 13% annually. Meanwhile, imports of oil/gas also increased during the period, from US$ 2.5 billion to US$ 4.4 billion, at an average of 6% per annum. The high growth rates in exports and imports during the 1985-96 period reflect the booming of the Indonesian economy.

4.2.1 Aggregate trade balance

The following analysis uses SITC export and import data, in which tradable commodities are classified into ten groups of commodities, namely: foodstuff and live animals (code 0), beverages and tobacco (code 1), raw materials and inedibles (code 2), mineral fuels (code 3), lubricants and related materials (code 4), animal and vegetable oils and fats (code 5), chemicals (code 6), manufactured goods (code 7), machinery and transport equipment (code 8), miscellaneous manufactured articles (code 9), and unspecified commodities and transactions (code 10). Data on export and import values are presented in more detail in Appendix Tables 7-8 and Appendix Tables 9-10, respectively.

During the 1985-96 period, as shown in Table 4.1, the total volume of Indonesia's trade expanded substantially at an average annual rate of 12%, growing from around US$ 29 billion in 1985 to US$ 93 billion in 1996. During that period, the total value of exports increased from US$ 18.5 billion to US$ 49.8 billion at a rate of 10.8% per annum. Meanwhile, total import value grew at a higher annual rate of 13%, from around US$ 10 billion to US$ 42 billion. This higher growth rate of imports as compared to exports has damaged Indonesia's balance of trade.

Table 4.1 Indonesia's exports, imports and balance of trade, 1985-1996 (million US$).

Year	Exports	Imports	Total Trade	Trade balance
1985	18,587	10,259	28,846	8,328
1986	14,805	10,718	25,523	4,087
1987	17,136	12,370	29,506	4,766
1988	19,218	13,249	32,467	5,969
1989	22,159	16,360	38,519	5,799
1990	25,675	21,837	47,512	3,838
1991	29,064	25,869	54,933	3,195
1992	33,967	27,280	61,247	6,687
1993	36,893	28,328	65,221	8,565
1994	40,053	31,984	72,037	8,069
1995	45,418	40,629	86,047	4,789
1996	49,815	42,929	92,744	6,886
Growth (%)	10.8	13.07	11.8	

Source: Central Bureau of Statistics (calculated from Appendix Tables 7 and 9).

The relative importance of the trade sector in the economy is reflected by the ratio of exports and imports to GDP. Interestingly, in spite of increasing government commitment towards an export-oriented economy, there was no significant increase in the ratio of both exports and imports to GDP over the 1985-96 period (see Table 4.2). The ratio of the total exports to GDP increased slightly over the 1985-92 period, from 0.22 to 0.26, but then started to decline and back to the level of 0.22 in 1996. The ratio of imports to GDP exhibited a better trend, rising from 0.12 in 1985 to 0.19 in 1996, and peaking in 1992 at 0.23. These figures are well below those of other East Asian export oriented economies, where the ratios are in excess of 40%. This indicates that the Indonesian economy has not really been "export led" in the way it has in some of East Asian export oriented economies. Accordingly, this may suggest the need for the government to further reform the economy and consistently implement previous deregulation packages.

Table 4.2 Ratio of exports and imports to GDP.

Year	GDP (million $)*	Export/GDP	Import/GDP	Total Trade/GDP	Balance of Trade/GDP
1985	85,838	0.22	0.12	0.34	0.10
1986	62,270	0.24	0.17	0.41	0.07
1987	75,418	0.23	0.16	0.39	0.06
1988	81,811	0.23	0.16	0.40	0.07
1989	92,623	0.24	0.18	0.42	0.06
1990	102,676	0.25	0.21	0.46	0.04
1991	113,896	0.26	0.23	0.48	0.03
1992	125,306	0.27	0.22	0.49	0.05
1993	142,596	0.26	0.20	0.46	0.06
1994	173,342	0.23	0.18	0.42	0.05
1995	196,261	0.23	0.21	0.44	0.02
1996	221,784	0.22	0.19	0.42	0.03

* Calculation based on December official exchange rate.

Despite accelerating its export growth, Indonesia has experienced declining trade surpluses over the 1985-96 period. This was caused mainly by rapidly growing imports of raw material and capital goods that outpaced the significant improvement in non-oil as well as oil exports (Erwidodo and Suryana 1997). It is important to note that the declining trade surplus should not be interpreted negatively, since these imports are expected to yield future improvement in production capacity, and in turn exports, and thus improve the non-oil trade surplus in the near future. As shown in Table 4.3, a similar situation and even worse occurred in other ASEAN members.

Table 4.3 Balance of trade of ASEAN countries (US$ million).

Country	1985	1990	1995
Indonesia			
Imports	10,259	21,837	40,629
Exports	18,587	25,675	45,418
Balance	8,328	3,838	4,789
Malaysia			
Imports	12,602	29,261	77,615
Exports	15,764	29,455	73,715
Balance	3,164	194	-3,900
Philippines			
Imports	5,261	13,042	28,337
Exports	4,544	8,186	17,502
Balance	-717	4,856	-10,835
Singapore			
Imports	26,285	60,770	124,502
Exports	22,813	52,729	118,263
Balance	-3,472	-8,041	-6,239
Thailand			
Imports	9,244	33,379	54,438
Exports	7,122	23,068	45,236
Balance	-2,122	-10,311	-9,202

Source: Central Bureau Statistics 1990, 1993, 1996.

The flattening of export growth in recent years highlights the need for Indonesia to maintain the pace of reform in order to improve economic efficiency and foster internationally competitive industries. The most recent trade reform is an encouraging sign but more is needed to overcome the anti-export bias of the trade regime and stimulate domestic competition. Agricultural and agro-based manufacturing industry could continue to prosper in the future if the government were to accelerate the pace of policy reform and also to reduce the remaining disincentives against these sectors. This would involve not only further reducing manufacturing

protection but also deregulating food processing and the export crop sector. The elimination of NTBs on agricultural raw materials would promote the food and beverage industry.

4.2.2 Direction of aggregate trade

Indonesia's external trade has been heavily biased towards three single countries, namely Japan, the USA, and Singapore, which accounted for more than 49% of total exports and around 40% of imports in 1996 (see Appendix Tables 11-14). However, Indonesia's dependence on these three countries has been declining steadily. Despite the relative importance of the EEC as a group, its individual member countries play comparatively small roles in Indonesia's foreign trade, and their share of both imports and exports remained unchanged during the period 1985-96. Similarly, the share of the countries of Central and Eastern Europe has also been very small, although Indonesia has been attempting to develop these markets for its exports since 1984.

Exports

Appendix Tables 11-12 show in detail the direction of Indonesia's exports. At the aggregate level, as shown in Table 4.4, Japan, USA, and Singapore continued to be the major export markets for Indonesian products. However, the total share of these three countries decreased from around 77% in 1985 to 49% in1996. This indicates of that Indonesia has been successful in diversifying its export markets. In 1985, for example, Japan was the first export market for Indonesian products accounting for 46% but its share then decreased to only 26% in 1996. Similarly, the share of USA decreased from 22% to 14% during this period. On the other hand, the EEC as a group has become a more important export market for Indonesian products. The share of the EEC market increased from only 6% in 1985 to more than 15% in 1996, and ASEAN's market share increased from 11% to 15%.

Imports

At the aggregate level, as shown in Table 4.5, Japan, USA, and Singapore have been the main sources of Indonesia's imports. Together they accounted for 38% to 51% of Indonesia's total imports for the last decade (see Appendix Tables 13-14). The relative importance of Japan and USA as the main sources of Indonesia's imports decreased slightly over the 1985-1996 period, although they remain important in absolute terms. Over the period, the share of Japan decreased from 26% to 20%, in spite of its increased value from US$ 2,644 million to US$ 7,273 million. Similarly, the share of USA decreased from 17% to 12%. Appendix Table 14 shows that the shares of ASEAN and other Asian countries increased slightly from 9 to 11%, and 17 to 21%, respectively.

Table 4.4 Share of Indonesia's exports by country of destination.

Year	Singapore	Japan	USA	Others
1985	0.09	0.46	0.22	0.23
1987	0.08	0.43	0.20	0.29
1989	0.08	0.42	0.16	0.34
1991	0.08	0.37	0.12	0.43
1993	0.09	0.30	0.14	0.47
1995	0.08	0.27	0.14	0.51
1996	0.09	0.26	0.14	0.51

Source: Central Bureau Statistics (calculated).

Table 4.5 Share of Indonesia's imports by country of origin.

Year	Singapore	Japan	USA	Others
1985	0.08	0.26	0.17	0.49
1987	0.08	0.29	0.11	0.52
1989	0.07	0.23	0.14	0.56
1991	0.07	0.24	0.13	0.56
1993	0.06	0.22	0.11	0.61
1995	0.06	0.23	0.12	0.59
1996	0.06	0.20	0.12	0.62

Source: Central Bureau Statistics (calculated).

4.3 Performance of agricultural trade

The aggregate level of exports and imports used in this analysis is based on SITC classification. The figures are calculated by summing SITC numbers 0, 1, 2, and 4. The figures may differ from other corresponding statistics using other commodity classifications. Despite its limitation, the SITC export and import data enable us to simply assess the aggregate trade performance and trade balance.

Table 4.6 shows that over the period 1985-96, Indonesia experienced surpluses in its agricultural trade. Agricultural exports grew at an average rate of 10% per annum, increasing from US$ 3.2 billion in 1985 to US$ 10.6 billion in 1996. Meanwhile, total imports increased at a much faster rate of 15% per annum. As a result, the surplus from agricultural trade has been declining over time.

Table 4.6 Agricultural exports and imports, 1985-1996 (million US$).

Year	Ag-Export	Ag-Import	Total Trade	Trade Balance
1985	3,249	1,342	4,591	1,907
1986	3,481	1,486	4,967	1,995
1987	3,972	1,744	5,716	2,228
1988	5,270	2,058	7,328	3,212
1989	5,446	2,769	8,215	2,677
1990	4,818	2,816	7,634	2,002
1991	5,549	3,347	8,896	2,202
1992	6,075	3,921	9,996	2,154
1993	6,587	3,990	10,577	2,597
1994	8,303	4,872	13,175	3,431
1995	10,197	6,948	17,145	3,249
1996	10,657	7,731	18,388	2,926
Growth (%)	10.3	15.1	12.2	3.6

Source: Central Bureau of Statistics (calculated from Appendix Tables 7 and 9).

Despite its rapid growth rate, agricultural trade remains small compared to both total GDP and agricultural GDP. The ratio of total agricultural exports and imports to GDP remains small and constant over the 1985-92 period, from 0.04 to 0.06 for exports/GDP, and from 0.02 to 0.03 for imports/GDP (Table 4.7). In 1996, as shown in Table 4.8, total agricultural trade accounted for more than 51% of the total agricultural GDP, increasing from 23% in 1985. The share of exports in Ag-GDP increased from only 16% in 1985 to 29% in 1996. Similarly, the share of agricultural imports in Ag-GDP increased from 7% to 21% during that period. Again, this indicates that agricultural development in Indonesia has not really been "export led".

Table 4.7 Ratio of agricultural exports and imports to GDP, 1985-1996.

Year	GDP (million $)	Agricultural Export/GDP	Agricultural Import/GDP	Agricultural Trade/GDP	Ag-trade Balance/GDP
1985	85,838	0.04	0.02	0.05	0.02
1986	62,270	0.06	0.02	0.08	0.03
1987	75,418	0.05	0.02	0.08	0.03
1988	81,811	0.06	0.03	0.09	0.04
1989	92,623	0.06	0.03	0.09	0.03
1990	102,676	0.05	0.03	0.07	0.02
1991	113,896	0.05	0.03	0.08	0.02
1992	125,306	0.05	0.03	0.08	0.02
1993	142,596	0.05	0.03	0.07	0.02
1994	173,342	0.05	0.03	0.08	0.02
1995	196,261	0.05	0.04	0.09	0.02
1996	221,784	0.05	0.03	0.08	0.01

Source: Central Bureau of Statistics (calculated).

Table 4.8 Ratio of agricultural-exports and imports to agricultural-GDP, 1985-1996.

Year	AgGDP (million $)	AgExport/ AgGDP	AgImport/ AgGDP	AgTrade/ AgGDP	Agtrade Balance/AgGDP
1985	19,923	0.16	0.07	0.23	0.10
1986	15,082	0.23	0.10	0.33	0.13
1987	17,593	0.23	0.10	0.32	0.13
1988	19,733	0.27	0.10	0.37	0.16
1989	21,682	0.25	0.13	0.38	0.12
1990	22,125	0.22	0.13	0.35	0.09
1991	22,313	0.25	0.15	0.40	0.10
1992	24,123	0.25	0.16	0.41	0.09
1993	27,839	0.24	0.14	0.38	0.09
1994	29,965	0.28	0.16	0.44	0.11
1995	33,683	0.30	0.21	0.51	0.10
1996	36,148	0.29	0.21	0.51	0.08

Source: Central Bureau of Statistics (calculated).

4.3.1 Trade performance for selected agricultural commodities

Natural rubber, palm oils, coffee, tea, and shrimps are the major sources of foreign exchange earnings for Indonesian agriculture. Data on the volume and value of exports for major agricultural commodities are presented in Appendix Tables 15 and 16, respectively. Both export volume and value increased steadily over the period 1985-96. Cacao, palm oils, shrimps and lobster experienced the highest growth rate compared to other commodities. Meanwhile, the export value of coffee, tea, pepper, and rawhides, grew at a negative annual rate over the 1985-96 period.

Export of natural rubber was somewhat variable during the 1985-1996 period. In 1994/95, however, it increased markedly at 46.6% after being relatively stable in the past three years. World market prices improved due to strengthening demand in industrialized countries, including Japan, in addition to an increase in world prices of natural rubber, especially for the Standard Indonesian Rubber (SIR). Contributing to this were supply bottlenecks in Thailand and Malaysia caused by shortages of manpower for tapping and the long rainy season in some production areas. Indonesia, Malaysia and Thailand now account for 80% of total world rubber production, with Indonesia as the largest producer and the second largest exporter after Malaysia. The three countries are now exploring avenues for cooperation to keep rubber prices favorable and to turn the rubber trade around from a buyer's market to seller's market.

In 1995, after being relatively depressed in the past few years, coffee exports grew at a remarkable rate as a result of a surge in international coffee prices that began in February 1994 and reached a peak at the end of July 1994. As a result, surpluses from coffee increased from US$ 289 million in 1990 to US$ 410.6 million in 1995. Coffee prices were driven up by supply

shortages resulting from crop failures in Central America and Brazil, brought on by frost damage. Also, the 30 members of the Association of Coffee Producing Countries (ACPC) embarked on stock retention to control supply in order to boost prices. In addition world coffee consumption is rising, with particularly high growth in China and the Pacific rim countries.

Exports of palm oil have increased substantially in recent years due to higher prices. Over the 1985-96 period, the total export value of palm oil increased substantially at an average annual growth rate of 18%. International prices of crude palm oil strengthened due to increased demand in China and India. However, exports of crude palm oil faced both internal and external constraints. Domestic difficulties include rising local consumption, which led the government to impose an export tax to ensure adequate supplies of cooking oil for domestic production. Also, the USA and European countries are restricting the use of palm oil due to perceived hazards to human health. Palm oil is quite competitive against the currently favored products on the world market such as soybean oil and sunflower oil. Palm oil has potential to become a mainstay export commodity for Indonesia. With rising investment and expansion of oil palm estates, Indonesia also has potential to become the world's largest producer of crude palm oil.

During 1985/86-1996/97 the value of tea exports fluctuated with a negative growth rate of –1.6% per annum. In 1994/95 the tea export declined further by 7.5% due to prolonged weakness in world tea prices. The low world price of tea was related to excess world supply and declining demand from potential consuming countries, such as Russia, Iraq and Kuwait, since they were still in the process of economic reconstruction. Consequently, the net export of tea declined, from US$ 122 million in 1990 to US$ 59 million in 1995.

The export value of prawn, shrimp and lobster increased steadily at a rate of 13.2% per annum, from only $ 280 million in 1985/86 to $ 1.7 billion in 1996/97. The increased export was primarily brought about by increase in volume despite fluctuating prices of a number of products. The rise in volume was attributable to opening of new markets in Europe, including France, the Netherlands, Germany, and Belgium, in addition to the traditional markets such as Japan and the USA.

Since 1990, Indonesia has been a net exporter of cacao, and it is now ranked as the second largest exporter in the world. Exports of cacao increased from only US$ 100 million in 1990/91 to US$ 277 million in 1996/97, growing at 23.1% per year. This was due to marked increase in export volume of cacao from 105 thousand tons in 1990/1991 to 214 thousand tons in 1996/1997. Cacao has been mainly produced in South and Southeast Sulawesi and West Sumatra. There has been an increasing demand for cacao in the domestic market in line with the rapid growth rates of agro-processing industries. Cacao is used as a raw material for candies, some cosmetic products, snacks, and other foodstuffs.

The important lesson here is that the deteriorating trade balance of agricultural products was mainly attributable to external factors, in particular demand and price fluctuations in world markets. Nevertheless, many believe that internal factors resulting from non-competitive domestic markets and anti-export trade regimes were also responsible for poorer agricultural trade performance in recent years. This suggests the need for Indonesia to maintain the pace of reform in order to stimulate domestic competition, improve economic efficiency and hence foster internationally competitive industries. In line with this, Anderson and Pangestu (1995) argued that Indonesia's agriculture could continue to prosper in the decades ahead if the government were to accelerate the pace of policy reform and in particular to reduce the remaining disincentives against agricultural and rural sectors. This would involve not only further reducing manufacturing protection but also deregulating food processing and the export crop sector.

Wheat, cotton, rice, animal feedstuffs, sugar and honey are the main agricultural import commodities (Appendix Tables 17 and 18). The import value of wheat grew steadily at 14.9% per annum, from US$ 259 million in 1985/86 to US$ 1.1 billion in 1996/97. Import demand for

wheat was mainly driven by the rapid development of food processing industries, and it is expected to increase steadily in the future.

During the 1985-1996 period, imports of cotton increased from US$ 179 million to US$ 980 million, at 14.7% per annum. Cotton fibers as a raw material for the textile industry are largely imported since local production does not meet the needs of the industry. Imports are expected to grow steadily in the future in response to increasing textile production. The textile industries, in particular the modern spinning and weaving industries, have expanded rapidly since the early 1970s. A supporting factor was the rapid increase in domestic and foreign investment due to the rising demand in the domestic market and favorable investment incentives. Since the early 1980s the garment industry has become export-oriented and has contributed significant foreign exchange earnings to the economy.

Since 1994 Indonesia has turned back into the world's leading rice importer. Severe drought in 1994 affecting parts of Java and many of the outer islands led to significant area abandonment and reduced yields on the off-season second crop in these producing regions. The weather problems continued in early 1995. Flooding and unfavorable early growing conditions produced below normal yields. In the end, Indonesia's 1994/95 rice production fell to only 30.3 million tons, down more than 3% from a year earlier. As a result, in 1995, Indonesia's rice import was around 2 million tons, the most ever taken in one year by a single country.

Due to declining government rice stocks, Indonesia began to aggressively seek international sources for large purchases of 25 and 35% broken rice in late 1994. China had also entered the international market in search of large supplies. Indonesia was forced to turn to other sources, principally Thailand. This drove up intermediate- and low-quality prices and raised the floor on Thailand's high-quality prices. As international prices continued to rice in the mid-1995, India (with essentially fixed export prices) was priced into the market representing a viable source of cheap, low-quality rice. Indonesia is estimated to have purchased nearly 1.3 million tons of rice from India in 1995.

Indonesia has also been a big importer for sugar, since domestic sugar production can not meet the ever-increasing demand for sugar. The import value increased significantly from only US$ 4 million in 1985 to US$ 505 million in 1996. The price of imported sugar was lower than that of domestic sugar.

The import value of animal feedstuffs increased at 13.5% per annum, from US$ 86 million in 1985 to US$ 603 million in 1996. This increasing demand for feedstuff is attributable mainly to the rapid development of livestock and poultry industries resulting from an increased demand for livestock and poultry products.

Early in 1991, Indonesia turned its status from a net exporter to a net importer of maize. This was because the increases in domestic production could not meet the accelerating demands for maize (feed corn) because of the fast growing feed and livestock industries. The import value of maize substantially increased from only US$ 1.7 million in 1990 to over US$ 132.8 million in 1996. If there is no technological breakthrough and no special government program coming into implementation, import of maize is projected to increase further in the future.

Imports of other agricultural commodities, such as milk and cream, and soybeans, have also accelerated during the 1985-1996 period. Soybean imports increased from US$ 79.6 million in 1985 to US$ 180 million in 1995, while milk and cream increased from US$ 43.6 million to US$ 152.8 million during this period. These two industries remain heavily protected as the domestic prices of the products are always well below the import parity prices.

4.3.2 Direction of agricultural exports for selected commodities

At the aggregate level, as shown in Table 4.9 and presented in more detail in Appendix Tables 19-21, USA, Japan, the Netherlands, Singapore, and Germany have been the five main countries of destination of Indonesia's agricultural exports. USA alone accounted between 19-27% of the total of Indonesia's agricultural exports for the period 1985-1996. In 1985,

agricultural exports to USA accounted for 24%, increasing to 27% in 1988 but then fluctuated and dropped to 19% in 1994 and increased again to 24% in 1996. In terms of value, however, total agricultural exports to USA increased steadily from only US$ 544 million to US$ 1,100 million or at an average annual growth rate of 6.1% over the period 1985-1996.

Table 4.9 Shares of agricultural export value by country of destination.

Year	USA	Singapore	Japan	Netherlands	Germany	Others	Total
1985	0.24	0.07	0.14	0.11	0.06	0.38	1.00
1986	0.21	0.06	0.15	0.10	0.09	0.39	1.00
1987	0.22	0.08	0.16	0.09	0.06	0.39	1.00
1988	0.27	0.12	0.21	0.07	0.05	0.28	1.00
1989	0.23	0.10	0.20	0.07	0.05	0.34	1.00
1990	0.23	0.10	0.22	0.06	0.07	0.32	1.00
1991	0.21	0.10	0.22	0.06	0.05	0.36	1.00
1992	0.25	0.11	0.22	0.07	0.04	0.30	1.00
1993	0.23	0.08	0.25	0.07	0.04	0.34	1.00
1994	0.19	0.07	0.24	0.07	0.05	0.38	1.00
1995	0.24	0.06	0.23	0.07	0.05	0.36	1.00
1996	0.24	0.05	0.22	0.07	0.05	0.38	1.00

Source: Central Bureau Statistics (calculated).

The position of the USA as the main export market has gradually been replaced by Japan. The share of Japan increased from 14% in 1985 to 22% in 1996, while the export value to Japan increased from US$ 308 million to US$ 1,028 million. In contrast, the share of Singapore slightly declined in the past few years, from 11% in 1992 to 5% in1996. This was also the case for the Netherlands, as its share decreased from 11% to 7% during the 1985-1996 period.

At the aggregate level, the direction of agricultural exports exhibited no significant change over the past decade. The export markets of Indonesia's agricultural products are becoming more concentrated. In 1985, the share of the USA and Japan together accounted for 38% of the country's total agricultural exports, while in 1995 the share increased to 46%. Nevertheless, it is important to note that the direction of trade and the relative importance of each export destination vary between one commodity to another. The following is a brief description of trade direction and export performance of some selected agricultural commodities.

Rubber

Indonesia is ranked as the second largest exporter of rubber in the world. As shown in Appendix Table 21, the main export markets of Indonesian rubber were the USA, Singapore, Japan, and Germany. In 1995, their combined share accounted for more than 67% of the total value of rubber exports. This indicates that rubber markets are relatively concentrated. In 1996, the share of the USA alone was 44%, down slightly compared with its share in 1995, which was 47% of the total value of the rubber export. Although it remains the second largest export destination, the share of Singapore has been continuously declining, from 21% in 1985 to 9% in 1996. In contrast, the combined share of other countries significantly increased from 23% to 35% during the period. This suggests that Indonesia has been successful in diversifying its rubber market and reducing its reliance on a single market.

The total value of Indonesia's rubber exports increased steadily with an average annual growth rate of 3% over the 1985-1996 period. Its value increased from US$ 716 million in 1985 to 1,918 million in 1996, and reached a peak of US$ 1,963 million in 1995. The decreased value of 1996 was mainly due to the long drought and widespread forest fires. This 1996 export value accounted for 26% of the total value of agricultural exports and for 5% of the total value of non-oil exports.

Coffee

The main export markets of Indonesian coffee were the USA, Japan, Germany, Algiers and England. Like rubber, the export markets of coffee remain highly concentrated in these five export destinations. Over the period 1985-1996, the combined share of these five export markets remained high although slightly reduced from 62% in 1985 to 57% in 1996. However, there have been some changes in the relative importance and share between markets. The share of the USA market appears to be fluctuating and decreasing over time. The share declined from 28% in 1985 to 5% in 1991 but then climbed up again to 16% in 1996. England has become an important market for Indonesia since the late eighties. England's market share significantly increased during the period 1985-1996, from only 0.1% to more than 6%. On the contrary, the share of Algiers as an Indonesian export market for coffee dropped from 22% in 1994 to only 2% in 1996.

Tea

The main export markets of Indonesian tea were Pakistan, USA, England, the Netherlands, and Australia (Appendix Table 21). The combined share of these five export markets remained high although variable over the period 1985-1996. Together the share was 53% in 1985, but then dropped to 32% in 1990, and gradually increased to 53% in 1996. Like other agricultural export commodities, the share of individual export markets of Indonesian tea appears to be fluctuating. The share of the Pakistan market appears to be fluctuating and decreasing over time. The share increased from 13% in 1985 to 26% in 1992 but then declined to 21% in 1996. The shares of England and the Netherlands have been relatively constant over the period. On the contrary, the relative importance of Australia as an Indonesian export market for tea tended to decline, from 9% in 1985 to only 5% in 1996.

Although declining in export value, tea remains an important export earner for Indonesia. The declining export of tea was mainly attributable to the excess supply and increased competition in the world market. The total export value of tea has been fluctuating and grew at a negligible annual rate of 0.83% over the 1985-1996 period. Its value increased from US$149 million in 1985 to US$ 181 million in 1990, dropped to only US$ 87 million in 1995 and started to climb up again to US$ 112 million in 1996. The drop in export value in 1995 was caused by a drop in export volume resulting from serious weather problems in 1994. Like its value, the export volume of tea has been fluctuated and varied between country of destination. Although fluctuating, the export volume to Pakistan grew at a positive rate of 6% per annum. Meanwhile, the volume of export to the USA has been going down, at an average annual growth rate of –3% over the period 1985-1996.

Tobacco

Germany, USA, the Netherlands, Belgium, and France were the main export markets for Indonesian tobacco. Over the period 1985-1996, the combined share of these five export markets remained high even though slightly reduced, from 76% in 1985 to 65% in 1996. There have been some changes in the relative importance and share between markets. The share of the German market appears to be decreasing over time. The share dropped from 57% in 1985 to 42% in 1990 and to 28% in 1996. The Netherlands, the USA, Belgium and Luxembourg appear to becoming more important export markets for Indonesian tobacco. The share of the Netherlands market significantly increased during the period 1985-1996, from only 7% to more than 13%, while the share of the USA increased from 10 to 14%. Similarly, the share of Belgium and Luxembourg as export destinations increased from 2% to 8% during the period.

Shrimps

The five major export destinations for shrimp during the period 1985-1995 were Japan, USA, Hong Kong, Singapore and the Netherlands. Compared to other markets, export markets for shrimp have been largely concentrated, although declining for the last decade. In 1985, for example, the share of Japan alone was above 86% of the total exports of shrimp. This share, however, decreased to 64% in 1991 but has constantly increased again to reach 81% in1995. These five export markets accounted for 98% in 1985 and decreased to 92% in 1996.

There have been some changes in the relative importance of individual export markets, besides the existence of some additional markets. The share of the USA market appears to be increasing over time, from only 2% in 1985 to 11% in 1996. The share of other markets increased from 2% to 8% over the same period. Meanwhile, the shares of Singapore, Hong Kong and the Netherlands have fluctuated with decreasing trends. The share of Singapore in 1996 declined to only 1% from its 1985 share of 6%. This has also been the case for the Hong Kong export market.

Shrimps have been one of the major foreign exchange earnings for Indonesia since the mid eighties. The total export value of Indonesia's shrimps (excluding prawn and lobster) increased steadily with an average annual growth rate of 12% over the 1985-1996 period. Its value increased from US$ 203 million in 1985 to 1,008 million in 1996. This was attributed to both increases on export volume and world market prices. The export volume of shrimps tripled for the period 1985-1996, from around 31,000 tons to 97,000 tons. These 1996 export values accounted for 14% of the total value of agricultural exports.

Palm oil

Export markets for Indonesian palm oil are relatively diversified compared to other markets of traditional export commodities. Data strongly confirm that the export market for palm oil has become less concentrated as indicated by the increased shares of other new export markets. The Netherlands, Germany, Pakistan and England were the five major export destinations for Indonesian palm oil over the period 1985-1995 (see Appendix Table 21). In 1985, these markets together accounted for 67%, and eventually decreased to 46% in 1996. The data show that the Netherlands has been the largest importer of palm oil from Indonesia. The domination of the Netherlands, however, has been declining, as its share decreased from 56% in 1985 to only 29% in 1996. This has also been the case for England, Pakistan, Italy and Germany. Looking at the market share in 1996, England and Pakistan are no longer major importers of Indonesian palm oil, as their shares decreased to only 1%. On the other hand, the shares of other markets are increasing. This confirms that Indonesia has been successful in diversifying its export markets for palm oils.

Palm oils have been one of the major foreign exchange earners for Indonesia since the mid eighties. The total export value of palm oils grew at an annual growth rate of 12% over the 1985-1996 period. Its value increased from US$ 356 million in 1985 to US$ 825 million in 1996. This 1996 export value accounted for 11% of the total value of agricultural exports. This was attributed to both increases in export volume and world market prices. The export volume of palm oils grew steadily at an annual rate of 10% over the period 1985-1996, from 518,000 tons to 1,672,000 tons.

4.4 Economic incentives and competitive indicators

In this section, some indicators of competitiveness and economic incentives on both export and import commodities are analyzed. This includes the analysis of price trends and trends in specific price ratios, such as FOB price, CIF price and wholesale prices to world prices. Price data sets of some selected export and import commodities are presented in Appendix Tables 22 and 23.

4.4.1 Major export crops

Tables 4.10 and 4.11 show the ratios of FOB to world prices (FOB/WP) and wholesale price to world price (WSP/WP), respectively, of Indonesia's major agricultural export commodities. The smaller the ratios (much less than one) the more competitive is the respective commodity in the world market. There are a number of factors influencing the degree of commodity competitiveness in the world market. The emergence of new competitive producers and new substitutes, which tends to depress the world market price, will likely reduce a single country's competitiveness of the corresponding commodity. An overvalued exchange rate reduces a country's competitiveness or vice versa. The current devaluation of the rupiah should theoretically increase Indonesia's competitiveness in the world market.

Table 4.10 Ratio of FOB to world prices for major agricultural export commodities, 1987-96.

	Ratio of FOB to World Price				
Year	Rubber	Coffee	Cocoa	Tea	CPO
1987	0.783	0.701	0.815	0.768	0.726
1988	0.851	0.612	0.841	0.755	0.814
1989	0.777	0.492	0.888	0.687	0.596
1990	0.773	0.437	0.832	0.804	0.892
1991	0.786	0.561	0.853	0.706	0.863
1992	0.863	0.662	0.810	0.725	0.876
1993	0.822	0.691	0.811	0.802	0.846
1994	0.758	0.895	0.856	0.622	0.839
1995	0.874	0.754	0.914	0.687	0.910
1996	0.854	0.659	0.887	0.667	0.878

Rubber

Indonesia is the second largest exporter of natural and semi-processed rubber in the world after Thailand. Many experts believe that Indonesia, with its abundant labor and land, could overtake Thailand's position in the near future. More than 90% of total rubber production is exported to more than 60 countries around the world, in particular to the USA.

Over the period of 1987-1995, Indonesia was still a competitive exporter of natural rubber, as indicated by the ratio of the FOB to WP well below one, even though somewhat variable with a decreasing trend. As shown in Table 4.10, the ratio of FOB to WP ranged from 0.77 to 0.87. The increase in the price ratio (the decline of competitiveness) was mainly due to the emergence of lower cost rubber producers, which eventually depressed prices, and continued increase in the cost of rubber production in Indonesia. The existence of synthetic rubber has also depressed prices of natural rubber in the world market.

Coffee

Indonesia is one the major coffee producers and exporters in the world market. Over the period of 1987-1995, the ratio of the FOB to WP ranged from 0.437 to 0.895. This indicates that Indonesia was a very competitive exporter over the period. Up to 1995, Indonesia was the third largest coffee exporter after Brazil and Columbia, with an export share around 10% of the world's total export value. Until today, Indonesian coffee remains competitive in the world market. With abundant land and low-cost of labor, Indonesia is one of the few countries expected to increase production substantially in the year 2000 (World Bank 1993). The current devaluation of the rupiah should theoretically make Indonesia's coffee much more competitive in the world market.

The ratio of FOB/WP increased from 0.43 in 1990 to 0.56 in 1991, and peaked at 0.89 in 1994. The fluctuation in the ratio was mainly attributed to the world price fluctuation resulting from the fluctuation in world coffee production. World coffee prices in real terms dropped significantly in 1991, due mainly to increased world production and exports since the

suspension in July 1989 of the quota system, which was operating under the International Coffee Agreement (ICA). The decline of Robusta prices was greater than that of Arabica. This caused great financial difficulties in many Robusta producing countries such as Cameron, Cote d'Ivoire, and Uganda, as well as Indonesia. The price decline continued in 1992 and depressed remarkably in 1994.

Table 4.11 Ratio of wholesale to world prices for major agricultural export commodities, 1987-96.

	Ratio of Wholesale to World Price				
Year	Rubber	Coffee	Cocoa	Tea	CPO
1987	0.751	0.567	na	0.459	na
1988	0.627	0.458	na	0.433	na
1989	0.562	0.365	na	0.375	na
1990	0.544	0.355	na	0.362	na
1991	0.536	0.383	na	0.381	0.984
1992	0.596	0.460	na	0.414	0.889
1993	0.625	0.592	0.535	0.492	0.806
1994	0.643	0.612	0.568	0.448	0.854
1995	0.660	0.646	0.612	0.512	0.853
1996	0.651	0.694	0.701	0.380	0.925

Tea

The FOB/WP ratio of Indonesian tea was in the range of 0.622-0.804 over the 1987-1995 period, indicating that Indonesia was competitive in the world tea market. The FOB/WP ratio declined from 0.804 in 1990 to 0.667 in 1995, indicating that the competitiveness of Indonesian tea in the world market was increasing over the period.

Cocoa

Even though a relatively new player in the world market of cocoa beans, Indonesia is a competitive player. Up to 1995, Indonesia's main competitors in the world market of cocoa beans were Cote d'Ivoire, Ghana, Brazil, and Malaysia. The export share of Indonesia in the world export market increased significantly over the 1985-1995 period, from only 2% in 1985 to more than 10% in 1995, replacing the position of Malaysia and Brazil.

Over 1987-1995, the ratio of Indonesia's FOB to WP for cocoa beans was always less than one, indicating competitiveness of Indonesian cocoa in the world market. The ratios were relatively stable, reached as low as 0.810 in 1992 and as high as 0.914 in 1994. Given the abundant land and labor resources, Indonesia is expected to be one of the largest exporters for cocoa beans in the year 2000. While the production of cocoa beans in Brazil, Cameroon, Cote d'Ivoire, and Malaysia is projected to decline, the production in Indonesia is projected to increase significantly (World Bank 1993). The coming to maturity of new plantings in Indonesia (planted in the early 1980s) has offset the adverse low price and weather effects on production.

In 1986-1993, world cocoa production exceeded consumption, resulting in a substantial drop of cocoa bean prices (World Bank 1993). In more detail, the reasons for the continuous fall in prices were: (i) slow supply response to the price decline due to the high level of new plantings during the early 1980s that offset poor crop maintenance due to low prices, (ii) while cocoa consumption in the USA and Western Europe increased more quickly due to the low prices, cocoa consumption in the former Soviet Union (FSU) dramatically declined, and (iii) cocoa production in absolute terms was higher than consumption. The price declines were recorded up to 1995.

Palm oil

Indonesia is recorded as the second largest producer and exporter of palm oil after Malaysia. In 1995, the production of palm oil in Malaysia and Indonesia was 2.13 and 1.2 million tons, respectively. The production of these two countries in the year 2000, according at Susila et al. (1995), is estimated at around 8.8 and 6.9 million tons, respectively. Meanwhile the World Bank (1993) projected the production at around 9.6 million tons for Malaysia, and 7.1 million tons for Indonesia in the year of 2000.

Up to the year 2000, Malaysia is projected to maintain its position as the largest palm oil exporter (Susila et al. 1995). This position, however, will likely be replaced by Indonesia in the mid-2000s considering that the export growth rate of Malaysia (3.2%) is lower than that of Indonesia (7.9%). Although they are competitors, they have different main export markets. The main export market for Indonesian palm oil is the European Union, while Malaysia's export market is the USA.

Over the 1987-1995 period, the FOB/WP ratio of Indonesian palm oil ranged from 0.622 to 0.804, indicating that Indonesia was competitive in the world market of palm oil. Many experts believe that low cost of production, due to the relatively low cost of labor, can make Indonesia's palm oil more competitive in the world market. Moreover, with its abundant land, Indonesia can easily overtake Malaysia to become the world's largest producer and exporter of palm oil in the near future.

4.4.2 Major import crops

The ratios of wholesale prices to CIFs (WSP/CIF) and the ratios of wholesale prices to world prices (WSP/WP) of Indonesia's major agricultural import commodities are presented in Table 4.12 and Table 4.13, respectively. These two ratios are in general greater than one, indicating that Indonesia has no competitive advantage in producing the respective commodities. The ratios also indicate that domestic producers are protected at the expense of consumers. Indonesian consumers must pay for the commodities at higher prices than those which would prevail in the absence of protection. The larger the WSP/WP ratio (much higher than one) the less competitive is the respective commodity in the world market. Similarly, the larger the WSP/CIF ratio, the larger the economic incentives enjoyed by domestic producers or the larger the economic cost born by domestic consumer.

As previously described, there are a number of factors influencing the degree of commodity competitiveness in the world market. The emergence of new competitive producers and new substitutes, which tend to depress the world market price, will likely reduce a single country's competitiveness of the corresponding commodity. An overvalued exchange rate reduces a country's competitiveness and vice versa.

For rice the WSP/WP ratio increased from 0.925 for the period 1987-1991 to 1.215 for the 1992-1995 period. This indicates that there is increasing inefficiency in the economy by producing rice, of which the cost of efficiency is paid by the rice consumer. Similarly, the WSP/CIF ratio was also greater than one, indicating that consumers paid a higher price than that which would prevail in the absence of market distortion.

Table 4.12 Ratio of CIF to world price of agricultural import commodities.

Year	Ratio of CIF to World Price			
	Rice	Maize	Soybeans	Sugar
1987	0.937	1.612	1.877	1.735
1988	0.900	1.129	1.323	1.176
1989	0.881	1.242	1.471	0.987
1990	0.971	1.237	1.867	1.069
1991	0.959	1.400	1.892	1.458
1992	1.135	1.203	1.774	2.565
1993	1.207	1.492	1.874	2.346
1994	1.160	1.553	1.931	1.887
1995	1.275	1.449	1.666	2.167
1996	1.196	1.235	1.490	2.361

Table 4.13 Ratio of wholesale to world price of agricultural import commodities.

Year	Ratio of Wholesale to CIF Price			
	Rice	Maize	Soybeans	Sugar
1987	0.962	1.094	1.843	1.149
1988	1.027	0.915	1.359	0.900
1989	0.996	0.973	1.272	0.812
1990	0.978	0.719	1.701	0.659
1991	0.972	1.055	1.663	0.787
1992	1.080	0.841	1.559	1.488
1993	0.960	1.104	1.758	1.586
1994	1.247	1.220	1.599	1.362
1995	1.436	0.810	1.455	1.426
1996	1.166	1.038	1.588	1.632

The ratios of WSP/WP for maize, soybeans and sugar also indicate that Indonesia has no competitive advantage in producing these commodities. The ratios were well above one for most of the years, and for sugar in particular exceeded two in some years. Meanwhile, the ratios of WSP/CIF for maize fluctuated, less than one for the 1988-1990 period and greater than one for some years during the 1987-1995 period. In general, the WSP/CIF ratio for maize is close to one, indicating that the level of economic inefficiency for producing maize is small. The WSP/CIF ratio for sugar increased from 0.785 for the period 1987-1991 to 1.425 for the 1992-1995 period. This indicates that during 1987-1991 sugar consumers were subsidized since they paid a lower price of sugar than that which would have prevailed in a free trade regime. Looking at both WSP/WP and WSP/CIF ratios for soybeans, we can conclude that Indonesia is not competitive in soybean production. Over the period 1987-1995, domestic consumers paid soybean prices 27-84% higher than those that would have prevailed in the absence of protection.

5. The Impact of Trade Liberalization

5.1 Introduction

The extent and impact of trade liberalization remains debatable. Those referring to standard economic theory believe that trade liberalization will bring substantial benefits for all participating countries. The possibilities for expanded trade offered by the multilateral commitment to liberalization are extremely important for all countries to increase export earnings and keep the rapid growth of their economy. On the other side, those who are not totally convinced of the benefits of trade liberalization believe that trade liberalization can potentially undermine national goals, since the total adjustment costs in the short run can be much higher than the potential benefits from trade liberalization.

Not all industries, producers and consumers will stand to gain equally from liberalization, and in some cases there may be intersectoral shifts of resources for output, factor use and trade flows which will be of primary concern within the economy. This may have important implications for internal income distribution in Indonesia, particularly between the agricultural and manufacturing sectors and between producer and consumer, which may need to be addressed in order to ensure that the overall benefits obtained in the form of increased welfare may be shared more equally across all participants in the economy.

The completion of the Uruguay Round was a major turning point for the world trading system and a milestone for developing countries in particular. As a group, developing countries have shown much higher growth rates of GDP, trade and employment than developed countries in recent years, and they have become increasingly important markets for developed countries and for each other. There has also been significant change in attitude towards trade and investment in many developing countries, with the success of a number of outward oriented economies in East Asia leading to much greater interest in trade liberalization and export expansion.

In earlier rounds of multilateral trade negotiations, developing countries focused most of their attention on obtaining preferential access to developed country markets. Few of them participated actively in the core business of the negotiations, namely the exchange of market access concessions. In the last Uruguay Round negotiation, however, many developing countries were very active participants both individually and in coalitions with developed countries. They made important market access offers in the conventional area of reducing tariff protection on manufactures trade and in areas such as trade in services and trade in agricultural products that were new to the trade liberalising process. Many developing countries, including Indonesia, had undertaken substantial unilateral trade liberalization after the mid-1980s, and their commitments at the end of the Round allowed them to lock in at least part of their gains from this liberalization.

This chapter analyzes of the effects of trade liberalization following the Uruguay Round on Indonesia's trade performance in general and on agriculture in particular. The direct effects of the Uruguay Round trade liberalization on enhancing market access and increasing market security are presented in the first section, followed by a literature review on the potential effects of the Uruguay Round trade liberalization on economic and sectoral growth as well as on national welfare of the member countries. In addition, a more detailed review of the impacts of trade liberalization on Indonesia's agriculture is also presented.

5.2 Enhanced market access for Indonesian exports

Prior to the Round, the multilateral trading rules for agriculture were largely ineffective, with a plethora of non-tariff barriers being used to provide high and variable rates of protection, both in developed and developing countries. Export subsidies were a particular source of discord, with export subsidies by the EU and USA depressing and destabilizing world prices. Farmers in developing countries have been adversely affected by depressed and highly variable world prices and the disposal of marketable surpluses by developed countries.

The Uruguay Round liberalization will expand access for Indonesia's exporters to major export markets. Indonesia's major export markets are mainly in the industrialized countries. The USA, The EU and Japan together accounted for more than 50% of Indonesia's total exports in 1995. These countries are also the major import suppliers of Indonesia, providing again more than half of the total imports. In terms of developing markets, the largest single outlets for Indonesia's exports are Singapore, Hong Kong and South Korea.

5.2.1 Tariff and non-tariff reduction

The Uruguay Round agreement will result in substantial tariff reduction. Considerable emphasis in the round was also placed on the removal of non-tariff barriers and much was accomplished. The tariff reduction among the major export outlets will provide enhanced market access for Indonesia's exporters. Global tariff barriers on industrial products of export interest to Indonesia will be reduced by around 42%. Tariffs in industrial countries will decline to an average of around 4% (Stephenson and Pangestu 1996). As stated in the Uruguay Round agreement, tariff reductions are to be implemented in equal annual installments by developed countries over a period of six years, and by developing countries over a period of ten years, beginning in January 1995. Table 5.1 shows the tariff levels pre- and post-UR which will face Indonesian exporters of agricultural and industrial products in three major export markets. The simple average tariffs for all products (except petroleum) will fall to 4.4% in Japan, 6.0% in the European Union, and 6.5% in the United States.

Table 5.1 Tariffs facing Indonesian exporters in major industrial markets before and after the Uruguay Round liberalization.

	Agricultural Products			Industrial Products			All Products*		
	Pre-UR	Post UR	% Red.	Pre-UR	Post UR	% Red.	Pre-UR	Post UR	% Red.
Japan Simple Avg.	11.4	7.9	-30.6	6.9	3.6	-47.7	7.8	4.4	-43.0
Weighted Avg.							4.4	1.5	-66.4
USA Simple Avg.	8.8	6.4	-28.3	8.8	6.5	-26.8	8.8	6.5	-27.0
Weighted Avg.							7.2	4.8	-32.6
E.U Simple Avg.	12.2	8.2	-33.1	8.1	5.6	-31.5	8.7	6.0	-31.9
Weighted Avg.							8.4	7.6	-10.0
Canada Simple Avg.	2.4	1.5	-39.5	16.8	11.0	-34.6	14.9	9.7	-34.7
Weighted Avg.							7.9	5.1	-35.9

* Excluding petroleum.
Source: Trade Policy Review, Indonesia, Volume II.

Many of Indonesia's most important export products will face larger than average tariff cuts in the major industrial export markets (Table 5.2). The largest cuts apply to wood, pulp, paper and furniture item (69%), mineral products and precious metals (59%), oil seeds, fats and oils (40%), and coffee, tea, cocoa, and sugar (34%). Export earnings from the items in these groups comprise between 21 to 50% of the total export earnings. Substantive tariff cuts will also apply to certain export items such as fruits and vegetables (36%), spices (35%), grains (39%), and other agricultural products (48%) (Stephenson and Erwidodo 1995). As shown in

Table 5.2, less than average tariff cuts will apply to other products of export interest to Indonesia, namely leather, rubber and travel goods (18%), textiles and clothing (22%), and fish and fish products (26%).

Table 5.2 UR tariff reductions on products of major export interest to Indonesia.

Product Group	% Tariff Reduction		
	Developed Countries	North America	Western Europe
Greater Than Average Reduction			
Wood, pulp, paper, furniture	69	76	67
Metal	59	63	35
Mineral products, precious metals and stones	52	31	22
Coffee, tea, cocoa, sugar etc.	34	35	29
Oil seeds, fats, and oils	40	43	34
Less Than Average Reduction			
Textiles and clothing	22	15	20
Fish and fish products	26	19	18
Leather, rubber, footwear, and travel goods	18	11	23

Source: Adopted from Stephenson and Pangestu (1996).

As shown in Table 5.3, a substantial proportion of Indonesia's exports will enter duty free to their major markets following the Uruguay Round. More than three-quarters of Indonesia's exports to Japan, and nearly half of exports to the United States and European Union will be duty free. This is a substantial increase in duty-free access to major markets as compared with the situation prior the Uruguay Round.

Indonesia will also benefit from various aspects of agricultural trade liberalization. Improved market access in this area will involve not just reductions in tariffs but the elimination of quantitative restrictions. The comprehensive binding of tariffs on agricultural items is the beginning of GATT discipline and liberalization in a sector which has been highly protected for many years.

Table 5.3 Indonesian exports subject to tariffs less than 10% in major industrial markets pre- and post- Uruguay Round liberalization (% of exports by tariff rate).

	Pre-UR				Post-UR			
Country	Duty Free	1-5%	6-10%	Total (%)	Duty Free	1-5%	6-10%	Total (%)
USA	42.1	6.4	22.7	71.2	47.0	6.2	19.2	72.4
Japan	20.6	28.0	4.1	52.7	76.5	11.0	12.0	99.5
EU	28.2	15.8	34.0	78.0	40.3	12.1	23.2	75.6
Canada	46.8	0.6	25.7	73.1	50.3	1.3	27.1	78.7

Source: Adopted from Stephenson and Pangestu (1996).

5.2.2 Greater security of market access

In addition to tariff reduction, the Uruguay Round has resulted in greater security of market access through an expanded number of tariff bindings. Tariff bindings, which amount to commitments to the GATT not to raise tariff levels above a certain percentage level, are a basic cornerstone of the obligations of the multilateral trading system, and they provide for security of market access for all agreed trade liberalization.

Appendix Table 25 shows the increase in coverage of tariff bindings for industrial and for agricultural products by both developed and developing countries following the UR. For developed counties, tariff bindings will cover 99 and 100% of trade in industrial and agricultural items, respectively. For developing countries, the corresponding percentages are 59 and 100%. The guarantee that tariff bindings provide for market access is important. Industrial countries have bound their tariffs at actually applied levels so that the bound tariff levels

following the implementation of the Uruguay Round will be those actually in effect after the agreed tariff reduction is implemented (Stephenson and Pangestu 1996).

Besides increasing market access, the Uruguay Round has achieved major improvements in the scope and discipline of multilateral trade rules, such as:

- An improved safeguard system for Article XIX or "escape clause" action contained in the agreement on safeguards.
- Institutionalized monitoring of GATT members' trade policies and practices through the Trade Policy Review Mechanism (TPRM); under TPRM the trade policies of developed countries are reviewed every two years, while other GATT members are reviewed at four or six-year intervals.
- Improved discipline concerning export and domestic subsidy practices affecting trade, as contained in the agreement on Subsidies and Countervailing Measures.
- Strengthened and binding dispute settlement procedures as contained in the Uruguay Round Integrated Dispute Settlement Procedures.

5.3 Estimated impacts of the Uruguay Round trade liberalization

Several studies have examined the pattern of world agricultural trade prior to the Uruguay Round, pointing out the distortions in trade flows created by protective agricultural policies and the potential gains from removal of these restrictions. A number of quantitative analyses were carried out prior to the Uruguay Round which attempted to measure the degree to which farm policies, particularly in the developed world, were responsible for the high costs of agricultural products and deterioration of the food trade balance of developing countries. The models analyze the impact of domestic pricing policies for agriculture on trade flows, output and welfare for selected countries or groups of countries. It was estimated in 1990 that liberalization of agriculture would offer the world a potential welfare increase of well over $200 billion a year in the form of savings to government and food purchasers. This order of magnitude comes from the OECD report (1989) which estimates the total transfers associated with current agricultural policies in OECD countries alone to be valued at $270 billion in 1988.

Most studies have employed multiple commodity trade models to examine this question, some using a partial equilibrium approach and others a general equilibrium approach. The models estimated the change in world food prices following the removal of interventions to agricultural trade and output and its impact on other variables. As price is the essential factor influencing agricultural production and consumption, it therefore provides a rough proxy for the welfare and trade effects of liberalization. All of the studies show increases in the prices of meat, dairy products, sugar and food grains. Some of the disparity in the magnitude of price changes shown in the table can be accounted for by the different base year chosen and by the differing assumptions made regarding the initial and final levels of protection. The price effects obtained by the general equilibrium models are closer than those of the partial models, showing a price response of around 15 to 18% for wheat, 8 to 11% for grains and 10 to 18% for meat (mainly on the assumption of full liberalization of protective policies). Among the commodities listed in this table, changes in food grain prices would seem to be the most politically sensitive product area, given the importance of food grains in nutrition.

The general consensus of the pre-Uruguay Round studies and the modeling work they contain is that following trade liberalization commodity prices will be higher than they would have been without liberalization. This will mean that countries that are net exporters of these commodities will gain from liberalization while countries that are net importers may lose. Addressing the question of possible loss from trade liberalization due to these upward price changes, Anderson and Tyers (1990) point out that developing countries may in fact be able to gain from agricultural liberalization if they reform their domestic policies simultaneously and

also act to redistribute income domestically between consumers and producers who gain from the higher commodity prices.

Three factors should serve to attenuate the price increases resulting from agricultural reform (Goldin and Knudsen 1990). The first one is the introduction of more rapid technical change, which would accelerate productivity gains, so that the price rises would be reduced by this endogenous technological change. Secondly, simultaneous liberalization of agricultural policies by developing countries will serve to dampen these price rises, especially when indirect effects as well as the direct effects of protection are taken into account. Developing countries can both reduce any adverse price effects and enhance the benefits of liberalization by industrial countries if they simultaneously reform their agricultural policies. Lastly, the estimates for increased prices of agricultural commodities resulting from trade liberalization are overstated because agricultural reform will in fact be a gradual process, with the general equilibrium effects of movements of resources between sectors creating other economic opportunities and dampening the overall adverse effects.

5.3.1 Estimated welfare effects of Uruguay Round liberalization

The Uruguay Round agreement will result in significant increases in world income, which will be widely distributed among developed and developing countries. Real wage impacts are generally expected to be positive, particularly in developing countries. Harrison et al. (1995) provided a detailed disaggregation of the effects of the Uruguay Round on real incomes and on real wages in a large number of regions. As shown in Table 5.4, the large absolute gains for developed countries are generally a rather small share of GDP, whereas for the developing countries undertaking substantial liberalization the benefits account for a much larger share of GDP. The results for each region depend upon a number of factors, including the efficiency gains from each country's liberalization as well as terms of trade effects.

The largest gains accrue to East Asian WTO members such as Indonesia, Malaysia, the Republic of Korea, and Thailand. They committed themselves to implement relatively progressive liberalization in both agriculture and manufactures. Substantial gains are coming from the competitive textile and clothing industries resulting from the abolition of the Multi-Fibre Agreement (MFA). Since these countries are expanding their production and export of labour intensive products, the demand for labour grows strongly and real wages increase significantly. The South Asia region is also expected to enjoy substantial benefits for much the same reasons as apply to the East Asian members. The estimated loss to Sub-Saharan Africa reflects a number of factors, including the lack of liberalization in this region, increases in world prices for some foods, and increases in the prices of imported textiles and garments.

Several previous studies indicate that most of the gains from trade liberalization arise as a consequence of a country's own liberalization. In particular, the efficiency gains, which result from market opening, are a benefit which accrues directly to the country undertaking trade liberalization. Liberalizing countries may also gain from greater exploitation of scale economies, from increases in the range of goods available to their producers and consumers, and from more rapid transfer of technology. There may be benefits to the country's trading partners if its import expansion is large enough to improve the exporter's terms of trade.

A unilateral trade liberalization can increase its real income in a number of ways including by allowing consumers to purchase their needs from the most efficient source, by scaling back production of goods which are not efficiently produced domestically, increasing production of goods which are most efficiently produced at home and by increasing the volume of trade on which remaining trade taxes are collected (Martin and Winters 1996). Further gains may be achieved by greater exploitation of scale economies in production, and from improvements in the range and quality of specialized products available to producers and consumers. In addition, countries may gain from liberalization by their trading partners, particularly if this increases the demand for their exports, and hence their terms of trade.

Table 5.4 Welfare and real income gains from the Uruguay Round liberalization.

Region/Country	Welfare Gains (billion $ of 1992)	Welfare Gains (% of GDP)	Real Wages (%)
Australia	3.26	1.10	1.2
New Zealand	1.43	3.62	2.8
Canada	2.61	0.46	0.3
USA	26.68	0.45	0.4
Japan	22.73	0.64	0.9
Republic of Korea	7.45	2.50	6.1
EU	49.93	0.74	0
Indonesia	2.61	2.12	6.1
Malaysia	5.03	8.78	9.0
Philippines	2.38	4.35	3.4
Singapore	0.73	1.70	6.8
Thailand	12.63	10.93	8.8
China/Hong Kong	1.99	0.27	1.0
Argentina	2.35	1.01	0.7
Brazil	4.27	1.12	0.8
Mexico	2.29	0.67	0.4
Other Latin America	4.70	1.72	1.1
Sub-Saharan Africa	-0.69	-0.40	0.1
Middle East and North Africa	1.54	0.26	-0.2
Economies in transition	1.16	0.14	-0.1
South Asia	6.74	2.03	2.6
Rest of the World	8.81	0.73	na
World	170.63	0.74	na

Source: Harrison et al. 1995.

5.3.2 Estimated terms of trade effect of agricultural trade liberalization

A major achievement of the Uruguay Round was the agreement to convert virtually all agricultural non-tariff barriers into tariffs subject to agreed maximum rates (so-called tariff bindings). This important advance provides transparency and stability in protection rates which were previously highly volatile. In some cases, tariff bindings were set below the applied rates of protection, and hence will require tariff reduction. Unfortunately, many others were set well above the previously applied tariff equivalents (Ingco 1995).

A particular concern raised by developing countries was the possibility of adverse terms of trade effects resulting from agricultural trade liberalization. It is obvious that the enormous agricultural protection provided by many developed countries was depressing world prices of many agricultural products both by protecting the domestic market from importing and by generating surpluses to be disposed of on the world markets with the help of export subsidies. Reductions in domestic supports and subsidies will benefit countries which reduce their own distortion and those which are net exporters of the products whose world prices rise but may harm net importers of goods whose prices rise.

The very limited degree of agricultural liberalization under the Uruguay Round, as documented by Ingco (1995), has one fortunate side effect. It implies that the adverse terms of trade effects imposed by the Uruguay Round liberalization are much smaller than previously expected. Goldin and van der Mensbrugghe (1995) concluded that it would cause the world prices of most agricultural products to rise by less than 2%. It is worth noting that the changes of terms of trade are inherently a zero sum game, while efficiency gains are a positive sum game where all countries can potentially gain.

5.4 Estimated impact of Uruguay Round on Indonesia's agriculture

Several studies, mostly using the computable general equilibrium (CGE) model, consistently show that Uruguay Round trade liberalization is expected to have a very strong and

positive impact on the Indonesian economy and that Indonesia will stand to gain considerably in terms of stimulus to both its trade and income (Stephenson and Erwidodo 1995; Lewis and Robinson 1995; Anderson and Pangestu 1995; Erwidodo and Feridhanusetyawan 1997; Feridhanusetyawan 1998). The results also make it clear that if Indonesia does not pursue trade deregulation along the lines of its trading partners, then not only will it suffer a loss of export competitiveness, but it will actually experience a decline in net social welfare.

Indonesia can expect to do very well in a liberalized and freer world market, the more it speeds the opening of its own economy during and following the implementation period of the Uruguay Round agreement. Agricultural growth may slow marginally, however, unless additional growth-enhancing policies are adopted. But even if farm output growth is slowed slightly as a consequence of the round, income growth of rural households is likely to accelerate as new job opportunities emerge with the expansion of labor intensive firms as more government investments in infrastructure are shifted outside urban areas.

The impacts of Uruguay Round trade liberalization on Indonesia's agriculture have been evaluated by Stephenson and Erwidodo (1995) using the GTAP model (Hertel and Tsigas 1994), a computable general equilibrium model of the world economy. Three aspects of the Uruguay Round liberalization package were introduced into the GTAP model in the form of policy shocks, namely (i) the improvement of market access for goods resulting from tariff reductions, (ii) the elimination of quantitative restrictions on industrial products particularly on textiles and clothing through the phase-out of the MFA, and (iii) liberalization in the area of agriculture including reduction in tariffs, domestic supports and export subsidies. The simulations were carried out using three scenarios, namely.

- Scenario 1: Uruguay Round trade liberalization, but Indonesia not participating,
- Scenario 2: Uruguay Round trade liberalization, Indonesia fully participating, and
- Scenario 3: scenario 2 plus 1% increase in productive efficiency across industries in Indonesia.

Under Scenario 1 the simulation is conducted on the assumption that all other countries carry out the agreed Uruguay Round liberalization, but Indonesia does not participate. In other words, there is no trade deregulation by Indonesia. Scenario 1 is relevant to the present situation, because even though Indonesia has already ratified the Uruguay Round Agreement, the market access offer which it submitted to the GATT is centered on across-the-board tariff binding at 40%. As this bound rate is double that of present applied tariff rates on average, Indonesia's Uruguay Round commitments (in the tariff area) will therefore not oblige the government to carry out tariff reduction. Under Scenario 2 Indonesia, along with all other members of the World Trade Organization, participate in the agreed Uruguay Round trade liberalization. Scenario 3 is based on scenario 2 with the addition of technical progress, through modeling an additional 1% increase in neutral output augmenting technical change. Scenario 3 aims to show the importance of increasing efficiency in order to maximize the gains from trade liberalization.

5.4.1 Macroeconomic impacts of Uruguay Round liberalization.

Table 5.5 presents aggregate and macroeconomic impacts of the simulation for the scenarios described above. The results indicate that trade reform, along with the effort to increase technical efficiency, is necessary for Indonesia to enjoy the largest benefits from the Uruguay Round. The results also confirm the notion that the more Indonesia deregulates its domestic economy, the larger the gain it can capture from global trade liberalization. In other words, the increase in Indonesia's exports and income will not come about at the expense of its trading partners. The extent to which Indonesia will benefit, as will others, will depend not only on the reduction of barriers in the markets of Indonesia's trading partners but also on the efforts to open Indonesia's own market.

The simulation results from Scenario 2 show that Indonesia's export value (volume) could increase by 10.4% (12.38%) more than it would otherwise have done, following complete implementation of the trade liberalization agreed in the Uruguay Round. The UR is estimated to increase household and factor incomes by 2.0% and 4.2%, respectively. In terms of increased income, implementation of Uruguay Round commitments is estimated to result in a net social benefit, as measured by the equivalent variation (EV), of around $ 782 million. The "equivalent variation" or EV measures the total change in welfare to society at large. It is a net (summation) of changes in producer, consumer and government surpluses following the introduction of a policy shock (such as Uruguay Round trade liberalization). This represents 0.75% of the GDP in 1992. There will be a negligible change in the terms of trade (slight deterioration of 0.4%).

Table 5.5 Macroeconomic impact of Uruguay Round (% change).

	Scenario 1	Scenario 2	Scenario 3
Change in Exports			
value	-1.17	10.37	12.87
volume	1.42	12.38	15.48
Change in Imports			
value	3.53	7.12	6.92
volume	0.90	11.72	11.48
Change in Terms of Trade	2.67	0.41	1.29
Change in GDP	2.15	3.91	5.20
Change in Household Income	3.38	2.05	3.48
Change in Factor Income	2.11	4.20	5.74
Net Social Benefits (million US$)	1,939	782	2,828

Source: Stepenson and Erwidodo 1995.

These positive macroeconomic impacts should contribute to the improvement of the Indonesian balance of trade and current accounts. It is interesting to note that the net gain is more than three times larger under Scenario 3 (around $ 2,828 million) if, in addition to deregulating its trade policy, the government also promotes increased productive efficiency in all sectors of the economy. Consumers are thus major gainers in the Scenarios 2 and 3 through the increase in household income and wages despite increased domestic prices for all products in the sector examined.

5.4.2 Sectoral impacts of Uruguay Round liberalization

Despite the overall welfare gains (positive equivalent variation of $ 782 million as discussed in the preceding section), most of the sectors would be expected to exhibit negative production (output) growth, with the exception of forestry and manufacturing, as resources shift from relatively less efficient to relatively more efficient sectors. Thus, efforts to increase efficiency would be essential if the avoidance of negative impacts of trade liberalization is a primary concern. The domestic price of all commodities is shown to increase, ranging from 1.4 to 3.9%.

In term of exports, trade liberalization under this scenario would also result in negative export growth for some sectors. The major exceptions to this picture are manufactured products and rice sectors, both of which realize substantial export increases. These positive changes in export value will offset the negative export change of other products. This will especially be so as the manufacturing sector now constitutes more than half of Indonesia's exports.

The simulation results obtained in this analysis are conservative estimates of potential Uruguay Round benefits, since they do not take into account the dynamic gains which trade liberalization may generate. Strong linkages exist between trade and investment, and in turn between investment and growth. Trade liberalization would reinforce these linkages, increasing productivity and stimulating investment and economic growth. Studies by GATT economists have estimated that the dynamic gains from the Uruguay Round can be at least three times those

of the static gains as shown by this analysis. Moreover, the quantitative impact of the UR over time will be larger as well, due to the qualitative improvement it will impart to the international trading system.

5.4.3 Impact of Uruguay Round on Indonesia's export markets

Uruguay Round trade liberalization will substantially lower barriers to trade on the part of all participating countries and will therefore change the pattern of world trade. The Uruguay Round results will stimulate a more efficient use of resources worldwide, based on comparative cost advantage. The results of the Round are expected to provide Indonesia with the opportunity to not only benefit from demand expansion for its products in the world market, but also to achieve greater efficiency in domestic production and more rapid economic growth.

The simulation results show that under Scenario 2, China, the EU, North America and Latin America are potential export markets for Indonesian rice, indicated by large (positive) percentage changes in rice exports to these regions (although, this large percentage must be interpreted with caution, coming on top of a very small base).

The results also show that Indonesia could expand exports of other agricultural products such as coffee, palm oil, rubber and other estate/industrial crops to the European Union, Sub-Saharan Africa and Australia/New Zealand. Exports of livestock products are also estimated to increase, especially to the European Union and the rest of world (EFTA, Eastern Europe). However, Indonesia's exports of forestry, fishery and agricultural processed products are shown to decline to all export destinations. A decline in the export of forest products to Japan could have a considerable impact on foreign exchange earnings, since Japan is currently the major export market for forest products. If Indonesia's Uruguay Round commitments had also covered the removal of high export taxes on logs and sawn logs, then the impact on its exports of these products might have shown quite a different pattern. However, export taxes have never been covered by the GATT rounds of multilateral trade negotiations.

The simulation results provide valuable information on possible changes in Indonesian exports resulting from the Uruguay Round. They clearly indicate that restructuring of agricultural sectors, particularly agro-processing, will be required, though government efforts and policies towards achieving greater efficiency in this sector (and overall) will be important, not only to reduce the impact of losses but more importantly, to enhance the opportunities for increasing the gains from trade liberalization.

It is worth noting that the dynamic effects arising from Uruguay Round trade liberalization should not be omitted. This is to say the results coming from comparative static CGE analysis need to be interpreted cautiously. The simulation results obtained from such approaches do not take into account the dynamic gains which trade liberalization may generate. Strong linkages exist between trade and investment, and in turn between investment and growth. Trade liberalization would reinforce these linkages, increasing productivity and stimulating investment. Francois et al. (1995) have show that the dynamic gains from the Uruguay Round trade liberalization can be at least three times those of the static gains shown in comparative static analysis. Moreover, the quantitative impact of the UR over time will be larger, due to the qualitative improvement it will impart to the international trading system.

5.5 Estimated impact of APEC and AFTA trade liberalization

Previous studies also indicate that countries which participate in regional trade liberalization such as APEC and AFTA will get additional benefit from the liberalization, in addition to the welfare gains from WTO liberalization (Erwidodo and Feridhanusetyawan 1997; Feridhanusetyawan 1998). The implementation of CEPT-AFTA as a trading block for ASEAN alone would lead to minimal benefit for ASEAN countries. By participating in the WTO and

APEC liberalization, the total welfare gains of ASEAN countries will increase substantially. Manufacturing sectors in ASEAN are expected to benefit from trade liberalization, and resources will move from the primary sectors such as agriculture and mining to manufacturing. The expansion of the manufacturing sector will lead to increase in labor demands. Indonesia as a labor abundant country will gain from the development of labor intensive manufacturing industries.

Raychaudhuri (1997) shows that trade creation within ASEAN is positive even though not too large, and any trade diversion that takes place is more than offset by trade creation so that the net result is a positive effect on trade volumes of the ASEAN countries. Income generation and welfare aspects of AFTA are, accordingly, both favorable for ASEAN. AFTA will also stimulate market-based production, investment and trade process especially when ASEAN needs transnational corporations (TNCs) and foreign direct investment (FDI) in their industrial restructuring strategies.

Although in the short term the CEPT will probably have only limited impact on regional trade, its implementation will accelerate industrial restructuring. It was noted that as regional markets expanded, distortion stemming from special domestic situations will be eliminated and conditions for structural adjustment will improve. At the corporate level, transnational corporations (TNCs) would promote regional division of labor and raise the local content ratio both for cost competitiveness and integrating ASEAN into a single market. The creation of AFTA would therefore offer such TNCs opportunity to consolidate and relocate operations within ASEAN more efficiently.

In terms of welfare effects, Felipe and Wescott (1992) also concluded that the welfare effects resulting from CEPT would be minimal. The general finding was that AFTA would have a relatively small effect on ASEAN countries but the net welfare effect was expected to be positive. It was also expected that trade with non-ASEAN countries such as the US, Japan, the NIEs and EC would increase, while that with the rest of the world would possibly fall.

5.6 Estimated impacts of unilateral trade liberalization

A number of studies have been undertaken to investigate the impacts of unilateral trade liberalization on agricultural sector performance in Indonesia. Using INDOGEM, a CGE of the Indonesian economy, Trewin et al. (1993) analyzed the impacts of 25% across the board tariff reduction on sectoral performance and agriculture in particular. Industry activity levels increased for lightly assisted sectors and decreased for heavily assisted sectors such as soybeans. Agricultural employment increased slightly more than for other production. Real GDP increased by 0.23% and the GDP deflator fell by 0.05%. Exports and imports increased by 1.26 and 0.63%, respectively.

Analyses using a multilevel modeling approach (MATA model), i.e. a recursive non-linear programming, show somewhat similar conclusions (Gerard and Erwidodo 1996; Erwidodo and Gerard 1996; Erwidodo 1998). At the aggregate level, agricultural market liberalization will not have a significant effect on rice production, indicating the low substitution between rice and other crops and high competitive advantage of rice in the lowland farming system in Java. In contrast, the impact of market liberalization on soybean production is substantial. The liberalization of soybean trade seems to be incompatible with the current policy objective of self-sufficiency in this crop. The result confirms that maize is more competitive than soybeans. At the farm level, impacts of market and trade liberalization are strongly negative on agricultural income, particularly in the case of small farms. The decrease is less pronounced if rice is excluded from the trade liberalization. This study highlights the importance of technical innovation in order to counteract the adverse effects of trade liberalization and to maintain rural income in a trade liberalization process. Efforts for increasing off-farm employment are critically important to

compensate for the negative income effects of market liberalization. This is particularly true in the densely populated areas in which cultivated land is scarce.